

102320-MN

IMPROVING LABOR MARKET OUTCOMES FOR POOR AND VULNERABLE GROUPS IN MONGOLIA

Franziska Gassmann

Daphne François

Lorena Zardo Trindade

December 2015

Acknowledgements

This report was written by Franziska Gassmann, Daphne François and Lorena Zardo Trindade. The authors would like to thank Junko Onishi and Tungalag Chuluun for their leadership and guidance throughout the preparation of this report and in-depth comments to earlier drafts. Useful comments were also provided by Taehyun Lee and Mohamed Ihsan Ajwad (peer reviewers), Achim Schmillen, James Anderson and Obert Pimhidzai.

We would also like to thank the representatives from different labor market institutions at the central and local level, which took the time to share their experiences and discuss current labor market challenges and employment and activation policies aimed at reintegrating the unemployed and inactive working age adults into the labor market. Field visits to two local Departments of Labor and two Departments of Social Welfare (Dundgovi aimag and Hanuul district in Ulaanbaatar) provided valuable insights into the Mongolian labor market and the challenges related to the implementation of the current policy measures. We sincerely thank the participants of two Focus Group Discussions in two Ger districts in Ulaanbaatar. The open discussion contributed to our understanding of the situation of seasonal and temporary workers that moved to the capital, the problems they have in finding jobs and how they cope with the situation. The key findings of the report have been presented and discussed with representatives of the Ministry of Labor, both from central and local levels, the Ministry of Population and Social Protection, and the National Employment Service at a Workshop in Ulaanbaatar on 15 September, 2015.

The findings, interpretations, and conclusions expressed in this note are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors, or the countries they represent.

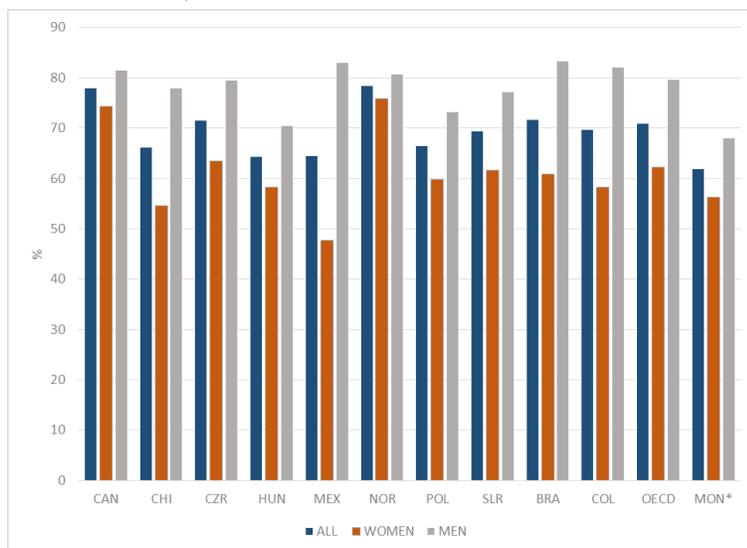
Funding for this note was provided by the Rapid Social Response Multi-Donor Trust Fund supported by the Russian Federation, Norway, the United Kingdom, Australia, and Sweden.

Executive summary

Mongolia has experienced strong economic growth and declining poverty in the past. However, growth was more volatile than in other countries in the East Asia and Pacific region, and growth is rather uneven across economic sectors and regions. The latter induced internal migration from areas with little economic activities to Ulaanbaatar, which led to an expansion of Ger districts in and around the capital with often precarious living conditions. Besides the lack of employment opportunities in rural areas, the labor market in Mongolia is characterized by a shortage of skills in certain sectors and a more general mismatch between demand and supply of skills, dependence on seasonal and temporary employment, gender inequalities and specific labor market challenges for certain age groups (both the very young and the generation aged 40 and above). Moreover, almost one third of the economically active is involved in agriculture, where productivity, wages and salaries are comparatively low. The Mongolian labor market and the related challenges differ from other countries in the region or countries at a similar development level. With a surface of 1.6 million km² and only three million inhabitants, Mongolia is very sparsely populated. Its landlocked location in Northern Asia renders a continental climate with extreme seasonal temperature differences. These contextual factors influence the nature of employment, which is highly seasonal in many sectors, and challenge the provision of labor market services throughout the country.

Having sustainable employment reduces the risk of living in poverty and helps sustain household livelihoods. It reduces the need for households to resort to coping strategies which are detrimental in the medium and long term, such as selling assets, taking children out of school, or not accessing health care facilities. It allows households to fully participate in society and reduces mental distress often associated with low and unstable income. From a societal perspective, active and productive labor market participation of the working age population contributes to and helps sustain the economic and human development of the country, ensuring long-term macro-economic development.

Labor Force Participation in selected countries, 2012



Compared to other countries, labor market participation in Mongolia is slightly lower. Only about two out of three working age adults (15+) are economically active. Depending on the season, the unemployment rate oscillates around nine percent. Mongolia has an extensive social welfare system offering more than 70 different non-contributory social welfare benefits to different groups of the population. About 40 percent of the population lives in a household benefiting from social welfare transfers. This does not include contributory pensions and social

insurance benefits, nor does it include the Child Money Program, which provides a universal transfer to all

children up to the age of 18. Most of the social welfare transfers are categorically targeted, with the exception of the Food Stamp program which targets the poorest five percent of the population.

The objective of the report is to describe and analyze labor market outcomes for different groups of the population in Mongolia, with a particular focus on poor and vulnerable households, and propose a set of policy interventions to strengthen the labor market participation and integration of currently unemployed or inactive adults. The quantitative analysis aims to answer the question why people are inactive, what their livelihoods are, and whether and to what extent the receipt of social welfare benefits creates labor market disincentives. The analysis in this report is based on existing reports, field visits and the empirical analysis of individual and household level data. Both the quantitative analysis and the policy analysis use data from 2012 to 2014 respectively, and should be interpreted as describing the Mongolian labor market at that point in time. More specifically, the main data sources are the Mongolian Household Social and Economic Survey (HSES) 2012 and the SW/PMT data, which combines administrative data on social welfare benefit receipt (SW) with the household data collected to apply the Proxy Means Test (PMT) used for the allocation of the Food Stamp Program. In addition, data from the Urban Inequality and Service Delivery Survey Ulaanbaatar 2014 are used to analyze the labor market position of (internal) migrants to Ulaanbaatar.

The focus of the report is on supply side issues of the labor market. The analysis of factors influencing labor demand, such as the macroeconomic conditions, the investment climate or the preference of employers in certain sectors for foreign workers, is beyond the scope of the present analysis. It is planned to address some of these topics in prospective follow-up analytical research. In order to better understand the mechanisms driving labor market outcomes, prospective follow-up analytical research also includes a qualitative analysis to complement the present quantitative analysis.

Context and characteristics of the Mongolian labor market

Mongolia has currently reached the status of a middle income country. It is one of the fastest growing economies in the world, with a GDP that increased from USD 1,632 to USD 4,056 per capita between 2007 and 2013 (World Bank, 2014). However, it is argued that economic growth is not sustainable due to the country's heavy dependency on the exploitation of natural resources (Asian Development Bank, n.d.; International Monetary Fund, 2013). Ninety percent of all exports are in minerals and 90 percent of these have China as destination (IMF, 2015a). In the first half of 2015 economic growth slowed down considerably and is projected to reach only 2.3 percent over the entire year. For 2016, the prospects are even weaker with economic growth expected to reach only 0.8 percent (World Bank, 2015). The sharp decline of the economy is due to declines in FDI and coal exports. The situation is further compounded by the slowdown of China's economy, Mongolia's most important export country (IMF 2015a; World Bank, 2015).

At the end of 2014, Mongolia had a total population of 2,995,949, which was an increase of 2.2 percent compared to the year before (NSO 2014). Based on data for the end of 2013, 27 percent of the population is between 0 and 14 years old and only 5 percent is older than 60. In spite of Mongolia's favorable economic and demographic conditions, still over a quarter of its population is living in poverty. The poor consume less than MNT 118,668 per month on average per capita. The average gap is seven percent of the poverty line. Poverty rates are highest in rural areas (35 percent) and lowest in the capital city (20 percent)¹, which is likely to be the results of the quantity and quality of employment opportunities available in either location.

¹ Estimates based on HSES 2012.

However, inequality among the poor is highest in urban areas other than the capital. When stratifying the country's population by region, individuals in the highlands are most likely to be poor and their average distance to the poverty line is largest. Family size and the number of children are important determinants of poverty: the larger a household is, the more likely its members are poor. Likewise, the more children a household has, the more likely it is to be poor. The employment status of the household head and his or her level of education are also indicative for the relative poverty risk, although having a paid job only marginally reduces the poverty risk. The higher the educational level of the household head, the lower is the risk that this household is poor. In situations where the household head has only primary education, the risk of being poor is 50 percent higher than for the average citizen. Being unemployed also raises the poverty risk substantially from 27 to 43 percent. In addition, the unemployed poor are considerably poorer than the average poor. The same applies to households where the head is only working seasonally or is used to have temporary jobs. The irregularity of income pushes these households easily into poverty. Contrary to expectations, the poverty rate for individuals living in a household with an inactive head is only marginally above the national average. This applies both to the extent and depth of poverty for this group.

The Mongolian labor market and the related challenges differ from other countries in the region or countries at a similar development level. Mongolia is very sparsely populated and a subject to harsh climate with extreme differences in seasonal temperatures. These contextual factors influence the nature of employment, which is highly seasonal in many sectors, and challenge the provision of labor market services throughout the country. Overall labor force participation of adults aged 15 and higher was 62 percent in 2013 according to data from the NSO. The employment rate (as a percentage of the labor force) amounted to 92.1 percent in 2013. In 2013, 7.9 percent of the population in working age was unemployed. The unemployment rate was 0.7 percentage points higher for women compared to men. Despite the economic slowdown in recent years and particularly during the first six months of 2015, unemployment rates remained largely unchanged or even decreased as in the third quarter of 2015 (NOS, www.1212.mn). Similarly, labor force participation rates remained at 62 percent (NOS, www.1212.mn). In addition, although the female population is larger than the male population in working age, both the proportion and absolute number of economically active men is considerably larger than the proportion and absolute number of economically active women.

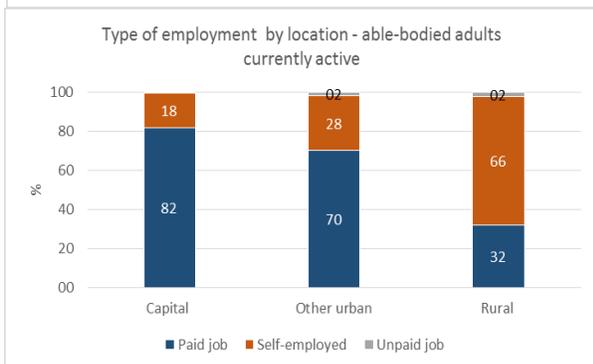
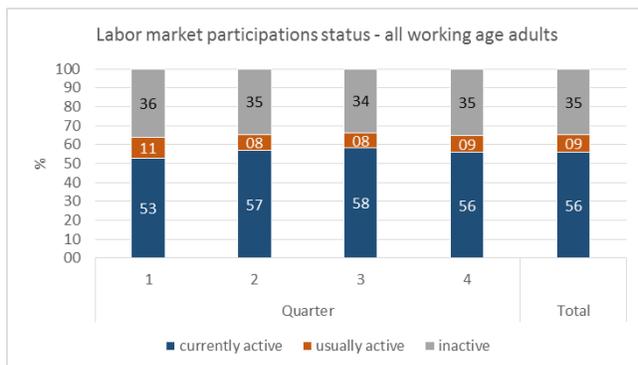
Informal employment is widespread in Mongolia, particularly among herders, unpaid family workers and workers employed in the mining sector. Estimates of the informal sector vary across different studies depending on the definition used. Shatz et al. (2015) estimate that the informal sector accounts for 57.4 percent of employment if animal husbandry is also considered as informal activity. They further conclude that informal employment has been decreasing over the last seven years. If informal employment is defined based on whether employees contribute to the mandatory social insurance system, then 40 percent of the economically active population has been engaged in the informal sector in 2013, down from 53 percent in 2010 (UN/ILO/Government of Mongolia, 2015). The contribution of the informal sector to the overall economy was estimated to be 13.7 percent of GDP in 2010 (Dandar & Chojiljav, n.d.). Based on recent Labor Force Survey data, the World Bank (2014) estimates that from the first quarter of 2013 to the first quarter of 2014, the number of paid employees dropped significantly, while the share of self-employed workers increased.

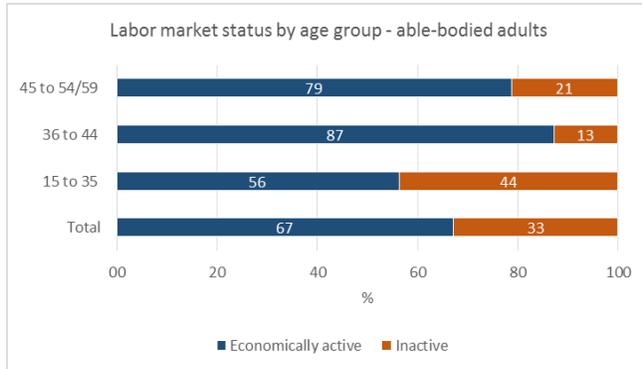
The Mongolian labor market faces a number of problems. According to the ADB (2014), the main labor market issues in Mongolia are skills shortages, gender inequality and child labor. Following the ILO (2013), certain labor market groups are comparably more vulnerable than others, including rural-to-urban

migrants, youth and children and women. Employers seem to discriminate against particular age groups. For workers above the age of 40, finding new employment is very difficult, especially if he or she has never been able to update the set of skills and knowledge needed in the current labor market. The youth is similarly disadvantaged. Graduates from secondary school, TVET colleges or higher education institutions have difficulties finding employment. Vacancies generally ask for some initial work experience, and employers also prefer hiring employees with certain life skills in order to reduce the high job turnover.

Labor market outcomes

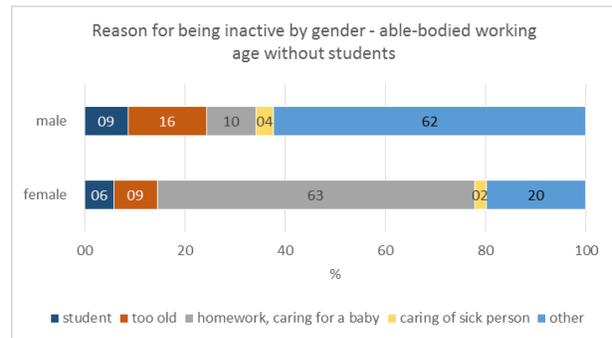
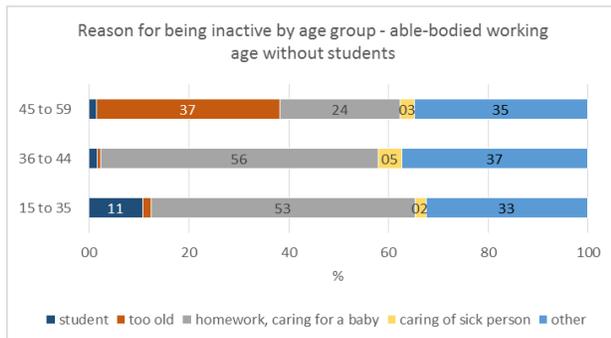
Based on the analysis of the HSES 2012, 65% of working-age adults, which includes all persons from the age of 15 up to retirement, which is 55 years for women and 60 years for men, actively participate in the labor market. Participation (and unemployment) rates vary slightly across season, with higher activity and lower unemployment from April to September. Working as a paid employee is the most common form of employment (61 percent of the currently employed adults). It serves as a proxy for formal employment, but it probably overestimates the size of the formal sector given earlier estimates that range between 40 to 60 percent of total employment (see previous section). Informal work, defined as self-employment or unpaid work, accounts for 39 percent of total employment. Informal work is the predominant form of employment in rural areas (68 percent) and is lowest in Ulaanbaatar (18 percent). Agriculture is still the most important employment sector. Although construction accounts only for seven percent of total employment, it is the most important sector for temporary and seasonal workers.





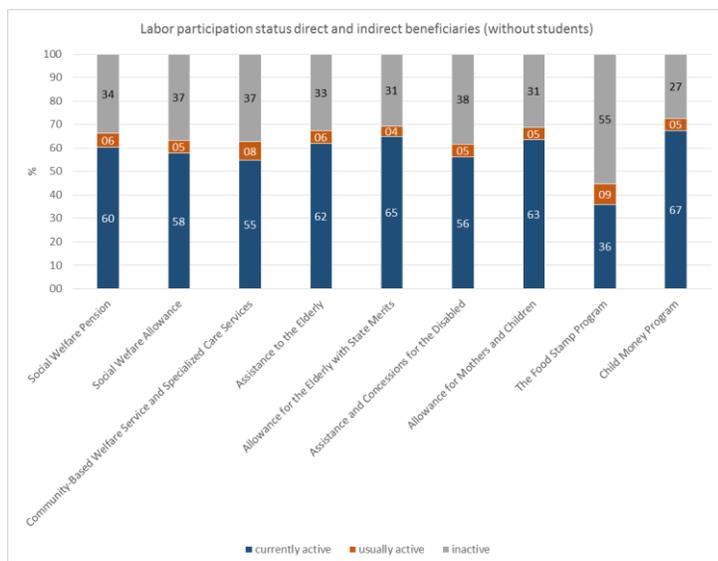
Inactivity is especially high among the young, those older than 45, women and those living in Ulaanbaatar. Adults living in households receiving social welfare benefits have slightly higher inactivity rates than the average. The same applies to individuals living in poor households. Studying is the main reason for inactivity, and concerns mostly the youngest age group. Excluding students below the age of 25 from the work-able population significantly reduces the inactivity rate.

For the remaining group of inactive work-able adults, housekeeping and child care is the most frequently stated reason for inactivity for half of them, while one third claims 'other' reasons, which are not specified. Helping family and relatives, for example with herding or agriculture, could be an explanation for their inactivity. Able-bodied adults aged 40 and older seem to be discouraged, as many of them indicate age as main reason for inactivity.



The analysis of the SW/PMT data allowed a more detailed analysis of the link between social welfare program receipt and labor market participation. Given that social welfare benefits are primarily allocated on categorical criteria, no labor market disincentive effects are expected a priori. After all, the level of individual or household income does not affect the eligibility for benefits. Yet, the availability of social welfare benefits, which are a guaranteed income in recipient households, may increase the reservation wage, which means that the potential salary that can be earned needs to be above the social welfare income.

The Food Support Program is the only exception as it is targeted to the poorest five percent of the population. However, the use of a proxy means test to identify eligible households also limits work disincentives by design. Social welfare benefits have a small negative effect on labor market participation for direct recipients, but this effect disappears if all work-able adults living in beneficiary households are considered. The extent to which beneficiaries participate in the labor market varies across different social welfare benefits. Recipients of social welfare allowances, allowances for the elderly or disabled have slightly lower activity rates, while the Food Stamp Program is negatively correlated with active participation. The share of inactive adults in FSP households is higher compared to other social welfare programs or non-recipient households. However, given the cross-sectional nature of the data it is not possible to conclude that FSP receipt leads to inactivity. Rather, it appears likely that due to the lack of work FSP households are highly vulnerable to poverty and therefore qualified for the FSP. Similar to the findings based on the HSES



2012, taking care of the family is the most frequently cited reason for inactivity. Not being able to find a suitable job comes second and concerns one third of the inactive adults. This may indeed indicate that a large group of work-able adults are simply discouraged. However, whether the discouragement is the result of lack of employment opportunities or due to unmet expectations with respect to the available jobs or earnings cannot be assessed.

The econometric analysis of labor market outcomes based on the HSES 2012 hints at the existence of weak negative work

incentives related to the receipt of social welfare benefits. However, these findings need to be interpreted with caution given the limitations of the HSES questionnaire to clearly identify non-contributory social welfare benefits.² The analysis suggests that individuals living in social welfare recipient households are slightly less likely to be active labor market participants. The effects differ for men and women and for the position in the welfare distribution. Social welfare receipt does not affect the participation of men, and has even a positive effect if only men of the bottom half of the welfare distribution are considered. Two social welfare programs were analyzed in more detail using information from the SW/PMT data. The econometric analysis of the effect of social welfare allowances and the allowance for mothers and children confirms the findings based on the HSES 2012.

Impact of SW benefits on active labor market participation (ATET)

	ALL			BOTTOM 50		
	ALL	MEN	WOMEN	ALL	MEN	WOMEN
ACTIVE	-0.017*** 0.002	-0.004 0.003	-0.032*** 0.003	0.000 0.003	0.039*** 0.004	-0.025*** 0.005

Active labor market policies in Mongolia: achievements and challenges

As mentioned above, active and productive labor market participation of the working age population has many positive consequences both from an individual and a societal perspective. The analysis in this report provides empirical evidence of the low labor market participation, particularly among young and old adults³, many of which are discouraged from participation. The Mongolian Government introduced the first Law on Employment Promotion already in 2004, recognizing the importance of active labor market participation for the livelihood protection of households and the development of the country.

The Law on Employment Promotion (amended in 2011) stipulates that the government will create opportunities for the employment of the population, link investment policy with employment promotion

² The HSES questionnaire does not follow the definition of social welfare benefits as used by the Ministry of Population Development and Social Protection. A clear distinction between contributory and non-contributory benefits is not possible when defining the categories of benefits received by the household.

³ Young adults: up to the age of 35; older adults: 45 and older.

measures, regulate labor force demand and supply, develop a labor force that is consistent with market demand, improve information and statistics on employment of the population and expand the scope of citizens covered by employment insurance. It further stipulates that it is the task of the Government to protect every citizen from becoming unemployed. It distinguishes between the following employment promotion services and measures: (1) occupational and vocational orientation, counseling and information services; (2) job mediation services; (3) vocational training and retraining services; (4) promotion for self-employed or citizens running businesses in forms of partnerships or cooperatives; (5) support to employers; and (6) public works (Mongolian Ministry of Labour, 2013).⁴

The establishment of the Ministry of Labor in 2012 was a clear sign for the importance of labor market policies in Mongolia and renewed the focus on employment promotion. While the Ministry of Labor is responsible for policy design, the Departments of Labor in aimag and district centers and the Labor Exchange Offices implement the state employment policy. Private Labor Exchange Offices (mainly in the capital) further strengthen the outreach to the unemployed allowing an effective employment promotion. A central administrative database keeps records on the unemployed and participants of activation programs. Job vacancies are collected in a unified database that can be easily accessed at office terminals and via internet.

This review of the Employment Promotion Program (EPP) was focused on the year 2014. Since then a number of changes have been introduced but in 2014, the EPP included eight programs and one project targeted at different vulnerable groups. Three out of the nine activation programs and projects could be classified as policies aimed at increasing the income of the most vulnerable unemployed. The other six measures are either policies to increase the job search activity and the probability of finding a job and policies to raise the employability and productivity of the unemployed job seeker. The *Preparation for Work Program* prepares citizens for the labor market by equipping them with vocational skills in a short period of time and provides support to employers. The *Herders' Employment Program* trains young herders with herding and entrepreneurial skills for sustainable livelihoods, provides them with young livestock and loans and financial support. The *Employment Promotion Program for Citizens over the Age of 40* offers work to citizens over the age of 40 and operates similar to a public works program. The *Employment Promotion Program for Disabled Citizens* provides financial support to citizens with a disability, business entities and organizations, and supports entrepreneurs that intend to create job opportunities meeting the special needs of disabled citizens. The *"Mongolia with Owner"* Program also has the features of a public work program. It provides the unemployed with work places and income support through engagement in green and community development initiatives, rehabilitation of nature and environment, infrastructure improvement. The *Entrepreneurship Development Program* promotes entrepreneurship and employment of the self-employed, partnerships and cooperatives and provides entrepreneurs with business incubation and small loan services. The *National Program for Preparing Skilled Workers* assists Mongolian citizens at TVET colleges in acquiring vocational skill of occupations that are highly demanded in the labor market.

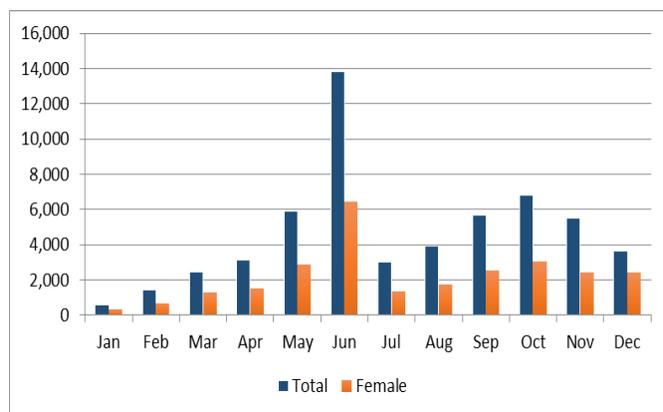
⁴ More specifically, the Law on Employment Promotion mentions the following services and measures: (1) provision of occupational and vocational orientation, counseling and information; (2) job mediation; (3) provision of unemployment benefits; (4) incorporation in the integrated registration and information service; (5) other services; (6) preparation for employment; (7) conduction of job training; (8) support to herders and self-employed, support to citizens willing to establish partnerships and cooperatives; (9) support to employers; (10) organization of public works; (11) promotion of employment to citizens faced with difficulties finding employment; (12) other projects and programs, specified in the law or identified by the decision of the Government and National council of employment.

These programs are usually instigated upon a concrete demand from a large enterprise. The *Employment Promotion Program for Youth* aims at engaging students and youth in soum and local development and construction activities, and provide them with temporary work places and labor discipline. Finally, the *Senior Experts' Consultancy Service Project* engages experienced seniors to share their knowledge with less experienced workers.

According to data from the Ministry of Labor, in 2014, more than 84 thousand job seekers participated in the EPP. The Mongolia with Owner Program was the largest with over 25 thousand participants, followed by the Preparation for Work Program, the Youth Employment Promotion Program and the Entrepreneurship Development Program. Overall, the Government of Mongolia spent MNT 49.8 billion (approximately USD 27.4 million). On average, MNT 591 thousand (USD 325) was spent per participants, though costs per participant vary considerably by program type. The most expensive program group is the National Skilled Worker Training Program (MNT 1725 thousand (USD 949) per participant), and the least expensive is the Mongolia with Owner Program (MNT 171 thousand (USD 94) per participant).

Due to the lack of a comprehensive monitoring and evaluation system for the EPP, it is impossible to say whether the measures have been effective in reducing unemployment and reactivating the inactive. Participation in the EPP does not per definition lead to a job. In most cases, participation provides a temporary job, which is in the nature of the respective EPP. According to data from the Ministry of Labor, 27 thousand permanent jobs resulted from the EPP in 2014. Participation in the Preparation for Work Program led to a permanent job for 44 percent of the participants. Of the 4,182 participants of the National Skilled Worker Training Program, 64 percent found a permanent job, and the Employment Program for Disabled People led to a permanent job for 61 percent of the participants. Least effective in that perspective was the Entrepreneurship Development Program where a permanent job was the outcome for only 17 percent of the participants.

Job placement by month, 2014



In 2014, a total of 55,909 job placements have been registered at the online job system e-job.mn, of which 26,054 (46.6 percent) concerned women. While the majority of placements were registered in June, fewest job placements were registered during the months January, February and March, confirming the high seasonality of the labor market. Job placements were most numerous in Ulaanbaatar and least in the Eastern region, which was the only region that did not perform according to the

targets that were to be reached in 2014.

Due to the lack of a comprehensive monitoring and evaluation system for the EPP mentioned above, a comprehensive review of current programs would need to be implemented before a specific analysis of strengths and weaknesses or concrete recommendations for improvements could be presented. This is beyond the scope of the present report. At the same time, based on discussions with service providers and a report from the Employment Services Center (2014), several apparent challenges can be cautiously identified that seem to limit the success of the EPP: Registration procedures create application barriers for

some groups given that a set of documents needs to be provided and registration can only take place at the aimag/district center where an applicant is officially registered. The transaction and opportunity costs may exceed the perceived benefits of program participation. Some of the programs are relatively new and not yet well-known among the target groups. Moreover, due to inadequate information applicants misunderstand program goals and rules. Not all programs are available in all aimags/districts leading to regional disparities with respect to the offered services. Job seekers living in Ulaanbaatar benefit from the highest service density. But the most important challenge for the EPP appears to be the lack of funding to meet the actual demand for these programs, which exceeds the number of available places by far.⁵

Despite its current shortcomings, the EPP is very important for the country addressing some of the most urgent labor market problems. However, activation measures cannot address all labor market challenges. Although some of the programs directly provide work and allow participants to increase their income at least temporarily, the programs cannot address the lack of employment opportunities in rural areas. The EPP is also ineffective in addressing the proliferation of seasonal and temporary jobs especially in urban areas. Currently, there is no specific activation program in place addressing seasonal unemployment. Rather, some of the programs that are currently in place directly or indirectly contribute to seasonal employment given the nature of the activities. More effort is needed to address the negative attitudes of both job seekers and employers. For the skills mismatch EPPs are only a partial remedy.

Conclusions and options for policy reforms

The most vulnerable groups in the labor market are seasonal workers, workers in the informal sector and those with precarious jobs, women and both the young and older workers. Given that sustainable and decent employment is at the core of any strategy to improve the situation and resilience of poor and vulnerable households, future policies should enable the labor market participation of all Mongolian citizens.

Based on the analysis in this report, the main challenges for the Mongolian government are to, (i) increase the labor market participation of women, (ii) increase the share of regular employment, which means reducing temporary and seasonal employment, (iii) improve the labor market prospects of young adults and (i) increase the employment of workers 45 years and older.

Policy recommendation I: Strengthen and expand the Employment Promotion Program

The Employment Promotion Program has immense activation potential. It requires increased outreach to the unemployed and inactive, increased outreach to vulnerable groups (including youth, rural-to-urban migrants and seasonal workers) and the expansion of the EPP to meet the demand. Before extending the EPP a comprehensive review of the current programs (including spending patterns and flows of funds) should be implemented. It is also recommended to develop a comprehensive policy strategy for the employment programs. The strategy would outline the long-term vision and formulate clear policy objectives and activities, similar to the former strategy (2002-2012). An agreement to an overarching employment strategy is expected to make the government a more predictable partner, also in the tripartite context, and allow for more sustainable employment policies.

⁵ Foreign worker fees paid by companies hiring foreign workers are the main funding source of the Employment Fund.

A more proactive role in promoting the EPP can strengthen the outreach to the unemployed and inactive population. Easing registration criteria for participation in EPP and actively supporting interested job seekers with the registration, for example, by waiving costs for documents or covering transportation costs, may further increase participation in the various programs. However, given that not even the current demand for these programs can be met, the existing EPP need to be expanded, which requires the extension of the various quota for participation and the allocation of more funds from the Employment Fund.

While some of the EPP activities are season-bound (e.g. Mongolia Owner Program), other activities, such as trainings, could be offered throughout the year. Existing programs, such as the Preparation for Work Program, could be further strengthened by upgrading the training content and lengthening the duration to better meet the needs of the employers. The Preparation for Work Program could be extended by offering participants on-the-job training in collaboration with prospective employers after completion of the program. Access to skills trainings and skill updates should also be available to job seekers older than 40 years old, particularly if unemployment is the result of lack of skills.

Reducing seasonal unemployment is challenging in a country as Mongolia, given that most of the seasonal work takes place in the construction sector. Weather protection systems, such as the use of materials and equipment to enclose the construction site and control the climate inside the enclosure (for example, tarpaulins and heaters) have been available for many decades, but the extent of their use depends on the structure of the construction industry. Countries with many, mostly small, firms often lack the resources to invest in new technologies and therefore, the use of new technologies remains limited. Alternatively, public work programs offered during the low season could provide workers with a minimum income during their seasonal unemployment spells.

Policy recommendation II: Increase outreach to job seekers and currently inactive adults

Users of employment services, and in particular the more vulnerable groups, benefit from intensive counseling. The employment services can be strengthened by putting more efforts on counseling and guidance of job seekers. The experience of private labor exchange offices has shown that an individualized approach is most effective for increasing the registration of job seekers and the successful placement of job seekers. Similar to private labor exchange offices, financial incentives could be introduced for the Departments of Labor and the Local Exchange Offices to actively follow-up placed workers. On the labor demand side, employment services could increase the outreach to employers to further improve the match with job seekers and ensure the regular stream of incoming job vacancies.

In order to promote employment services and the registration of job seekers, mobile labor exchange offices can reach out to formerly underserved groups of inactive and unemployed citizens. Home visits can be used to approach discouraged workers and introduce the available services. Furthermore, the use of text messaging for vacancy announcements and registration follow-up would also allow reaching those without access to internet. The use of traditional media, such as newspapers, radio and TV, for the dissemination of vacancies and information on EPP may be needed to reach out to the most vulnerable groups, such as the poor and those living in Ger districts.

Labor market discrimination against particular groups should be legally banned and employers should be encouraged to review their recruitment criteria. Awareness programs and public campaigns could be used to sensitize employers and change their attitudes towards 'older' job seekers. In general, the public sector

could give a positive example by hiring older workers and ban all discriminatory criteria from their recruitment policies.

Policy recommendation III: Strengthen policy analysis, monitoring and evaluation

The availability of regular and reliable data from household surveys is very important for policy monitoring and evaluation. The questionnaire of the current HSES should be carefully reviewed and aligned with current government policies and standard international practices.

The analysis in this report indicated the need for a comprehensive monitoring and evaluation system, regular policy impact evaluations and in-depth analysis of particular topics relevant for policy design. For example, more research is needed to better understand why so many Mongolian women, particularly those with high education, do not work. Factors may relate to norms and values with respect to the position of women in society, or may simply reflect satisfaction with the current living standard. An in-depth study on female labor market participation in Mongolia would contribute to a better understanding of the relatively high share of inactive women and policy strategies, which could address this issue.

While the current analysis heavily relied on the analysis of quantitative information, qualitative research will provide insights into the underlying supply and demand-side dynamics that drive labor market outcomes. A qualitative analysis is proposed for the next phase. It is expected to shed light on (perceived) barriers to employment, such as the negative attitudes of both job seekers and employers, or the preference of employers for foreign workers.

Beyond labor market policies

Other measures to stimulate labor market participation are beyond the strict realm of labor market policies. In order to increase the labor market participation of women, the reconciliation of work and family life needs to be facilitated, for example, by promoting part-time employment and by allowing flexible working hours. Furthermore, the provision of affordable child care facilities and investment in pre-school education will facilitate re-entry into the labor market for women with children.

The current educational system could be further strengthened and aligned with the needs of the labor market in order to reduce the skills mismatch between labor demand and supply. Extending the compulsory years of education, investing in TVET colleges and revising the curricula of Higher Education Institutions are policy options, which will contribute to a better educated and skilled workforce and increase the productivity of the Mongolian economy in the long run. Career counseling should be part of the regular secondary school curriculum. Internships during the last year of compulsory education would allow students to sample different vocations and bring them into contact with future employers. Finally, scholarships for TVET colleges and access to structural trainings offered by TVET colleges may influence the educational choices of the future labor force.

Table of Contents

Acknowledgements	i
Executive summary.....	ii
1. INTRODUCTION.....	1
1.1 Data limitations and methodological issues.....	3
1.2 Structure of the report	5
2. CONTEXT AND CHARACTERISTICS OF THE MONGOLIAN LABOR MARKET	6
2.1 Economic and demographic context	6
2.2 Characteristics of the labor market	9
3. LABOR MARKET OUTCOMES.....	18
3.1 Data and Methodology	18
3.2 Labor market participation and type of employment.....	23
3.3 Inactivity	26
3.3 Internal migrants	30
3.4 Labor market participation and social welfare receipt	31
3.5 Determinants of labor market outcomes.....	37
3.6 Summary of the empirical analysis	44
4. ACTIVE LABOR MARKET POLICIES IN MONGOLIA: ACHIEVEMENTS AND CHALLENGES	46
4.1 The role and types of labor market policies in general.....	46
4.2 Institutional context Mongolia.....	49
4.2 Employment Promotion Programs in Mongolia.....	52
5. CONCLUSIONS AND OPTIONS FOR POLICY REFORMS.....	59
Bibliography.....	69
Annex A - Background.....	73
Annex B - Description of Employment Promotion Programs in Mongolia	76
Annex C - Policy measures addressing seasonal unemployment around the globe	85
Annex D – Additional tables quantitative analysis	89
Annex E- Assessing the quality of matching	109

List of Tables

Table 1. Poverty rates in 2012, different groups of the population.....	8
Table 2. Basic labor market statistics, 2013	9
Table 3. Average monthly salaries per sector and size of enterprise, 2013 (thds MNT).....	16
Table 4. Share of the reference group in total population: Mongolia, 2012	19
Table 5. Summary statistics for the variables used in the econometric models based on HSES 2012.....	22
Table 6. Summary statistics for the variables used in the econometric models based on the SW/PMT	23
Table 7. Inactivity rates by poverty and SW benefit status	30
Table 8. Labor market status of migrants in Ulaanbaatar (able-bodied, working age, not students)	31
Table 9. Inactivity by sex and reasons for inactivity, migrants versus non-migrants	31
Table 10. Coverage rates social welfare benefits, by quintile	32
Table 11. Distribution of social welfare benefits across quintiles	32
Table 12. Social welfare benefits as percentage of household consumption, receiving households only...	33
Table 13. Child Money Program: coverage, distribution and adequacy of transfers	33
Table 14. Direct and indirect beneficiaries of social welfare programs	34
Table 15. Determinants of active labor market participation (marginal effects)	39
Table 16. Impact of SW benefits on active labor market participation (ATET)	42
Table 17. Impact of SW benefits on labor market outcomes of employed individuals (ATET)	43
Table 18. Impact of Social Welfare Allowance on active labor market participation (ATET)	43
Table 19. Impact of Allowance for Mothers and Children on active labor market participation (ATET).....	44
Table 20: Tasks of aimag and district level institutions responsible for Employment Promotion Policies...	50
Table 21. Main characteristics of the Unemployment Insurance scheme	51
Table 22. Employment Promotion Programs: participation, expenditures and jobs created, 2014	54
Table A 1. Poverty rates in 2012, by education, labor market status and social welfare receipt.....	73
Table A 2. The eight fundamental ILO Conventions and their dates of ratification	73
Table A 3. Implementation and design features, options and implication of public works programs	74
Table B 1. Total participation, expenditure and job creation for all employment promotion programs	84

Table C 1. Overview of different contributions depending on the duration of the employment contract ..	88
Table D 1. Labor market participation by quarter, 2012.....	90
Table D 2. Employment status and type of employment for different subpopulations, 2012.....	91
Table D 3. Currently active, usually active and temporary workers by ISCO classification sector, 2012.....	91
Table D 4. Currently active by subpopulation and job category using ISCO classification, 2012	92
Table D 5. Temporary workers by subpopulation and job category using ISCO classification, 2012	93
Table D 6. Inactive population by subpopulation (able-bodied working age adult, with and without students)	94
Table D 7. Reason for inactivity by subpopulation, 2012.....	95
Table D 8. Labor participation status of social welfare program recipients (direct beneficiaries).....	96
Table D 9. Labor participation status of social welfare program recipients (direct and indirect beneficiaries)	96
Table D 10. Labor market participation status by social welfare program (able-bodied working age without students).....	97
Table D 11. Social welfare program recipients that are currently working by program and type of work	100
Table D 12. Reason for inactivity of social welfare program recipients	101
Table D 13. Multinomial model of labor market participation (base: inactive)	102
Table D 14. Determinants of work effort	104
Table D 15. Models estimating the determinants of the hourly wage [$\ln(\text{wage}/\text{hour})$], employed adults only	105
Table D 16. Determinants of social welfare program receipt (probit models; SW=1/0).....	108
Table E 1. Covariate balance summary	110

List of Figures

Figure 1. Real GDP growth in Mongolia and the East Asia and Pacific region, 2005-2013.....	7
Figure 2. Population pyramid, end 2013.....	7
Figure 3. Labor Force Participation in selected countries, 15-64, 2012.....	10
Figure 4. Employment by sector, 2013	10
Figure 5. Internal migration to Ulaanbaatar	12
Figure 6. Pattern of internal migration	12
Figure 7. School attendance rates, by age, 2012	14
Figure 8. Average monthly wages per sector, first quarter 2013.....	16
Figure 9. Labor market status across quarters, 2012.....	24
Figure 10. Unemployment rates by quarter, 2012	24
Figure 11. Type of employment by location, 2012	25
Figure 12. Type of employment by level of education, 2012.....	25
Figure 13. Employment by sector and employment status, 2012	26
Figure 14. Composition of currently active population by occupation	26
Figure 15. Labor market status by age group, 2012	27
Figure 16. Reasons for inactivity, by age group, 2012	27
Figure 17. Labor market status for different definitions of the work-able population	28
Figure 18. Reasons for inactivity (w/o students), 2012.....	28
Figure 19. Reasons for inactivity, different population groups (w/o students), 2012.....	29
Figure 20. Inactivity: poor individuals and social welfare recipients.....	29
Figure 21. Reasons for inactivity: poor and social welfare recipients	30
Figure 22. Labor participation status by social welfare receipt	35
Figure 23. Labor participation status of individual recipients, by program.....	36
Figure 24. Labor participation status of direct and indirect beneficiaries, by program	36
Figure 25. Reasons for inactivity, direct beneficiaries.....	37
Figure 26. Institutions involved in employment protection and unemployment benefit payments.	49
Figure 27. Job placement by month in 2014, total and female	55
Figure 28. Job placement in 2014, by month and region.....	55

Figure 29. Job placement by economic activity sectors.....	56
Figure A 1. Relationship between involvement in child labor and future labor market chances.....	75
Figure C 1. Seasonal variation in the employment rate	86
Figure C 2. Calculation of Kug	87
Figure E 1. Covariate density distribution	111
Figure E 2. Propensity Score Distribution.....	112

Exchange rate used: USD 1 = MNT 1818 (WDI for 2014)

1. INTRODUCTION

Mongolia has experienced strong economic growth and declining poverty in the past. However, growth was more volatile than in other countries in the East Asia and Pacific region, and growth is rather uneven across economic sectors and regions. The latter induced internal migration from areas with little economic activities to Ulaanbaatar, which led to an expansion of Ger districts in and around the capital with often precarious living conditions. Besides the lack of employment opportunities in rural areas, the labor market in Mongolia is characterized by a shortage of skills in certain sectors and a more general mismatch between demand and supply of skills, dependence on seasonal and temporary employment, gender inequalities and specific labor market challenges for certain age groups (both the very young and the generation aged 40 and above). Moreover, almost one third of the economically active is involved in agriculture, where productivity, wages and salaries are comparatively low. The Mongolian labor market and the related challenges differ from other countries in the region or countries at a similar development level. With a surface of 1.6 million km² and only three million inhabitants, Mongolia is very sparsely populated. Its landlocked location in Northern Asia renders a continental climate with extreme seasonal temperature differences. These contextual factors influence the nature of employment, which is highly seasonal in many sectors, and challenge the provision of labor market services throughout the country.

Compared to other countries, labor market participation in Mongolia is slightly lower. Only about two out of three working age adults (15+) are economically active. Depending on the season, the unemployment rate oscillates around nine percent. Mongolia has an extensive social welfare system offering more than 70 different non-contributory social welfare benefits to different groups of the population. About 40 percent of the population lives in a household benefiting from social welfare transfers. This does not include contributory pensions and social insurance benefits, nor does it include the Child Money Program, which provides a universal transfer to all children up to the age of 18. Most of the social welfare transfers are categorically targeted, with the exception of the Food Stamp program which targets the poorest five percent of the population.

With the implementation of the Law on Employment Promotion in 2011, the Government of Mongolia provided the legal base for a set of employment promotion programs. By means of these programs, different vulnerable labor market groups are addressed, ranging from graduates to disabled, older workers, herders and unskilled job seekers. The implementation of “activation policies”, aiming to reduce dependency on social assistance and unemployment benefits, assist the unemployed in their search for new jobs and improve earnings capacity has increased significantly in recent years (Kuddo, 2013). While such measures are widespread in developed countries, as is the evidence base regarding their success, their implementation is less common and their outcomes less well researched in lower income countries.

The objective of the report is to describe and analyze labor market outcomes for different groups of the population in Mongolia, with a particular focus on poor and vulnerable households, and propose a set of policy interventions to strengthen the labor market participation and integration of currently unemployed or inactive adults. More specifically, this report aims to

- Describe and analyze labor market outcomes for different groups of the population;
- Analyze the potential of labor market disincentives related to social welfare benefits;

- Map existing activation policies and employment services and identify main challenges;
- Provide examples from other countries where relevant;
- Propose a set of policy interventions to improve the labor market outcomes of vulnerable families.

The focus of the report is on supply side issues of the labor market. The analysis of factors influencing labor demand, such as the macroeconomic conditions, the investment climate or the preference of employers in certain sectors for foreign workers, is beyond the scope of the present analysis. It is planned to address some of these topics in prospective follow-up analytical research. In order to better understand the mechanisms driving labor market outcomes, a prospective qualitative analysis is already planned to complement the present quantitative analysis.

Having sustainable employment reduces the risk of living in poverty and helps sustain household livelihoods. It reduces the need for households to resort to coping strategies which are detrimental in the medium and long term, such as selling assets, taking children out of school, or not utilizing health care facilities. It allows households to fully participate in society and reduces mental distress often associated with low and unstable income. From a societal perspective, active and productive labor market participation of the working age population contributes to and helps sustain the economic and human development of the country, ensuring long-term macro-economic development.

Increasing labor market participation in itself does not necessarily prevent individuals from falling into poverty, avert social exclusion or increase their well-being. Policies that successfully aim to achieve these goals should ensure that individuals are placed in decent jobs, i.e. jobs that are “productive, delivering a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men” (ILO, 2014).

Preventing unemployment and keeping periods of unemployment as short as possible by encouraging rapid re-entry into work is important for several reasons. In the first place, unemployment leads to loss of income, which in turn increases an individual’s (and its dependents’) risk of falling into poverty while deepening poverty of those who are already poor. Unemployment and underemployment belong to the most important causes of poverty (UNDP, 2007). In addition, unemployment and a more general withdrawal from the labor market may lead to social exclusion, depriving individuals from actively participating in society. The adoption of adverse coping strategies in the face of limited resources during periods of unemployment – such as temporarily reducing spending on education, health or nutrition – is likely to reduce the employability of those looking for work, for instance due to health issues. Such measures also hinder optimal development of children and diminish their future labor market opportunities and earnings capacity (UNICEF, N.d.). Finally, unemployment negatively affects well-being and causes mental distress, hence directly affects an individual’s mental health status.

Classical economic theory assumes that individuals act rational, time consistent and entirely self-interested and that their labor decisions are the product of these traits. More recent results from empirical research in the area of behavioral economics, however, show that individuals do not always act rationally, but instead “can make systematic errors or be put off by complexity, that they procrastinate, and that they hold non-standard preferences and non-standard beliefs” (Babcock, Congdon, Katz, & Mullainathan, 2012; DellaVigna, 2009). For instance, they may have biased wage expectations on the basis of which they evaluate and possibly refuse reasonable job offers, or procrastinate their job search efforts, even though

doing so is likely to be in contradiction with their long-term self-interest. In addition, individuals may lack resources and information allowing them to optimally search for work or to participate in trainings to upgrade their skills. In such cases, incentivizing and supporting them in their efforts to find employment can have a positive effect on their labor market outcomes.

The analysis in this report is based on existing reports, field visits and the empirical analysis of individual and household level data. Both the quantitative analysis and the policy analysis use data from 2012 to 2014 respectively, and should be interpreted as describing the Mongolian labor market at that point in time. More specifically, the main data sources are the Mongolian Household Social and Economic Survey (HSES) 2012 and the SW/PMT data, which combines administrative data on social welfare benefit receipt (SW) with household data collected by the Government of Mongolia for the purpose of applying a Proxy Means Test (PMT) for the allocation of the Food Stamp Program. In addition, data from the Urban Inequality and Service Delivery Survey Ulaanbaatar 2014 are used to analyze the labor market position of (internal) migrants to Ulaanbaatar.

Definitions used for labor market participation status

HSES 2012:

- . *Employed* - individuals who worked or had a job attachment during the week under survey.
- . *Unemployed* - individuals who are without work or a job attachment, but available for work and actively seeking it.
- . *Active labor force (market) participation* - individuals that are currently active or usually active, according to the following definitions:
 - o *Currently active* – individuals who worked during the week under survey.
 - o *Usually active* – unemployed individuals or people who worked or had a job attachment during the year under survey unemployed individuals.
- . *Inactive* - individuals who did not work or did not have a job attachment during the year under survey and were not actively searching for a job.

SW/PMT:

- . *Currently active* – individuals who worked during the week under survey.
- . *Usually active* – individuals who worked or had a job attachment during the year under survey.
- . *Inactive* - individuals who did not work or did not have a job attachment during the year under survey.

1.1 Data limitations and methodological issues

Limited information on key concepts. The HSES 2012 does not provide detailed information on social welfare benefits. The HSES questionnaire does not follow the definition of social welfare benefits as used by the Ministry of Population Development and Social Protection. A clear distinction between contributory and non-contributory benefits is not possible when defining the categories of benefits received by the household. Therefore, when using the HSES data, the recipients of social welfare benefits are identified as all individuals living in households in which at least one of the following sources is a component of the household income: unemployment benefit, maternity benefit, disability pension, survivor pension, illness payments, funeral payments, mother benefit, student benefit and other social benefit. Since this definition

of social welfare receipt is imperfect, given that the benefits have both contributory and non-contributory components, the results of the analysis of social welfare dependence have to be interpreted with caution. A priori it is not possible to say whether and to what extent the mixing of benefits biases the outcomes. The receipt of social welfare benefits, both contributory and non-contributory may affect the (re-)allocation of labor in the household. Receipt of social insurance type benefits, which replace income in case of old age, sickness or disability, is expected to result in withdrawal of the beneficiary from the labor market, leading to a negative effect on labor supply. Non-contributory social welfare benefits represent additional household income and may also result in negative labor supply effects. Note that benefit receipt is recorded at household level, which means that all individuals living in a recipient household are considered as beneficiaries. Although labor supply is essentially an individual decision, it also depends on the household situation. Furthermore, the empirical analysis focuses on able-bodied adults of working age, which are not full-time students. This excludes old-age pensioners and disabled individuals. Therefore, we expect that the findings based on the HSES are robust with respect to the sign, but the magnitude of the effect may be over- or underestimated.

The administrative records on social welfare programs provide a snapshot of who are recipients of benefits as of June 30, 2014. For benefits that are provided less frequently (such as once a three years or once a five years), beneficiary status was recorded if they had benefited from the service since June 30, 2009. Consequently, the combined dataset contains information on whether or not the individual has received a specific program benefit between July 2009 and June 2014, at least once. It is not possible to identify neither when the individuals have received the same benefit multiple times, nor the frequency, nor the amount.

The information provided by the HSES 2012 is not sufficient to reproduce international standard methodologies when constructing labor market indicators. Therefore, the construction of a single indicator for labor participation status that could distribute individuals into categories of employed, unemployed and inactive was not feasible. In addition, the question about the reason that the respondent did not work during the last 7 days does not provide categorical answers that are along the lines of internationally-agreed definitions.

Limited data comparability over different sources of data. Questions and response categories for common information between the 2012 HSES and the SW/PMT data are not standard, therefore, does not allow reliable comparisons. A first issue refers to social welfare benefits classification. In the 2012 HSES, the social welfare benefit categories cannot be directly linked to the classification of social welfare programs defined by the Ministry of Population Development and Social Welfare (MPDSP). As a consequence, the information provided by the HSES 2012 and the SW/PMT data are not directly comparable. Given that it is not possible to connect the social welfare income registered in the HSES to social welfare programs from the SW/PMT data, any impact assessment of specific programs becomes unfeasible. The second issue refers to the labor market information. Definitions for labor market participation status used in the HSES 2012 could not be completely reproduced for the SW/PMT data. *Currently active* is the only status that has the same definition for both datasets. The definition of *usually active* and *inactive* differs in the SW/PMT data because there is no information about whether one is available for work and actively seeking a job. For the same reason *employed* and *unemployed* individuals, as defined in the HSES 2012, could not be identified using the SW/PMT data.

Limited sample for key groups in the labor market. Internal migrants, who moved to Ulaanbaatar, are a key group to be considered in the analysis of labor market outcomes in Mongolia. Internationally-agreed

definitions classify migrants as those who are enumerated in a place different from their place of birth, or those whose place of last residence is different from the place of enumeration, or those who resided n years ago in a place different from their place of residence at the time of the census (UN, 1970). Although the migration section of the HSES 2012 provides most information which is needed to identify migrants, only two percent of the sampled households (270 households) meet the criteria of internal migrants (households that have moved to Ulaanbaatar since 2008). Given the small sample, the labor market outcomes for internal migrants have not been analyzed separately.

Limitations of Propensity Score Matching (PSM). PSM does not allow for a definitive indication of a program's effects. That will depend upon macroeconomic scenario, labor market context, cohort effects, whether the program is voluntary or compulsory, the size of the program, etc. (Bryson, Dorsett and Purdon, 2002). PSM greatest strength is estimating mean program effects for a population or sub-group, the average treatment on the treated. However, its use as an evaluation tool faces significant limitations. According to Bryson, Dorsett and Purdon (2002), there are three questions which PSM is not able to address, but which may be of fundamental to policy makers. First, PSM does not allow for reliable assumptions to be made about the distribution of impacts (Heckman, Smith and Clements, 1997). Therefore, it cannot answer questions regarding the distributional effects of the program, such as the percentage of program participants who benefit. Second, it does not estimate the impact of the program beyond the eligible group. These effects may occur when it is verified that program participants are benefited at the expense of other deprived groups not targeted by the program. Thirdly, PSM cannot estimate the mean impact of the program on those whose participation status changes due to a change in policy.

1.2 Structure of the report

The report is structured as follows: Section 2 provides the country context in terms of economic and demographic developments and the characteristics of the Mongolian labor market. The empirical analysis is presented in Section 3. It starts with the presentation of descriptive statistics comparing different groups of the population with respect to their labor market status, employment and reason for inactivity. Using the SW/PMT data, labor market outcomes of social welfare beneficiaries and non-beneficiaries are compared. Finally, the analysis uses a quasi-experimental design to assess the impact of social welfare benefits on labor market outcomes. In Section 4 the existing labor market policies in Mongolia are mapped and their challenges discussed. Finally, Section 5 concludes and recommends a set of policy measures to further improve the labor market outcomes of poor and vulnerable groups.

2. CONTEXT AND CHARACTERISTICS OF THE MONGOLIAN LABOR MARKET

2.1 Economic and demographic context

The collapse of the Soviet bloc set off a period of profound political and socio-economic change in Mongolia. Until 1989, the country had known a centrally planned system monopolized by the Mongolian People's Revolutionary Party (MPRP), which after constitutional reform was replaced by a multi-party system with a freely elected parliament. Apart from the political instability that followed, the transition triggered an economic crisis, which went hand in hand with increasing unemployment. Simultaneously, as a result of the withdrawal of financial support of the Soviet bloc, government spending cuts were inevitable. Surging unemployment in combination with considerable decline of social spending resulted in increasing poverty and inequality (Asian Development Bank, 2014; Hodges, Dashorj, Jong, Dufay, Budragchaa, & Mungun, 2007).

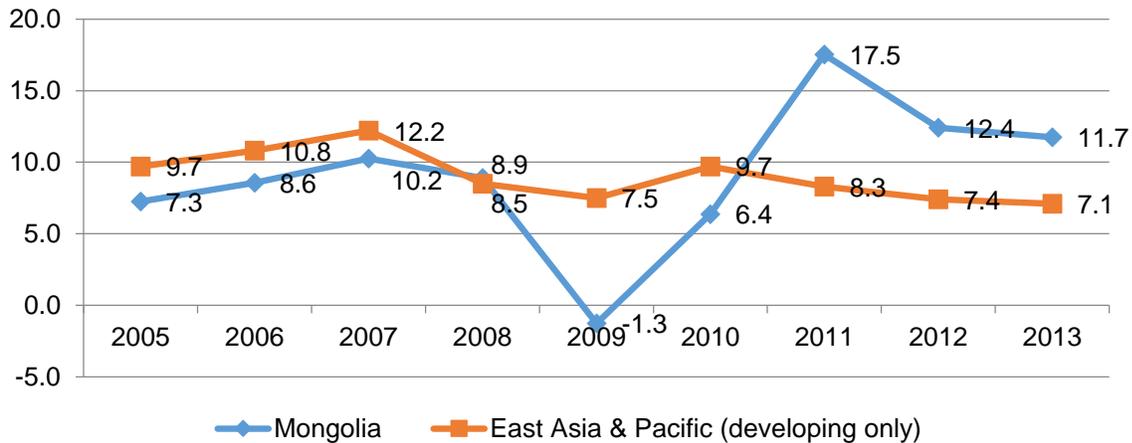
In the mid-nineties the Mongolian economy gradually started to recover. In spite of repeated economic setbacks due to recurring dzuds⁶ as well as the financial and economic crises, Mongolia has currently reached the status of middle income country. It is one of the fastest growing economies in the world, with a GDP that increased from USD 1,632 to USD 4,056 per capita between 2007 and 2013 (World Bank, 2014). However, it is argued that economic growth is not sustainable due to the country's heavy dependency on the exploitation of natural resources (Asian Development Bank, n.d.; International Monetary Fund, 2013). Ninety percent of all exports are in minerals and 90 percent of these have China as destination (IMF, 2015a). In the first half of 2015 economic growth slowed down considerably and is projected to reach only 2.3 percent over the entire year. For 2016, the prospects are even weaker with economic growth expected to reach only 0.8 percent (World Bank, 2015). The sharp decline of the economy is due declines in FDI and coal exports. The situation is further compounded by the slowdown of China's economy, Mongolia's most important export country (IMF 2015a; World Bank, 2015).

Mongolia's primary pillars of economic growth are its mining industry and livestock sector, facilitating its role as an important exporter of coal, copper and gold and the second largest exporter of Kashmir in the world (International Monetary Fund, 2014). Consequently, export revenues have become the backbone of the Mongolian economy: in 2013, exports of goods and services amounted to 47 percent of GDP. In addition to the effects of Dutch disease⁷, its export-dependency makes the country vulnerable to global price fluctuations, which is reflected in Figure 1. While GDP growth reached a level of 17.5 percent in 2011 (far above the average of other developing countries in the East-Asia and Pacific region), Mongolia was significantly harder hit by the global economic and financial crises when GDP growth reached a low of -1.3 percent in 2009.

6 Dzuds occur when extreme winter conditions – particularly heavy snow cover – prevent livestock from accessing pasture or from receiving adequate hay and fodder.

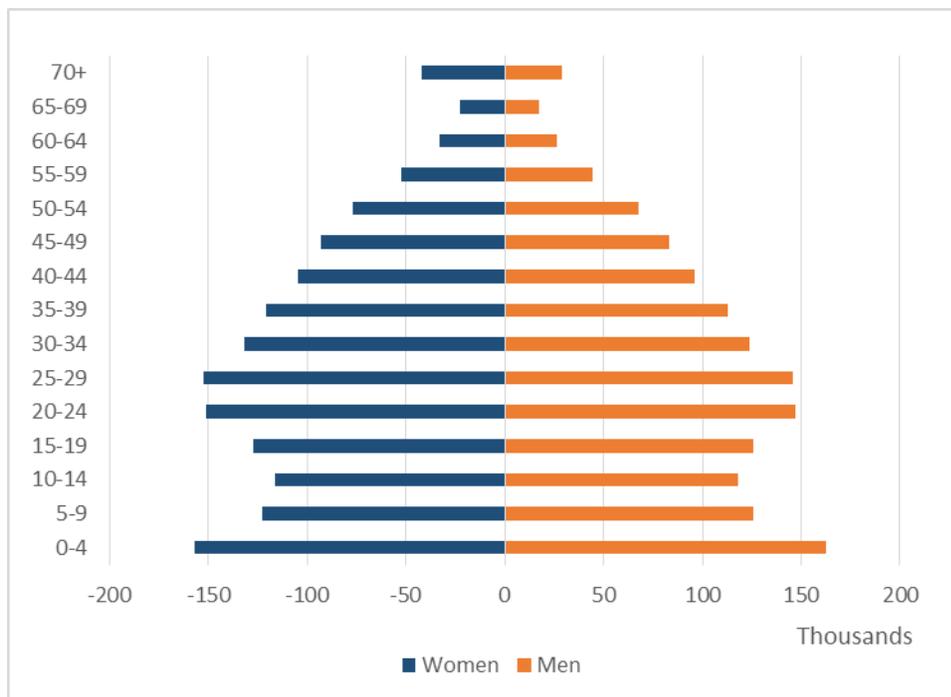
7 "...changes in the structure of production that are predicted to occur in the wake of a favorable shock, such as discovery of a large natural resource. [...] Such structural changes are expected to include, in particular, a contraction or stagnation of other tradable sectors of the economy; and to be accompanied by an appreciation of the country's real exchange rate" (Brahmbhatt, Canuto, & Vostroknutova, 2010).

Figure 1. Real GDP growth in Mongolia and the East Asia and Pacific region, 2005-2013



Source: World Bank national accounts data, and OECD National Accounts data files. Notes: Annual percentage growth rate of GDP at market prices based on constant MNT. Aggregates are based on constant 2005 U.S. dollars.

Figure 2. Population pyramid, end 2013



Source: based on data from NSO (www.1212.mn)

At the end of 2014, Mongolia had a total population of 2,995,949, which was an increase of 2.2 percent compared to a year before (NSO 2014). Based on data for the end of 2013, 27 percent is between 0 and 14 years old and only 5 percent is older than 60, with the remaining 68 percent accounting for the population in working age (Figure 2)⁸ According to demographic theory, the period in which the country finds itself at

⁸ Own calculation based on data from NSO (www.1212.mn), retrieved on 27 January 2015.

this very moment – during which the number of children is declining due to a drop in fertility, but the elderly population is still a small proportion of the total – opens up a so-called “demographic window of opportunity” that allows for accumulation of investment and human capital and as such has the potential to contribute to economic growth (Neupert, et al., n.d.). A precondition for optimally making use of this advantageous demographic structure is that labor market conditions are favorable, i.e. that the full potential of the labor force is used, that labor supply matches demand and that employment is productive.

Table 1. Poverty rates in 2012, different groups of the population

Subpopulation	Poverty indices		
	Poverty rate	Gap	Severity
Total population	27%	7%	0.027
Location			
Capital	20%	5%	0.020
Other urban	30%	8%	0.033
Rural	35%	9%	0.032
Region			
West	32%	8%	0.026
Highlands	39%	10%	0.038
Central	28%	7%	0.027
East	33%	10%	0.040
Ulaanbaatar	20%	5%	0.020
N. of people per household			
1 to 2 members	8%	1%	0.005
3 to 4 members	20%	4%	0.014
5 to 6 members	36%	10%	0.037
7 or more member:	60%	19%	0.081
N. of children per household			
no children	12%	2%	0.008
1 children	21%	5%	0.015
2 children	33%	8%	0.030
3 or more children	56%	18%	0.075

Source: Estimates based on HSES 2012.

In spite of Mongolia’s favorable economic and demographic conditions in 2012 when the data was collected, still over a quarter of its population is living in poverty⁹. Table 1 shows that both the poverty headcount and poverty gap are highest in rural areas (35 percent) and lowest in the capital city (20 percent), which is likely to be closely linked to the quantity and quality of employment opportunities available in either location. However, inequality among the poor is highest in urban areas other than the capital. When stratifying the country’s population by region, individuals in the highlands are most likely to be poor and their average distance to the poverty line is largest. Poverty severity is highest in the east of the country. As

9 Based on the official national poverty line: MNT 8,000 per person per month for urban households and MNT. 6,900 per person per month for rural households.

expected, family size and the number of children are important determinants of poverty: the larger a household is, the more likely its members are poor. Likewise, the more children a household has, the more likely it is to be poor. While 60 percent of households with more than seven household members are poor, 56 percent of households with three or more children are living in poverty. The average poverty gap and poverty severity similarly increase with household size and number of children. The level of education of the household head is negatively correlated with the risk of living in poverty. The higher the attained education of the head, the lower the poverty rate. With respect to the labor market status, individuals living in households where the head has only temporary or seasonal employment have an increased poverty risk compared to those that are currently employed or even inactive. Similarly, having an unemployed household head increases the poverty risk substantially (Table A 1 in Annex A).

Mongolia’s Human Development Index (HDI) has been on the rise over the past decades. Its HDI increased from a value of 0.580 in 2000 to 0.698 in 2013, moving to the 110th place out of 187 countries. Although all components of the HDI contributed to this development, the country’s fast growth of Gross National Income (GNI) per capita seems to have been an important contributor to this development, increasing from 4,014 to 8,466 USD (PPP, 2011 prices). Within the same period, life expectancy at birth increased from 62.9 to 67.5, expected years of schooling from 9.4 to 15.0 and mean years of schooling from 8.1 to 8.3 (UNDP, 2014).

Table 2. Basic labor market statistics, 2013

Indicator	Total	Male	Female
Population aged 15 and over	1,937,120	920,806	1,016,314
Economically active population	1,198,333	626,610	571,723
Economically inactive population	738,787	294,196	444,591
Labor force participation rate (percentage)	61.9	68.1	56.3
Employment rate (percentage)	92.1	92.4	91.7
Unemployment rate (percentage)	7.9	7.6	8.3

Source: NSO (www.1212.mn).

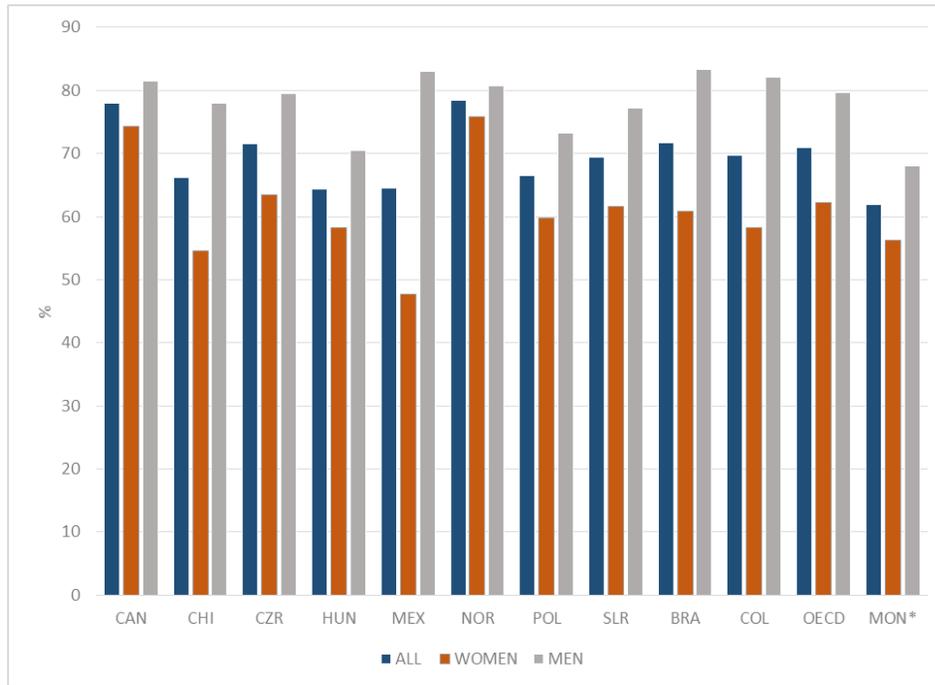
2.2 Characteristics of the labor market

The Mongolian labor market and the related challenges differ from other countries in the region or countries at a similar development level. Mongolia is very sparsely populated and a subject to harsh climate with extreme differences in seasonal temperatures. These contextual factors influence the nature of employment, which is highly seasonal in many sectors, and challenge the provision of labor market services throughout the country.

Overall labor force participation of adults aged 15 and higher was 62 percent in 2013 according to data from the NSO (see Table 2). This is lower than the average for the OECD countries, but similar to countries such as Hungary or Mexico (Figure 3). Colombia, which has a GDP per capita similar to Mongolia (IMF 2015), has a slightly higher labor force participation rate, but the difference is mainly driven by a significantly higher participation of men. The employment rate (as a percentage of the labor force) amounted to 92.1 percent in 2013, which upon stratification reveals a slight difference between male and female employment rates. In 2013, 7.9 percent of the population in working age was unemployed; a number that was slightly higher for women than for men. The unemployment rate was 0.7 percentage points higher for females in comparison to males. Despite the economic slowdown in recent years and particularly during the first six

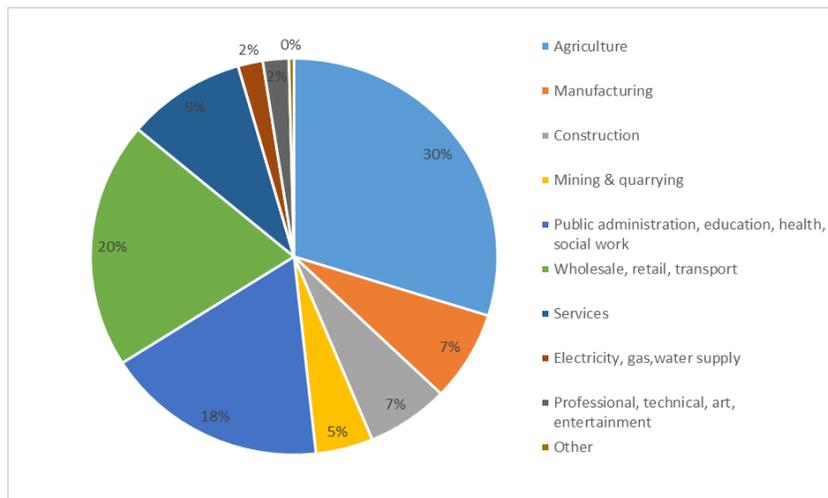
months of 2015, unemployment rates remained largely unchanged or even decreased as in the third quarter of 2015 (NOS, www.1212.mns).). Similarly, labor force participation rates remained at 62 percent (NOS, www.1212.mn). In addition, the table shows that, although the female population is larger than the male population in working age, both the proportion and absolute number of economically active males (626,610; 68.1 percent) is considerably larger than the proportion and absolute number of economically active females (571,723; 56.3 percent).

Figure 3. Labor Force Participation in selected countries, 15-64, 2012



Source: OECD.Stat (retrieved 22 Jan 2015); for Mongolia: NSO (www.1212.mn). *Mongolia: 15+, 2013

Figure 4. Employment by sector, 2013



Source: NSO (www.1212.mn). Note: (i) *Services* include accommodation and food services, finance and insurance, information and communication, administrative and support service activities, other services; (ii) *Other* includes foreign organizations, household employers, real estate activities.

Figure 4 shows that in 2013 the agricultural sector employed 30 percent of working Mongolians. In addition, the figure shows that, in spite of constituting a significant share of GDP, the mining sector is of relatively low employment intensity. In 2013, only 5 percent of working Mongolians were employed in mining and quarrying, although the mining sector alone generated 21.4 percent of GDP (World Bank, 2014). However, this picture is likely to change in the future, due to an increased demand for technically skilled workers to be employed in the expanding mining, heavy industry and construction sectors and a contracting agricultural sector.

According to the ADB (2014), the main labor market issues in Mongolia are skills shortages, gender inequality and child labor. Another factor contributing to unemployment and inactivity is the mismatch between demand and supply of labor. In 2014, Mongolia had 70,000 vacancies, but not all could be filled. Employers in certain sectors resort to foreign workers (China, North Korea, Russia), even though they have to pay a substantial amount of money into the Employment Promotion Fund for not hiring local labor. Following the ILO (2013), certain labor market groups are comparably more vulnerable than others, including rural-to-urban migrants, youth and children and women.

Internal migrants

Throughout the past decades, Mongolia has seen a total of three internal migration waves deviating from the traditional nomad-driven pattern of migration. The first of these waves occurred during the 60's, 70's and 80's as a product of collectivization and initial industrialization, triggering large numbers of individuals to move towards emerging towns and cities. During the second wave, occurring in the early 90's, many individuals were pushed from the cities back into rural areas as a result of economic restructuring going hand in hand with high unemployment rates. The share of herders in the population grew substantially during that period. When the consequences of climate change caused severe dzuds¹⁰ to kill millions of livestock in 1999-2000, a third wave of internal migration was set in motion, once again pushing inhabitants from rural areas and soum centers towards the urban centers of the country (Shi, 2011). Based on a recent survey among residents of Ulaanbaatar¹¹, Figure 5 shows that internal migration to the capital started to increase after 1990. It reached a peak in 2000 and again after 2010.

While during communist times internal migration was regulated by the state according to working opportunities, the rights to freedom of movement within the country and the freedom of choosing one's place to live are currently enshrined in the Mongolian constitution (Alгаа, 2007). Apart from being safe from the consequences of climate change, urban areas – i.e. aimag centers and the capital Ulaanbaatar – offer a number of other benefits compared to rural areas. Not only does living in these areas come with the advantage of being close to schools, markets and health care facilities; the fact that there are more jobs in urban areas that are of comparably higher productivity and remuneration constitutes a fundamental factor that persuades large numbers of rural dwellers to leave their rural lives behind.

As can be seen in Figure 6, for most migrants the end-destination is Ulaanbaatar, with other destinations – such as Darkhan-uul, Dornogobi and South-Gobi – merely functioning as stepping stones towards the capital. Between 2000 and 2007, the population in Ulaanbaatar increased by 31 percent and currently is home to 1,132 million people or 40 percent of Mongolia's total population (World Bank, n.d.). While men primarily

¹⁰ A dzud is „a multiple natural disaster consisting of a summer drought resulting in inadequate pasture and production of hay, followed by very heavy winter snow, winds and lower-than-normal temperatures.”

¹¹ Urban Inequality and Service Delivery Survey Ulaanbaatar 2014 (World Bank)

migrate to cities for economic reasons, such as the search for employment opportunities, women are more often motivated by educational reasons, i.e. wanting to study (Byambaa, n.d.; Tsogtsaikhan, 2008). Some migrants move towards mining areas, where employment – often of hazardous nature – is largely found in the informal sector where control and oversight are minimal (International Organization for Migration, 2010).

Figure 5. Internal migration to Ulaanbaatar

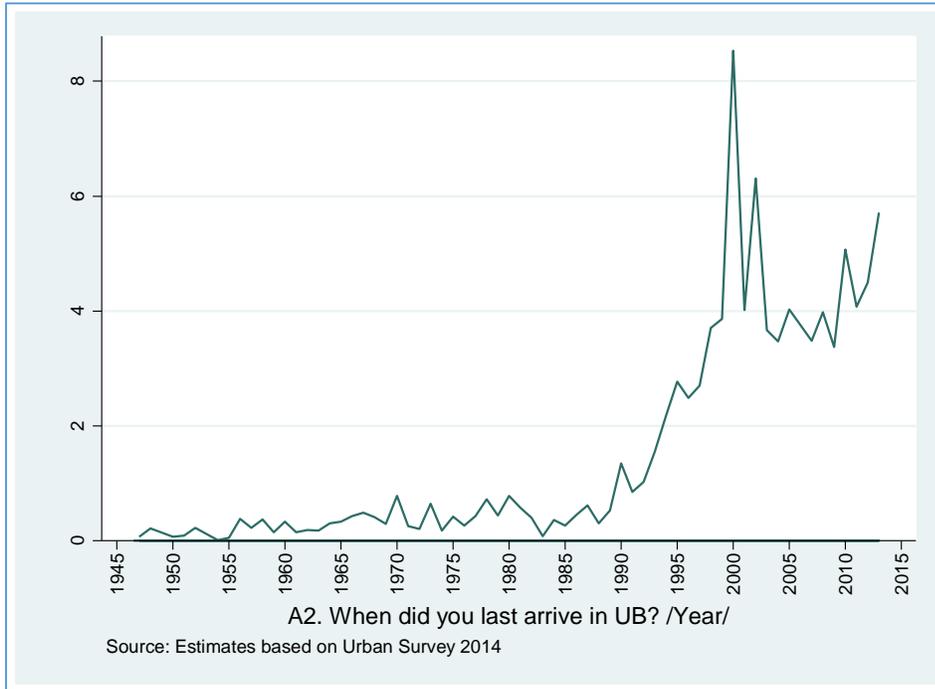
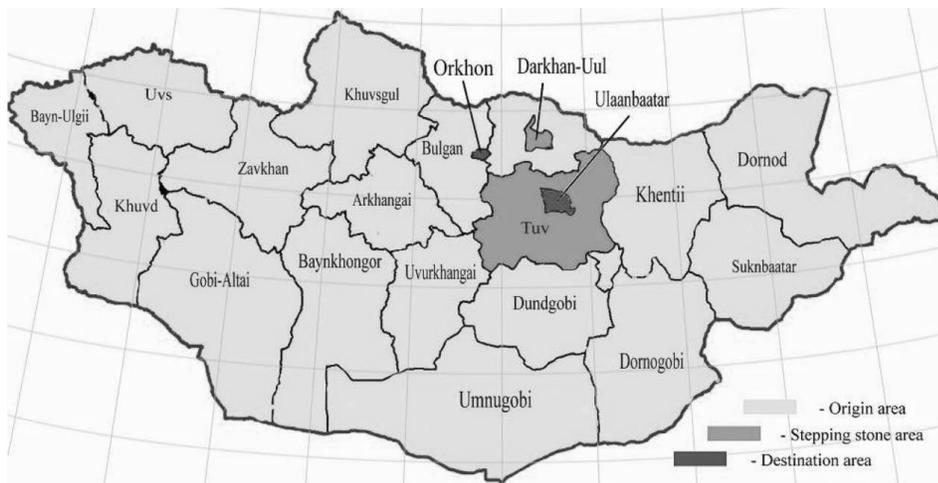


Figure 6. Pattern of internal migration



Source: Byambaa, n.d.

Migrants moving from rural areas or soum centers¹² towards cities often lack adequate education and skills to find sustainable, full-time and reasonably paid jobs in the formal sector, resulting in the fact that many of them are unemployed, underemployed or in vulnerable employment (International Labour Organization, 2006). In addition, many of them do not - or are not able to register in their respective districts, partly due to documentation problems, complex procedures or high costs. As a result, a large portion of migrants does not have access to labor market services that are offered by the government, such as occupational and vocational orientation, counseling and information services; job mediation services and vocational training and retraining due to the requirement of registration at the official (registered) place of residence. In the view of their comparably low skills and unfamiliarity with urban labor markets, they are very much in need of such services (International Organization for Migration, 2011).

In the absence of long-term integration policies for rural-urban migrants who are planning to stay in urban areas, many of them remain stuck in the Ger districts at the outskirts of urban areas, which as a consequence of insufficient space have expanded to increasingly unsafe locations, such as steep hillsides. Ulaanbaatar can currently be divided into two areas: “a built up area of walk up apartments (legacy of the Socialist era) and official enterprises, and a large temporary city, including areas where people live in tents, surrounding the formal built up area” (World Bank - Urbanization Dynamics and Policy Frameworks in Developing East Asia East Asia Infrastructure Department, n.d.; International Organization for Migration, 2010). Water and sanitation facilities are limited and air pollution prominent: the World Health Organization (WHO) ranked Ulaanbaatar among the five cities with the worst air quality in the world (Guttikunda, Lodoysamba, Blugansaikhan, & Dashdondog, 2013).

Children and youth

Calculations by the US Department of Labor’s Bureau of International Labor Affairs based on 2011 Labor Force Survey data and the National Child Labor Survey reveal that 13.8 percent of children aged between 4 and 15 years old were employed. The majority of working children were employed in the informal sector, where there is little law enforcement and oversight. Child labor is significantly more prevalent amongst children in rural areas – especially young boys – who are prone to be engaged in animal husbandry and herding. As a result, young boys in rural areas are more likely to drop out of school than young girls (US Department of Labor's Bureau of International Labor Affairs , 2013; World Bank, 2009). A joint analysis by the ILO, UNICEF and the World Bank pointed out that among the most important determinants of child labor are age, sex, education of the household head, household income and place of residence. Older boys living in a poor, rural household with a lowly educated / illiterate household head are most prone to be engaged in child labor (World Bank, 2009; International Organization for Migration, 2010).

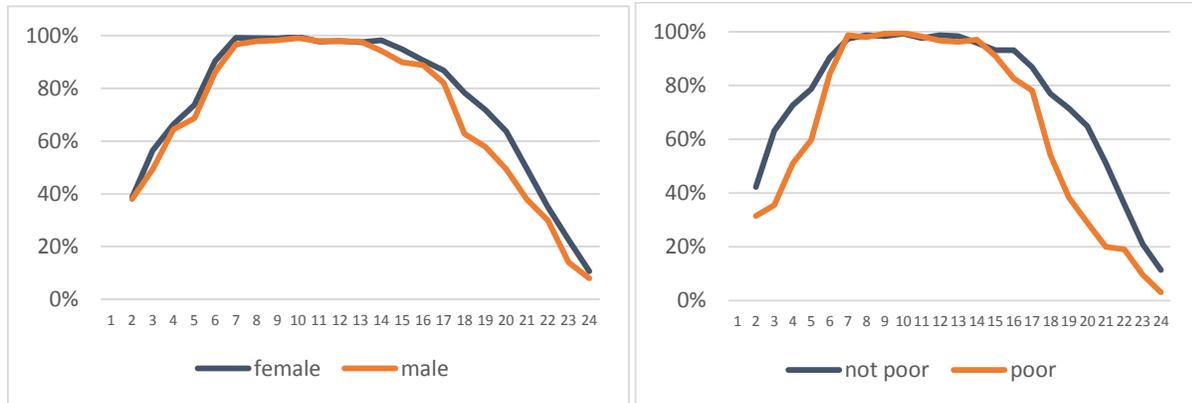
Child labor inevitably implies decreasing or entirely refraining from school attendance, which is likely to reduce future labor market chances. The relationship between involvement in child labor and future labor market chances is illustrated in Figure A 1 in Annex A. Figure 7 shows that school attendance drops steadily after grade 9, respectively after the age of 15.¹³ The minimum age for employment is set at 16, but children aged 15 are allowed to work with the permission of a parent or guardian. When comparing between boys and girls, as expected, boys’ school attendance decreases faster than it does for girls (left panel). A more pronounced difference can be observed when comparing poor and non-poor children and young adults.

¹² Mongolia consists of 329 soums or districts and 21 aimags or provinces. In official Mongolian statistics, soum centers are classified as rural areas, whereas aimag centers are classified as urban areas.

¹³ Schooling is mandatory from grade 1-9 (age 6-15).

After the compulsory schooling, school attendance of poor children drops significantly faster than the school attendance of non-poor children. By the age of 20, close to 30 percent of young adults from poor households are still in school, while this number amounts to more than 60 per cent for the non-poor.

Figure 7. School attendance rates, by age, 2012



Source: Estimates based on HSES 2012.

Simultaneously, youth in working age (15+) is plagued by high levels of unemployment and inactivity. The ILO estimates unemployment of economically active young persons between 15 and 24 years old to have reached a level of 11 percent in 2011 (International Labour Organization, 2013). When young persons that are not actively searching for work are included in the calculations, this number rises to 16 percent. With respect to job quality, the rural youth is worse off. The majority of young workers are employed in low-productivity, low or non-paid jobs in the informal sector, such as animal husbandry or informal family jobs. Only 6 percent holds jobs in the formal economy (International Labour Organization, 2013). Urban youth – especially young persons living in soum centers – find it particularly difficult to access the labor market: here, unemployment of persons between 15 and 24 reached a level of 16 percent in 2011. Besides the fact that youth unemployment is high, unemployment spells among young persons are on average longer than those among persons of higher age (International Labour Organization, 2013).

An important cause of youth unemployment arises from mismatches between the skills and knowledge many university graduates offer and the employers’ demand for technical and vocational skills. This is illustrated by the fact that higher educated youth is more likely to become unemployed and many of them decide to leave the country and work in higher productivity jobs abroad: a phenomenon known as “brain-drain” (UNDP, 2007; International Labour Organization, 2013).

Migration does not have negative effects on education or labor market outcomes of migrant children. Findings from a World Bank study indicate that (1) migrant youth seem to be more likely to attend school and less likely to be working, and (2) migration seems to lead to an improvement in their education (most probably due to an increased availability of educational facilities in destination areas) and labor market opportunities. However, children moving from rural to urban areas were found to be more likely to work while attending school (World Bank, 2009).

Women

Although women are more likely to be enrolled in education than men and have similar educational results, their labor market outcomes in terms of labor force participation and job quality are comparably poorer.

While the extent of the former disparity in itself is not alarming compared to other countries (the gap between male and female labor force participation amounts to 10 percentage points, similar to the average gap within the EU-27), the job quality among women is worrisome. A large share of women - particularly in rural areas - is employed in non-remunerated jobs such as unpaid family work.

In addition, on average women earn approximately 10 percent less than men; a gap that becomes larger among younger age groups and that statistical analysis proofed to be not solely explicable by differences in endowments. Women are also less likely to be self-employed or to reach higher-level managerial positions (Khan et al., n.d.).

However, estimates based on the Labor Force Survey show that in the first quarter of 2014, labor force participation and employment increased more rapidly for females than for males. Whether this will be the start of more positive developments for the female labor force can only be confirmed if the trend continues over a longer period (World Bank, 2014).

Informal workers

According to the ILO, individuals are considered to be employed informally “if their employment relationship is, in law or in practice, not subject to labor legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severances of pay, paid annual or sick leave, etc.)” (17th ICLS). This definition includes the self-employed or own-account workers, unpaid family workers and employers and employees working in establishments with less than five persons employed.

Informal employment is widespread in Mongolia, particularly among herders, unpaid family workers and workers employed in the mining sector. Estimates of the informal sector vary across different studies depending on the definition used. Shatz et al. (2015) estimate that the informal sector accounts for 57.4 percent of employment if animal husbandry is also considered as informal activity. They further conclude that informal employment has been decreasing over the last seven years. If informal employment is defined based on whether employees contribute to the mandatory social insurance system, then 40 percent of the economically active population has been engaged in the informal sector in 2013, down from 53 percent in 2010 (UN/ILO/Government of Mongolia, 2015). The contribution of the informal sector to the overall economy was estimated to be 13.7 percent of GDP in 2010 (Dandar & Chojiljav, n.d.). Based on recent Labor Force Survey data, the World Bank (2014) estimates that from the first quarter of 2013 to the first quarter of 2014, the number of paid employees dropped significantly, while the share of self-employed workers increased. Hence, formal sector employment is experiencing a decreasing trend lately.

Wages and salaries

The average monthly wage in the first quarter of 2013 was MNT 692,300 (USD 381), a nominal increase of 39.8 percent compared to the first quarter in 2012. This also reflects a real improvement of wages given a consumer price index of 14.2% in 2012 (World Bank, 2014). The figure below shows that earnings were highest in the financial and insurance business, foreign organizations and the mining sector. Average monthly wages were lowest in agriculture, forestry, fishing and hunting, where approximately one third of the employed have been working in 2013. Table 3 shows that in the majority of economic sectors wages were higher in larger enterprises (100+ employees).

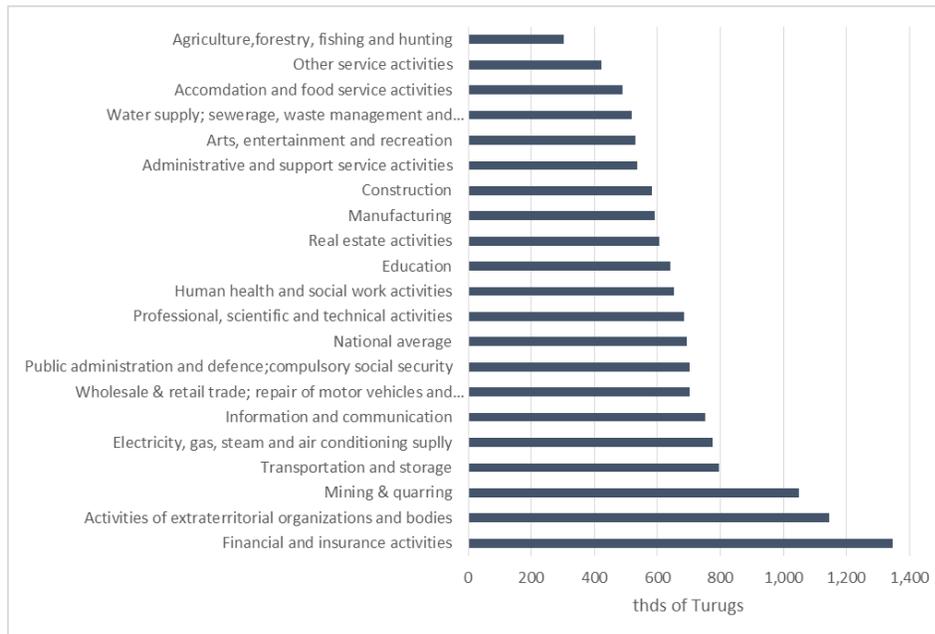
Apart from the economic sector of employment, studies on earnings of Mongolian males and females reveals that education higher than secondary school level has a significant positive impact on wage for both

men and women, which further increases with additional educational attainment (Batchuluun & Dalkhjav, 2014; Shatz et al., 2015). In the case of men, Batchuluun & Dalkhjav find that for each additional year of educational attainment, wages increase by approximately 10 percent. The effect for women is similar.

Differentiating the impact of education on earnings by region reveals that for males, keeping all other factors constant, the impact is higher in urban areas than in rural areas. For females the impact of education is similar in urban and rural regions. In addition to education, experience is an important determinant of earnings (Batchuluun & Dalkhjav, 2014).

In summary, the Mongolian labor market faces a number of problems. The main issues are skills shortages, low productivity and unprotected employment, and gender inequality. Certain groups are more vulnerable than others, including rural-to-urban migrants, youth, children and women. Employers seem to discriminate against particular age groups, such as those older than 40. They have difficulties finding work, especially if they have never updated their skills set to match the needs of the current labor market. The youth is similarly disadvantaged. Employers prefer hiring employees with work experience and certain life skills in order to reduce job turnover.

Figure 8. Average monthly wages per sector, first quarter 2013



Source: NSO (www.1212.mn).

Table 3. Average monthly salaries per sector and size of enterprise, 2013 (thds MNT)

Sector	More than 100 employees	Less than 100 employees	as % of large
National average	813.5	627.2	77%
Construction	813.7	569.2	70%
Education	682.5	618.1	91%

Manufacturing	633.1	509.4	80%
Wholesale & retail trade; repair of vehicles	761.2	691.9	91%
Accommodation and food service activities	634.4	508.8	80%
Information and communication	882.6	637.8	72%
Professional, scientific and technical activities	749.9	719.4	96%
Financial and insurance activities	1,239.7	927.3	75%
Public administration and defense	724.5	688.2	95%
Transportation and storage	843.5	633.9	75%
Administrative and support service activities	611	550.6	90%
Arts, entertainment and recreation	571.9	538	94%
Water supply; sewerage, waste management	578.9	454.4	78%
Mining & quarrying	1,443.8	1,022.8	71%
Other service activities	307.5	537.9	175%
Real estate activities	462.7	713.6	154%
Agriculture, forestry, fishing and hunting	360.4	302.6	84%
Human health and social work activities	716.4	627.7	88%
Electricity, gas, steam and air conditioning supply	945.2	461.8	49%
Foreign organizations	na	1,139.1	Na

Source: NSO (www.1212.mn)

3. LABOR MARKET OUTCOMES

The empirical analysis in this section aims at identifying factors that may explain individual labor market participation, work effort and wages. Moreover, the analysis will also assess to what extent the receipt of social welfare benefits affects various labor market outcomes. First, different population groups are compared with respect to their labor market status using descriptive statistics derived from the HSES 2012. For a detailed analysis of the link between social welfare programs and labor market position, descriptive statistics are derived from the SW/PMT data. Secondly, the HSES 2012 data are analyzed in more detail using different econometric models for a better understanding of the determinants of labor market outcomes. The analysis first considers all able-bodied working age adults (excluding students), and secondly only the bottom half of the welfare distribution in order to assess whether different factors play a role for adults living in poorer households.

3.1 Data and Methodology

Data

The analysis in this section uses mainly data from the 2012 Mongolian Household Socio-Economic Survey (HSES) and the combination of the 2013 Proxy Means Test data with administrative records from social welfare programs (SW/PMT). Data from the Urban Inequality and Service Delivery Survey Ulaanbaatar 2014 (Urban Survey) are used to capture the situation of internal migrants living in Ulaanbaatar.

The HSES is a cross-sectional household survey conducted annually by the National Statics Office (NSO). Data is collected over a 12-month period (rolling sample) providing detailed information about the demographic composition of the household, incomes, expenditures, housing, assets and labor for almost 13,000 households. The survey is nationally representative and covers the whole country, stratified by Ulaanbaatar, aimag centers, soum centers and the countryside (NSO, 2014).

The SW/PMT data contains information about 2,636,370 individuals. The administrative records on social welfare programs provide a snapshot of who are recipients of benefits as of June 30, 2014. For benefits that are provided less frequently (such as once a three years or once a five years), beneficiary status was recorded if they had benefited from the service since June 30, 2009. Although about 10 percent of individual administrative records are not linked to the PMT data, we do not expect this to influence the analysis (World Bank, 2015).

The Urban Survey was implemented in 2014 with funding and technical assistance from the World Bank. Its main objective was to collect data on the availability and quality of public services in Ulaanbaatar. The sample includes 3,000 households and the survey is representative for the city. For the purpose of the present analysis, the available information on the labor market status of adults was used in order to understand differences between migrants and residents that have always lived in Ulaanbaatar.

The labor market analysis in the subsequent sections uses different labor market indicators:

Labor Market Status	Definition	HSES	SW/PMT
Active LM participation	Individuals that are currently active or usually active	YES	NO
Currently active	Employed or unemployed individuals	YES	YES
Employed	Individuals (15+) who worked or had a job attachment during the week under survey	YES	NO
Unemployed	Individuals who did not work or had no job attachment, but available for work and actively seeking it during the week under survey	YES	NO
Usually active	Individuals who worked or had a job attachment at some point during the past 12 months.	YES	YES
Inactive	Individuals who did not work or had a job attachment during the year under survey and were not actively searching for a job.	YES	YES

The analysis focuses on the group of people that can be expected to be economically active. Therefore, able-bodied working-age adults¹⁴, excluding full time students¹⁵, are used as reference group, unless indicated otherwise. This group represents 50.9 percent of the total population in Mongolia (Table 4).

Table 4. Share of the reference group in total population: Mongolia, 2012

Population	Share of total population in %
Adult	63.6
Able-bodied adult	61.7
Able-bodied adult, not full time student	50.9

Source: Estimates based on HSES 2012.

Methodology

In order to better understand the determinants of labor market outcomes, the study applies an econometric framework that allows identifying factors that may explain individual labor market participation, work effort and wages. Moreover, the analysis will also assess to what extent the receipt of social welfare benefits affects various labor market outcomes.

In order to investigate the determinants of labor market participation the first step is to estimate a simple binary model (*probit*) to test whether able-bodied adults living in households receiving social welfare benefits are more or less likely to actively participate in the labor market. In addition, separate models are estimated for men and women, assuming that their labor market decisions differ. Furthermore, a multinomial logit model is used to identify factors that may explain different labor market statuses, distinguishing between adults that are currently active, those usually active and adults that are inactive. In both models, labor market participation is assumed to be a function of individual characteristics; other

¹⁴ Includes all persons from the age of 15 up to retirement, which is 55 years for women and 60 years for men.

¹⁵ Individuals aged 24 years old or less that reported to be *attending school* were excluded from the analysis given the importance of education for human capital development.

household income; household status for belonging to the bottom half of the welfare distribution; household composition; household living conditions; and household location.

Employed adults differ in terms of work effort, measured by the total hours worked per week. Therefore, in order to determine factors that influence the level of work effort, an *ordered probit model* was estimated for different categories of total hours worked per week (Low: 2-39 hours per week; Middle: 40-54 hours per week; and High: 55 hours or more per week). The level of total hours worked per week is assumed to be a function of wage per hour (ln); individual characteristics; other household income; household status for belonging to the bottom half of the welfare distribution; and household composition. Given that the dependent variable is observed only for those who work indicates a classic case of sample selection bias in the first model. With the aim of addressing this issue, two additional models are estimated: an *ordered probit model* only for the employed individuals in the sample; and a *Heckman ordered probit model*. The latter treats the unobserved selection factors as a problem of specification error or a problem of omitted variables, and corrects for bias in the estimation of the outcome equation by explicitly using information gained from the model of sample selection. In this case, the existing bias from the first model is corrected using information from the determinants of the probability of being employed.

Wage determinants are analyzed using three different models. Given that only employed adults report their wages, the empirical model needs to account for the potential selection bias. Therefore, in addition to the classic Ordinary Least Squared (OLS) regression model, two other models were estimated: *Heckman sample selection* and *Tobit*. Wages are assumed to be a function of individual characteristics; other household income; household status for belonging to the bottom half of the welfare distribution; household living standards; and household location. With the purpose of obtaining a more accurate measure for the financial returns of education, the models include four different levels of education (no education, complete secondary, vocational or associate and higher education) and compare it to complete primary or incomplete secondary education.

In order to test whether social welfare benefits have negative labor market effects, different econometric models are used. First, the determinants of social welfare receipt are estimated using a binary model at the household level. Secondly, given that binary models are limited in providing conclusions about the impact of social welfare benefit receipt on labor market participation, a quasi-experimental design is applied to compare labor market outcomes of individuals with and without social welfare benefits.

Social welfare receipt is assumed to be determined by individual characteristics; other household income; household status for belonging to the bottom half of the welfare distribution; household composition; household living conditions; and household location. For the quasi-experimental design, Propensity Score Matching is used to create a control group of non-recipients as similar as possible compared to recipients of social welfare benefits¹⁶. By comparing the labor market behavior of these two groups, we will be able to analyze whether or not social welfare benefits create work disincentives. The Propensity Score Matching

¹⁶ The variables used to match non-recipients to recipients of social welfare benefits were based on: individual characteristics (gender, age, marital status, household head status, education level (higher secondary school or more), interview during quarters 2 & 3); other income sources (HH is recipients of aid from relatives and/or friends, HH has at least one pensioner), HH living conditions (HH has electricity, HH has toilet, HH belongs to the bottom 50% of per capital consumption), HH composition (HH size, HH has at least one child below 6 years old and in infant school, HH has at least one child below 6 years old not in infant school, HH has at least one child in school age, HH has at least one elder, HH has at least one disabled member), and HH location (other urban areas and rural areas).

model is used to estimate the Average Treatment Effect (ATET) of the treated (i.e. the recipient of social welfare benefits) on labor market outcomes. The treatment group in this analysis comprises adult individuals (15-54 for women, and 15-59 for men), which are social welfare benefit recipients.

Propensity Score Matching

Propensity Score Matching is a quasi-experimental method which allows for the creation of an adequate counterfactual, isolating the effects resulting from the program intervention from other factors. The technique matches individuals from the participant group (i.e. social welfare recipients) with individuals from the nonparticipant group who share similar characteristics in order to ensure that the outcomes are compared with individuals that have similar probabilities of participating in the program. The average treatment effect of the program is given by the mean difference in outcomes between these two groups. The average treatment effect based on the Propensity Score Matching model can be estimated by Stata's program *teffects psmatch*.

The matching model is first applied to the HSES 2012 data. The Propensity Score Matching model is estimated for all able-bodied working age adults, excluding full time students. Separate models are also estimated for men and women, assuming that social welfare receipt might have different impacts according to one's gender. The dependent variables used to estimate the impact of social welfare receipt on labor market outcomes are active labor market status; wage worker; self-employed; hours worked per week; and wage per hour. Given that being a wage worker or self-employed, the hours worked per week and the wage per hour are measured only for people who are employed, the impact of receiving social welfare benefits on these outcomes will be estimated based on a reduced sample including only employed individuals. In all models, it is assumed that work decisions are a function of individual and household characteristics. The individual and household characteristics used to estimate the models based on the HSES 2012 described above and their summary statistics are presented in Table 5.

In order to calculate the impact of specific social welfare programs on labor market outcomes and verify the results based on the HSES 2012, an additional set of Propensity Score Matching models is estimated using the SW/PMT data. The treatment group comprises able-bodied adult individuals (15-54 for women, and 15-59 for men, not students), which are direct social welfare recipients. Separate models are estimated for men and women where appropriate, assuming that social welfare receipt might have different impacts according to one's gender. The same set of models is also estimated for the bottom 50% of the PMT score distribution.

The dependent variables used to estimate the impact of the selected social welfare programs on labor market outcomes identify those who are active (currently active or usually active), and those who are currently active. The variables used to match non-recipients to recipients of Social Welfare Allowance/Allowance for Mothers and Children were based on: individual characteristics (gender, age, household head status, education level (higher secondary school or more); other income sources (HH has at least one recipient of Social Welfare Pension, HH has at least one recipient of Assistance to the Elderly, HH has at least one recipient of Allowance for the Elderly with State Merits, and HH has at least one recipient of Assistance and Concessions for the Disabled), HH belongs to the bottom 50% (20%) of PMT score distribution), HH composition (HH size, HH has at least one child below 6 years old and in infant school, HH has at least one child below 6 years old not in infant school, HH has at least one child in school age, HH has at least one elder, HH has at least one disabled member), and HH location (not Ulaanbaatar). The individual

and household characteristics used to estimate the Propensity Score Matching model using the SW/PMT data and their summary statistics are presented in Table 6.

Table 5. Summary statistics for the variables used in the econometric models based on HSES 2012

Variable	Obs	Mean	Std. Dev.	Min	Max
Active	23097	0.82	0.38	0	1
Employed	23097	0.75	0.43	0	1
Wage per hour worked	18956	1055	1660	0	73269
Wage per hour worked (ln)	24247	3.11	3.60	0	11.20
Wage per hour worked (ln) sq	24247	22.64	27.22	0	125.48
Hours worked	17851	50.36	15.45	2	140
Male	24247	0.50	0.50	0	1
Age	24247	35.68	10.58	15	59
Age sq	24247	1385	782	225	3481
Married	24247	0.69	0.46	0	1
Household head	24247	0.41	0.49	0	1
Education level: higher secondary school or more	24247	0.67	0.47	0	1
Eduaction level: no education	23097	0.03	0.18	0	1
Education level: complete secondary	23097	0.34	0.47	0	1
Education level: vocational or associate	23097	0.12	0.32	0	1
Education leve: higher degree	23097	0.24	0.43	0	1
Interview during quarters 2 & 3	24247	0.52	0.50	0	1
HH is recipient of SW	24247	0.41	0.49	0	1
HH is recipient of aid from relatives and/or friends	24247	0.12	0.33	0	1
HH has at least one pensioner	24247	0.18	0.38	0	1
HH dwelling is ger type	24247	0.46	0.50	0	1
HH has electricity supply	24247	0.87	0.33	0	1
HH has centralized heating	24247	0.21	0.41	0	1
HH has centralized water supply and protected well	24247	0.54	0.50	0	1
HH has toilet	24247	0.88	0.32	0	1
HH belongs to the bottom 50% of per capita consumption distribution	24247	0.49	0.50	0	1
HH belongs to the bottom 20% of per capita consumption distribution	24247	0.18	0.39	0	1
HH size (ln)	24247	1.35	0.42	0	2.71
HH has at least one child below 6 years old in infant school	24247	0.27	0.44	0	1
HH has at least one child below 6 years old NOT in infant school	24247	0.28	0.45	0	1
HH has at least one child in school age	24247	0.46	0.50	0	1
HH has at least one elder	24247	0.14	0.34	0	1
HH has at least one disabled member	24247	0.06	0.24	0	1
Other urban areas	24247	0.27	0.44	0	1
Rural areas	24247	0.45	0.50	0	1

Source : Estimates based on HSES 2012.

Table 6. Summary statistics for the variables used in the econometric models based on the SW/PMT

Variable	Obs	Mean	Std. Dev.	Min	Max
Currently active + Usually active	1159833	0.73	0.44	0	1
Currently active	1159833	0.67	0.47	0	1
Individual is recipient of Social Welfare allowance	1162967	0.02	0.15	0	1
HH has at least one recipient of Social Welfare allowance	1162967	0.07	0.25	0	1
Individual is recipient of Allowance for Mothers and Children	1162967	0.11	0.32	0	1
HH has at least one recipient of Allowance for Mothers and Children	1162967	0.34	0.47	0	1
Male	1162967	0.50	0.50	0	1
Age	1162967	36	10	15	59
Age sq	1162967	1385	760	225	3481
Household head	1162967	0.43	0.50	0	1
Education level: higher secondary school or more	1162967	0.73	0.44	0	1
HH has at least one recipient of Social Welfare Pension	1162967	0.06	0.23	0	1
HH has at least one recipient of Assistance to the Elderly	1162967	0.06	0.23	0	1
HH has at least one recipient of Allowance for the Elderly with State Merits	1162967	0.00	0.04	0	1
HH has at least one recipient of Assistance and Concessions for the Disabled	1162967	0.04	0.19	0	1
HH belongs to the bottom 50% of PMT score distribution	1162967	0.51	0.50	0	1
HH belongs to the bottom 20% of of PMT score distribution	1162967	0.22	0.41	0	1
HH size (ln)	1162674	1.35	0.42	0	3
HH has at least one child below 6 years old in infant school	1162967	0.20	0.40	0	1
HH has at least one child below 6 years old NOT in infant school	1162967	0.28	0.45	0	1
HH has at least one child in school age	1162967	0.45	0.50	0	1
HH has at least one elder	1162967	0.14	0.34	0	1
HH has at least one disabled member	1162967	0.10	0.30	0	1
Not Ulaanbaatar	1162967	0.42	0.49	0	1

Source : Estimates based on PMT.

3.2 Labor market participation and type of employment

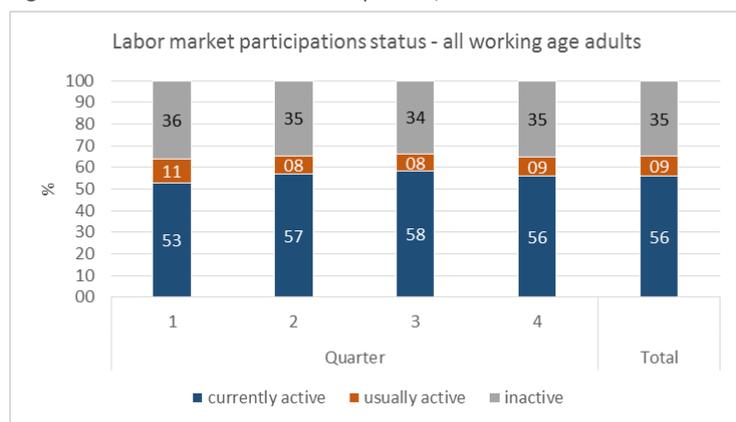
According to the HSES 2012, the labor market participation in Mongolia is relatively low at 65 percent of working-age adults, which includes all persons from the age of 15 up to retirement (55 years for women, 60 years for men), and varies slightly across seasons (Figure 9).¹⁷ The weak seasonal pattern is also reflected in the unemployment rate, which drops from 11 percent in the first quarter (January-March) to 7 percent in the third quarter (July-September) and then increases again in the colder months. Unemployment rates differ across population groups. Men have a slightly higher risk of being unemployment compared to

¹⁷ These numbers deviate from the NSO data presented in Table 2 because we consider working age adults.

women (10 versus 7 percent). Unemployment rates are higher for the economically active younger generation (11 percent for the age group 15-35) and for individuals living in poor households (14 percent). Based on location, unemployment rates are highest in the West and East of Mongolia (10 percent) and in urban areas outside Ulaanbaatar (12 percent) (Table D 2 in Annex D).

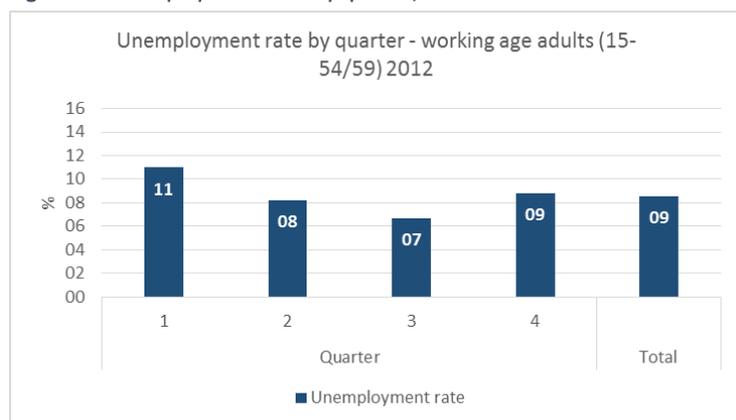
Working as a paid employee is the most common form of employment (61 percent of the currently employed adults). It serves as a proxy for formal employment, but it probably overestimates the size of the formal sector given earlier estimates that range between 40 to 60 percent of total employment (see previous section). Informal work, defined as self-employment or unpaid work, accounts for 39 percent of total employment. Informal work is the predominant form of employment in rural areas (68 percent) and is lowest in Ulaanbaatar (18 percent) (Figure 11). The higher the level of education, the higher is the likelihood of being in paid employment (Figure 12). Informal employment is more likely among men, the poor, and everywhere outside Ulaanbaatar. Social welfare recipients, on the other hand, are less likely to be engaged in the informal sector (Table D 2 in Annex D).

Figure 9. Labor market status across quarters, 2012



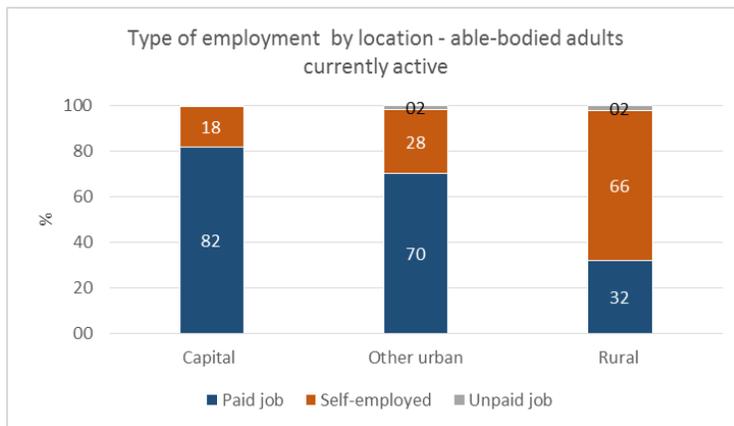
Source: Estimates based on HSES 2012.

Figure 10. Unemployment rates by quarter, 2012



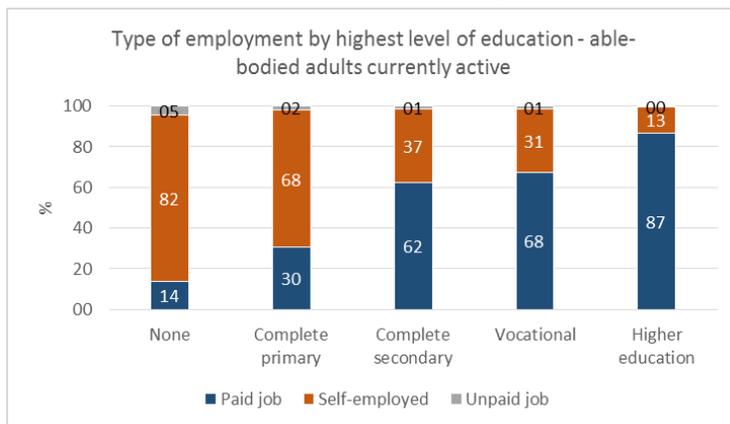
Source: Estimates based on HSES 2012.

Figure 11. Type of employment by location, 2012



Source: Estimates based on HSES 2012.

Figure 12. Type of employment by level of education, 2012



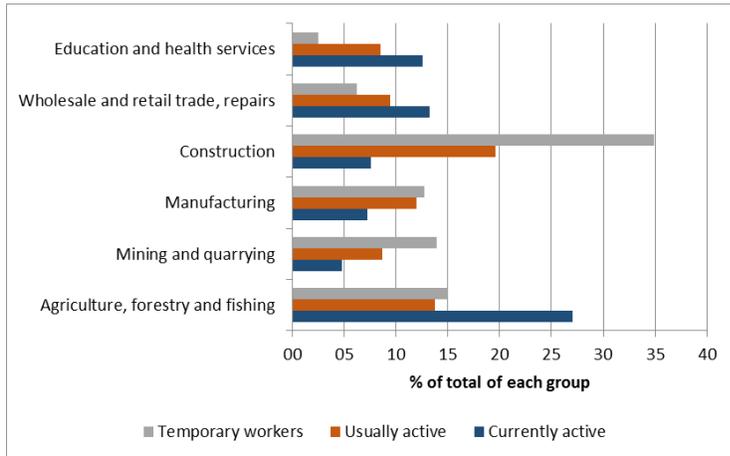
Source: Estimates based on HSES 2012.

Agriculture is the most important employment sector accounting for 27 percent of the currently employed population based on the HSES 2012 data. This number slightly deviates from the NSO data, which reported a share of 35 percent working in agriculture in 2012 (30 percent in 2013). This discrepancy is the result of a different classification of jobs and the inclusion of working-age adults only. Trade and repairs and the education and health sector each account for 13 percent of current employment. Construction, manufacturing and mining are the most important sectors for temporary workers (Figure 13). In terms of occupation, 26 percent of the currently active working-age adults work as skilled agriculture and forestry workers. Services and retail workers account for 15 percent, professionals for 14 percent and craft and related trade workers for 12 percent (Figure 14). The distribution of job types changes significantly when considering temporary workers. Craft and trade related workers account for 41 percent of temporary employment.

The Mongolian labor market is segregated by gender. Excluding agriculture which is the most important sector both for men and women, women are more likely to work as services and retail workers or as professionals, and men as craft and trade workers or as plant and machine operators (Table D 4 in Annex D). The prevalence of certain occupations also differs by level of education, poverty status of the household

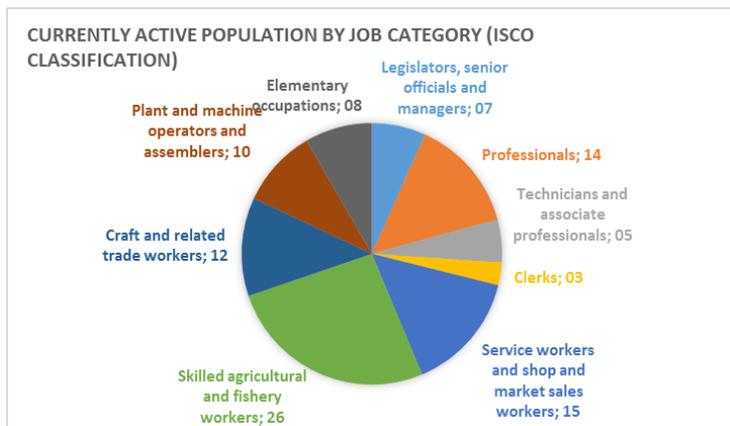
and by location. Active adults with higher education are mainly working as professionals (40%) or as legislators, senior officials and managers. Individuals with primary education or less are predominantly engaged in agriculture. This also applies to active adults from poor households, of which 45 percent work in agriculture. Not surprisingly, agriculture is also the main occupation in rural areas accounting for 63 percent of active adults.

Figure 13. Employment by sector and employment status, 2012



Source: Estimates based on HSES 2012.

Figure 14. Composition of currently active population by occupation



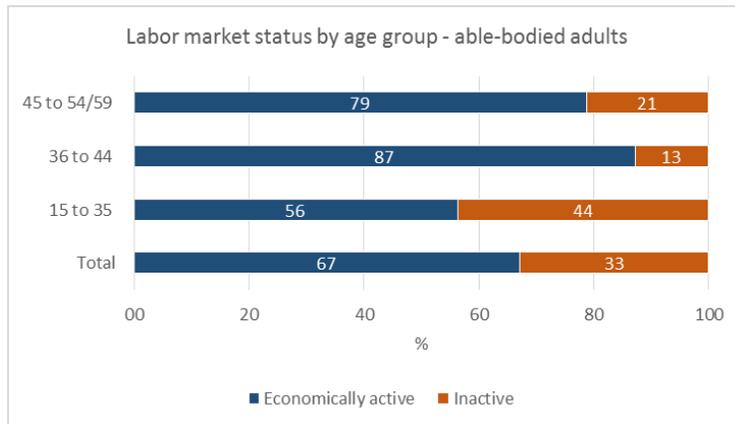
Source: Estimates based on HSES 2012.

3.3 Inactivity

Overall, only two out of three able-bodied adults of working age are economically active. Inactivity rates are particularly high among adolescents and young adults, women and individuals living in urban areas (Table D 6 in Annex D). More than two out of five young able-bodied adults between the age of 15 and 35 are neither working nor actively looking for work (Figure 15). Studying is the predominant self-reported reason for inactivity, and it concerns mainly the youngest age group. Overall, 55 percent of the inactive able-bodied adults of working age are studying. This share is 70 percent for those aged 15 to 35 (Figure 16). Excluding students below the age of 25 from the work-able population reduces the inactivity rate to 19 percent. In other words, of those that can be expected to work, 81 percent are economically active (Figure 17). Under

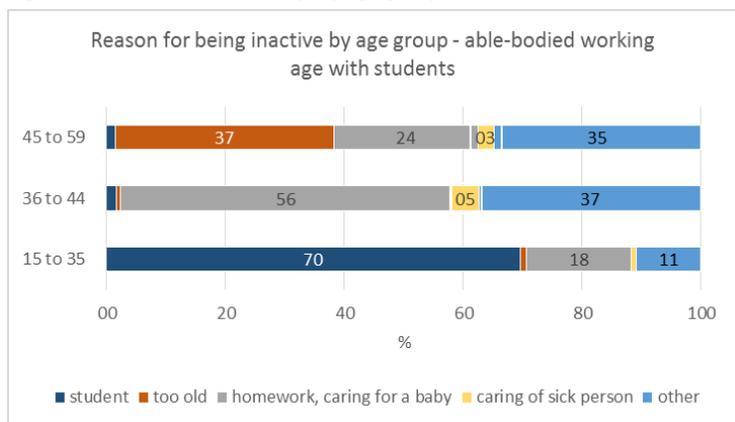
the presumption that studying up to a certain age is a legitimate reason for economic inactivity, students below the age of 25 are excluded from the further analysis of inactivity.

Figure 15. Labor market status by age group, 2012



Source: Estimates based on HSES 2012.

Figure 16. Reasons for inactivity, by age group, 2012

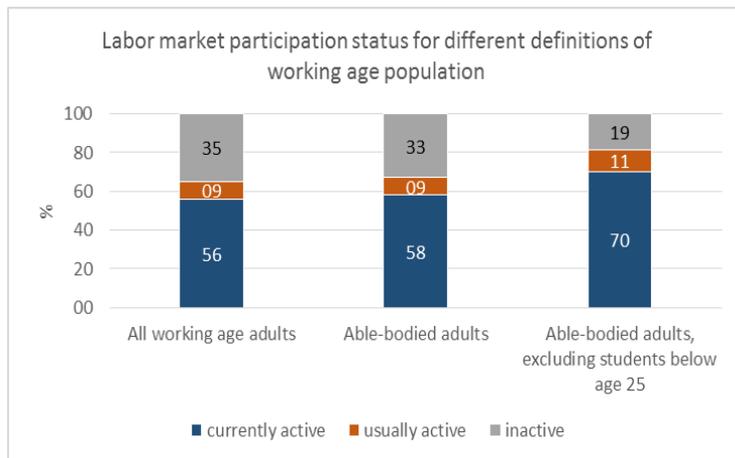


Source: Estimates based on HSES 2012.

Having excluded full-time students below the age of 25, the rate of inactivity for the youngest age group (15-35) is 21 percent, similar to the rate for the oldest group (45 up to retirement). Inactivity rates are higher for women (25 percent) than for men (13 percent). With respect to the position in the household, household heads are the most active (89 percent). Among spouses and other relatives, only three out of four are economically active. Inactivity rates are highest among individuals living in Ulaanbaatar (23 percent), and lowest in rural areas (13 percent) (Table D 6 in Annex D).

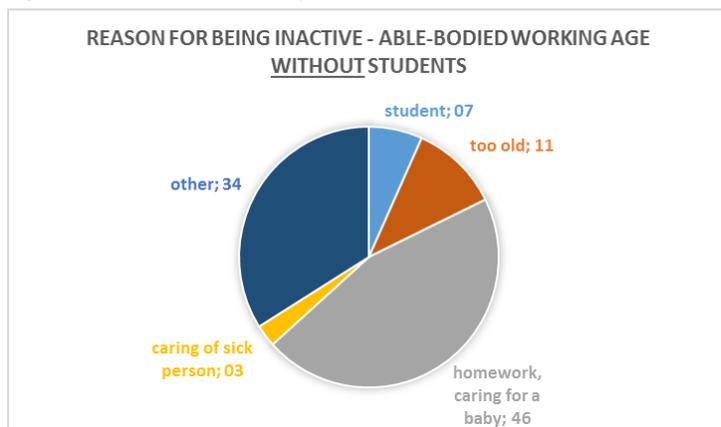
The relatively high inactivity rates among certain groups of the population raises the question what these adults are doing. Almost half of the inactive adults are involved in housekeeping and child care (46 percent) (Figure 18). About one third claims 'other' reasons, for which the data do not provide more specific information. Helping family and relatives, for example with herding or agriculture, could be an explanation for inactivity. Strictly speaking, this activity should be considered (unpaid) work.

Figure 17. Labor market status for different definitions of the work-able population



Source: Estimates based on HSES 2012.

Figure 18. Reasons for inactivity (w/o students), 2012

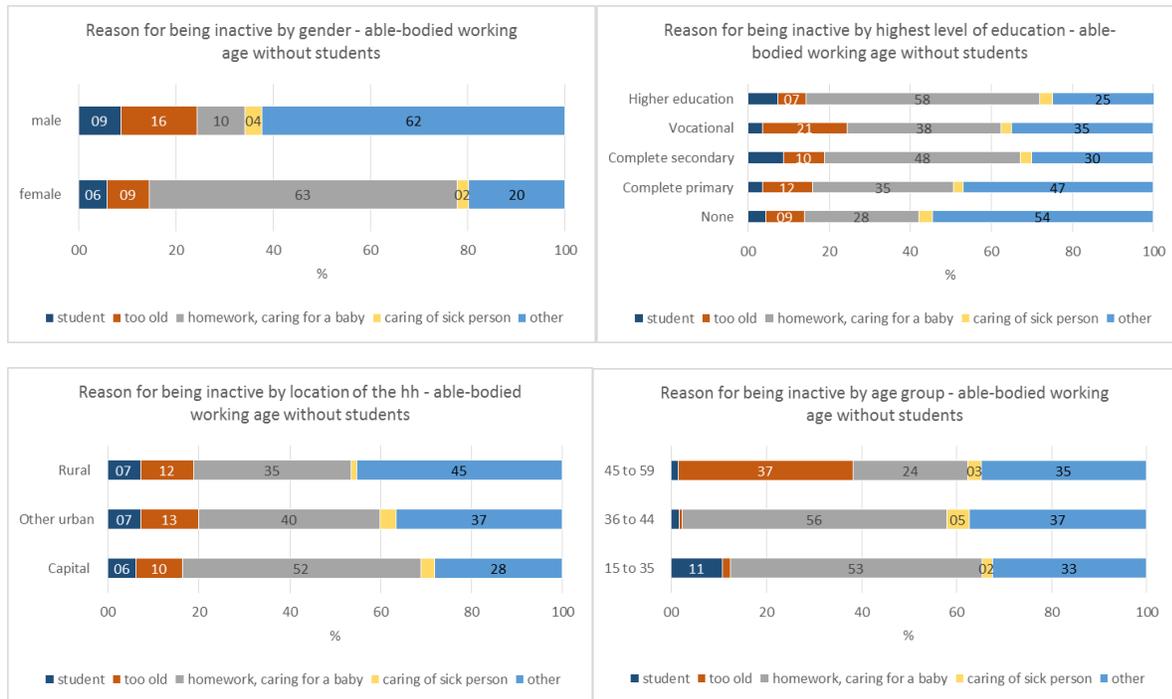


Source: Estimates based on HSES 2012.

Women and men have rather different reasons for being inactive (Figure 19). Housekeeping and childcare account for 63 percent of inactive women. Among inactive men, 62 percent account for 'other' reasons. Able-bodied adults aged 45 and beyond seem to be discouraged given that 37 percent indicate that they are 'too old' for work. This widespread presence of age discrimination in the Mongolian labor market further supports this assumption. Of the inactive adults in Ulaanbaatar, individuals with higher education and those up to the age of 45, more than half claim to be inactive due to housekeeping and childcare. Among inactive women with higher education, 74 percent stay out of the labor market due to care related duties. This is a rather surprising finding and contrary to what one would find in other countries, where women with higher education have higher labor market participation rates compared to other women. From a social investment perspective, inactivity among highly educated women is a waste of public and private resources that were used to finance tertiary education. The finding also raises the question whether the inactivity is embedded in societal gender norms and values or whether it is the (unintended) outcome of particular labor market characteristics and policies. With regard to the latter, active labor market participation of women with (small) children needs to be enabled with appropriate policy measures in the education sector, such as

kindergartens and pre-school facilities, and the willingness of employers to allow for part-time positions and flexible work hours.

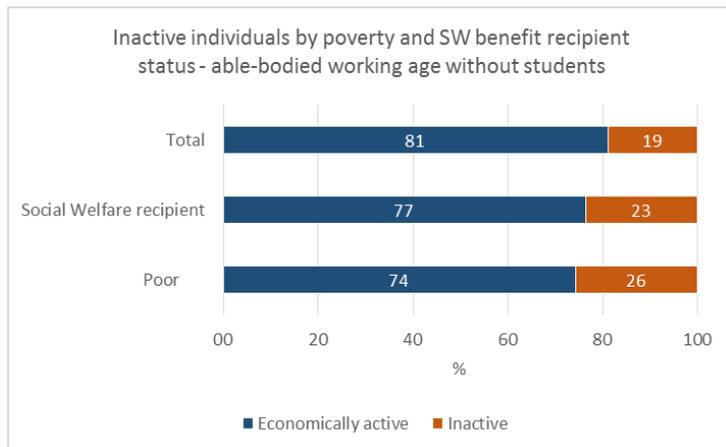
Figure 19. Reasons for inactivity, different population groups (w/o students), 2012



Source: Estimates based on HSES 2012.

Able-bodied working age adults living in monetary poor households have lower activity rates than their non-poor counterparts. The same applies to individuals living in households that receive social welfare benefits, which are less likely to be active (Figure 20). Table 7 shows that work-able adults living in poor households and receiving a social welfare benefit have the highest inactivity rates. The main reasons for inactivity are very similar for both groups and do not differ substantially from the rest (Figure 21).

Figure 20. Inactivity: poor individuals and social welfare recipients



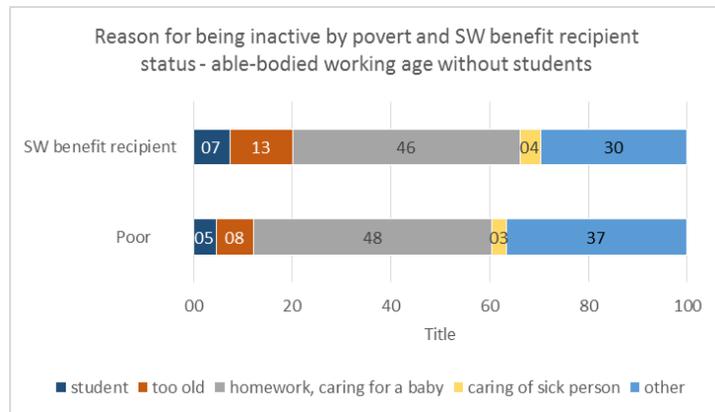
Source: Estimates based on HSES 2012.

Table 7. Inactivity rates by poverty and SW benefit status

	%	
	No benefits	SW benefit recipient
Not poor	13.8	21.0
Poor	22.4	29.7

Source: Estimates based on HSES 2012.

Figure 21. Reasons for inactivity: poor and social welfare recipients



Source: Estimates based on HSES 2012.

3.3 Internal migrants

The HSES does not allow for a separate analysis of the labor market status of internal migrants. A recent household survey ‘Urban Inequality and Service Delivery Survey Ulaanbaatar 2014’ collected unique data from 3,000 households in Ulaanbaatar of which half of the sampled households are – mostly internal – migrants. The survey also collected basic information on the employment situation of the respondents and their household members. Table 8 indicates that the situation of able-bodied working adults in migrant households differs from those that have always lived in the capital. However, it also matters how long ago the migration to Ulaanbaatar took place. The adults living in a household that migrated before 1991 have lower employment rates, but are more likely to be unemployed or inactive compared to other migrants and to the native UB population. With respect to the most recent migrants, the rate of employment is similar to all-time residents of Ulaanbaatar, but lower than for migrants, which have moved more than five years ago. Similarly, the share of inactive adults is higher among the most recent migrants.

According to the Urban Survey, inactive adults are predominantly female. Among the most recent migrants, 84 percent of the inactive adults are women, compared to the average for the capital of 77 percent. Homemakers account for 32 percent of the inactive adults in Ulaanbaatar. Among the most recent migrants, this share is almost 40 percent. More than one third of inactive adults are not looking for work. Again, this share is highest among the most recent migrants.

Table 8. Labor market status of migrants in Ulaanbaatar (able-bodied, working age, not students)

	Migrated in					Always in UB	Total	in %
	2009-2014	2003-2008	1997-2002	1991-1996	before 1991			
employed	69.0	73.0	72.4	71.4	62.5	70.5	70.6	
unemployed	8.6	8.5	7.8	11.0	12.1	9.0	9.0	
inactive	22.4	18.5	19.8	17.6	25.4	20.5	20.5	
Total	100	100	100	100	100	100	100	

Source: Estimates based on Urban Survey 2014

Table 9. Inactivity by sex and reasons for inactivity, migrants versus non-migrants

	Migrated		Always in UB	Total	in %
	last 5 years	before 2009			
Female	83.8	75.1	77.8	77.4	
Male	16.2	24.9	22.3	22.6	
not looking for work	36.9	36.1	31.8	34.1	
pensioner	13.7	25.0	25.5	24.0	
homemaker	39.4	27.7	32.9	31.5	
maternity leave	5.3	4.8	5.9	5.4	
other	4.8	6.4	4.0	5.0	
Total	100	100	100	100	

3.4 Labor market participation and social welfare receipt

Mongolia has an extensive social protection system offering more than 70 non-contributory social welfare programs to different groups of the population.¹⁸ All programs, except for the Food Stamp program, are categorically targeted. Overall, the social welfare programs are progressive, but the pro-poorness differs considerably across programs (World Bank, 2015). Given that program eligibility depends on categorical criteria, income from work has no impact on the social welfare entitlements. Hence, benefit receipt should not affect the labor market participation of recipients, especially in the case of low transfers. However, the availability of social welfare benefits, which constitute a guaranteed income in recipient households, may increase the reservation wage, which means that the salary that can be earned on the labor market needs to be above the social welfare income. Therefore, social welfare benefits may negatively affect labor market participation in recipient households.

Based on the HSES, 44 percent of the population was living in a social welfare recipient household in 2012 (Table 10). Benefit coverage is only slightly higher in the first quintiles. The benefits with the highest coverage rates are mother benefits (19 percent), maternity benefits (11 percent) and disability pensions (12 percent). Coverage with these three benefits is highest among the poorest (first quintile), and lowest among the richest 20 percent (fifth quintile). While coverage is higher among the poor, the overall distribution of social welfare transfers is regressive (Table 11). Of all social welfare benefits, 25 percent was received by

¹⁸ For a detailed review of the social welfare programs and beneficiary profiles, see World Bank (2015).

the richest 20 percent versus 17 percent that went to the poorest group. However, the distributional efficiency varies considerably across different social welfare transfers. Maternity benefits, disability pensions and survivor pensions are rather uniformly distributed across the welfare distribution. Illness payments, student benefits and other social benefits benefit mainly the better off households. The mother benefit is also slightly regressive, allocating a higher share of benefits to the richest 40 percent. Most regressive are student benefits that allocate 64 percent to the richest 40 percent. Only six percent of total allocated student benefits have reached the poor in 2012.

Table 10. Coverage rates social welfare benefits, by quintile

	Quintiles: Real per capita consumption					in %
						Total
	1	2	3	4	5	
All social welfare benefits	50.4	44.2	42.6	44.0	40.0	44.2
By program						
Unemployment benefit	0.0	0.1	0.0	0.1	0.3	0.1
Maternity benefits	15.2	12.1	10.9	11.2	7.9	11.4
Disability pension	16.4	13.1	12.0	10.3	7.6	11.9
Survivor pension	3.9	3.9	2.2	2.4	1.4	2.8
Illness payments	0.9	1.2	1.1	1.0	0.8	1.0
Funeral payments	0.7	0.4	0.1	0.2	0.4	0.3
Mother benefit	25.3	19.8	18.8	17.0	14.7	19.1
Student benefit	4.0	7.4	9.1	10.7	13.6	9.0
Other social benefit	2.3	1.1	1.2	1.6	1.6	1.6

Source: Estimates based on HSES 2012

Table 11. Distribution of social welfare benefits across quintiles

	Quintiles: Real per capita consumption					in %
						Total
	1	2	3	4	5	
All social welfare benefits	17.4	18.0	19.0	20.6	25.0	
By program						
Unemployment benefit	0.0	12.9	10.5	4.8	71.7	
Maternity benefits	22.2	19.8	20.0	21.5	16.6	
Disability pension	20.6	19.0	21.4	19.7	19.3	
Survivor pension	20.1	25.8	17.8	23.1	13.2	
Illness payments	10.7	19.2	23.1	22.9	24.2	
Funeral payments	41.1	20.9	2.7	12.0	23.2	
Mother benefit	17.2	17.8	18.6	21.7	24.7	
Student benefit	6.0	13.4	17.1	23.8	39.8	
Other social benefit	7.3	4.1	5.6	14.7	68.4	

Source: Estimates based on HSES 2012

Although the distribution of social welfare benefits is mainly regressive, the transfers are more important for poor receiving households. Table 12 shows the share of the transfers as percentage of total household consumption. Survivor pensions, illness payments and funeral payments each contribute almost one fifth to total household consumption in poor recipient households, but only very few households benefit. More

important are disability pensions. They account for one fourth of total household consumption in poor beneficiary households. Most other benefits are relatively small and as such are contribute only a small share to the household budget.

Table 12. Social welfare benefits as percentage of household consumption, receiving households only

	Quintiles: Real per capita consumption					in %
						Total
	1	2	3	4	5	
All social welfare benefits	14.0	10.4	8.4	6.2	4.4	7.1
By program						
Unemployment benefit	15.6	21.0	3.0	8.1	0.0	8.5
Maternity benefits	5.0	3.5	2.9	2.2	1.4	2.6
Disability pension	24.6	18.2	16.5	12.4	9.0	14.5
Survivor pension	21.2	17.2	15.7	13.3	7.1	14.0
Illness payments	19.3	15.5	15.1	11.0	7.8	11.8
Funeral payments	18.9	12.8	4.9	5.7	2.2	6.2
Mother benefit	2.4	1.9	1.5	1.4	1.0	1.5
Student benefit	7.9	5.9	4.5	3.8	2.6	3.6
Other social benefit	7.0	5.7	5.5	7.3	14.4	10.0

Source: Estimates based on HSES 2012

Although the HSES 2012 does not include information on the CMP, coverage with the CMP and the distribution and adequacy of the transfer can be estimated using microsimulation given that the CMP is a universal transfer to all children up to the age of 18. Each eligible child in the HSES is assigned an annual transfer of 240,000 MNT after which the targeting performance indicators can be estimated (Table 13). Overall, 33 percent of the population lives in a household benefiting from the CMP. In the poorest quintile, the share of beneficiaries is 45 percent, which can be explained by the fact that poorer households are more likely to have children. The distribution of CMP transfers is progressive given that 27 percent of the allocated transfers go to the poorest 20 percent of the population and only 14 percent is received by the richest quintile. Particularly for the poorest households, the CMP is important as it accounts for 12 percent of total household consumption in recipient households.

Table 13. Child Money Program: coverage, distribution and adequacy of transfers

	Quintiles: Real per capita consumption					in %
						Total
	1	2	3	4	5	
Coverage of the population	45.2	37.4	32.5	29.1	23.4	33.4
Distribution of benefits	26.6	22.2	19.4	17.5	14.3	100.0
Adequacy (recipients hh only)	12.4	7.1	5.0	3.5	1.9	4.6

Source: Estimates based on HSES 2012

The HSES provides limited information for the analysis of the labor market status of social welfare recipients. More detail can be derived using the SW/PMT database. Half of the Mongolian population is a direct beneficiary of one or more social welfare programs (Table 14, col. 1 and 2). The largest program by far is the Child Money Program (CMP), which is provided to 33 percent of the population, or 94 percent of all children below the age of 18. The other social welfare programs are relatively small in coverage. Allowances for mothers and children cover 10 percent of the population. Direct beneficiaries of social welfare allowances account for 3 percent of the population, social welfare pensions for 2 percent, assistance to the

elderly for 4 percent and the assistance and concessions for disabled cover one percent of the population. However, coverage of social welfare programs is much broader if indirect beneficiaries, which are all household members living together with a social welfare recipient, are considered as well (Table 14, col. 3 and 4). Only ten percent of the population lives in a household that does not benefit from any social welfare program. The CMP reaches 77 percent of the population, if also indirect beneficiaries are counted. The Food Stamp Program (FSP), the only poverty-targeted program, reaches 4 percent of the population.

Table 14. Direct and indirect beneficiaries of social welfare programs

SW programs	Number of benefits (direct beneficiaries)		Direct and indirect Beneficiaries	
	Frequency (1)	Percent (2)	Frequency (3)	Percent (4)
Total population in SW/PMT database	2,379,068	100	2,379,068	100
Social Welfare Pension	46,958	2.0	181,389	7.6
Social Welfare Allowance	63,263	2.7	198,072	8.3
Community-Based Welfare Service and Specialized Care Services	6,455	0.3	20,662	0.9
Assistance to the Elderly	83,703	3.5	216,024	9.1
Allowance for the Elderly with State Merits	1,864	0.1	5,655	0.2
Assistance and Concessions for the Disabled	33,897	1.4	122,371	5.1
Allowance for Mothers and Children	235,059	9.9	894,720	37.6
The Food Stamp Program*	15,118	0.6	87,486	3.7
Child Money Program	785,819	33.0	1,833,824	77.1
<i>as % of eligible children</i>		93.9		
No benefit	1,224,530	51.5	246,165	10.4

*The FSP is allocated per household. The number of benefits therefore reflects the number of households receiving the FSP.

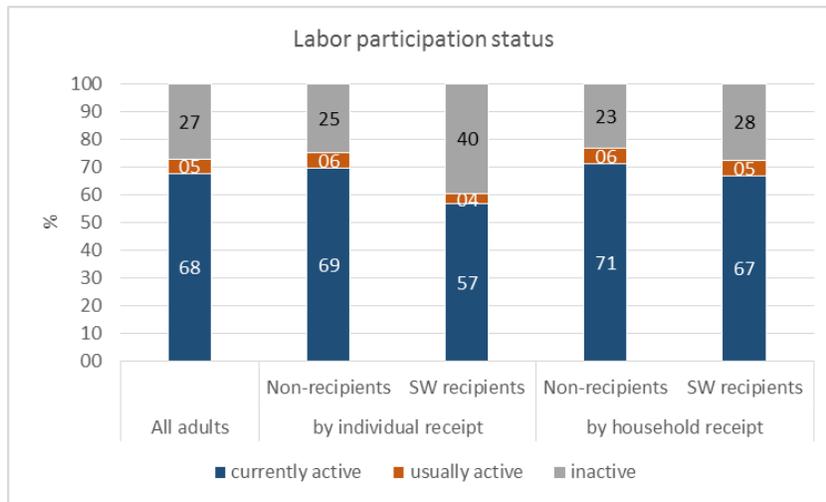
Source: Estimates based on SW/PMT data. Benefit receipt reflects status per 30 June 2014.

In line with the analysis above, only able-bodied adults of working age, excluding students, are considered for the assessment of the labor participation status of social welfare program recipients. Of all the adults that can be expected to work, 73 percent are active labor market participants and 27 percent are inactive (Figure 22). Considering only individual (direct) beneficiaries, the share of inactive adults is considerably higher (40 percent). However, the negative effect of social welfare program receipt on labor market participation disappears if all adult household members are considered living in recipient households. This indicates that intra-household reallocation of work may take place.

The extent to which social welfare program recipients are active in the labor market varies across the different programs (Figure 23). Recipients of the allowance for elderly with state merits have the highest participation rate (67 percent), whereas recipients of social welfare allowances, assistance to the elderly or for the disabled have the highest rate of inactivity. Figure 23 seems to indicate that recipients of the child money program are least active. Note, however, that the recipients reflected in this figure are children aged 15-17 (the direct program beneficiaries), which are currently not studying. Figure 24, which includes all adult household members in recipient households, shows that the child money program does not result in higher inactivity rates given that the share of inactive adults is the same as for all adults in the country, and only slightly higher compared to adults in non-recipient households. This difference is most probably due to child caring activities in households receiving a child money program transfer. A more detailed breakdown by demographic characteristics indeed indicates that 35 percent of adult women in CMP households are inactive compared to 19 percent of the men (Table D 10 in Annex D). Participation in the food stamp program is strongly correlated with higher inactivity rates. Only 45 percent of the able-bodied

adults of working age living in FSP households are active labor market participants. However, based on this finding it is not possible to conclude that program eligibility leads to lower participation. More likely, the fact that more than half of this group is not working may reflect their households' poverty and vulnerability, which made them eligible for the FPS in the first place. Not surprisingly, inactivity rates are above the national average both for men and women in FPS households (Table D 10 in Annex D). Moreover, the share of adults with temporary or seasonal employment is considerably higher in this group, particularly among men. Only 40 percent of adult men in FPS have been employed at the time of the PMT data collection, while 13 percent reported to be irregularly active. Of the social welfare program recipients that have reported to be working at the time of the data collection, most are employed as wage workers, followed by herders (Table D 11 in Annex D). A few notable exceptions emerge: 33 percent of the currently working adults in FSP households are working as herders and 25 percent are involved in unpaid work. Only 36 percent are employed as wage workers. With respect to recipients of the CMP, children aged 15-17 which are not studying, but currently active, 31 percent work as herders and 50 percent are doing unpaid work.

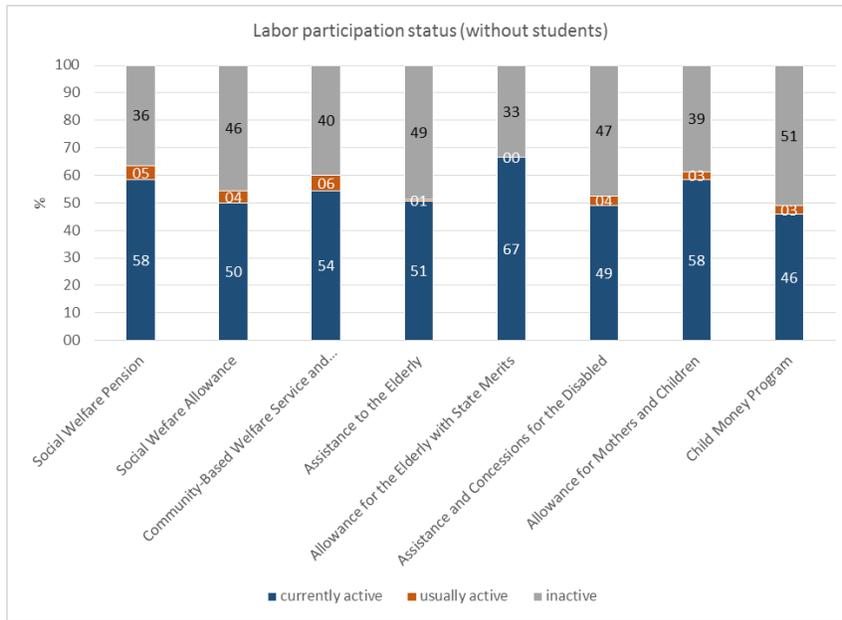
Figure 22. Labor participation status by social welfare receipt



Source: Estimates based on SW/PMT data.

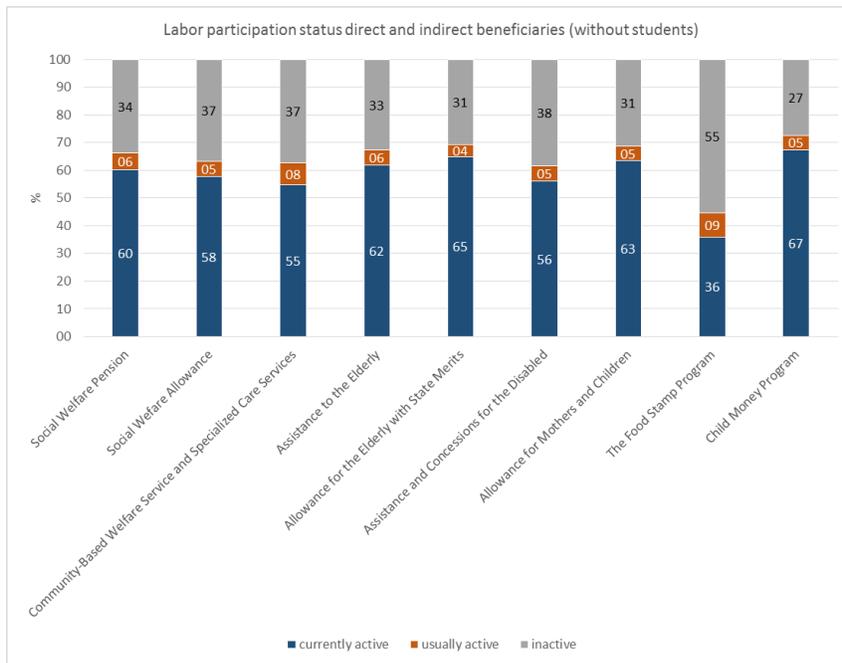
Similar to the findings based on the HSES analysis above, looking after the family is the most frequent reason for inactivity among direct social welfare program recipients (44 percent) (Figure 25). Not being able to find a suitable job is the second most prevalent reason for inactivity. Among direct beneficiaries this share is 26 percent, but when all inactive adults are included in beneficiary households, it concerns one third of the inactive adults (Table D 12 in Annex D). This group is clearly discouraged when it comes to labor market participation. Whether the discouragement is the result of lack of employment opportunities or unmet expectations with respect to the type of job or earnings cannot be assessed. Finally, the share of discouraged workers is particularly high among adults in FSP households. Almost half of the able-bodied adults in this group report not finding a suitable job as the main reason for being outside the labor market.

Figure 23. Labor participation status of individual recipients, by program



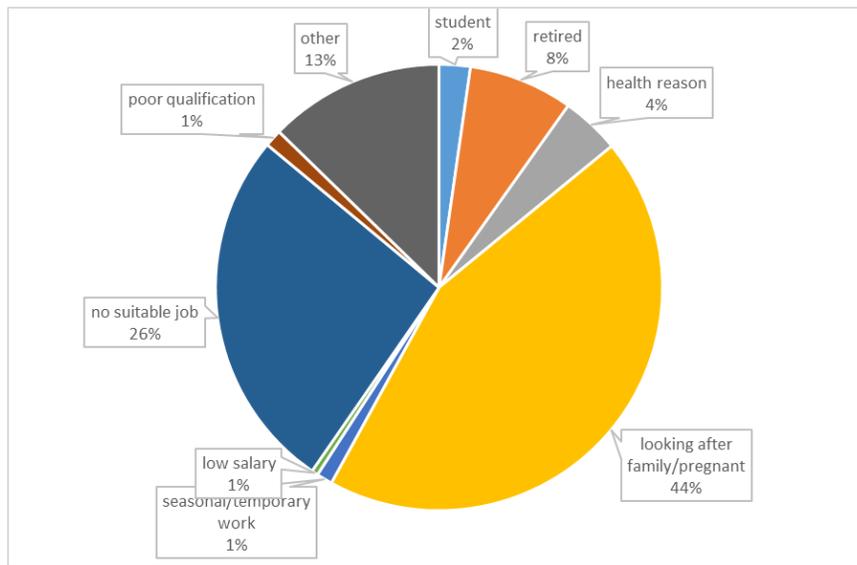
Source: Estimates based on SW/PMT data.

Figure 24. Labor participation status of direct and indirect beneficiaries, by program



Source: Estimates based on SW/PMT data.

Figure 25. Reasons for inactivity, direct beneficiaries



Source: Estimates based on SW/PMT data.

3.5 Determinants of labor market outcomes

The analysis above relies on the comparison of group averages. In order to better understand the determinants of labor market participation, this section uses econometric analysis to distill factors that may explain the labor market status of individuals. Moreover, the analysis will also assess to what extent the receipt of social welfare benefits affects various labor market outcomes.

Active labor market participation is determined by individual characteristics, such as the sex of an individual, his/her age, the level of education and the position in the household. The composition of a household may also influence an individual's possibility to engage in the labor market. The presence of children or disabled in the household may explain in particular the participation of women. A household's living standard and its location may also predict the likelihood that a working-age able-bodied adult is active. Finally, the receipt of formal or informal financial support may reduce the necessity to work. The determinants of active labor market participation are estimated using a binary model. First, the model is estimated for all working-age able-bodied adults (excluding full-time students below the age of 25). Secondly, the models are estimated separately for men and women assuming that different factors explain their participation. In order to be better understand the motives of poorer households, all models are then re-estimated for the bottom 50 percent of the welfare distribution. The results are summarized in Table 15.

As expected, men are more likely to be active in the labor market. The probability that a man is economically active is 8 percentage points (p.p.) higher compared to women if all adults are included and 9 p.p. if only the bottom half of the welfare distribution is considered. Labor market participation increases with age, but the function is concave. The increase is larger for women than for men and does not differ for poorer households. Being the head of the household is also a strong predictor of participation. Heads are between four and 12 p.p. more likely to be active than other household members. Adults with higher education also have a higher probability of being active.

The demographic composition of the household is particularly important for the position of women. Household size has a positive effect on labor market participation. The effect is particularly strong for the

bottom half of the welfare distribution and for women. A 10 percent increase in household size increases the likelihood of participation with 10 percent for women belonging to poorer households. The presence of children does not affect male participation, but it negatively affects the labor market participation of women, in particular if the children are below the age of five and not attending a nursery or kindergarten. Women with small children at home are 17 p.p. less likely to work. If the children are in day care, the effect is reduced by two thirds. This finding supports the idea that the provision of child care facilities may increase the labor participation of women. Furthermore, the presence of elderly in households with young children has a positive effect on the labor market participation of both men and women. These adults are five p.p. more likely to be active compared to the situation where no elderly is present. This implies that the elderly in multigenerational households take over child care duties, thereby allowing the parents to work. Interestingly, though, this effect is not present if only the poorer half of the population is considered.

Variables representing the living standard of the individual's household provide a mixed picture. Belonging to the bottom 50 percent (or bottom 20 percent in models 4-6) of the welfare distribution negatively affects active labor market participation. However, having electricity or a proper toilet, which could indicate a higher living standard, is also negatively correlated with labor market participation. These two variables may catch other effects related to the housing situation and location of a household. With respect to location, the models indicate that living outside Ulaanbaatar is relevant for women but not for men. Women in rural areas or other urban areas are more likely to be active than those living in the capital.

Finally, the receipt of formal and informal financial support is reflected by three variables indicating whether an individual is living in a household receiving social welfare benefits, pensions or informal support from family and relatives. The receipt of pensions or informal aid has a negative effect on labor market participation in all models. Pensions and informal aid decrease the likelihood of participation between 6 and 10 p.p. The receipt of social welfare benefits affects the labor market behavior of women. Women in recipient households are about five p.p. less likely to be active labor market participants.

Table 15. Determinants of active labor market participation (marginal effects)

Dependent variables	Complete pcc distribution			Bottom 50% of pcc distribution		
	All	Men	Women	All	Men	Women
HH is recipient of SW	-.025*** (0.006)	0.0086 (0.009)	-.054*** (0.009)	-.022** (0.009)	0.0046 (0.013)	-.043*** (0.014)
Male	.078*** (0.007)			.09*** (0.011)		
Age	.042*** (0.002)	.026*** (0.002)	.056*** (0.004)	.043*** (0.003)	.029*** (0.004)	.056*** (0.005)
Age sq	-5.9e-04*** (0.000)	-4.0e-04*** (0.000)	-7.5e-04*** (0.000)	-6.2e-04*** (0.000)	-4.4e-04*** (0.000)	-7.8e-04*** (0.000)
Married	0.0091 (0.007)	.061*** (0.012)	-.052*** (0.013)	0.017 (0.011)	.065*** (0.019)	-.053*** (0.019)
Household head	.095*** (0.008)	.082*** (0.016)	.035** (0.017)	.118*** (0.013)	.103*** (0.024)	.042* (0.025)
Education level: higher secondary school or more	.042*** (0.007)	.022** (0.009)	.06*** (0.011)	.025*** (0.010)	.021* (0.013)	.026* (0.014)
Interview during quarters 2 & 3	0.0063 (0.005)	.013* (0.007)	0.0012 (0.008)	0.012 (0.008)	0.018 (0.012)	0.0096 (0.012)
HH belongs to the bottom 50% of per capita consumption distribution	-.075*** (0.006)	-.064*** (0.009)	-.088*** (0.010)			
HH belongs to the bottom 20% of per capita consumption distribution				-.066*** (0.009)	-.046*** (0.012)	-.085*** (0.013)
HH size (ln)	.058*** (0.009)	0.016 (0.012)	.06*** (0.014)	.097*** (0.015)	.057*** (0.021)	.095*** (0.023)
HH has at least one child below 6 years old in infant school	-.038*** (0.007)	-0.011 (0.010)	-.055*** (0.010)	-.044*** (0.010)	-0.015 (0.015)	-.063*** (0.014)
HH has at least one child below 6 years old NOT in infant school	-.105*** (0.007)	-0.0099 (0.010)	-.172*** (0.010)	-.101*** (0.010)	-0.019 (0.015)	-.162*** (0.014)
HH has at least one child in school age	-.021*** (0.007)	-0.0084 (0.010)	-.028*** (0.010)	-.019* (0.010)	-0.016 (0.015)	-0.017 (0.015)
HH has at least one elder	0.018 (0.016)	0.017 (0.020)	0.035 (0.025)	0.021 (0.023)	0.019 (0.030)	0.046 (0.035)
HH has at least one elder & one child below 6 years old	-.014 (0.016)	-0.017 (0.020)	-0.024 (0.025)	-0.023 (0.023)	-0.03 (0.030)	-0.037 (0.035)
HH has at least one elder & one child in school age	.056*** (0.011)	.047** (0.015)	.056** (0.017)	.055** (0.015)	0.045 (0.021)	0.052 (0.023)
HH has at least one disabled member	-0.016 (0.011)	-0.022 (0.015)	-0.025 (0.017)	-0.022 (0.015)	-0.031 (0.021)	-0.034 (0.023)
HH dwelling is ger type	.03* (0.016)	0.012 (0.020)	0.037 (0.025)	0.016 (0.023)	0.0006 (0.030)	0.016 (0.035)
HH has electricity supply	-.026** (0.011)	-.043*** (0.015)	-0.014 (0.017)	-.028* (0.015)	-.038* (0.021)	-.022 (0.023)
HH has centralized heating	-0.0035 (0.006)	-0.004 (0.009)	-0.0023 (0.010)	-0.0033 (0.009)	-0.0079 (0.013)	0.00078 (0.014)
HH has centralized water supply and protected well	-.105*** (0.013)	-.094*** (0.018)	-.121*** (0.019)	-.112*** (0.016)	-.089*** (0.024)	-.135*** (0.023)
HH has toilet	.015* (0.008)	0.016 (0.011)	0.014 (0.012)	0.0093 (0.014)	0.016 (0.020)	0.0019 (0.021)
Other urban areas	-0.0078 (0.006)	-.018** (0.009)	0.003 (0.009)	-.021** (0.009)	-.044*** (0.012)	-0.000075 (0.013)
Rural areas	-.205*** (0.015)	-.161*** (0.021)	-.264*** (0.023)	-.253*** (0.021)	-.211*** (0.031)	-.306*** (0.029)
HH is recipient of aid from relatives and/or friends	.021*** (0.007)	-0.0041 (0.009)	.045*** (0.010)	.027** (0.010)	0.0099 (0.015)	.042*** (0.015)
HH has at least one pensioner	.061*** (0.007)	.017* (0.010)	.106*** (0.011)	.074*** (0.011)	.034** (0.016)	.114*** (0.016)
HH is recipient of aid from relatives and/or friends	-.056*** (0.008)	-.064*** (0.011)	-.056*** (0.012)	-.079*** (0.013)	-.081*** (0.018)	-.08*** (0.019)
HH has at least one pensioner	-.079*** (0.011)	-.063*** (0.014)	-.101*** (0.017)	-.069*** (0.017)	-.054** (0.023)	-.094*** (0.027)
N	23,097	23,601	23,743	11,389	11,543	11,610

Standard errors in parentheses; * p<0.10, **p<0.05, *** p<0.01

Source: Estimates based on HSES 2012

Using a multinomial logit model, we analyze determinants that may explain the labor market participation status, distinguishing between adults that are currently employed, those usually employed and adults that are inactive. The analysis first considers all able-bodied working age adults (excluding students) and then considers only the bottom half of the welfare distribution in order to assess whether different factors play a role for adults living in poorer households (see for results Table D 13 in Annex D). Of particular interest are determinants that may explain temporary or seasonal employment, which is captured by those individuals that are only usually active. Factors that increase the probability that someone is ‘usually active’ compared to inactive relate to the living standard of the household, its location, and whether or not a household receives transfers. Irregular employment is more common for the poorer half of the population and outside Ulaanbaatar. Recipients of informal transfers or social welfare benefits are also more likely to be employed irregularly. The latter finding is rather interesting given that welfare recipients are less likely to be currently employed. This may indicate that these groups are exposed to more insecure work arrangement. The results also indicate that the likelihood of employment is higher in the summer. The variable summer, representing those adults that were interviewed between April and September, is positively correlated with current employment. This is confirmed by the outcome ‘usually active’, where summer interviewees are less likely to be temporarily active. Residents in urban areas outside Ulaanbaatar are less likely to be employed, but they have a higher probability of experiencing interrupted work episodes, which may reflect the lack of stable employment. While the presence of children has a negative effect on current employment, it does not explain the status of being usually active.

Employed adults differ in terms of work effort, which is measured by the total hours worked per week. Overall, Mongolians are working long hours. 39 percent of the employed adults work 55 hours or more per week and 51 percent work between 40 and 54 hours per week. Using an ordered probit model¹⁹, we estimate the determinants of work effort (results in Table D 14 in Annex D). Being a man, having higher education or being the household head increases the likelihood of working more hours. The wage per hour is also strongly positively associated with a higher workload. However, the relationship is concave, indicating that adults with a considerably higher wage work less hours per week. Adults belonging to the bottom 50 percent of the welfare distribution work fewer hours than their richer peers. The model only establishes correlation. It is therefore not possible to say whether poverty is the result of less work effort, or whether poor adults simply do not have the option to work more hours, which would confirm the earlier assessment of underemployment. Household composition has no influence on the hours worked, but the larger the household, the more likely are adults working 55 hours or more. Adults living in social welfare recipient households do not seem to be different in terms of hours worked.

Finally, wage determinants are analyzed using three different models (results in Table D 15 in Annex D).²⁰ Given that only currently employed adults report their wages, the empirical model needs to account for the potential selection bias. The three models produce relatively consistent results for most of the explanatory variables. First of all, the level of the hourly wage is strongly correlated with education. The variables for education distinguish between five different levels allowing the estimation of returns to education. The higher the education, the higher is the hourly wage, confirming the findings reported in Batchuluun and Dalkhjav (2014). Compared to adults with completed primary education as highest educational achievement, employed adults with secondary education earn around twice as much and adults with higher

¹⁹ Only for employed adults, we estimate a simple ordered probit model and two-stage selection model (Heckprobit).

²⁰ OLS, Heckman Selection model, Tobit model

education earn at least three times as much per hour. Hourly wages also seem to be higher during the summer months. The models are inconclusive with respect to sex. Two models imply that men earn higher wages, while the third model indicates positive gender discrimination towards women. Living outside Ulaanbaatar also has a negative effect on the hourly wage, with rural areas responsible for the largest gap compared to the capital.

Effect of social welfare receipt on labor market outcomes

The descriptive analysis above indicates that social welfare receipt and active labor market participation are negatively correlated. In order to test whether social welfare benefits indeed create negative labor market effects, different econometric models are used. First, the determinants of social welfare receipt are estimated using a binary (probit) model at the household level. Secondly, a quasi-experimental design is applied to compare labor market outcomes of individuals with and without social welfare benefits.

The outcomes below have to be interpreted cautiously, given that the HSES data has its limitations. The HSES 2012 does not provide detailed information on social welfare benefits. This makes it impossible to clearly distinguish between contributory and non-contributory benefits when defining the benefit categories received by the household. Moreover, the benefit categories cannot be directly linked to the classification of social welfare programs defined by the Ministry of Population Development and Social Welfare (MPDSP). Given that the HSES 2012 does not provide information on the Child Money Program or the Food Support Program, it is not possible to analyze whether these programs change the labor market behavior of adults in recipient households.

Table D 16 in Annex D presents the results of six model variations. The models differ in that we include different sets of explanatory variables to test for the sensitivity of the results. The estimates generated by models three to six are quite consistent. Households belonging to the bottom half of the welfare distribution are 7 p.p. less likely to receive a social welfare benefit, which seems to indicate that social welfare transfers are not pro-poor.²¹ The characteristics of the household head also affect the likelihood of receiving these transfers. Households where the head is male or married are less likely to receive transfers. The likelihood of receiving transfers decreases with increasing age of the head, but the function is convex. The larger the household, the more likely is the receipt of social welfare benefits. The presence of children has mixed effects on the probability that a household receives transfers. Having school-age children or small children in day-care reduces the likelihood that this household is a social welfare recipient. On the other hand, the presence of small children at home increases the likelihood of receiving transfer with 11 p.p. Having a disabled household member is also a strong predictor for social welfare receipt, as his/her presence in the household has a positive effect of 66 p.p. Households outside Ulaanbaatar are more likely to receive social welfare benefits compared to those in the capital. Finally, other formal and informal transfers are positively correlated with the probability of receiving social benefits. A household that receives informal support from family and relatives is 11 p.p. more likely to receive social transfer. In case of a pension, the likelihood of other social welfare benefits is 8 p.p. higher.

The analyses in the previous section and in section 3.4 point at negative effects of social welfare benefits on labor market outcomes. Based on the descriptive statistics, adults living in social welfare recipient households have lower active labor market participation rates. The binary models above seem to confirm

²¹ Note that this result contradicts the overall findings in the detailed review based on the SW/PMT data in World Bank (2015). This is most likely due to the incomplete information on social welfare receipt in the HSES.

this finding as social welfare recipients are less likely to be active, all else being equal. However, in order to assess the ‘true’ impact of the transfers on labor market outcomes, recipients need to be compared with a control group which is as similar to our recipients as possible. Essentially, an impact is determined by comparing relevant outcomes of program participants with the outcomes those same individuals would have experienced in the absence of the program (Blomquist, 2003). In other words, the question we aim to answer is whether in the absence of social welfare transfers, these individuals would have behaved differently in the labor market. In the absence of data on the situation without social transfers, a control group needs to be established by statistical design. The subsequent analysis uses propensity-score-matching (PSM) to establish a control group. Each able-bodied working age adult living in a social welfare recipient household is matched with a non-recipient based on observable characteristics, such as individual characteristics, household composition, receipt of other transfers, household living standard, and location. The two groups are then compared with respect to various labor market outcomes.

The results in Table 16 partly confirm the findings above. Receiving a social welfare benefit has a negative impact on active labor market participation if all adults are included in the analysis. Individuals in social welfare recipient households are two percentage points less likely to be active. However, the impact differs for men and women and across the welfare distribution. Social welfare receipt does not affect the participation of men, but it has a negative impact of three percentage points for women. If only the bottom half of the welfare distribution is considered, the impact remains the same for women, but men in recipient households are now more likely to be active in the labor market than non-recipients.

Table 16. Impact of SW benefits on active labor market participation (ATET)

	ALL			BOTTOM 50		
	ALL	MEN	WOMEN	ALL	MEN	WOMEN
ACTIVE	-0.017***	-0.004	-0.032***	0.000	0.039***	-0.025***
	0.002	0.003	0.003	0.003	0.004	0.005

Source: Estimates based on HSES 2012.

In order to assess the impact of social welfare benefits on other labor market outcomes, such as the type of employment, hours worked or the wage per hour, the matching procedure is applied to employed individuals only. Overall, employed social welfare recipients are more likely to be wage workers, but less likely to be self-employed compared to the control group (Table 17). However, the effect is rather small. If men and women are analyzed separately, or if only the bottom half of the welfare distribution is considered, the impact of social welfare benefits on the type of employment is stronger. For employed men belonging to the poorer half of the population, social welfare benefits result in a 3.6 p.p. higher probability that they are employed as wage workers. Similarly, they are less likely to be self-employed. The impact of the benefits on employed women of the bottom half is exactly opposite. They are 2.5 p.p. less likely to be wage workers, but 1.2 p.p. more likely to self-employed than comparable women not living in a social welfare recipient household.

Although the analysis above points at a negative impact of social welfare benefits on active labor market participation, the question arises whether benefits also have an impact on the hours worked and the wage earned of those that are actually working. Again, the results indicate that the impact is rather different for employed men and women. Men in beneficiary households tend to work more hours than their counterparts, an effect which is even stronger when considering only men of the bottom half of the welfare distribution. Women, on the other hand, work less hours if they are social welfare recipients. Finally, the analysis considers whether social welfare benefits are related to the hourly wage employed adults earn. As

Table 17 indicates, the effect of welfare benefits on the hourly wage is rather strong, but also unexpected when considering the entire welfare distribution. Especially employed men in recipient households earn 15 percent more per hour than men of the control group. This effect is even stronger when considering only the poorer half of the population. These findings may be related to the categorical allocation of social welfare benefits, with beneficiaries spread over the entire welfare distribution. After all, a higher income does not prevent benefit eligibility. On the other hand, the impact of the benefits is negative for employed women, and particularly when considering women from poorer households.

Table 17. Impact of SW benefits on labor market outcomes of employed individuals (ATET)

	ALL			BOTTOM 50		
	ALL	MEN	WOMEN	ALL	MEN	WOMEN
Wage worker	0.007** 0.003	0.026*** 0.004	0.035*** 0.004	-0.028*** 0.004	0.036*** 0.006	-0.025*** 0.006
Self-employed	-0.006** 0.003	-0.025*** 0.004	-0.035*** 0.004	0.028*** 0.004	-0.036*** 0.006	0.012** 0.006
Hours worked	0.004* 0.002	0.019*** 0.002	-0.035*** 0.003	-0.002 0.003	0.029*** 0.004	-0.054*** 0.004
Wage per hour	0.103*** 0.021	0.149*** 0.026	-0.058** 0.029	-0.309*** 0.030	0.250*** 0.042	-0.235*** 0.037

Source: Estimates based on HSES 2012.

In order to calculate the impact of specific social welfare programs on labor market outcomes and verify the results based on the HSES 2012, an additional set of Propensity Score Matching models has been estimated using the SW/PMT data. Two social welfare programs have been selected: Social Welfare Allowance and Allowance for Mothers and Children. The two programs are among the largest and provide benefits to adults that most likely have work capacities. The treatment group comprises able-bodied adult individuals (15-54 for women, and 15-59 for men, not students), which are direct social welfare recipients. Separate models are estimated for men and women where appropriate, assuming that social welfare receipt might have different impacts according to one's gender. The same set of models is also estimated for the bottom 50% of the PMT score distribution. The outcome variables used to estimate the impact of the selected social welfare programs on labor market outcomes identify those who are active (currently active or usually active), and those who are currently active.

The results in Table 18 and Table 19 all point at negative labor market effects and confirm the findings of the descriptive analysis in section 3.4. The Social Welfare Allowance has slightly larger effects on women than on men. The negative effects are smaller when only the poorer half of the population is considered. The impact of the Allowance for Mothers and Children is also negative on labor market participation, but the effect is much smaller compared to the Social Welfare Allowance. Women receiving the Mother and Child Allowance are between three and six percentage points less likely to be active on the labor market.

Table 18. Impact of Social Welfare Allowance on active labor market participation (ATET)

Labor participation status	SW recipient status at individual level					
	ALL			BOTTOM 50		
	ALL	MEN	WOMEN	ALL	MEN	WOMEN
ACTIVE	-.135*** 0.004	-.127*** 0.006	-.133*** 0.004	-.121*** 0.004	-.115*** 0.008	-.117*** 0.005
CURRENTLY ACTIVE	-.133*** 0.004	-.128*** 0.007	-.129*** 0.004	-.115*** 0.004	-.108*** 0.008	-.111*** 0.005

Source: Estimates based on SW/PMT data. Active = currently and usually active.

Table 19. Impact of Allowance for Mothers and Children on active labor market participation (ATET)

Labor participation status	SW recipient status at individual level	
	ALL	BOTTOM 50
	WOMEN	WOMEN
ACTIVE	-.059*** 0.002	-.04*** 0.003
CURRENTLY ACTIVE	-.053*** 0.002	-.033*** 0.003

Source: Estimates based on SW/PMT data. Active = currently and usually active.

3.6 Summary of the empirical analysis

Based on the analysis of the HSES 2012, 65 percent of working-age adults, which includes all persons from the age of 15 up to retirement, which is 55 years for women and 60 years for men participate in the labor market in Mongolia. Participation (and unemployment) rates vary slightly across season, with higher activity and lower unemployment from April to September. Agriculture is still the most important employment sector. Although construction accounts only for seven percent of total employment, it is the most important sector for temporary and seasonal workers.

Inactivity is especially high among the young, those older than 45, women and those living in Ulaanbaatar. Adults living in households receiving social welfare benefits have slightly higher inactivity rates than the average. The same applies to individuals living in poor households. Studying is the main reason for inactivity, and concerns mostly the youngest age group. Excluding students below the age of 25 from the work-able population significantly reduces the inactivity rate. For the remaining group of inactive work-able adults, housekeeping and child care is the most frequently stated reason for inactivity for half of them, while one third claims 'other' reasons, which are not specified. Helping family and relatives, for example with herding or agriculture, could be an explanation for their inactivity. Able-bodied adults aged 40 and older seem to be discouraged, as many of them indicate age as main reason for inactivity.

The analysis of the SW/PMT data allowed a more detailed analysis of the link between social welfare program receipt and labor market participation. Given that social welfare benefits are primarily allocated based on categorical criteria, no labor market disincentive effects are expected a priori. After all, the level of individual or household income does not affect the eligibility for benefits. The Food Support Program is the only exception as it is targeted to the poorest five percent of the population. However, the use of a proxy means test to identify eligible households also limits work disincentives by design.

Direct social welfare recipients have higher inactivity rates, but this effect disappears if all work-able adults living in beneficiary households are considered. The extent to which beneficiaries participate in the labor market varies across different social welfare benefits. Recipients of social welfare allowances, allowances for the elderly or disabled have lower activity rates, while the Food Stamp Program is negatively associated with active participation. The share of inactive adults in FSP households is considerably higher compared to other social welfare programs or non-recipient households. However, given the cross-sectional nature of the data it is not possible to conclude that FSP receipt leads to inactivity.

Similar to the findings based on the HSES 2012, taking care of the family is the most frequently cited reason for inactivity. Not being able to find a suitable job comes second and concerns one third of the inactive

adults. This may indeed indicate that a large group of work-able adults are simply discouraged. However, whether the discouragement is the result of lack of employment opportunities or due to unmet expectations with respect to the available jobs or earnings cannot be assessed.

The econometric analysis of labor market outcomes based on the HSES 2012 hints at the existence of negative work incentives related to the receipt of social welfare benefits. Overall, individuals living in social welfare recipient households are less likely to be active labor market participants. However, the effects differ for men and women and for the position in the welfare distribution. Social welfare receipt does not affect the participation of men, and has even a positive effect if only men of the bottom half of the welfare distribution are considered. The negative effect for women holds irrespective of the welfare level. Considering only the employed population, social welfare recipients are more likely to be wage workers, except for women from poorer households. Male beneficiaries work more hours on average and also have a higher hourly wage than non-beneficiaries, while the opposite holds for women in social welfare recipient households.

Two social welfare programs were analyzed in more detail using information from the SW/PMT data. The econometric analysis of the effect of social welfare allowances and the allowance for mothers and children supports the findings based on the HSES 2012. However, the negative effects of the transfers on labor market outcomes are slightly larger and are also negative for men in the case of the social welfare allowance. This means that benefit recipients are less likely to be active in the labor market compared to adults from a control group that shares similar characteristics with the beneficiaries.

As indicated above, the outcomes based on the HSES data have to be interpreted cautiously, given its limitations. The HSES 2012 does not provide detailed information on social welfare benefits, and benefit categories cannot be directly linked to the classification of social welfare programs defined by the Ministry of Population Development and Social Welfare (MPDSP). It is therefore impossible to clearly distinguish between contributory and non-contributory benefits when defining the various benefit categories.

4. ACTIVE LABOR MARKET POLICIES IN MONGOLIA: ACHIEVEMENTS AND CHALLENGES

Having sustainable employment reduces the risk of living in poverty and helps sustain household livelihoods. It reduces the need for households to resort to coping strategies which are detrimental in the medium and long term, such as selling assets, taking children out of school, or not accessing health care facilities. It allows households to fully participate in society and reduces mental distress often associated with low and unstable income. From a societal perspective, active and productive labor market participation of the working age population contributes to and helps sustain the economic and human development of the country, ensuring long-term macro-economic development. The analysis in the preceding section pointed at the low labor market participation, particularly among young and old adults, many of which are discouraged from participation. The analysis also indicated that social welfare benefit receipt may also lead to inactivity among certain groups. The Mongolian Government introduced the first Law on Employment Promotion already in 2004, recognizing the importance of active labor market participation for the livelihood protection of households and the development of the country. This section discusses the role of labor market policies in general and then maps existing labor market policies in Mongolia and identifies the main achievements and challenges.

4.1 The role and types of labor market policies in general

According to the OECD (2013), the core objectives of activation policies are “to bring more people into the effective labor force, to counteract the potentially negative effects of unemployment and related benefits on work incentives by enforcing their conditionality on active job search and participation in measures to improve employability, and to manage employment services and other labor market measures so that they effectively promote and assist the return to work”.

While this definition primarily focuses on incentivizing persons who are currently not working but potentially could work, activation policies may also target persons wanting to access better jobs, for instance when they are engaged in low productivity and low paid activities (i.e. the underemployed). They allow for the provision of suitable support to specific population sub-groups experiencing more difficulties in their quest to find (decent) work than others. These include persons who have been unemployed for a long time, youth, older persons, low-skilled/low-educated persons and national minorities.

Activation policies are typically implemented by Public Employment Services (PES) and may include measures that

- Strengthen people’s motivation to search for work and take up employment;
- Improve the capabilities of people who are looking for work;
- “Expand the set of earnings opportunities that are available and accessible to jobseekers and those with limited income from work” (Immervoll & Scarpetta, 2012).

While unemployment or other benefit schemes address income loss and the risk of falling into poverty, in itself they do not promote rapid reintegration into the labor market and – depending on their design – may even act as a disincentive to take up a new job (Eicher & Konle-Seidl, 2008). Moreover, research finds that

in selected OECD countries²² former recipients of social assistance benefits are 60 to 80 percent more likely to be a recipient in the next observation period, hence increasing the likelihood of so-called ‘benefit dependency’ (Immervoll, Jenkins, & Königs). Activation policies on the other hand – linking social protection and labor market policies – typically make qualification for income replacement benefits contingent upon a set of conditions that need to be fulfilled, such as active job search and taking part in trainings and employment programs. Income replacement benefits in most cases are unemployment benefits, but can also be social assistance, single parent or disability benefits (Immervoll & Scarpetta, 2012). In this way they create a system of mutual obligations with incentives and sanctions inherent to their design (Almeida, et al., 2012).

Almeida et al. (2012) makes a distinction between those policies primarily implemented in middle- and high-income countries, categorizing them as *activation policies*, and policies in low-income countries categorizing them as *graduation policies*. While according to this definition both activation and graduation policies aim to link individuals to jobs and/or increase their earnings, the ultimate goal of graduation policies is more ambitious in the sense that it also aims to achieve “more independent, sustainable, and resilient livelihoods”. In order to achieve this goal, they include a broader set of interventions. (Almeida, et al., 2012).

Two types of activation policies can be distinguished, namely “policies to increase job search activity and the probability of accepting a job” and “policies to raise individual employability and productivity [...] to make job searchers more attractive to potential employers and to increase potential wages” (Eicher & Konle-Seidl, 2008).

It needs to be borne in mind that activation policies vary widely across countries depending on their labor market conditions and the capacity of service providers (Immervoll & Scarpetta, 2012). They include

- Unemployment benefit schemes with built-in incentives;
- Public employment services;
- Vocational Training;
- Wage and employment subsidies (make-work-pay);
- Public works programs;
- Microenterprise development and self-employment assistance (Grosh, Del Ninno, Tesliuc, & Ouerghi, 2008).

Unemployment benefits with built-in incentives

According to Babcock et al. (2012), the main design challenge inherent in unemployment schemes is moral hazard, resulting in the need for a careful balance between “the provision of liquidity and support for consumption smoothing during unemployment [and] the tendency of such benefits to distort incentives to search for and take new employment”. If unemployment benefits are close to the income one would receive from employment, they have a disincentivizing impact on job search and on accepting suitable job offers. If income replacement benefits are very low on the other hand, they may constitute a barrier to efficient job search and reduce the employability of jobseekers.

One way to prevent benefit dependency is to apply benefit levels that decrease with duration of unemployment (Shavell & Weiss, 1979). Making eligibility for unemployment benefits contingent upon job search efforts is another way to push individuals to engage in job search activities and ensure their speedy

²² Britain, Canada, the Netherlands, Norway and Sweden.

return into employment. Finally, sanctions, such as termination of benefits for not accepting one or more job offers also constitute an incentive to make individuals move back into employment (Babcock, Congdon, Katz, & Mullainathan, 2012). The existence of unemployment benefit schemes is strongly associated with the level of development of a specific country. In high- and middle-income countries, unemployment benefit schemes are much more common and show much higher take-up rates than in developing countries (Kuddo, 2013).

Public Employment Services (PES)

Public employment services include placement assistance, job matching, counseling, services to employers and other specialized services. Their objective is to help individuals to return to work speedily and to make sure that the worker and the job match well. Often PES target the long-term unemployed and the disadvantaged (Kuddo, 2013; Betcherman, Oliva, & Dar, 2004).

In their basic form PES may for instance coordinate job listings so that job seekers and employers in demand of labor are brought together. In a more extended form, they may also include the provision of assistance in improving job search skills or labor market information (Babcock, Congdon, Katz, & Mullainathan, 2012). PES are relatively inexpensive and show positive impacts on job placement and earnings capacity of individuals in developed countries. Nevertheless, in developing countries PES often face a number of challenges, such as lack of funding, understaffing and insufficient access to labor market information (Kuddo, 2013).

Vocational Training (VT)

Vocational trainings typically aim at (i) providing access to opportunities that are out of reach with the skills a particular individual has at hand and at (ii) increasing earnings capacity. They can be provided directly, - for instance through public training institutes -, or indirectly by providing subsidies. In comparison to the Public Employment Services described above, trainings are relatively costly.

Wage and employment subsidies (make-work-pay policies)

Make-work-pay policies aim to tackle the paradox of supporting the living standards of individuals or households with low incomes on the one hand and preventing benefit dependency on the other. They typically target unemployed persons with low education and/or little work experience receiving unemployment or social assistance benefits. In addition, they may target recipients of disability benefits (Immervoll & Scarpetta, 2012).

From the perspective of the benefit recipient, make-work-pay policies have the potential to overcome work disincentives that arise from a small difference between income replacement benefits and wages that unemployed, usually low-skilled workers would receive on the labor market. In this case, they take the form of wage top-ups. When addressing the demand-side of labor, their aim is to minimize disincentives to hire low-skilled workers by reducing the cost of employing them (OECD, 1999).

Micro-enterprise development/self-employment assistance

This kind of program provides assistance to unemployed workers to start up their own businesses. Support may include funding, business advice and screening to estimate the likelihood of success (Grosh, Del Ninno, Tesliuc, & Ouerghi, 2008).

Public works

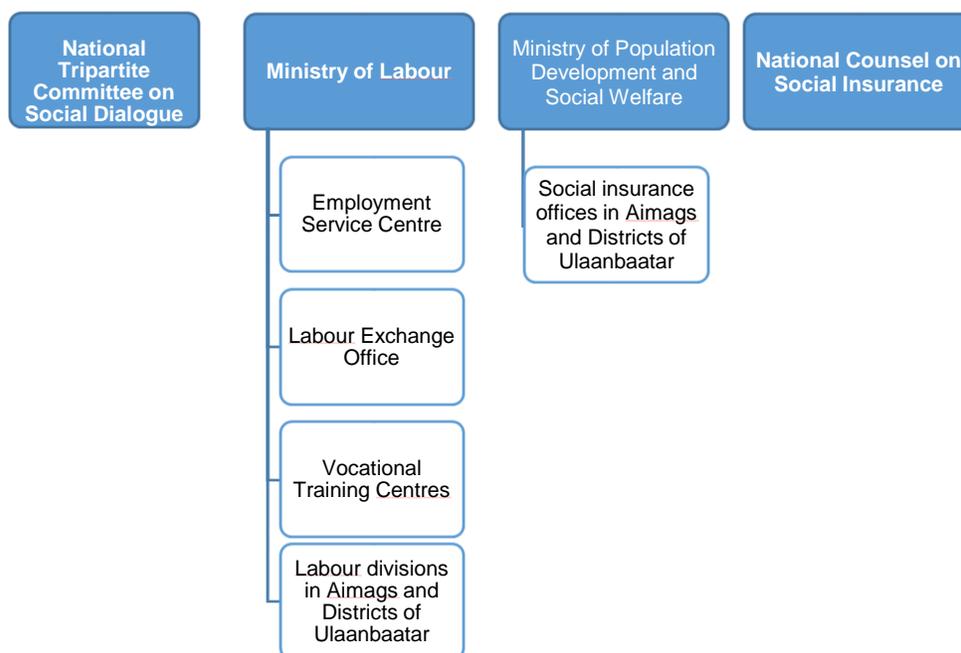
Public works programs aim at creating jobs. Del Ninno, Subbarao & Milazzo (2009) distinguish four different objectives of public works programs, including (i) mitigation of covariate or idiosyncratic shocks, such as economic crises or seasonal unemployment (ii) poverty reduction and (iii) bridging the gap towards better/longer-term employment. The fourth objective – complementary to one or more of the other objectives – is (iv) the creation, maintenance or reconstruction of public goods by employing the poor in temporary jobs, mostly within the infrastructure sector, environmental and agricultural projects or social services. In order for public works programs to be justifiable, public goods created should have a positive impact on the community. They may in turn lead to secondary employment or income benefits (Del Ninno, Subbarao, & Milazzo, 2009).

Important considerations in the design and implementation of public works programs amongst others include the targeting method, choice of remuneration, the wage rate, the number of hours worked and the financing, which all have implications for the outcomes. Table A 3 in Annex A gives an overview of the various design options of public works programs as well their implications.

4.2 Institutional context Mongolia

There are numerous institutions directly or indirectly influencing the Mongolian labor market (Asian Development Bank, 2014). According to the Ministry of Labor (2013), the main institutions directly involved in the design, management and implementation of activation policies and the payment of unemployment benefits are fourfold, with the Ministry of Labor – established in 2012 – playing the central role (see Figure 26 below).

Figure 26. Institutions involved in employment protection and unemployment benefit payments.



Source: Mongolian Ministry of Labor, 2013.

Amongst others, the Ministry of Labor is responsible for planning and coordinating the implementation of activation policies, setting future policy directions and redefining target groups based on arising challenges

(Asian Development Bank, 2014). Its mission statement is “to provide support for maintaining comfortable working environment and equal opportunity in the labor market, as well as to ensure employment and income for citizens by enhancing the quality and availability of employment service” (Mongolian Ministry of Labour, n.d.). The Ministry of Labor is in charge of Employment Service Center, Labor Exchange Office, Vocational Training Centers and the Labor Divisions in the aimags and districts in Ulaanbaatar. The exact tasks of these institutions are listed in the table below. Note that, while legislation stipulates to assign an employment officer at soum and horoo level, in reality this legal provision has not yet been met, resulting in the fact that inhabitants of some administrative units do not have access to employment services (Mongolian Ministry of Labour, 2014).

Table 20: Tasks of aimag and district level institutions responsible for Employment Promotion Policies

<p><i>Employment Service Center</i> (Located in Ulaanbaatar)</p>	<ul style="list-style-type: none"> • Provide information to job seekers about the labor market as well as employment and vocational and skill upgrading training opportunities; • Elect, register and certify private vocational training centers; • Implement employment programs as stated in Law on Employment Promotion.
<p><i>Labor Exchange Office</i> (Located in Ulaanbaatar)</p>	<ul style="list-style-type: none"> • Manage digital labor market information portal; • Provide registration and job matching services for the unemployed; • Provide counseling for selection of job and profession and provide information about labor market.
<p><i>Vocational Training Centers</i></p>	<ul style="list-style-type: none"> • Improve employability of workers by helping them to upgrade their skills to get better positions or return to work; • Sets standards and curriculums for training courses; • Pursue a policy to meet workers’ and employers’ needs.
<p><i>Labor Divisions in aimags and in districts of Ulaanbaatar</i></p>	<ul style="list-style-type: none"> • Register unemployed people; • Implement employment promotion programs; • Provide information about employment, vocational training.

Source: Ministry of Labor, 2013

In 1999, tripartite partners established the National Tripartite Committee on Social Dialogue in order to ensure – through their representatives – the participation of the state, employers and workers in the development, implementation and monitoring of the national employment policy (Buckley & Casale, 2006; Mongolian Ministry of Labour, 2014). To date, social consultation is the most important mechanism to implement employment policy. Besides the National Tripartite Committee on Social Dialogue, other Committees influencing labor policy are amongst others the National Committee of Employment Promotion; National Committee of Vocational Training and National Tripartite Committee of Occupational Safety and Health (Asian Development Bank, 2014).

In addition to public sector institutions, a number of private sector institutions are involved in the implementation of labor market policies, such as Mongolian Employers Federation and Chamber of Commerce, trade unions, private employment services as well as SMEs and NGOs. The former have played an important role in helping to identify training needs from the perspective of employers and to attempt to move people into employment (Asian Development Bank, 2014). However, as opposed to the common view in market economies that it is the role of the government to create an *environment* in which the private sector is able to sustainably create jobs, this view has not yet replaced the pre-transition idea that it is the responsibility of the government to create *jobs* for its people in Mongolia (Asian Development Bank, 2014).

Legal framework

The most important legislation regulating the labor market in Mongolia includes

- The Constitution of Mongolia (1992);
- The Labor Law (1999)²³
- The Unemployment Insurance Law (1994/ revised 2002)
- The Law on Government Special Funds (2009)
- The Law on Vocational Training and Education (2009)
- The Law on Employment Promotion (2004/ revised 2011)
- International labor conventions ratified by Mongolia.²⁴

The Constitution grants Mongolian citizens the right to freely choose their profession and job, which they should be able to carry out in decent working conditions and be compensated for in the form of remuneration. In addition, the Constitution stipulates that workers are entitled to have holidays. Finally, it establishes the right to receive benefits upon retirement, becoming unable to work or during maternity leave.

The Labor Law concretizes the above by defining the “common rights and duties of employers and employees who are parties to labor relations based on an employment agreement” (Labor Code of Mongolia, 1999). In addition, it defines collective agreement and bargaining, collective and individual labor disputes, labor conditions, management, control, and liabilities for breach of the legislation, and to ensure equality of the parties.

Table 21. Main characteristics of the Unemployment Insurance scheme

<i>Qualification rules</i>	<i>Duration of the benefit</i>	<i>Benefit level</i>	<i>Financing</i>
<ul style="list-style-type: none"> • At least 24 months of insured employment, the last 9 of which must be continuous (reduced to 6 months from 1 August 2009 to 1 January 2011); • 6 more months of insured work for a subsequent claim (reduced to 3 from 1 August 2009 to 1 January 2011) • Registration at the territorial employment promotion unit is obligatory. 	<ul style="list-style-type: none"> • Benefits can last 76 days (between 1 August 2009 to 1 January 2011, this was increased to 126 days); • Benefit extension in times of high unemployment is possible: between 1 August 2009 to 1 January 2011, this was increased to 126 days. 	<ul style="list-style-type: none"> • Benefits based on average wages of last 3 months and time employed; • Up to 5 years: 45% rate 5 to 10 years: 50% 10 to 15 years: 60% 15 and above: 70% • Minimum benefits: not less than 75% of the official minimum wage. 	Social Insurance Fund

Source: Carter, Bédard, & Bista, 2013

The Unemployment Insurance Law constitutes the legal basis for the Unemployment Insurance scheme, obliging employees who become unemployed – including public servants – to register at Unemployment Service Offices. The self-employed have the option to register on a voluntary basis. The main characteristics of the UI scheme are listed in the table below, suggesting that qualification rules are rather strict and benefit

²³ Currently under revision.

²⁴ See the list of ratified conventions in the annex.

duration is short. In addition, the requirement of having to have been in continuous employment for a period of at least nine months before unemployment to be eligible for a benefit, rules out those who are affected by seasonal unemployment or other types of short-term employment (Carter, Bédard, & Bista, 2013).

Legislation regulating the Employment Promotion Program (EPP) includes the (1) Law on Employment Promotion, (2) the Law on Vocational Training and Education and (3) the Law on Government Special Funds. Together, they provide a legal basis for types, forms, scope, and financing of the employment promotion measures and services currently in place.

The Law on Employment Promotion stipulates that the government will create opportunities for the employment of the population, link investment policy with employment promotion measures, regulate labor force demand and supply, develop a labor force that is consistent with market demand, improve information and statistics on employment of the population and expand the scope of citizens covered by employment insurance. It further stipulates that it is the task of the Government to protect every citizen from becoming unemployed. It distinguishes between the following employment promotion services and measures: (1) occupational and vocational orientation, counseling and information services; (2) job mediation services; (3) vocational training and retraining services; (4) promotion for self-employed or citizens running businesses in forms of partnerships or cooperatives; (5) support to employers; and (6) public works (Mongolian Ministry of Labour, 2013).²⁵

The Law on Vocational Training and Education sets out the objectives, structure, management and organization of national vocational education, skills and training needs for the labor market and employers. The Law on Government Special Funds regulates amongst other the allocation of funds to the Entrepreneurships Development Program.

Employment services may also be offered by private providers, who are to conclude a contract that specifies obligations and responsibilities regarding the regulation of labor relations; terms and conditions of the work; safety; wage and social protection. However, no concrete legal regulation of the role of private providers offering PES at state level exists, which results in high risk of violation of the rights of employees hired through such providers (Mongolian Ministry of Labour, n.d.).

4.2 Employment Promotion Programs in Mongolia

The above-described legislation shaped the legal environment for a total of nine Employment Promotion Programs²⁶ (see Table 22), which are described in detail in Annex B. They offer a broad range of measures to support a large variety of vulnerable groups in the Mongolian labor market. These include persons that

²⁵ More specifically, the Law on Employment Promotion mentions the following services and measures: (1) provision of occupational and vocational orientation, counseling and information; (2) job mediation; (3) provision of unemployment benefits; (4) incorporation in the integrated registration and information service; (5) other services; (6) preparation for employment; (7) conduction of job training; (8) support to herders and self-employed, support to citizens willing to establish partnerships and cooperatives; (9) support to employers; (10) organization of public works; (11) promotion of employment to citizens faced with difficulties finding employment; (12) other projects and programs, specified in the law or identified by the decision of the Government and National council of employment.

²⁶ Note that the description of the Employment Promotion Programs in this section refers to the situation in 2014. As of January 2015, the EPPs have been revised and reduced to five key programs. See also Annex B for the most important revisions.

in general experience difficulties in finding a job, youth, older workers aged 40+, disabled persons, herder households in need of support, persons lacking vocational skills, entrepreneurs in need of support and retired experts who wish to increase their livelihoods. In addition, the programs in place almost unexceptionally address the multiple dimensions that contribute to the problematic labor market situation these vulnerable groups find themselves in. Amongst others, they aim to

- Increase livelihoods through compensation for activities carried out within the framework of the program;
- Upgrade knowledge and skills through training measures;
- Increase the motivation of workers through personal coaching;
- Bring job seekers and employers together using a database that contains vacancies as well as information on job seekers; and
- Balance demand and supply of labor through cooperation with private firms to offer trainings according to the employers' needs to job seekers.

In 2014, the Employment Promotion Program (EPP) includes eight programs and one project targeted at different vulnerable groups.²⁷ Three out of the nine activation programs and projects could be classified as policies aimed at increasing the income of the most vulnerable unemployed. The other six measures are either policies to increase the job search activity and the probability of finding a job and policies to raise the employability and productivity of the unemployed job seeker. The Preparation for Work Program prepares citizens for the labor market by equipping them with vocational skills in a short period of time and provides support to employers. The Herders' Employment Program trains young herders with herding and entrepreneurial skills for sustainable livelihoods, provides them with young livestock and loans and financial support. The Employment Promotion Program for Citizens over the Age of 40 offers work to citizens over the age of 40 and operates similar to a public works program. The Employment Promotion Program for Disabled Citizens provides financial support to citizens with a disability, business entities and organizations, and supports entrepreneurs that intend to create job opportunities meeting the special needs of disabled citizens. The "Mongolia with Owner" Program also has the features of a public work program. It provides the unemployed with work places and income support through engagement in green and community development initiatives, rehabilitation of nature and environment, infrastructure improvement. The Entrepreneurship Development Program promotes entrepreneurship and employment of the self-employed, partnerships and cooperatives and provides entrepreneurs with business incubation and small loan services. The National Program for Preparing Skilled Workers assists Mongolian citizens at TVET colleges in acquiring vocational skill of occupations that are highly demanded in the labor market. These programs are usually instigated upon a concrete demand from a large enterprise. The Employment Promotion Program for Youth aims at engaging students and youth in soum and local development and construction activities, and provide them with temporary work places and labor discipline. Finally, the Senior Experts' Consultancy Service Project engages experienced seniors to share their knowledge with less experienced workers.

According to data from the Ministry of Labor, in 2014, more than 84 thousand job seekers participated in the EPP. The Mongolia with Owner Program was the largest with over 25 thousand participants, followed by the Preparation for Work Program, the Youth Employment Promotion Program and the Entrepreneurship

²⁷ The review of the EPP focuses on 2014. In 2015, a number of changes have been introduced among which the reduction of the number of programs to five (see Annex B for more details).

Development Program (Table 22). Overall, the Government of Mongolia spent MNT 49.8 billion (USD 27.4 million). On average, MNT 591 thousand (USD 325) was spent per participants, though costs per participant vary considerably by program type. The most expensive program group is the National Skilled Worker Training Program (MNT 1725 thousand (USD 949) per participant), and the least expensive is the Mongolia with Owner Program (MNT 171 thousand (USD 94) per participant).

Due to the lack of a comprehensive monitoring and evaluation system for the EPP, it is impossible to say whether the measures have been effective in reducing unemployment and reactivating the inactive. Participation in the EPP does not per definition lead to a job. In most cases, participation provides a temporary job, which is in the nature of the respective EPP. According to the data from the Ministry of Labor, 27 thousand permanent jobs resulted from the EPP in 2014. Participation in the Preparation for Work Program led to a permanent job for 44 percent of the participants. Of the 4,182 participants of the National Skilled Worker Training Program, 64 percent found a permanent job, and the Employment Program for Disabled People led to a permanent job for 61 percent of the participants. Least effective in that perspective was the Entrepreneurship Development Program where a permanent job was the outcome for only 17 percent of the participants.

Table 22. Employment Promotion Programs: participation, expenditures and jobs created, 2014

Name of projects and programs	Total participants	Expenditure '000 MNT	Jobs created		
			Total	Permanent	Temp
1 Preparation for Work Program	12,581	2,911,478	5,475	5,475	
2 Employment promotion program for people over 40	3,841	1,151,016	3,841		3,841
3 Herders' Employment Promotion Program	2,633	3,592,709	1,492	1,492	
4 Entrepreneurship Development Program	10,075	2,617,635	1,771	1,771	
5 Mongolia with an Owner Program	25,329	4,331,898	25,329		25,329
6 Employment Promotion Program for Disabled People	2,622	1,725,497	1,600	1,600	
7 Youth Employment Promotion Program	10,203	2,088,090	10,203		10,203
8 Senior Experts' Consultancy Service Project	3,302	984,705	3,302		3,302
9 National Skilled Worker Training Program	4,182	7,215,000	3,085	2,695	390
TOTAL	84,323	49,868,046	72,839	27,052	45,787

Note: more detailed information on sub-programs is provided in Table B 1 in Annex B.

While the encompassing nature of the EPP opens up the possibility of addressing various vulnerable groups and the problems they face at the same time, it is no easy task to coordinate such a large variety of programs and the different activities they offer. Furthermore, for the EPP to be effective, solid administrative capacity and a considerable amount of fiscal space are indispensable. To date, EPP face a number of challenges, which concentrate in the following areas:

- Insufficient funding;
- Lack of sustainability of jobs provided;
- Administrative issues;
- Inadequate information dissemination and resulting lack of transparency and awareness;
- Regional disparities in availability of services; and
- Program design issues.

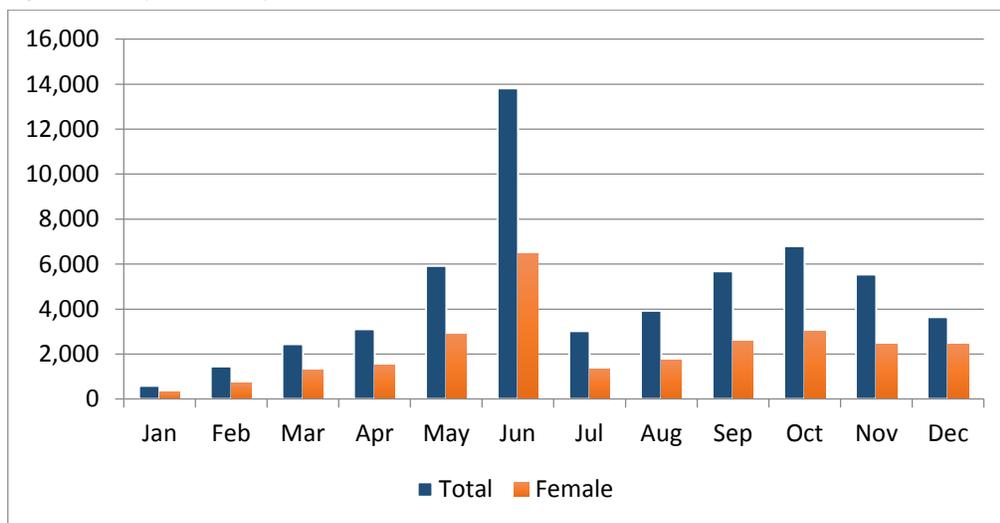
A major challenge to the effectiveness of EPP is posed by the limited funding available for program implementation, which is an issue for the majority of EPP currently in place. Limited funding influences (1) the quality of the programs offered and (2) the compensation that is provided to participating employers and job seekers. While - due to low investments - training curricula, equipment and facilities are outdated,

salaries and project funding provided are generally low, causing employers' and job seeker's interest to participate limited.

With regard to the program design, certain design features (1) make the target group's participation in the program difficult and (2) cause jobs provided within the framework of the various EPP offered unsustainable. Examples of the former are the Entrepreneurship Development Program – which requires fulfillment of extremely strict criteria to obtain funding from the Mongolian State Bank, the Senior Consultancy Service Project – which requires participation in groups of minimum three persons –, or the non-coverage of additional expenses within the Student Employment Promotion Project. Such program criteria are likely to exclude those that need support most.

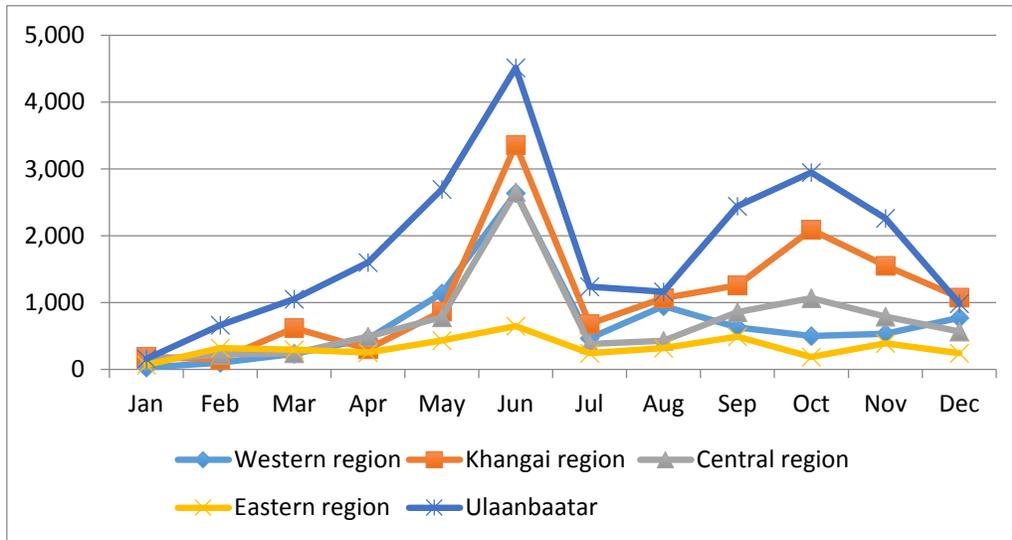
In 2014, a total of 55,909 job placements have been registered at the online job system e-job.mn, of which 26,054 (46.6 percent) concerned women. While the majority of placements were registered in June, fewest job placements were registered during the months January, February and March. These seasonal impacts are clearly visible in the two figures below. The latter figure additionally shows that job placements were most numerous in Ulaanbaatar and least in the Eastern region, which was the only region that did not perform according to the targets that were to be reached in 2014. Of the 4,400 job placements that were to be achieved, only 3,896 job placements were realized due to underperformance within the Khentii district.

Figure 27. Job placement by month in 2014, total and female



Source: Information, Monitoring and Evaluation Department - Employment Services Center, 2014

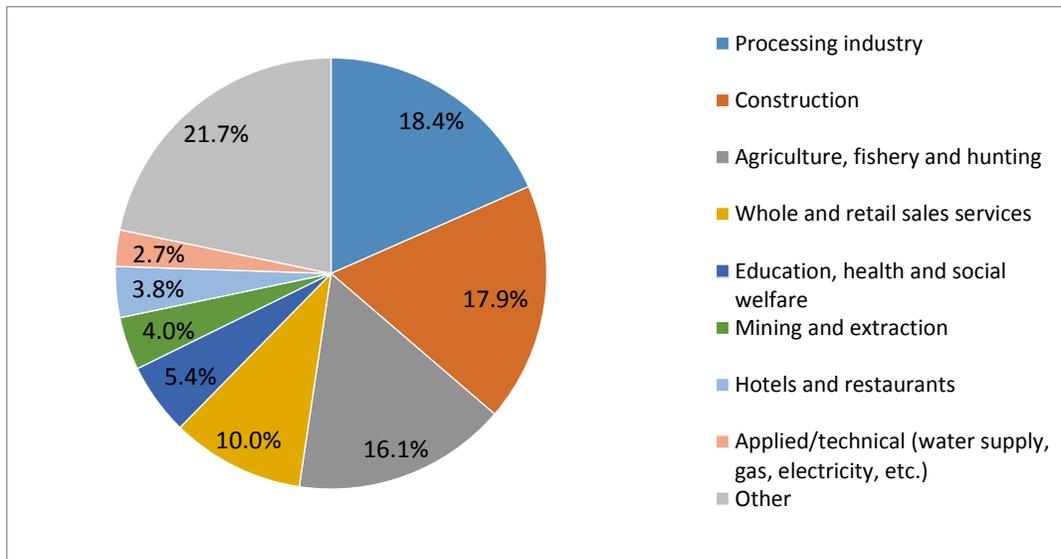
Figure 28. Job placement in 2014, by month and region



Source: Information, Monitoring and Evaluation Department - Employment Services Center, 2014

Three economic sectors stand out in terms of job placements in 2014, namely the processing industry, the construction sector and agriculture, fishery and hunting. Together they account for over half of the job placements that were realized in 2014. Work in the latter two of these sectors is highly seasonal; hence job placements in these sectors tend to be of short duration. The mining and extraction sector accounts for only 4% of job placements.

Figure 29. Job placement by economic activity sectors



Source: Information, Monitoring and Evaluation Department - Employment Services Center, 2014. Notes: Category "other" includes Art, entertainment, leisure activities; International Organizations resident representatives; Household based entrepreneurship activities; Public management and defense activities; Management and support activities; Real estate activities; Financial and insurance activities; Telecommunication; Transportation and warehouse activities and Other services activities.

The highly seasonal nature of work in Mongolia is also inherent to the design of some of the EPP due to the type of activities they offer. Examples include the Employment Promotion Program for Citizens over 40, and

the Mongolia with Owner Program. Some of the measures falling under the former program promote activities that are highly vulnerable to seasonal unemployment. For instance, the Potato, Vegetable and Fruit Cultivation Measure, aiming to train groups of beneficiaries to cultivate, harvest and sell vegetables to improve their livelihood, contributes to seasonal unemployment. Through Green works (gardening of parks and streets in public land areas; protecting and taking care of places of worship; cleaning and protecting the forest and preparing firewood; and combating against desertification and deforestation) and Public Works (amongst others building flood dams and constructing local roads and bridges), the Mongolia with Owner program also reinforces seasonal unemployment.

Besides program design issues, administrative issues limit the effectiveness and efficiency of EPP. As mentioned earlier in this report, a precondition for accessing social services and assistance in the place of residence – including taking part in EPP – is registration with the local Civil Authority. This criteria is particularly problematic for migrants, since most of them do not register in their new place of residence. Reasons for refraining from doing so vary from documentation problems²⁸ to complex application procedures and high costs related to registration. Not being able to access social services hinders migrants' integration. In order to expand accessibility of employment services and to ensure that coverage of the target group is as high as possible, the registration at Civil Authorities should be low-cost, transparent and requirements for official documentation should be kept as limited as possible. Options for decreasing official documentation needs would be to shift the burden of de-registration to the Civil Authority of re-registration, which could contact the Civil Authority of origin to de-register the respective client or simply to allow Mongolian citizens to apply country-wide for employment promotion measures (International Organization for Migration, 2010).

In addition to issues related to documentation, the capacity of employment officers does not yet meet international standards. According to the Ministry of Labor, there is a need to upgrade quality of services to ensure better assistance of clients according to their needs (Mongolian Ministry of Labour, 2014).

Several activation programs falling within the jurisdiction of the Law on Employment Promotion are still quite new, resulting in the fact that many people are not yet aware of them. In addition, due to lack of information dissemination, applicants at times misunderstand program goals and/or rules (Asian Development Bank, 2008; ILO 2014). Increasing awareness among the target group and transparency of program goals and rules contribute to better targeting and limiting program costs, which are both preconditions for success. Hence, using the right media to communicate a clear and transparent message to the target audience greatly contribute to achieving program goals (Castañeda & Lindert, 2005).

With regard to the availability of services, rural areas are worse off as compared to urban areas, with persons living in Ulaanbaatar experiencing the highest service density. These regional disparities amongst others arise from the fact that in order to participate in many programs, application at the aimag labor division is required. Hence, the unemployed in rural areas, including the many seasonal unemployed there, are left behind.

Besides problems inherent to the EPP, the attitude of job seekers stands in the way of achieving the desired program outcomes. According to analysis by the ADB (2013), the viewpoint that the government is responsible for job creation is still widely held in Mongolia, indicating that the country has not yet achieved

²⁸ In order to re-register in their new place of residence, migrants first need to obtain the correct paperwork by deregistering at the place of origin.

a fully developed market economy in which the role of the government is merely to ensure an environment in which private sector job creation can thrive. This viewpoint negatively impacts on the attitude of job seekers (Asian Development Bank, 2014). Hence, the perception that it is the responsibility of the government to provide job seekers with a job should be replaced with a higher degree of own responsibility of the job seekers.

In spite of the large demand for such professions, practical technical professions involving skills needed in the mining, construction and manufacturing sector are generally valued less than the more theoretical university studies (UNDP, 2007). In order to increase interest for the former, practical technical professions should be better marketed and be made more attractive for students as well as job seekers. In addition, curricula could be developed in close cooperation with employers of highly demanded professions so as to match demand and supply of skills.

Despite some of the shortcomings of the EPP, the active labor market programs initiated and implemented by the Government of Mongolia are very important for the country addressing the relatively low labor market participation and other urgent labor market problems. Although some of the programs directly provide work and allow participants to increase their income at least temporarily, the programs cannot address the lack of employment opportunities in rural areas. The EPP is also ineffective in addressing the proliferation of seasonal and temporary jobs especially in urban areas. Currently, there is no specific activation program in place addressing seasonal unemployment. Rather, some of the programs that are currently in place directly or indirectly contribute to seasonal employment given the nature of the activities. Experience from other countries may serve as inspiration to tackle the issue. Examples of policy measures taken in other countries to cope with seasonal employment, particularly in the construction sector, are provided in Annex C. More effort is needed to address the negative attitudes of both job seekers and employers. For the skills mismatch EPPs are only a partial remedy. To tackle the problem policy efforts are needed in the area of education.

5. CONCLUSIONS AND OPTIONS FOR POLICY REFORMS

The objective of this report was to describe and analyze labor market outcomes for different groups of the population in Mongolia, with a particular focus on poor and vulnerable groups, and propose a set of policy recommendations to further strengthen the labor market participation and integration of currently unemployed or inactive adults.

The Mongolian labor market is characterized by skills shortages and mismatches, lack of opportunities in rural areas, a substantial share of the labor force engaged in seasonal or temporary employment, and age discrimination. Labor market participation is slightly lower compared to other countries resulting in a relatively high number of adults that are inactive. The most vulnerable groups in the labor market are internal migrants, workers in the informal sector and those with precarious jobs, women and both the young and older workers.

65 percent of working-age adults participate in the labor market, which includes all persons from the age of 15 up to retirement, which is 55 years for women and 60 years for men. Participation (and unemployment) rates vary somewhat across seasons, with higher activity and lower unemployment from April to September. Informal work (defined as the self-employed and unpaid workers) accounts for 39 percent of total employment, with markedly higher rates in rural areas. Agriculture is still the most important employment sector (30 percent in 2013), although the share is decreasing. While construction accounts only for seven percent of total employment, the share of temporary and seasonal work is particularly high in this sector.

Inactivity is especially high among the young, those older than 45, women and those living in Ulaanbaatar. 44 percent of the able-bodied between 15 and 35 years of age are neither working, nor looking for work, and those in the age group that are economically active are more likely to be unemployed. Studying is the main reason for inactivity, and concerns mostly the youngest age group. Excluding students below the age of 25 from the work-able population reduces the inactivity rate to 19%. For the remaining group of inactive work-able adults, housekeeping and child care is the most frequently stated reason for inactivity for half of them, while 34 percent claim 'other' reasons, which are not further specified. Even though in principle individuals engaged in unpaid work should not be counted as inactive, those in the 'other' category might still be suspected of being engaged in unpaid activities such as supporting family members with herding or agriculture. Able-bodied adults aged 40 and older seem to be discouraged, as many of them indicate age as the main reason for their inactivity.

Especially inactive adults living in Ulaanbaatar and women with higher education claim to be inactive due to housekeeping and child care. This is a rather surprising finding and contrary to what one would find in other countries, where women with higher education have higher labor market participation rates than other women. From a social investment perspective, inactivity among educated women is a waste of public and private resources invested in education.

The econometric analysis of labor market outcomes hints at the existence of negative work incentives related to the receipt of social welfare benefits. Overall, individuals living in social welfare recipient households are less likely to be active labor market participants. However, the effects differ for men and women and for the position in the welfare distribution. Social welfare receipt does not affect the

participation of men, and has even a positive effect if only poorer men are considered. The negative effect for women holds irrespective of the welfare level.

With the establishment of the Ministry of Labor in 2012, the Government of Mongolia gave a clear sign for the importance of labor market policies in Mongolia and renewed the focus on employment promotion. The Law on Employment Promotion, amended in 2011, provides the legal bases for a number of new employment promotion programs. In 2014, the Employment Promotion Program (EPP) included eight programs and one project targeted at different vulnerable groups. Three out of the nine activation programs and projects could be classified as policies aimed at increasing the income of the most vulnerable unemployed. The other six measures are either policies to increase the job search activity and the probability of finding a job and policies to raise the employability and productivity of the unemployed job seeker.

Due to the lack of a comprehensive monitoring and evaluation system for the EPP, it is impossible to say whether the measures have been effective in reducing unemployment and reactivating the inactive. Therefore, a comprehensive review of current programs would need to be implemented before a specific analysis of strengths and weaknesses or concrete recommendations for improvements could be presented. This is beyond the scope of the present report. At the same time, based on discussions with service providers and a report from the Employment Services Center (2014), several apparent challenges can be cautiously identified that seem to limit the success of the EPP. Registration procedures create application barriers for some groups given that a set of documents need to be provided and registration can only take place at the aimag/district center where an applicant is officially registered. The transaction and opportunity costs exceed the perceived benefits of program participation in some cases. Programs that are relatively new are not yet well-known among the target groups. Moreover, due to inadequate information applicants misunderstand program goals and rules. Not all programs are available in all aimags/districts leading to regional disparities with respect to the offered services. Persons living in UB benefit from the highest service density. But the most important challenge for the EPP is the lack of funding to meet the actual demand for these programs, which exceeds the number of available places by far.

Given that sustainable and decent employment is at the core of any strategy to improve the situation and resilience of poor and vulnerable households, future policies should enable the labor market participation of all Mongolian citizens. Lessons from behavioral economics indicate that individuals not always act rationally or in their best self-interest. People make errors in interpreting the situation; they may be put off by the complexity of a situation; they may procrastinate or hold non-standard preferences and beliefs. As a result, they may have biased expectations when it comes to their careers or the wage they can expect leading to the refusal of a rationally reasonable job. The lack of information or resources may further inhibit their search for work or training participation. Professional guidance and the application of (financial) incentives may nudge the currently unemployed and inactive back into the labor market. Creating awareness of the importance of every individual's participation not only for him/herself but also for the greater benefit of the country and society as a whole may be worthwhile in the long run.

Based on the analysis in this report, the main challenges for the Mongolian government are to (i) increase the labor market participation of women, (ii) increase the share of regular employment, which means reducing temporary and seasonal employment, (iii) improve the labor market prospects of young adults and (iv) increase the employment of older workers. While policy options to address these challenges will involve multiple policy sectors, the policy recommendations below focus on (i) strengthening and expanding the

Employment Promotion Program, (ii) the outreach to job seekers and currently inactive adults, and (iii) better monitoring and evaluation of labor market policies.

Policy recommendation I: Strengthen and expand the Employment Promotion Program

- Assess the effectiveness of current EPP measures

The Employment Promotion Program has immense activation potential. It requires increased outreach to the unemployed and inactive (in particular vulnerable groups like youth, rural-to-urban migrants or seasonal workers), and the expansion of the EPP to meet the demand. Before extending the EPP a comprehensive review of the current programs (including outputs, outcomes, spending patterns and flows of funds) should be implemented. It will provide insights into which measures were most effective and which gaps need to be addressed.

- Develop long-term policy strategy for employment programs

Similar to the National Decent Employment Program it is recommended to develop a comprehensive policy strategy for the employment programs. The strategy would outline the long-term vision and formulate clear policy objectives and activities, similar to the former strategy (2002-2012), which was developed with support of the ADB. An agreement to an overarching employment strategy is expected to make the government a more predictable partner, also in the tripartite context, and allow for more sustainable employment policies.

- Facilitate participation in EPP

A more proactive role in promoting the EPP can strengthen the outreach to the unemployed and inactive population. Easing registration criteria for participation in EPP and actively supporting interested job seekers with the registration, for example, by waiving costs for documents or covering transportation costs, may further increase participation in the various programs. However, given that not even the current demand for these programs can be met, the existing EPP need to be expanded, which requires the extension of the various quota for participation, the allocation of more funds from the Employment Fund and – in the medium term – the augmentation of funds from the Employment Fund with funds from more predictable and sustainable funding sources.

- Broaden the scope of existing EPP measures

Although the EPP are highly valued, one of the current problems of the EPP concerns their seasonality. While some of the EPP activities are season-bound (e.g. Mongolia Owner Program), other activities, such as trainings, could be offered throughout the year. Existing programs, such as the Preparation for Work Program, could be further strengthened by upgrading the training content and lengthening the duration. Employers welcome participants with knowledge and skills that go beyond the sheer minimum. The Preparation for Work Program could be extended by offering participants on-the-job training in collaboration with prospective employers after completion of the program.

It would also be helpful to make access to skills trainings and skill updates available to job seekers older than 40 years old, particularly if unemployment is the result of lack of skills. Evidence from OECD countries indicates that older workers benefit from active labor market policies (Sonnet et al., 2014).

- Consider the introduction of new EPPs and follow-up measures to existing EPPs

Reducing seasonal unemployment is challenging in a country as Mongolia, given that most of the seasonal work takes place in the construction sector. Countries with similar climate conditions as Mongolia experience rather different levels of seasonal unemployment (mainly in the construction sector) implying that other factors play a role. Measures that can influence the incidence of seasonal unemployment are broadly grouped into (i) technology and (ii) regulation. Weather protection systems, such as the use of materials and equipment to enclose the construction site and control the climate inside the enclosure (for example, tarpaulins and heaters) have been available for many decades, but the extent of their use depends on the structure of the construction industry. Countries with many, mostly small, firms often lack the resources to invest in new technologies and therefore, the use of new technologies remains limited. In Canada, the use of materials and equipment to enclose the construction site and control the climate inside the enclosure, such as tarpaulins and heaters, has become widespread. These technological innovations helped to reduce the seasonal impact on employment. Alternatively, public work programs offered during the low season could provide workers with a minimum income during their seasonal unemployment spells. Public work programs have proven to be effective in mitigating the impact of severe economic contractions, as shown in the Latvian case (see Box below).

Policy measures addressing seasonal unemployment

Most countries use the regulatory system to offset seasonal unemployment. The most common policy measures are incentives or regulations to smooth construction works over the entire year (for example, subsidies to support contracts during the ‘low season’, or fines for laying off workers), and compensation payments for workers in the event of income loss due to adverse weather conditions (for example, bad weather allowance, unemployment benefits during low season).

1. The Netherlands: (1) For selected sectors (agriculture, construction, hospitality, culture and industrial painting) the contributions that employers pay to finance Unemployment Insurance are tied to the duration of the contracts they offer employees: the longer the duration of the contract, the lower the premiums that the employer has to pay. (2) The ‘Winter painter’: subsidies for carrying out painting activities during the winter months. Note that the latter has been extended to all construction work involved in renovating houses during the recent economic crisis (irrespective of the season).
2. Denmark: construction work must continue during the winter period by Ministerial Order, irrespective of the weather circumstances. Only if winter precautions do not suffice, the employer is obliged to pay a bad weather compensation to employees.
3. Germany: Seasonal short time allowance: full wages for the hours they are still able to work and a share of their full wages for the hours they would have worked in the absence of seasonal impacts. Seasonal short work time allowance is paid by the government and solely applies to the construction sector.
4. Canada: Employees that are affected by seasonal unemployment can apply for unemployment benefits without restrictions.
5. Denmark, the Netherlands: consultancy offers guidance as to the performance of weather-related measures and raise awareness regarding the benefits of winter construction, using a “cost-benefit model showing that the extra costs incurred by using weather protection systems are in many cases fully compensated by benefits achieved”.

Source: for more details, see Annex C.

The case of Latvia

During the 2008 – 2010 crisis, Latvia's economy experienced severe contraction. Drops in employment and increase in poverty were two unavoidable consequences, disproportionately affecting urban areas. According to Azam et al. (2013), between 2008 and 2010, 11.2 percent of the pre-crisis workforce had lost their jobs.

As a response to the crisis' severe negative consequences for Latvia's workforce and the lack of responsiveness of its safety net leaving approximately 40 percent of workers who had lost their job ineligible for unemployment benefits, the government initiated the Workplaces with Stipends program. The two main goals of this "emergency public works program" included (1) provision of income support to those in need and (2) prevention of skills loss among the unemployed and in some cases even provide the opportunity of gaining new skills.

The program was open to all registered unemployed, irrespective of place of residence. In spite of these rather broad eligibility criteria, the program's self-targeting mechanism worked exceptionally well. A combination of providing a relatively low stipend (80 percent of the minimum wage) and high labor intensity resulted in 80 percent of the program beneficiaries being poor and one fifth of all beneficiaries being non-poor.

Besides its good targeting performance, detailed examination of the program's outcomes has shown that it was also effective in increasing beneficiaries' income and decreasing the likelihood that they would adopt adverse coping strategies. With regard to the former, program beneficiaries' incomes on average increased by 67 LVL per month out of a total stipend of 100 LVL. In addition, beneficiaries were considerably less likely to adopt food, utility or health-based coping strategies than their counterparts who did not receive a stipend (Azam et al., 2013).

By 2011, in line with recovering economy and increasing labor market opportunities, the WWS program was gradually phasing out. Currently, a much smaller Public Works program targeting long-term unemployed persons is in place. It provides higher stipends and has a stronger training component.

Source: Azam et al. (2013); ICF GHK (2012).

Policy recommendation II: Increase outreach to job seekers and currently inactive adults

- Intensify active coaching of job seekers and employers

Users of employment services, and in particular the more vulnerable groups, benefit from intensive and personalized counseling with respect to their employment options and career planning. The current employment services can be further strengthened by putting more efforts on counseling and guidance of job seekers. The experience of private labor exchange offices has shown that an individualized approach is most effective for increasing the registration of job seekers and the successful placement of job seekers. After a successful job placement, labor exchange offices could actively follow-up during at least one year after the placement was made. Such an approach allows capturing potential problems in the new employee/employer relationship early on. Employers may be encouraged to play by the rules with respect to the agreed salary and social insurance contributions, and refrain from laying the worker off after a few months. Employees, on the other hand, are monitored with respect to the signed contract and are nudged into keeping their job commitment. Similar to private labor exchange offices, financial incentives could be introduced for the Departments of Labor and the Local Exchange Offices to actively follow-up placed workers. In practice this would mean, that all labor exchange offices receive a financial benefit for each successful job placement after a certain period. On the labor demand side, employment services could increase the outreach to employers to further improve the match with job seekers and ensure the regular stream of incoming job vacancies.

- Strengthen outreach activities and introduce mobile services

In order to promote employment services and the registration of job seekers, mobile labor exchange offices can reach out to formerly underserved groups of inactive and unemployed citizens. Home visits can be used to approach discouraged workers and introduce the available services. A recent pilot project implemented by the private labor exchange office showed that as a result of increased outreach activities, the number of registered job seekers increased. Furthermore, the use of text messaging for vacancy announcements and registration follow-up would also allow reaching those without access to internet. The use of traditional media, such as newspapers, radio and TV, for the dissemination of vacancies and information on EPP may be needed to reach out to the most vulnerable groups, such as the poor and those living in Ger districts.

- Secure the position of private labor exchange offices

The 37 currently active private labor exchange offices, which are mainly based in Ulaanbaatar, offer services free of charge to job seekers. In principle, the private offices are paid for their services by the Central Labor Exchange Office and by employers. In order to secure their operations in the future, the Labor Code could include a chapter on private providers of labor exchange, which settles the funding issues.

Policy initiatives to stimulate employment of older workers

The policy reforms implemented over the past decade in OECD countries to stimulate longer working lives focused primarily on the reform of old-age pension and welfare systems. While such measures had positive effects on the labor market participation of older workers, other policy measures are required to enable older workers to participate. Recent policy initiatives included measures to better reward work, address employer practices and increase the employability of older workers. A study on France, the Netherlands, Norway and Switzerland provided the following insights:

1. Legally prevent discrimination: Age discrimination is legally banned in France, the Netherlands and Norway. The Netherlands screen vacancy announcement; France tried anonymous applications, but it cannot prevent age discrimination during the hiring process.
2. Cooperation with and involvement of social partners is crucial to change attitudes of employers and increase the esteem for older workers. Social partners play an important role in the Netherlands and Norway to raise the awareness of the value of older workers.
3. Increase support to older workers by public employment services and access to active labor market policies are the most frequent measures. The validation of acquired experience is important for older workers with initial qualifications that are outdated. It gives prove of their acquired skills on the job for potential employers. The Netherlands provide Experience Certificates validating skills. The Certificate is part of labor agreements in several sectors.
4. Mainstreaming of employment services for older workers was initiated in all four countries. Public employment services provide individual action plans to respond to the needs of older long-term unemployed citizens.

Source: Sonnet et al. (2014)

- Formally recognize the work experience of older workers

The advantage of older workers compared to a young person is experience. Even if the previous formal education was limited or is outdated, older workers acquired valuable experience on the job. By formally

acknowledging the set of skills and experience of older job seekers, future employers are enabled to objectively assess the quality of the job seeker and the match with the job and the team. The Netherlands, for example, provide Experience Certificates, which validate acquired skills. The certificates are part of labor agreements in various sectors (see Box above). Still, employers' attitudes towards older workers in Mongolia have to change. Labor market discrimination against particular groups could be legally banned (as is the case in the Netherlands, France and Norway), and employers could be encouraged to review their recruitment criteria. Awareness programs and public campaigns could be used to sensitize employers and change their attitudes towards 'older' job seekers. The public sector could give a positive example by hiring older workers and ban all discriminatory criteria from their recruitment policies.

Policy recommendation III: Strengthen policy analysis, monitoring and evaluation

- Align data collection instruments

The availability of regular and reliable data – including from a well-functioning management information system and from household surveys – is very important for policy monitoring and evaluation. Given the limitations of the analysis indicated in the first chapter, the existing data collection instruments could be improved to facilitate similar analyses in the future. The questionnaire of the current HSES could benefit from being carefully reviewed and aligned with current government policies. This applies most urgently to the section on income from social welfare benefits. While it may be beyond the scope of the survey to distinguish between the more than 70 different social welfare programs, it is imperative to clearly distinguish between social insurance-based benefits and non-contributory benefits (i.e. social assistance). The most prominent or politically relevant benefits should be listed separately. Secondly, information collected in the labor section could allow the establishment of labor market indicators following international standards. Thirdly, standardizing questions and response categories would improve the comparability across HSES and SW/PMT data.

- Rigorous evaluation of current EPP

As mentioned above, the further development of the EPP would benefit from a comprehensive review. Such a review could answer questions regarding the cost-effectiveness of the different programs under the EPP, inform the selection of programs to be expanded and identify the programs to be revised or replaced.

- Initiate further analytical work to better understand labor market dynamics

The analysis in this report indicated the need for regular policy impact evaluations and in-depth analysis of particular topics relevant for policy design. For example, more research is needed to better understand why so many Mongolian women, particularly those with high education, do not work. Factors may relate to norms and values with respect to the position of women in society, or may simply reflect satisfaction with the current living standard. An in-depth study on female labor market participation in Mongolia would contribute to a better understanding of the relatively high share of inactive women and policy strategies, which could address this issue.

While the current analysis heavily relied on the analysis of quantitative information, qualitative research can provide insights into the underlying supply and demand-side dynamics that drive labor market outcomes. A prospective qualitative analysis is planned for the future to shed light on (perceived) barriers to employment, such as the negative attitudes of both job seekers and employers, or the preference of employers for foreign workers.

Beyond labor market policies

Other measures to stimulate labor market participation are beyond the strict realm of labor market policies. In order to increase the labor market participation of women, the reconciliation of work and family life needs to be facilitated, for example, by promoting part-time employment and by allowing flexible working hours. A new chapter in the Labor Code could foresee in these possibilities. Furthermore, the provision of affordable child care facilities and investment in pre-school education will facilitate re-entry into the labor market for women with children. Such measures are commonly promoted in OECD countries, as indicated in the Box below.

The current educational system could be further strengthened and aligned with the needs of the labor market in order to reduce the skills mismatch between labor demand and supply. Extending the compulsory years of education, investing in TVET colleges and revising the curricula of Higher Education Institutions are policy options, which will contribute to a better educated and skilled workforce and increase the productivity of the Mongolian economy in the long run. Access to education for youth in rural areas can be improved by reducing barriers related to information and financing of education beyond the compulsory nine years (Shatz et al., 2015).

However, in order to address the current skills mismatch, the attitude of pupils, students and their parents needs to change as well. Career counseling could become part of the regular secondary school curriculum. For example, regular occupational and vocational counseling in the last year of compulsory education could guide these adolescents to occupations with good employment opportunities, encourage them to learn skills which are in high demand and counter the idea that a university degree will automatically lead to a good job. Internships during the last year of compulsory education would allow students to sample different vocations and bring them into contact with future employers. Finally, scholarships for TVET colleges and access to structural trainings offered by TVET colleges may influence the educational choices of the future labor force.

Policies to increase female labor market participation

Over the last thirty years, female labor market participation in OECD countries increased from 54 percent in 1980 to 71 percent on average in 2010, though large cross-country differences prevail (Thévenon, 2013). The increase in participation of women can be attributed to a number of factors:

1. The increase of the service sector in the economy offered more job opportunities for women. In most OECD countries the service sector accounts for more than 70 percent of female employment.
2. The reliance on part-time work in many service sector branches (for example, health, education, catering or domestic services) attracted women in particular.
3. Increasing public employment: employment in the public sector is interesting for women due to better job security, particularly in the situation of family creation. In Norway, for example, more than one-third of female employment is in the public sector.
4. Public policies:
 - a. Provision of paid maternity and (unpaid) parental leave.
 - b. Investments in the provision of child care services and pre-school education: the number of children in formal day care has increased significantly in a number of OECD countries. The provision of child care is positively associated with female labor supply. Greater or higher-quality child care allowed women to move from part-time to full-time work.
 - c. Effective tax systems which do not punish two-earner families thereby increasing the incentive for women to work (part-time). Higher effective tax rates on the second earner reduce female labor supply.
 - d. Flexible workplace arrangements (part-time work, flexible start or finishing times, teleworking) governed by collective agreements. In most OECD countries, employees have the right to request part-time work in order to care for a young child (but only seven countries have similar regulations to care for an adult).

OECD countries differ considerably in the way they combine different policy instruments to support families. Nordic countries (DK, FI, IC, NO, SW) use generous leave conditions after childbirth, provide widely available quality childcare and out-of-school services. These governments spend on average more per child than other OECD countries, particularly on childcare services and earnings-related parental leave. Anglophone countries (IE, UK, AUS, CA, NZ, US) prefer cash benefits to low-income families and pre-school children. Continental European countries tend to provide high financial benefits, but the in-kind support to dual-earner families is limited. Only France provides strong support to working mothers.

Source: Thévenon (2013); Adema (2012)

Bibliography

Adema, W. (2012). 'Setting the scene: The mix of family policy objectives and packages across the OECD. *Children and Youth Services Review*. 34:487-498.

Agentur der Arbeit. (n.d.). *Dienste und Leistungen der Agentur der Arbeit - Saison-Kurzarbeitergeld*.

Alгаа, S. (2007). Growth of Internal and International Migration in Mongolia. *8th International Conference of Asia Pacific Migration Research Network* .

Almeida, R., Arbelaez, J., Honorati, M., Kuddo, A., Lohmann, T., Ovadiya, M., et al. (2012). *The role of Activation Policies in Developing Countries*. Washinton D.C.: World Bank.

Asian Development Bank. (n.d.). *Economic Outlook 2014*. Manila: ADB.

Asian Development Bank. (2014). *TA-8241 MON: Promoting Inclusive Growth* . Manila: ADB.

Azam, M, Céline F and MI Ajwad, (2013) "Can public works programs mitigate the impact of crises in Europe? The case of Latvia", *IZA Journal of European Labor Studies* 2013, 2:10.

Babcock, L., Congdon, W. J., Katz, L. F., & Mullainathan, S. (2012). Notes on behavioral economics and labor market policy. *IZA Journal of Labor Policy* , 1 (2).

Batchuluun, A., & Dalkhjav, B. (2014). Labor Force Participation and Earnings in Mongolia. Washinton D.C.: World Bank.

Betcherman, G., Oliva, K., & Dar, A. (2004). *Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries* . Washington D.C.: World Bank.

Blomquist, J. (2003). *Impact Evaluation of Social Programs: A Policy Perspective*. Social Safety Nets Primer. Washington D.C.: World Bank.

Brahmbhatt, M., Canuto, O., & E. Vostroknutova (2010). 'Dealing with Dutch Disease'. *Economic Premise*, Number 16. Washington DC: The World Bank.

Bryson, A., Dorsett, R. and Purdon, S. (2002). *The use of propensity score matching in the evaluation of active labour market policies*, Department for Work and Pensions Working Paper No.4

Buckley, G., & Casale, G. (2006). *Social Dialogue and Poverty Reduction Strategies*. Geneva: International Labour Office.

Byambaa, E. (n.d.). *Migration Issue in Mongolia*. Ulanbaatar: School of Economic Studies, National University of Mongolia.

Carter, J., Bédard, M., & Bista, C. P. (2013). *Comparative review of unemployment and employment insurance experiences in Asia and worldwide*. Bangkok: International Labour Organization - Regional Office for Asia and the Pacific.

Castañeda, T., & Lindert, K. (2005). *Designing and Implementing Household Targeting Systems: Lessons from Latin American and The United States*. Washington D.C.: The World Bank.

Dandar, O, & E. Choijiljav (n.d.), Country Report on "Informal Economy, Work and Employment" (Mongolia), mimeo.

- De Place Hansen, E., & Norvig Larsen, J. (2011). Employment and winter construction: a comparative analysis of Denmark and western European countries with a similar climate. *Construction Management and Economics*, 29 (9), 875-890.
- De Raaf, S., Kapsalis, C., & Vincent, C. (2003). *Seasonal Employment and Reliance on Employment Insurance: Evidence from the SLID*. Ottawa: Social Research and Demonstration Corporation.
- Del Ninno, C., Subbarao, K., & Milazzo, A. (2009). *How to Make Public Works Work: A Review of the Experiences*. Washington D.C.: World Bank.
- DellaVigna. (2009). Psychology and Economics: Evidence from the Field. *Journal of Economic Literature* (47), 315-372.
- Eicher, W., & Konle-Seidl, R. (2008). *Contingent Convergence: A Comparative Analysis of Activation Policies*. Bonn: IZA.
- Employment Services Center - Information, M. E. (2014). *Labour Market Outlook - 2014*. Ulaanbaatar.
- Grady, P., & Kapsalis, C. (2002). *The Approach to Seasonal Employment in the Nordic Countries: A Comparison with Canada*. Quebec : Human Resources Development Canada Publications Centre .
- Grosh, M., Del Ninno, C., Tesliuc, E., & Ouerghi, A. (2008). *For Protection and Promotion: The Design of Effective Safety Nets*. Washington D.C.: World Bank.
- Guttikunda, S. K., Lodoysamba, S., Blugansaikhan, B., & Dashdondog, B. (2013). Particulate pollution in Ulaanbaatar, Mongolia. *Air Quality, Atmosphere & Health*, 6 (3).
- Heckman, J., Smith, J. and Clements, N. (1997). Making the Most Out of Programme Evaluations and Social Experiments: Accounting for Heterogeneity in Programme Impacts, *Review of Economic Studies*, 64(4), 487-537
- Hodges, A., Dashorj, K., Jong, K., Dufay, A.-C., Budragchaa, U., & Mungun, T. (2007). *Child benefits and poverty reduction: Evidence from Mongolia's Child Money Programme*. New York: UNICEF.
- Immervoll, H., & Scarpetta, S. (2012). Activation and employment support services in OECD countries. An overview of current approaches. *IZA Journal of Labor Policy*, 1 (9).
- Immervoll, H., Jenkins, S., & Königs, S. *Are Recipients of Social Assistance 'Benefit Dependent'?* OECD Social, Employment and Migration Working Papers No. 162.
- International Labour Organization - CEACR. (2012). *Observation (CEACR) - adopted 2011, published 101st ILC session (2012)*. Retrieved 11 29, 2014, from http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:13100:0::NO::P13100_COMMENT_ID:2699728
- International Labour Organization. (2006). *Mongolia: Decent Work Country Programme*. Geneva: ILO.
- International Labour Organization. (2013). *Youth employment: Challenges in Mongolia - An overview*. Geneva: International Labour Organization.
- International Monetary Fund. (2013). *IMF Country Report No. 14/64 - MONGOLIA. 2013 Article IV Consultation—Staff Report; Press Release and Statement by the Executive Director for Mongolia*. Washington D.C.: IMF.

International Monetary Fund. (2014). *Selected Macroeconomic Indicators*. Washington D.C.: IMF.

International Monetary Fund (2015). *World Economic Outlook Database April 2015*. Washington D.C.: IMF.

International Monetary Fund. (2015a). *IMF Country Report No. 14/64 - MONGOLIA. 2013 Article IV Consultation—Staff Report; Press Release and Statement by the Executive Director for Mongolia*. Washington D.C.: IMF.

International Organization for Migration. (2010). *Displaced rural herder communities Response Assessment and Intentions Survey (RAIS)*. Geneva: International Organization for Migration.

International Organization for Migration. (2011). *Mongolia*. Retrieved 11 14, 2014, from <https://www.iom.int/cms/en/sites/iom/home/where-we-work/asia-and-the-pacific/mongolia.html>

Khan et al. (n.d.). *Mongolia: Gender disparities in labour markets and policy suggestions*. Washington D.C.: World Bank.

Kuddo, A. (2013). *Public Employment Services and Activation Policies*. Washington D.C.: World Bank.

Mongolian Ministry of Labour. (n.d.). *Our mission*. Retrieved 11 24, 2014, from <http://www.mol.gov.mn/eng/nodes/view/type:beginning/slug:эрхэм-зорилго>

Mongolian Ministry of Labour. (2014). *Results of comparative survey - Articles, provisions of the Convention 88 / 1948/ on Employment Services of the International Labor Organization and the national situation*. Ulaanbaatar.

Mongolian Ministry of Labour. (n.d.). *Results of Comparative Survey on the Provisions of the C181 - Private Employment Agencies Convention /1997/ and the national situation*. Ulaanbaatar.

Mongolian Ministry of Labour. (2013). *Unemployment benefits and employment services in Mongolia*. Retrieved 11 24, 2014, from <http://www.google.de/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCMQFjAA&url=http%3A%2F%2Fwww.social-protection.org%2Fgimi%2Fgess%2FresourceDownload.action%3Fresource.ressourceId%3D41359&ei=sUhZVPXdJcb6PMW3gagH&usg=AFQjCNHG7siusXND4Q4gp5LOtHOqXrJNEA&bvm=bv.80185997,d.ZWU>

National Statistics Office (NSO) (2014). *Mongolia - Household Socio-Economic Survey 2012*. Ulaanbaatar. <http://web.nso.mn/nada/index.php>

Neupert, R., Tsogtsaikhan, B., Byamaa, E., Tumor, G., Tumertolgoi, N., Chimedtseren, T., et al. (n.d.). *Implications of Demographic Trends for Socio-Economic Development and Public Policy in Mongolia*. Ulaanbaatar: United Nations Population Fund - Mongolia Country Office.

OECD. (1999). *OECD Economic Outlook*. Paris: OECD.

OECD (2014).

Rijksoverheid. (2007, 06 15). *Rijksoverheid huurt winterschilder*. Retrieved 12 18, 2014, from <http://www.rijksoverheid.nl/documenten-en-publicaties/persberichten/2007/08/31/rijksoverheid-huurt-winterschilder.html>

Shatz, H.J., Constant, L., Perez-Arce, F., Robinson, E., Beckman, R., Huang, H., Glick, P. & B. Ghosh-Dastidar. (2015). *Improving the Mongolian Labor Market and Enhancing opportunities for Youth*. Santa Monica: Rand Corporation.

Shavell, S., & Weiss, L. (1979). The Optimal Payment of Unemployment Insurance Benefits over Time. *Journal of Political Economy*, 87 (6), 1347-62.

Shi, A. (2011). *Rural Out-Migration and Family Life in Cities in Mongolia*. Washington DC: East-Asia and Pacific Region/CMU, The World Bank.

Sonnet, A., Olsen, H. and T. Manfredi (2014). 'Towards More Inclusive Ageing and Employment Policies: The Lessons from France, The Netherlands, Norway and Switzerland', *De Economist*, 162, pp.315-339.

Thévenon, O. (2013). 'Drivers of Female Labor Force Participation in the OECD'. *OECD Social, Employment and Migration Working Papers*, no. 145. Paris: OECD Publishing.

Tsogtsaikhan, B. (2008). *Mongolia*. Ulaanbaatar: National University of Mongolia.

UN/ILO/Government of Mongolia (2015), *Social protection assessment based national dialogue: Definition and cost of a social protection floor in Mongolia*, United Nations; ILO Regional Office for Asia and the Pacific; Government of Mongolia. Ulaanbaatar: UN/ILO/Government of Mongolia.

UNDP. (2014). *2014 Human Development Report - Mongolia*. New York: UNDP.

UNDP. (2007). *Report on the World Social Situation 2007: The Employment Imperative*. New York: UNDP.

UNICEF. (n.d.). *Multi-sectoral Approaches to Nutrition: Nutrition-specific and nutrition-sensitive interventions to accelerate progress*. New York: UNICEF.

United Nations Department of Economic and Social Affairs - UN. (1970). *Methods of measuring internal migration*. Population Studies No. 47. New York.

US Department of Labor's Bureau of International Labor Affairs . (2013). *Findings on the worst forms of Child Labour*. Washington D.C.: US Department of Labor.

UWV. (n.d.). *Premievaststelling Sectorfondsen*.

World Bank - Urbanization Dynamics and Policy Frameworks in Developing East Asia East Asia Infrastructure Department. (n.d.). *Issues and Dynamics: Urban Systems in Developing East Asia - Mongolia*. Washington D.C.: World Bank.

World Bank. (2009). *Understanding children's work and youth employment outcomes in Mongolia*. Washington D.C.: World Bank.

World Bank. (2014). *Mongolia Economic Update - June 2014*. Washington D.C.: World Bank.

World Bank. (2015). *Mongolia Economic Update -November 2015*. Washington D.C.: World Bank.

Annex A - Background

Table A 1. Poverty rates in 2012, by education, labor market status and social welfare receipt

Subpopulation	Poverty indices		
	Headcount ratio	Gap	Severity
Total population	27%	7%	0.027
Highest level of education (household head)			
None	55%	16%	0.063
Complete primary	41%	11%	0.043
Complete secondary	26%	7%	0.025
Vocational	20%	4%	0.014
Higher education	8%	2%	0.005
Labor market participation status (household head)			
currently active	25%	6%	0.022
usually active	36%	11%	0.044
inactive	30%	8%	0.033
Employment status (currently active)			
employed	25%	6%	0.022
Unemployed	43%	13%	0.056
Type of employment (currently active)			
paid-job	21%	6%	0.021
self-employed	31%	7%	0.023
unpaid job	32%	6%	0.023
Job category (currently active)			
Legislators, senior officials and managers	3%	1%	0.001
Professionals	9%	2%	0.006
Technicians and associate professionals	15%	4%	0.012
Clerks	13%	3%	0.012
Service workers and shop and market sales workers	20%	5%	0.018
Skilled agricultural and fishery workers	40%	9%	0.031
Craft and related trade workers	31%	8%	0.033
Plant and machine operators and assemblers	21%	5%	0.018
Elementary occupations	37%	11%	0.046
SW benefit recipient status (household)			
No benefits	25%	6%	0.022
With benefits	30%	8%	0.032

Source: Estimates based on HSES 2012

Table A 2. The eight fundamental ILO Conventions and their dates of ratification

<i>Fundamental ILO Conventions</i>	<i>Date of ratification</i>
C029 - Forced Labour Convention, 1930 (No. 29)	March 15, 2005
C087 - Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)	June 3, 1969
C098 - Right to Organise and Collective Bargaining Convention, 1949 (No. 98)	June 3, 1969
C100 - Equal Remuneration Convention, 1951 (No. 100)	June 3, 1969
C105 - Abolition of Forced Labour Convention, 1957 (No. 105)	March 15, 2005
C111 - Discrimination (Employment and Occupation) Convention, 1958 (No. 111)	June 3, 1969

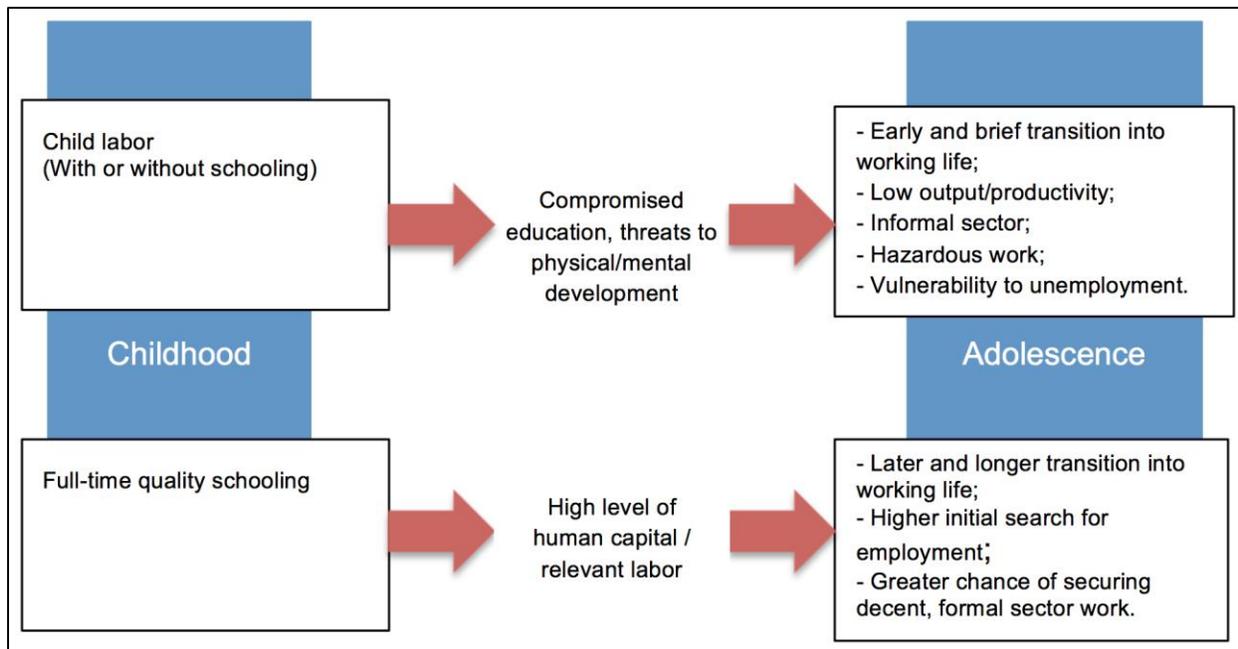
Source: ILO NORMLEX

Table A 3. Implementation and design features, options and implication of public works programs

Design feature	Design options	Implications
Targeting method	Self-selection Additional targeting methods	Cheap Better targeting performance
Financing and execution	Traditional delivery model: the government finances and executes Combination by government, private bodies and donors.
Remuneration	Daily rate Piece rate	Easy to administer Exploitation is more difficult Allows for more flexibility, for instance sharing the work
Number of hours worked	Rationing the number of days in the program	
Wage rate	Program wage < market wage Minimum wage < program wage < market wage Minimum wage = / > market wage → Legal obligation to pay the minimum wage	Self-selection of the poor Other targeting mechanisms might be necessary to identify the poor

Source: Authors based on Del Ninno et al.

Figure A 1. Relationship between involvement in child labor and future labor market chances



Source: World Bank, 2009.

Annex B - Description of Employment Promotion Programs in Mongolia

Note: A subset of 2014 EPP programs has recently been revised and amended. Revised programs include the Employment Promotion Program for Disabled Citizens, the Herder's Employment Promotion Program, the Employment Program for Youth, the Preparation for Work program and the Entrepreneurship Development Program. Programs as described below reflect the status quo in 2014. The most important amendments are briefly described at the end of each program description.

Preparation For Work Program.²⁹

- Aim: To prepare citizens for the labor market by equipping them with vocational skills in a short period of time and to provide support to employers.
- Legal base: Law on Employment Promotion (art. 10, 11, 15.1.2 and 15.1.4).
- Target group: Working-age citizens in households receiving social welfare; the disabled; citizens released from prison; residents from a nursing home reaching working age; registered unemployed who have been searching for work for over six months; and children who dropped out of school and reached their working age.
- Financing: Employment Promotion Fund

In order to prepare vulnerable groups for work, persons belonging to the target group are eligible to take part in the Preparation for Work program once every year. In the first place, the program provides a package of activities, including (1) occupational and vocational orientation, counseling and information provision, (2) communication and self-expression training and (3) training on labor regulations and work safety. The activities are spread over a period of 3 – 5 working days and are either carried out in an individual or a group setting. Labor offices are free to determine the exact package composition themselves. Additionally, the program provides allowances to reimburse the expenses of the renewal of lost documents and medical check-ups.

Occupational and vocational training (VT) can either take place

- a) On the workplace or production site of an employer in an “economically efficient sector” with high demand demand of employment, who has been approved by the Employment Service Center in Ulaanbaatar or one of the aimag labor offices;
- b) At vocational training institutions, or;
- c) From a distance making use of communication and information technology.

Trainings can be arranged for citizens living in the countryside who wish to participate, but travel costs are not reimbursed. If there are no training providers available in the aimags or remote districts in Ulaanbaatar, mobile trainings can be organized. Support to employers is given in monetary form to fully or partially compensate for the extra costs incurred with employing vulnerable persons.

²⁹ The information for the EPPs is compiled from the following sources: Peyron Bista, 2014; Kuddo, 2013; Mongolian Ministry of Labour, n.d; Tsenddavaa, 2010 and on the Report on Review, Analysis and Evaluation of the semi-annual Implementation of Ongoing Employment Promotion and Support Programs and Projects At the Aimag and District levels in 2014.

The Report on Review, Analysis and Evaluation of the semi-annual Implementation of Ongoing Employment Promotion and Support Programs and Projects suggests that its strengths lie in linking job seekers and employers, enhancing the competitiveness of job seekers through training and providing them with a certificate of competence as well as (temporary) jobs upon completion of the training. However, program weaknesses are still numerous. In the first place, jobs provided by employers are not sustainable (many employers only offer seasonal jobs). Secondly, part of the target group is excluded due to suboptimal program design, such as high enrolments costs (documentation, health screening); inappropriate promotion measures, e.g for blind people; and the fact that training is only offered in aimag centers. Finally, participation in the program is very costly for employers as a result of the relatively low funding they receive, the high fee that has to be paid to be linked to job seekers, and the obligation to provide at least 70 percent of participants with a job upon completion of the training.

As a result of the 2015 amendment of the program, its name has changed to “Program For Providing Employment Skills And Retaining Work Places”, suggesting an increased emphasis on work place retainment as opposed to an exclusive focus on preparation for work. Further amendments include a more specific definition of program components, such as mobile trainings and criteria for training course design.

The Herder’s Employment Program

- Aim: (1) Equip young herders with herding and entrepreneurial skills for sustainable livelihoods, (2) to restock herders and promote their income, and (3) to provide loans and financial support to motivate herder-employers.
- Legal base: Law on Employment Promotion (art. 12, 13.4 and 15.2)
- Target group: Herder households and herder employers.
- Financing: Employment Promotion Fund

The Promoting the Herder Household Measure targets herder households with at least two members aged under 40 who are employable; 50-150 heads of livestock as well as facilities for livestock herding (i.e. fences, shelters, etc.). The measure incorporates various services: one-off financial support, entrepreneurship training, non-for-profit activities intended to improve operational efficiency of agricultural production in the form of public works and the provision of small loans and financial support. The latter takes place in line with the “Guidelines on the provision of small loans and financial support from the Employment Promotion Fund”. Implementation of the program is the responsibility of the Employment Service Center, while monitoring and evaluation is the task of employment councils and aimag labor offices.

The Promoting the Herder Employer Measure targets herder employers possessing 1,000 or more heads of livestock, having an employment agreement with a herder assistant who is appointed to herd at least 200 heads of livestock. The task of the herder employer is to train the herder assistant in herding skills, while paying him or her at least the minimum wage or restocking him or her with at least 15 female heads of livestock in breeding age. To be eligible for the program, the herder employer must pay income taxes and social insurance contributions. Upon eligibility, the herder employer will be granted one-off financial support of 1 million MNT.

Based on evaluation results, the program is working rather well. Its strengths are the sustainable workplaces it creates for young herders; the fact that herder’s livestock and productivity increase; household income

of herders, herder employers and herder assistants increases; and the opportunity to socialize and exchange experiences it offers. However, the requirement to pay 50 percent of funding back is deemed to be quite high, especially considering that spending priorities have been fixed, leaving herder only little freedom of spending. In addition to funding problems, the program is at high risk due to its sensitivity to climate change.

The 2015 summary of program amendments amongst others suggests that the program branch targeting herder employers is now abolished. Instead, the program seems to provide more elaborate support to herder households in the form of equipment and tools as well as entrepreneurial skills and experience sharing meetings. Amendments affecting herder households include (1) reduction of the maximum age from 40 to 35 for at least two employable members in the household; (2) reduction of the maximum number of heads of livestock for eligibility from 150 to 100, (3) reduction of the period for repayment of the 50 percent of the loan from three to two years.

Employment Promotion Program For Citizens Over 40

- Aim: to provide job places for citizens over the age of 40.
- Legal base: Law on Employment Promotion (art. 6.3.7)
- Target group: Registered unemployed persons in working age over the age of 40
- Financing: Employment Promotion Fund

The “Employment Promotion program for Citizens over the Age of 40” provides on-the-job training places within three different projects: (1) the potato, vegetable and fruit cultivation project, (2) the community groups project and (3) the supervision of school crossing project. The program is managed and guided by the Employment Service Center, while city, aimag and district employment councils as well as aimag and district labor offices monitor its implementation.

The Potato, Vegetable and Fruit Cultivation Measure aims to train groups of beneficiaries to cultivate, harvest and sell vegetables to improve their livelihood. To be eligible, citizens should register at the Labor Exchange Office in Ulaanbaatar. Maximum duration of participation is two years, after which a new applicant on the list takes the place of the former participant. The Community Groups Measure evolves around public wellbeing and environmental protection, including activities such as keeping the environment rubbish-free and accompanying children to and from school. Aimag and district labor offices are responsible for this measure. Participants are divided into groups, with each group running at maximum four months a year. Under the Supervision of School Crossing Measure, beneficiaries regulate traffic and supervise school children to ensure that they can safely cross the streets near their schools. Realization of the project is the responsibility of the district labor offices. Beneficiary groups may participate in the program for a maximum period of eight months per year.

Program evaluation suggests that the program enhanced participants’ competitiveness on the labor market, provided them with short-term jobs and resulted in a cleaner and safer environment. However, there is still considerable scope for improvement of the program. In the first place, jobs provided are of short duration: due to the nature of the activities that are offered within the scope of the program, the work is largely seasonal. In addition, program funding is limited, resulting in low compensation for participants, especially for those engaging in the Community Groups Measure. In some districts administration was weak, leading to incomplete databases. Some of these downsides may cause job seekers to be disinterested in participating in this program.

Employment Promotion Program for Disabled Citizens

- Aim: (1) Provide financial support to disabled citizens, business entities and organizations; and (2) provide support to entrepreneurs that intend to create job opportunities meeting the special needs of disabled citizens.
- Legal base: Law on Employment Promotion (art. 6.3.7; 15.1.3 – 15.1.5), Labor Code (art. Art 111.1 and 111.5).
- Target group: Persons with disabilities, employers.
- Financing: Employment Promotion Fund

In order to take part in entrepreneurship training, advice and counseling, disabled citizens who intend to run a business themselves or in cooperation with partners can apply for financial support provided by the aimag or district Labor Division where they are registered. To be eligible, the applicant is required to provide proof of disability as well as of the fact that – in spite of the disability – he or she will be able to implement the project obtained from the Clinic-Labor Verification Committee. The self-delivered application must be accompanied by a business plan, an action plan and - in case the project is to be carried out in a partnership or cooperative - a budget proposal. Project proposals are reviewed twice a year, in April and September. Upon the successful completion of a project, the applicant may reapply after a period of two years.

Employer promotion measures are provided in the form of grants and financial support. While the former is provided to the employer as an incentive upon creation of a permanent special work place for a disabled person (i.e. for at least one year), the latter is awarded in the form of financial support to employers who intend to create eight or more permanent work places meeting the needs of the disabled. Employers may apply twice a year for financial support at the Employment Service Center.

Vocational skills training (VT) for the disabled is provided by the Employment Service Center in Ulaanbaatar and is conducted over a period of one to ten months. The program is managed and guided by the Employment Service Center, while city, aimag and district employment councils as well as aimag and district labor offices monitor its implementation.

Program evaluation suggests that, a result of the program, vocational and entrepreneurship skills of program participants enhanced, interest of employers in hiring them increased, as did their job opportunities. Due to these enhanced labor market chances, overall, participants' motivation to work and livelihoods improved. Nevertheless, program funding is limited, leading to the fact that not all eligible applicants can be engaged in program activities and desired program outcomes remain beyond reach. In addition, in some districts program administration is weak, leading to project proposals being accepted that do not fulfill the criteria, in that way further limiting available funding for those that are most in need.

The 2015 amendments to the existing program include a more elaborate specification of the eligibility criteria, such as a clear definition of disability stated in legislation which is linked to the requirement of a valid decision by the Clinic-Labour Verification Committee regarding the applicant's ability to participate in mainstream social life. Revised legislation additionally suggest that the eligibility criteria for employers to participate in the program by providing work places for the disabled have become less strict.

The Mongolia With Owner Program

- Aim: Providing the unemployed with work places and income support through (1) engagement in green and community development initiatives, (2) protecting and rehabilitating nature and environment; and (3) improving infrastructure.
- Legal base: Law on Employment Promotion.
- Target group: Unemployed persons; youth and students; herders; senior citizens; local community groups; local administrative organizations and NGO's.
- Financing: Employment Promotion Fund.

Green Works include activities such as gardening of parks and streets in public land areas; protecting and taking care of places of worship; cleaning and protecting the forest and preparing firewood; and combating against desertification and deforestation. Initiatives are taken either by local community groups, local administrative organizations and/or NGO's. Projects may continue for a maximum period of three months, and participants who contributed for at least 10 hours a month (30 hours for three months) are entitled to receive the minimum wage.

Public Works include both highly labor intensive activities, such as building flood dams and constructing local roads and bridges; and activities of lower labor intensity such as cleaning litter, setting up children's playgrounds and landscaping. Public works can be organized solely by local administrative organizations or jointly by business entities, companies and NGO's. Again, public works are selected based on project proposal handed in to the aimag

Projects are selected by aimag and district labor divisions on the basis of a project proposal. While program management is the responsibility of the Employment Service Centre, the implementation, monitoring and evaluation of Green Works and Public Works fall under the competence of the aimag and district labor divisions.

According to the program evaluation, the activities carried out within the scope of this program reflect local needs and demand and are implemented using the local resources that are available. Besides creating temporary jobs for the unemployed and as such enhancing their livelihoods, the program resulted in an increased environmental awareness among participants as well as a nicer, cleaner environment for the community. The downside of this program is that jobs are of short duration: activities are heavily subjected to weather conditions and cannot be carried out during the long and harsh Mongolian winters. In addition, the program budget is very limited, resulting in low compensation and lack of adequate working materials. Finally, since the start of the program project monitoring has been weak.

Entrepreneurship Development Program

- Aim: (1) Promote entrepreneurship and employment of the self-employed, partnerships and cooperatives; (2) provide entrepreneurs with business incubation and small loan services.
- Legal base: Law on Employment Promotion (art. 12), Law on Government.
- Target group: Entrepreneurs, self-employed, partnerships, and cooperatives.
- Financing: Employment Promotion Fund

Financial support can be provided to entrepreneurship projects of citizens over the age of 40; projects of citizens who struggle to find a job; and the self-employed, cooperatives and partnerships that transferred from the informal sector to the formal economy. In the first two cases, entrepreneurship projects are selected twice per year (in April and September) by aimag or district labor offices based on business project proposals. In the latter case, financial support is equal to reimbursement for the first six months of social insurance contributions after registration with tax and social insurance offices. Those who were granted financial support once are not eligible for another round of financial support.

The Business Incubation Services Measure applies to the self-employed; citizens who founded or are intend to found cooperatives or partnerships; citizens struggling to find a job and citizens returning from overseas employment. It includes the provision of entrepreneurship training for citizens with business ideas and assistance in the development of the project proposal; assistance during the practical implementation of business proposals that have been approved; and the provision of marketing and networking assistance.

The measures to grant small loans and interest relief are regulated by the “Guidelines on the provision of financial support from the Employment Promotion Fund”. Program implementation is managed and guided by the Employment Service Center, while city, aimag and district employment councils as well as aimag and district labor offices monitor its implementation.

Since this program effectively supported entrepreneurs in improving their business skills, expanding their businesses, transferring from the informal to the formal sector and in sustainably increasing their income, demand for support from this program was high. The fact that interest rates were set at a low rate also played an important role in this high demand. According to the program evaluation, however, qualification requirements for funding from the State Bank of Mongolia are strict and procedures to verify eligibility are bureaucratic, requiring too much time. In case financial support is granted, grants are typically too small both to procure materials, pay sufficiently high wages to staff and provide them with sustainable workplaces.

The 2015 revision has resulted in a number of new measures currently being part of the program, amongst others including the option for participants to take up microcredit and to make use of support services for sales and marketing.

National Program for Preparing Skilled Workers

- Aim: To assist Mongolian citizens at Vocational Training and Education Institutes (VETIs) in acquiring vocational skill of occupations that are highly demanded in the labor market.
- Legal base: Agreement between Mongolian Government (MOL) and Oyu Tolgoi LLC, a large mining project in Mongolia
- Target group: Working-age unemployed with secondary education.
- Financing: Employment Promotion Fund.

The implementation section (art. 145) of the Mongolian Government’s action plan “Mongolians with Job and Income” program sets the objective of creating 150,000 sustainable and productive new work places in the manufacturing industry in collaboration with business entities in the period 2012 – 2016. The National Program for Preparing Skilled Workers plays a major role in achieving this target.

The main stakeholders in the program are the trainees, employer organizations, Vocational Training and Production Centers and implementing agencies of the Ministry of Labor. These four parties are brought together in employer-job seeker meetings in the capital city, where applicants can register; employers can announce open positions and applicants can be selected. Vocational Training contracts have to be signed by all aforementioned parties.

Trainings last five to six months with a ratio of 20 percent theory and 80 percent on-the-job training, the latter of which is organized by the employer and supervised by a technician / engineer who at maximum supervises 15 students. Upon completion of the training apprentices are assessed by the Labor Exchange Bureau and the Employment Service Center. Graduates are awarded a certificate of competence and are assisted in their job search by the Labor Exchange Bureau in Ulaanbaatar; and the Labor Divisions, Vocational Training and Production Centers and Employers in local rural areas. While the Labour Exchange Bureau manages and implements the program in the capital, the Labour Exchange Bureau and the Labor Divisions respectively manage and implement the program in the aimags and districts.

Program evaluation suggests that the strength of this program is that it brings together labor market demand and supply, allowing employers to train job seekers according to their needs while making use of financial support they receive from the government. As a result of extensive vocational training, participants acquire those hands-on skills that employees are looking for. However, according to the evaluation, interest in this program remains limited among employers and among those employers that participate, the quality of trainings leaves scope for improvement. The latter may result from the fact that – at least in some districts – in spite of government funding employer’s resources are limited. In addition, some of the program criteria – such as the requirement to have attended at least secondary education – exclude large groups of interested job seekers that are in need of training from the program. Finally, in some districts employment provided upon completion of the training was not sustainable and there was a lack of opportunities in rural areas.

Youth Employment Promotion Program /Work Start Line/

- Aim: To increase labor market opportunities for students and youth, to prepare them for employment, to recruit and train them, provide industry attachment, reduce the period of joblessness after graduation, career counseling and to provide youth with part-time working opportunities next to their schooling.
- Legal base: Employment Promotion Law.
- Target group: Students and youth who are studying at universities, higher educational institutions, colleges and vocational training and production centers.
- Financing: Employment Promotion Fund, Local Employment Promotion Fund and donations and financial assistance from international organizations and private sector entities.

Considering that youth unemployment is one of the most pressing labor market issues Mongolia faces at the moment, the Youth Employment Program is of particular importance. It consists of three branches: (1) information management and dissemination, (2) general employment services provision and (3) the creation of a legal environment for student’s hourly work.

In relation to the first of these, the an integrated registration and information database of students’ hourly work history and employment opportunities, connected to public, private and education organizations has

been developed. Information dissemination takes place at “Student Employment Promotion Centers” located at universities, colleges and vocational training and production centers, where the school management and students are provided with labor market information. In addition, information is disseminated through the student hourly employment hotline 1896. Besides information services, employment support services are offered, including career counseling, trainings and job mediation to engage students in paid public and community development activities such as cleaning and landscaping public spaces and cleaning transportation vehicles. Perhaps the most important component of this program in the short run is the provision of financial incentives to private enterprises and companies as an incentive for them to recruit students. Finally, the legal branch of the Youth Employment Promotion Program includes the establishment of a working group under the Prime Minister’s guidance that is mandated to develop a draft “Law on Students Hourly Employment” and enforce the law upon ratification.

By offering students temporary jobs during their summer holidays, the program addresses the often problematic transition from student into working life through the early transfer of practical working skills that are valued by employers. Since the activities offered within the scope of the program include local construction and development work, it additionally has positive externalities for the community. The program evaluation suggests that, as a result, student’s income and motivation to work increased.

However, like the for other EPPs, evaluation revealed a number of weaknesses of the Youth Employment Promotion Program. In the first place, while compensation provided is disproportionate in relation to the large amount of work to be done in a relatively short period of time, some of the participants’ expenses – such as those related to transportation, labor safety and food – were not covered. Taking into account that some students had to travel from very remote areas to participate, their expenses for transportation are likely to have been high. Such costs in combination with low wages may constitute an important disincentive to participate in the training for those who need it most. In addition, the program evaluation suggests there is considerable scope for improvement of the basis of collaboration with the Mongolian Youth Association, which is a crucial element to ensure the quality of this program. So far, the Youth Association has been rather passive.

2015 amendments to the program include clearer definition of the eligibility criteria for the program, such as a maximum age for participation of students set at 25 years old. Revised legislation also puts a stronger emphasis on the eligibility of graduates from vocational education and training institutions, its new name being “Employment Promotion Program For Youth And Graduates From Vocational Education And Training Institutions”.

Senior Experts’ Consultancy Service Project

- Aim: To engage knowledgeable and experienced seniors to provide advisory services for activities related to the implementation of the development plan while offering them an opportunity to increase their income.
- Legal base: Employment Promotion Law.
- Target group: Retired senior experts (e.g. zoologists, agronomists)
- Financing: Employment Promotion Fund.

In teams of at minimum three members, retired senior experts are invited to provide advisory services according to local context and professional needs for a period of no less than three months. Compensation for their services may amount to a maximum of 1 million MNT. To apply, team members are amongst others required to provide a project plan and a Governor’s letter of recommendation supporting the senior experts

team to be engaged in the project implementation. While the aimag and district Labour division deal with most of the administrative procedures advancing the approval of projects, the project implementation is managed and guided by the Employment Service Center.

As a result of this program, skills and experience is transferred from the older to the younger generation. Program evaluation suggests that this did not only benefit knowledge and skills of the younger generation, but also considerably benefited seniors, who both increased their income and their social participation as a valued and respected member of society. Participation of some seniors in the program is made difficult due to the requirement of operating in a team with at minimum three members, which is not always possible to fulfill. In addition, the requirement to provide services for a minimum of three months at a relatively high number of hours per month but against a maximum fee of only 1 million MNT is deemed inappropriate.

Table B 1. Total participation, expenditure and job creation for all employment promotion programs

#	Name of projects and programs	Total participants	Expenditure '000 MNT	Jobs created			Average cost per participant '000 MNT	permanent jobs as % of participants
				Total	Permanent	Temp		
1	Preparation for Work Program	12,581	2,911,478	5,475	5,475	0	231	44%
	1.1 Preparation for work measures	5,695	144,171	1,109	1,109		25	19%
	1.2 Employment Training measures	6,399	1,618,186	3,879	3,879		253	61%
	1.3 Employers' Support measures	487	1,149,121	487	487		2,360	100%
2	Employment promotion program for people over 40	3,841	1,151,016	3,841	0	3,841	300	
	2.1 Measures targeted for the community patrol, watch, nature & environment protection, restoration, prevention from injuries, accidents	2,097	539,565	2,097		2,097	257	
	2.2 Measures targeted for assisting the pedestrian crossing near the Secondary schools	458	84,340	458		458	184	
	2.3 Projects to plant potatoes, vegetables, fruits	1,286	527,110	1,286		1,286	410	
3	Herders' Employment Promotion Program	2,633	3,592,709	1,492	1,492		1,364	57%
	3.1 Restocking for young herders	1,492	2,905,985	1,492	1,492		1,948	100%
	3.2 Herder Employers' Support measures	40	40,000				1,000	
	3.3 Training	687	174,033				253	
	3.4 Public works		268,352					
	3.5 Share experiences, organize fair and exhibitions	414	204,340				494	
4	Entrepreneurship Development Program	10,075	2,617,635	1,771	1,771	0	260	18%
	4.1 Citizen's Project Selection	1,417	1,565,000				1,104	
	<i>Provided to citizens over 40</i>	1,058	1,251,100				1,183	
	<i>Provided to citizens, who are having difficulties in finding job</i>	257	254,000				988	
	<i>Provided to self-employers, citizens, established partnership, cooperatives, or people officially transferred to formal employment sector</i>	102	59,900				587	
	4.2 Business incubator service	8,658	1,052,635				122	
	<i>Entrepreneurship training</i>	8,500	385,215				45	
<i>Business incubation</i>	158	667,420				4,224		
5	Mongolia with an Owner Program	25,329	4,331,898	25,329		25,329	171	
	5.1 Public works	17,299	2,251,618	17,299		17,299	130	
	5.2 Green works	8,030	2,080,280	8,030		8,030	259	
6	Employment Promotion Program for Disabled People	2,622	1,725,497	1,600	1,600	0	658	61%
	6.1 Conducting training	1,022	83,342				82	
	6.2 Citizen's project selection	1,455	1,244,360	1,455	1,455		855	100%
	6.3 Supporting employers	45	97,795	45	45		2,173	100%
	6.4 Special work place and job increasing projects	100	300,000	100	100		3,000	100%
7	Youth Employment Promotion Program	10,203	2,088,090	10,203	0	10,203	205	
	7.1 Soum Youth Project	1,978	403,604	1,978		1,978	204	
	7.2 Start of Work Project	7,311	1,485,686	7,311		7,311	203	
	7.3 Model winter camp building project	914	198,800	914		914	218	
8	Senior Experts' Consultancy Service Project	3,302	984,705	3,302	0	3,302	298	
	<i>consultant teams</i>	3,030	984,705	3,030		3,030	325	
	<i>consultant teams contracted with 4 NGOs and Employment Service Center</i>	272		272		272		
9	National Skilled Worker Training Program	4,182	7,215,000	3,085	2,695	390	1,725	64%
	TOTAL	84,323	49,868,046	72,839	27,052	45,787	591	32%

Source: (Employment Services Center - Information, 2014).

Annex C - Policy measures addressing seasonal unemployment around the globe

In spite of having similar climates, countries may experience vastly different levels of seasonal unemployment, which points to the fact that other features – besides the purely climatological ones – influence seasonal unemployment. According to De Place Hansen and Norvig Larsen (2011), in the Nordic countries (Denmark, Sweden, Finland) and the UK, the Netherlands and Germany, these factors can broadly be divided into two branches: (1) climate technology and (2) the regulatory environment.

With regard to the first branch, although technical solutions to the problem of seasonal variation – such as weather protection systems – have been available for many decades, the extent to which they are used largely depends on the structure of the construction industry. Countries where many (small) firms are the drivers of this industrial sector, often lacking resources to invest in new technologies, may lag behind (De Place Hansen & Norvig Larsen, 2011).

Regarding the second point, evidence has shown that the necessity for regulation to offset seasonal unemployment varies significantly according to the economic climate of a country, with less need for regulation in times of economic growth than in times of recession. Since the late 1950's, two types of policies are traditionally being implemented as a response to seasonal unemployment: (1) incentives or regulations to trigger the smoothening of construction works over the entire year, and (2) compensation to workers for loss of income as a result of adverse weather events. While the first group includes subsidies provided by the government to support contracts during the “low season” or punishments for laying off workers, the second includes bad weather allowances or unemployment benefits during seasonal layoff periods (De Place Hansen & Norvig Larsen, 2011).

In many countries, the question whether to provide unemployment benefits to workers who have periodic, often foreseeable and in some cases even planned spells of unemployment, constitutes a point of debate. Some argue that, since unemployment in such cases is anticipated, it no longer constitutes a risk against which requires protection (Grady & Kapsalis, 2002).

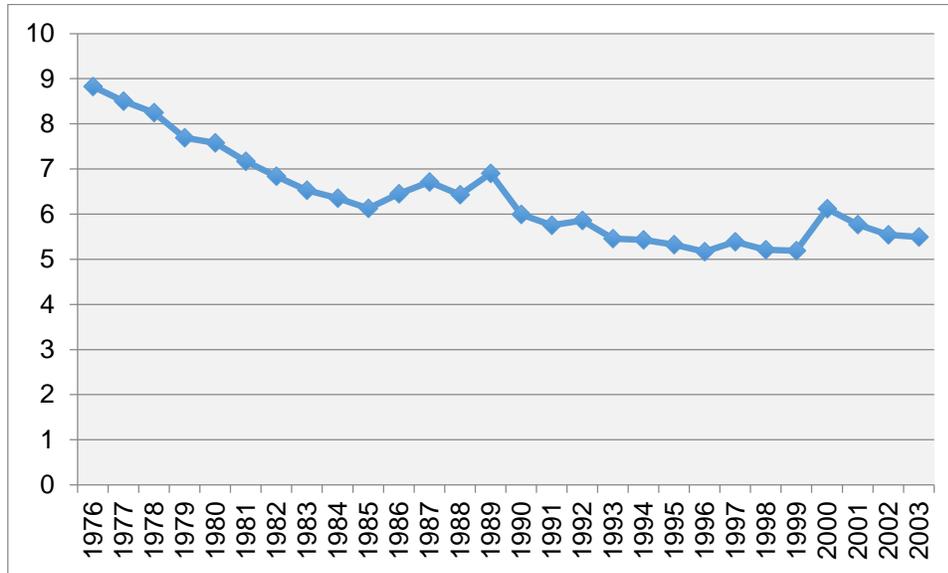
Below the case of Canada is described, where technological innovation in the construction sector has allowed for increasing winter construction activities over the past decades. In addition, this case illustrates that certain personal traits – such as age, educational attainment and location – to a considerable extent determine which of seasonal workers typically rely more on unemployment benefits than others. The case of Canada is followed by the case of Germany, Denmark, the Netherlands and Latvia.

The case of Canada

As a country with a large natural resource sector and one of the most varied climates in the world, Canada has always been forced to cope with seasonal fluctuations in output and employment. Since the late 1970ies, the country experienced a decrease of seasonal unemployment. Besides being a result of an overall drop of the employment share of industries that are sensitive to seasonal effects, technological innovations that declined the impacts of the seasons on employment in certain industries played an important role in this development. Particularly, the increased use of materials and equipment to enclose part of a construction site and control the climate inside the enclosure, such as tarpaulins and heaters, has become widespread (De Raaf, Kapsalis, & Vincent, 2003).

The figure below shows that the mean seasonal variation in the employment rate declined from 9 to a little over 5 percent between 1976 and 2003. Nevertheless, despite this decline Canada is still more dependent on seasonal work in comparison to the Nordic countries in Europe, except for Finland.

Figure C 1. Seasonal variation in the employment rate



Source: Sharpe & Smith, 2005.

Employees that are affected by seasonal unemployment can apply for unemployment benefits without restrictions. Long-term seasonal workers (i.e. workers who had three unemployment spells occurring in the same 'off-season' in either the 1993-1997 or the 1994-1998 period) relying most intensively on unemployment benefits were typically concentrated in Atlantic Canada and Quebec. While these provinces are not the only ones where seasonal work is common, stricter eligibility rules for unemployment benefits and more off-season employment opportunities kept the seasonal unemployment beneficiaries in provinces like Ontario and the Western provinces limited in number (De Raaf, Kapsalis, & Vincent, 2003).

Besides location, age and educational attainment seem to be important determinants of whether seasonal workers will claim unemployment benefits or not. Persons who claimed unemployment benefits after a spell of seasonal unemployment three times in a row were on average older and lower educated than those who claimed unemployment benefits less often or not at all. Hence, it seems that the relatively more vulnerable seasonal workers rely more heavily on unemployment benefits than those with better labor market chances.

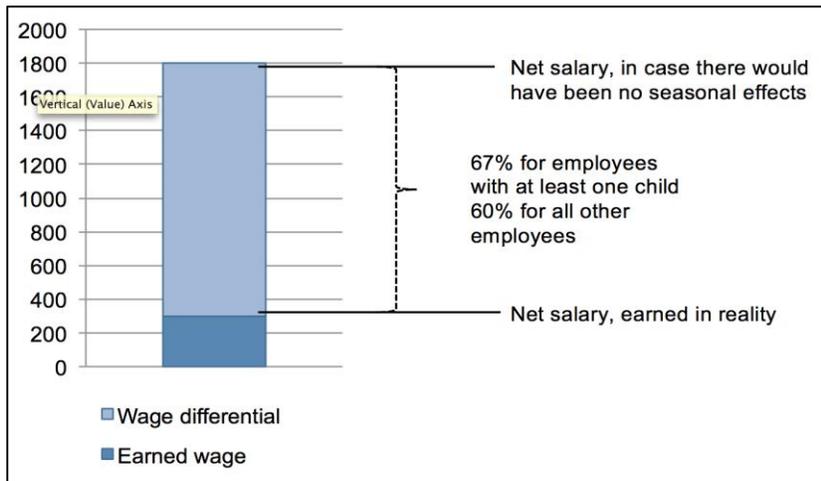
De Raaf et al. (2003) argue that the unrestricted availability of unemployment benefits for seasonal workers nurtures the reliance on UI and is therefore not in the long-run best interest of the beneficiaries, nor of the country.

The case of Germany

While in Canada workers can relatively easily be laid off in times of reduced demand, the German policy of Saison-Kug (seasonal short work time allowance) aims to prevent such practices by providing bad weather compensation to workers on days that construction activities are put on hold (see Figure C 2). Instead of laying off workers in times of reduced employment, by means of seasonal short-time allowance the German

government aims to stabilize employment relationships by paying workers their full wages for the hours they are still able to work and a share of their full wages for the hours they should have worked if there would have been no seasonal impacts. Seasonal short work time allowance is paid by the government and solely applies to the construction sector. The figure below illustrates how it is calculated (Agentur der Arbeit, n.d.).

Figure C 2. Calculation of Kug



Source: Based on Bundesagentur für Arbeit, n.d.

The case of Denmark

Denmark is one of very few countries in the world where Ministerial Act regulates winter construction and where in some cases the client is responsible for taking weather-related precautions. In Denmark, the Construction Act together with the Social Housing Act and additional ministerial acts and orders regulate winter construction. The “Ministerial Order on Building and Construction Work in the Period 1 November to 31 March” stipulates that construction work must continue during the winter period, irrespective of the weather circumstances (De Place Hansen & Norvig Larsen, 2011). The act specifies a set of precautions and measures that are to be taken in order to warrant continuation of activities on the building site during the winter period. Responsibilities for these measures are shared between the client and the contractor:

- Based on a number of guidelines, the client specifies which of the measures listed are applicable to the specific case and to which extent they are to be used;
- In addition, the client should describe how these measures are to be shared by the contractors;
- Finally, the client should describe the construction site measures necessary to ensure the execution of work in the winter period (1 November – 31 March).

In case any of the parties is in violation with the rules, they can be fined. Only if winter precautions do not suffice for the work to be continued – a situation that is acknowledged as such by the contractor – it can be decided to discontinue construction activities for a maximum of 16 days. In such situations, employers pay compensation for bad weather to employees.

In addition to the rules and regulations set by the Danish government, the construction sector utilizes the services of the “Winter Consultants”. The Winter Consultants are a joint venture financed by the Construction Workers Union, the Co-operative Employers’ Association in Denmark and Danish Construction

Association, providing specialist knowledge on measures to be taken in case of adverse weather conditions and the costs and benefits generated by these measures. In many cases the extra costs generated as a result of installing weather protection systems are fully compensated by their benefits (De Place Hansen & Norvig Larsen, 2011).

Nevertheless, in times of reduced demand it is relatively easy for employers to lay off workers, since they can be hired on short-term contracts and employment benefits available to them are high.

The case of the Netherlands

For selected sectors (agriculture, construction, hospitality, culture and industrial painting) the contributions that employers pay to finance Unemployment Insurance are tied to the duration of the contracts they offer employees: the longer the duration of the contract, the lower the premiums that the employer has to pay. By setting contributions at the lowest level for long-term contracts - i.e. contracts with a duration of one year or longer - employers are stimulated to make a trade-off between the wish to keep labor costs as low as possible on the one hand, and to be flexible with regards to hiring and firing of employees on the other. The table below provides an overview of the contributions (in %) that employers in the five selected sectors have to pay in case of short-term, medium term and long-term contracts. As in the case of Denmark, construction firms in the Netherlands can also make use of a service providing advice and education on winter construction (UWV, n.d.).

Table C 1. Overview of different contributions depending on the duration of the employment contract

Sector	Short-term contract	Medium-term contract	Long-term contract
Agriculture	7.58	2.11	0.98
Construction	12.84	4.84	4.19
Catering, hotel, tourism	8.67	3.96	2.02
Culture	12.8	4.74	2.76
Industrial painting	15.91	4.71	3.57

Source: UWV, 2013.

A weakness of the system arises from the loopholes that are left to get around this regulation. For instance, by hiring personnel through staffing agencies – which are subject not to the employment conditions of the construction sector.

As another way of smoothing the work of painters over the year, the Dutch government used to subsidize their activities during the winter season. By doing so, clients were triggered to plan those activities that can easily be carried out in cold weather circumstances during the season in which painters normally experience a drop in demand for their services. Until recently the subsidy would amount to 30 euros per hour of work done by the painter (Rijksoverheid, 2007).

Annex D – Additional tables quantitative analysis

in %

Table D 1. Labor market participation by quarter, 2012

Labor market participation status	All working age adults					Able-bodied adults					Able-bodied adults, excluding students below age 25				
	Quarter				Total	Quarter				Total	Quarter				Total
	1	2	3	4		1	2	3	4		1	2	3	4	
LM status 1															
currently active	53.0	57.1	58.3	55.8	56.1	54.7	58.8	60.0	57.8	57.9	66.8	71.5	71.9	70.3	70.2
usually active	10.8	8.2	7.9	9.1	9.0	11.1	8.5	8.2	9.4	9.2	13.3	10.1	9.6	11.0	10.9
inactive	36.3	34.7	33.8	35.2	35.0	34.2	32.8	31.8	32.8	32.9	20.0	18.4	18.5	18.8	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LM status 2															
economically active	63.8	65.3	66.2	64.9	65.1	65.8	67.2	68.2	67.2	67.1	80.0	81.6	81.6	81.2	81.1
inactive	36.3	34.7	33.8	35.2	35.0	34.2	32.8	31.8	32.8	32.9	20.0	18.4	18.5	18.8	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
LM status 3															
employed	89.0	91.8	93.3	91.2	91.4	89.0	91.8	93.3	91.2	91.4	89.0	91.8	93.4	91.2	91.4
unemployed	11.0	8.2	6.7	8.8	8.6	11.0	8.2	6.7	8.8	8.6	11.1	8.2	6.6	8.8	8.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Estimates based on HSES 2012.

Table D 2. Employment status and type of employment for different subpopulations, 2012

in %

Subpopulation	Employment status		Total	Type of employment for currently active individuals			Total
	Employed	Unemployed		Paid job	Self-employed	Unpaid job	
Total	91.4	8.6	100.0	60.6	38.2	1.2	100.0
Gender							
Female	92.7	7.3	100.0	63.2	35.1	1.8	100.0
Male	90.3	9.7	100.0	58.4	40.9	0.7	100.0
Age							
15 to 35	89.3	10.7	100.0	61.9	36.8	1.3	100.0
36 to 44	93.1	6.9	100.0	57.8	40.8	1.4	100.0
45 to 59	94.0	6.0	100.0	61.3	37.7	1.0	100.0
Highest level of education							
None	90.9	9.1	100.0	13.8	81.6	4.6	100.0
Complete primary	91.2	8.8	100.0	30.5	67.6	2.0	100.0
Complete secondary	90.2	9.8	100.0	62.2	36.6	1.2	100.0
Vocational	91.1	8.9	100.0	67.5	31.2	1.2	100.0
Higher education	93.3	6.7	100.0	86.6	13.2	0.3	100.0
Poor under the NSO poverty line							
Not poor	93.0	7.0	100.0	64.2	34.6	1.2	100.0
Poor	86.1	13.9	100.0	47.7	50.8	1.5	100.0
SW benefit recipient status							
No benefits	92.2	7.8	100.0	59.7	39.2	1.2	100.0
With benefits	90.1	9.9	100.0	62.3	36.4	1.3	100.0
Region							
West	89.8	10.2	100.0	43.7	54.0	2.3	100.0
Highland	92.0	8.0	100.0	39.3	58.4	2.3	100.0
Central	92.1	7.9	100.0	50.9	47.4	1.7	100.0
East	89.8	10.2	100.0	48.8	50.2	1.0	100.0
Ulaanbaatar	91.7	8.3	100.0	81.8	18.0	0.2	100.0
Location							
Capital	91.7	8.3	100.0	81.8	18.0	0.2	100.0
Other urban	88.3	11.7	100.0	70.1	28.2	1.7	100.0
Rural	92.9	7.1	100.0	31.8	66.1	2.1	100.0

Source: Estimates based on HSES 2012.

Table D 3. Currently active, usually active and temporary workers by ISCO classification sector, 2012

in %

Job sector (ISCO classification)	Labor participation status		Temporary workers
	Currently active	Usually active	
Agriculture, forestry and fishing	27.0	13.8	15.1
Mining and quarrying	4.8	8.7	14.0
Manufacturing	7.2	12.0	12.8
Utilities	2.8	1.7	1.6
Construction	7.6	19.6	34.9
Wholesale and retail trade, repairs	13.2	9.5	6.3
Transport and communication	7.9	8.1	6.0
Hotel and catering	3.2	6.4	1.7
Public administration and security	6.1	3.4	0.7
Education and health services	12.6	8.6	2.5
Personal services	1.9	2.3	0.7
Other services	5.3	5.6	3.6
Others	0.4	0.3	0.2
Total	100.0	100.0	100.0

Source: Estimates based on HSES 2012.

Table D 4. Currently active by subpopulation and job category using ISCO classification, 2012

in %

Subpopulation	Job category (ISCO classification) for currently active individuals										Total
	Legislators, senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service workers and shop and market sales workers	Skilled agricultural and fishery workers	Craft and related trade workers	Plant and machine operators and assemblers	Elementary occupations		
Total	6.7	14.1	5.3	2.8	14.8	26.1	12.2	9.7	8.3	100.0	
Gender											
Female	5.9	19.9	6.7	4.2	20.4	24.0	7.2	1.3	10.3	100.0	
Male	7.4	8.9	4.1	1.6	9.9	27.9	16.7	17.1	6.5	100.0	
Age											
15 to 35	5.7	15.6	5.9	3.0	13.9	27.7	13.0	8.8	6.5	100.0	
36 to 44	7.1	13.4	4.2	2.5	16.0	24.8	12.0	10.0	10.2	100.0	
45 to 59	8.1	11.9	5.4	2.9	15.3	24.4	11.0	11.2	9.8	100.0	
Highest level of education											
None	0.0	0.0	0.3	0.2	1.2	86.4	6.2	1.1	4.4	100.0	
Complete primary	0.5	0.8	0.8	0.4	8.2	62.0	10.2	8.2	8.9	100.0	
Complete secondary	2.8	3.6	3.2	2.4	22.6	19.1	18.0	16.1	12.3	100.0	
Vocational	3.9	11.5	7.9	4.2	19.9	14.1	18.4	11.3	8.8	100.0	
Higher education	18.3	40.5	11.2	5.1	10.6	2.3	5.2	3.6	3.2	100.0	
Poor under the NSO poverty line											
Not poor	8.3	16.8	6.1	3.2	15.5	20.8	11.4	10.3	7.7	100.0	
Poor	1.0	4.4	2.6	1.3	12.6	44.8	15.3	7.7	10.4	100.0	
SW benefit recipient status											
No benefits	6.8	14.6	5.3	2.8	14.8	26.8	11.8	9.2	7.9	100.0	
With benefits	6.4	13.1	5.4	2.8	14.9	24.7	13.0	10.6	9.1	100.0	
Region											
West	4.8	11.5	4.2	1.8	10.4	43.2	9.7	7.9	6.6	100.0	
Highland	3.3	9.3	3.0	1.8	10.4	49.4	9.2	6.7	6.9	100.0	
Central	4.2	11.2	5.0	2.2	11.2	40.0	9.3	9.3	7.7	100.0	
East	3.4	10.8	5.3	2.6	10.8	43.6	7.0	9.1	7.4	100.0	
Ulaanbaatar	10.4	18.8	6.9	3.9	20.4	1.3	16.5	11.9	9.9	100.0	
Location											
Capital	10.4	18.8	6.9	3.9	20.4	1.3	16.5	11.9	9.9	100.0	
Other urban	5.8	15.5	5.6	3.2	19.7	8.3	16.9	13.3	11.6	100.0	
Rural	2.9	8.0	3.4	1.4	6.1	63.2	5.0	5.3	4.8	100.0	

Source: Estimates based on HSES 2012.

Table D 5. Temporary workers by subpopulation and job category using ISCO classification, 2012

in %

Subpopulation	Job category (ISCO classification) for temporary/seasonal worker currently not working									Total
	Legislators, senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service workers and shop and market sales workers	Skilled agricultural and fishery workers	Craft and related trade workers	Plant and machine operators and assemblers	Elementary occupations	
Total	1.3	4.6	2.3	0.5	9.8	14.1	40.8	14.0	12.7	100.0
Gender										
Female	3.7	3.8	2.6	1.8	20.4	21.4	31.7	4.0	10.7	100.0
Male	0.4	5.0	2.1	0.0	5.8	11.3	44.3	17.9	13.4	100.0
Age										
15 to 35	0.0	4.8	2.4	1.0	12.4	10.2	40.8	13.9	14.3	100.0
36 to 44	0.0	3.5	2.4	0.0	8.1	17.4	42.8	15.0	10.8	100.0
45 to 59	5.7	5.7	1.7	0.0	6.8	17.6	38.0	12.9	11.6	100.0
Highest level of education										
None	0.0	0.0	0.0	0.0	2.7	33.4	42.6	7.2	14.2	100.0
Complete primary	0.2	1.4	0.9	0.6	4.4	20.8	39.5	11.8	20.5	100.0
Complete secondary	0.0	3.8	1.4	0.0	16.1	9.6	42.1	17.0	9.9	100.0
Vocational	3.0	4.4	4.1	0.0	3.8	11.2	48.2	18.1	7.3	100.0
Higher education	8.2	19.7	8.4	2.9	11.2	7.2	30.2	6.8	5.5	100.0
Poor under the NSO poverty line										
Not poor	1.9	6.5	2.6	0.5	11.1	12.6	37.8	16.8	10.3	100.0
Poor	0.0	0.9	1.5	0.6	7.3	17.1	46.9	8.3	17.4	100.0
SW benefit recipient status										
No benefits	1.6	3.4	2.1	0.9	8.8	14.2	42.8	15.2	11.0	100.0
With benefits	0.9	6.1	2.5	0.0	11.1	13.9	38.4	12.5	14.6	100.0
Region										
West	1.2	1.6	2.1	0.0	14.6	22.0	28.4	20.6	9.6	100.0
Highland	0.7	0.0	1.3	0.0	7.2	19.5	46.5	10.7	14.1	100.0
Central	0.0	1.7	3.5	1.3	7.8	24.3	24.2	13.1	24.0	100.0
East	0.7	2.8	0.0	0.0	8.0	34.4	17.9	23.3	13.0	100.0
Ulaanbaatar	2.0	8.8	2.7	0.7	10.2	2.0	52.4	11.6	9.5	100.0
Location										
Capital	2.0	8.8	2.7	0.7	10.2	2.0	52.4	11.6	9.5	100.0
Other urban	1.1	1.0	2.7	0.0	11.6	8.6	45.0	16.4	13.6	100.0
Rural	0.4	1.5	1.3	0.6	8.1	34.0	22.3	15.6	16.2	100.0

Source: Estimates based on HSES 2012.

Table D 6. Inactive population by subpopulation (able-bodied working age adult, with and without students)

in %

Subpopulation	Able-bodied working age with students			Able-bodied working age without students		
	Labor market participation status		Total	Labor market participation status		Total
	Economically active	Inactive		Economically active	Inactive	
Total	67.1	32.9	100.0	81.1	18.9	100.0
Gender						
female	61.3	38.7	100.0	75.0	25.0	100.0
male	73.3	26.8	100.0	87.3	12.7	100.0
Age						
15 to 35	56.3	43.7	100.0	79.2	20.8	100.0
36 to 44	87.2	12.8	100.0	87.2	12.8	100.0
45 to 54/59	78.7	21.3	100.0	78.7	21.3	100.0
Position in the household						
household head	87.9	12.1	100.0	88.9	11.1	100.0
spouse	75.4	24.7	100.0	75.8	24.2	100.0
other relative	41.8	58.2	100.0	74.7	25.3	100.0
other relation	21.2	78.8	100.0	49.2	50.8	100.0
Household head is female	60.7	39.4	100.0	76.9	23.1	100.0
Household head is female and not married	60.5	39.5	100.0	77.5	22.5	100.0
Household with children under 2 y	65.3	34.7	100.0	72.2	27.8	100.0
N. of children below 15y per household						
no child	64.5	35.5	100.0	83.1	16.9	100.0
1 childr	65.6	34.4	100.0	80.4	19.6	100.0
2 childr	72.2	27.8	100.0	81.1	18.9	100.0
3+ children	69.6	30.4	100.0	77.7	22.3	100.0
N. of adults (15-59y) per household						
1 adult	74.1	25.9	100.0	81.4	18.6	100.0
2 adults	78.0	22.0	100.0	82.1	17.9	100.0
3 adults	64.0	36.0	100.0	81.7	18.3	100.0
4+ adults	56.9	43.1	100.0	79.2	20.8	100.0
N. of elders (60y more) per household						
no elder	67.8	32.2	100.0	81.9	18.1	100.0
1 elder	63.2	36.8	100.0	76.2	23.8	100.0
2+ elders	62.6	37.4	100.0	78.2	21.8	100.0
Household with disabled members	55.1	44.9	100.0	70.8	29.2	100.0
HH with economically active children (10-14y)	94.3	5.7	100.0	98.1	1.9	100.0
Highest level of education						
None	81.2	18.9	100.0	83.7	16.3	100.0
Complete primary	59.0	41.0	100.0	81.8	18.2	100.0
Complete secondary	59.4	40.6	100.0	77.2	22.8	100.0
Vocational	81.0	19.1	100.0	82.4	17.6	100.0
Higher education	83.7	16.3	100.0	85.0	15.0	100.0
Poor under the NSO poverty line						
Not poor	68.3	31.7	100.0	83.4	16.6	100.0
Poor	63.6	36.4	100.0	74.4	25.6	100.0
SW benefit recipient status						
No benefits	72.6	27.5	100.0	84.2	15.9	100.0
SW benefit recipient	59.8	40.2	100.0	76.5	23.5	100.0
Region						
West	69.2	30.8	100.0	87.0	13.0	100.0
Highland	69.6	30.4	100.0	85.1	14.9	100.0
Central	70.2	29.8	100.0	83.9	16.1	100.0
East	67.2	32.8	100.0	79.0	21.0	100.0
Ulaanbaatar	64.4	35.6	100.0	77.2	22.8	100.0
Location						
Capital	64.4	35.6	100.0	77.2	22.8	100.0
Other urban	63.4	36.6	100.0	79.6	20.4	100.0
Rural	73.2	26.8	100.0	87.3	12.7	100.0

Source: Estimates based on HSES 2012.

Table D 7. Reason for inactivity by subpopulation, 2012

Subpopulation	Able-bodied working age without students					Total	%
	Reasons for being inactive						
	student	too old	homework, caring for a baby	caring of sick person	other		
Total	6.7	11.1	45.6	2.8	34.0	100.0	
Gender							
female	5.7	8.8	63.3	2.4	19.9	100.0	
male	8.6	15.7	9.9	3.5	62.3	100.0	
Age							
15 to 35	10.7	1.6	53.0	2.1	32.5	100.0	
36 to 44	1.6	0.7	55.7	4.7	37.3	100.0	
45 to 59	1.5	36.7	24.1	2.8	34.8	100.0	
Position in the household							
household head	2.6	24.4	20.6	3.2	49.1	100.0	
spouse	2.6	8.2	72.7	1.8	14.8	100.0	
other relative	14.9	4.5	30.6	3.6	46.4	100.0	
other relation	0.0	7.4	0.0	0.0	92.7	100.0	
Household head is female	6.5	12.0	36.5	5.4	39.5	100.0	
Household head is female and not married	6.8	13.3	35.2	5.4	39.2	100.0	
Household with children under 2 y	4.3	4.7	76.8	1.1	13.1	100.0	
N. of children below 15y per household							
no child	9.4	21.7	14.5	5.0	49.4	100.0	
1 child	6.4	9.4	49.5	2.0	32.6	100.0	
2 children	5.4	5.4	63.8	1.6	23.8	100.0	
3+ children	4.1	3.1	67.5	1.8	23.5	100.0	
N. of adults (15-59y) per household							
1 adult	4.8	22.1	23.8	5.7	43.6	100.0	
2 adults	3.7	6.3	64.2	2.1	23.7	100.0	
3 adults	6.6	14.1	36.4	3.7	39.3	100.0	
4+ adults	10.6	12.8	33.4	2.3	40.9	100.0	
N. of elders (60y more) per household							
no elder	6.1	10.2	49.2	1.8	32.7	100.0	
1 elder	10.0	16.9	27.9	7.4	37.8	100.0	
2+ elders	7.4	8.5	29.6	5.9	48.7	100.0	
Household with disabled members	7.0	13.7	31.9	12.1	35.3	100.0	
HH with economically active children (10-14y)	45.6	0.0	0.0	23.2	31.3	100.0	
Highest level of education							
None	4.4	9.5	28.2	3.4	54.4	100.0	
Complete primary	3.7	12.3	34.6	2.4	47.0	100.0	
Complete secondary	8.7	10.2	48.3	2.8	30.1	100.0	
Vocational	3.6	20.8	37.9	2.6	35.0	100.0	
Higher education	7.4	6.9	57.5	3.2	25.0	100.0	
Poor under the NSO poverty line							
Not poor	7.7	12.9	44.1	2.6	32.6	100.0	
Poor	4.6	7.5	48.3	3.0	36.5	100.0	
SW benefit recipient status							
No benefits	6.0	9.4	45.2	1.4	38.1	100.0	
SW benefit recipient	7.4	12.8	46.0	4.2	29.7	100.0	
Region							
West	8.3	11.3	39.3	2.8	38.3	100.0	
Highland	4.8	11.8	35.6	2.3	45.4	100.0	
Central	8.5	14.9	36.0	1.7	39.0	100.0	
East	8.5	9.5	40.3	2.9	38.8	100.0	
Ulaanbaatar	6.2	10.1	52.5	3.1	28.1	100.0	
Location							
Capital	6.2	10.1	52.5	3.1	28.1	100.0	
Other urban	7.3	12.6	40.0	3.5	36.7	100.0	
Rural	7.1	11.8	34.6	1.2	45.2	100.0	

Source: Estimates based on HSES 2012.

Table D 8. Labor participation status of social welfare program recipients (direct beneficiaries)

SW beneficiaries labor participation status	Able-bodied working age without students	
	Freq.	Percent
All adults		
currently active	782,870	67.5
usually active	61,495	5.3
inactive	315,468	27.2
Total	1,159,833	100.0
Non-recipients		
currently active	682,515	69.5
usually active	54,882	5.6
inactive	244,918	24.9
Total	982,315	100.0
SW recipients		
currently active	100,355	56.5
usually active	6,613	3.7
inactive	70,550	39.7
Total	177,518	100.0

Source: Estimates based on SW/PMT data.

Table D 9. Labor participation status of social welfare program recipients (direct and indirect beneficiaries)

SW beneficiaries labor participation status	Able-bodied working age without students	
	Freq.	Percent
All adults		
currently active	782,870	67.5
usually active	61,495	5.3
inactive	315,468	27.2
Total	1,159,833	100.0
Non-recipients		
currently active	126,250	71.1
usually active	10,025	5.6
inactive	41,350	23.3
Total	177,625	100.0
SW recipients		
currently active	656,620	66.9
usually active	51,470	5.2
inactive	274,118	27.9
Total	982,208	100.0

Source: Estimates based on SW/PMT data.

Table D 10. Labor market participation status by social welfare program (able-bodied working age without students)

SW beneficiaries by program and individual characteristics	Direct beneficiaries			Direct and indirect beneficiaries		
	Currently working	Usually working	Inactive	Currently working	Usually working	Inactive
in %						
Social Welfare Pension						
Total	58.44	5.17	36.38	60.33	5.81	33.86
Gender						
female	57.05	4.56	38.39	58.26	3.59	38.15
male	61.03	6.32	32.65	62.56	8.2	29.23
Age group						
15 to 35	54.79	5.01	40.2	56.29	6.27	37.44
36 to 44	63.89	5.35	30.76	65.8	6.1	28.1
45 to 59	56.55	5.24	38.21	62.94	4.59	32.47
Highest level of education						
None	56.69	2.18	41.13	59.81	3.97	36.22
Primary	64.69	3.88	31.43	66.44	4.58	28.99
Secondary	57.82	5.4	36.78	59.7	6.36	33.94
Complete secondary	53.53	5.79	40.68	55.17	6.67	38.17
Technical vocational	60.32	7.48	32.2	60.99	7.26	31.75
Higher	67.25	4.47	28.28	68.77	3.93	27.3
Household head	63.56	6.11	30.33	66.74	6.86	26.4
Social Welfare Allowance						
Total	49.95	4.3	45.75	57.77	5.39	36.84
Gender						
female	47.92	3.12	48.96	53.18	3.13	43.69
male	55.43	7.51	37.06	62.6	7.77	29.63
Age group						
15 to 35	47.69	4.35	47.96	55.1	5.71	39.19
36 to 44	54.76	4.51	40.73	62.64	5.61	31.75
45 to 59	47.97	3.98	48.05	58.21	4.45	37.34
Highest level of education						
None	56.65	2.61	40.74	59.1	4.02	36.89
Primary	61.85	2.76	35.38	65.77	4.07	30.16
Secondary	53.59	4.45	41.96	57.86	5.96	36.18
Complete secondary	43.73	5.11	51.16	51.09	6.46	42.46
Technical vocational	49.84	4.98	45.18	58.07	6.51	35.42
Higher	51.41	3.23	45.36	65.39	3.41	31.2
Household head	52.71	6.52	40.77	64.91	6.98	28.11
Community-Based Welfare Service and Specialized Care Services						
Total	54.39	5.67	39.94	54.72	7.81	37.47
Gender						
female	51.39	4.07	44.54	52.57	5.08	42.35
male	60.25	8.79	30.96	56.84	10.49	32.68
Age group						
15 to 35	56.08	7.94	35.98	53.43	8.5	38.07
36 to 44	55.02	6.22	38.76	57.03	8.78	34.19
45 to 59	52.92	3.9	43.18	55.29	5.06	39.65
Highest level of education						
None	16.67	16.67	66.67	39.23	12.15	48.62
Primary	53.13	0	46.88	49.15	8.14	42.71
Secondary	47.55	8.39	44.06	46.85	11.79	41.36
Complete secondary	49	6.43	44.58	50.08	8.35	41.57
Technical vocational	53	5	42	53.81	8.76	37.44
Higher	73.78	2.44	23.78	68.92	3.62	27.46
Household head	57.87	6.09	36.04	60.92	9.03	30.05
Assistance to the Elderly						
Total	50.58	0.58	48.84	61.8	5.51	32.69

Gender						
female	54.07	1.11	44.81	61	3.37	35.64
male	46.75	0	53.25	62.49	7.38	30.12
Age group						
15 to 35	85.71	0	14.29	60.87	5.79	33.33
36 to 44	72.22	0	27.78	65.28	6.22	28.49
45 to 59	45.43	0.68	53.88	60.4	3.74	35.85
Highest level of education						
None	48	0	52	64.4	4.45	31.15
Primary	50	0	50	68.58	4.8	26.62
Secondary	49.07	0.93	50	57.93	7.5	34.57
Complete secondary	45.93	0.74	53.33	52.01	7	40.99
Technical vocational	37.18	1.28	61.54	61.32	6.45	32.23
Higher	66.13	0	33.87	69.7	3.66	26.64
Household head	47.79	0.37	51.84	69.24	5.2	25.56
<i>Assistance and Concessions for the Disabled</i>						
Total	49.11	3.51	47.38	56.09	5.43	38.48
Gender						
female	47.38	2.77	49.85	53.82	3.24	42.94
male	51.35	4.48	44.17	58.46	7.71	33.83
Age group						
15 to 35	46.79	3.71	49.5	52.72	6.17	41.11
36 to 44	54.18	3.27	42.56	61.74	5.51	32.76
45 to 59	47.71	3.55	48.75	57.68	4.26	38.06
Highest level of education						
None	38.07	2.03	59.9	52.34	3.79	43.88
Primary	50.64	2.15	47.21	57.98	4.65	37.37
Secondary	47.28	3.72	49	53.06	6.58	40.36
Complete secondary	43.13	3.93	52.94	49.91	6.07	44.02
Technical vocational	52.66	4.71	42.62	58.3	6.23	35.47
Higher	60.38	2.71	36.91	66.54	3.78	29.68
Household head	50.76	4.66	44.59	61.86	6.45	31.68
<i>Allowance for Mothers and Children</i>						
Total	58.39	2.85	38.75	63.37	5.31	31.32
Gender						
female	58.4	2.85	38.74	58.79	3.26	37.95
male	54.42	2.85	42.74	67.96	7.37	24.68
Age group						
15 to 35	50.39	2.47	47.13	60.01	5.68	34.31
36 to 44	66.23	3.54	30.23	69.22	5.79	25
45 to 59	62.61	2.84	34.55	65.75	4.21	30.04
Highest level of education						
None	63.4	1.75	34.84	66.91	3.89	29.2
Primary	68.5	1.74	29.76	72.14	4	23.87
Secondary	61.86	3.1	35.04	63.68	6.07	30.25
Complete secondary	51.89	3.37	44.74	56.37	6.4	37.24
Technical vocational	60.74	3.7	35.55	63.4	6.41	30.19
Higher	60.31	2	37.7	69.41	3.4	27.18
Household head	53.7	4.23	42.06	71.6	6.37	22.03
<i>The Food Stamp Program</i>						
Total				35.93	8.69	55.38
Gender						
female				32.23	4.89	62.89
male				39.96	12.85	47.19
Age group						
15 to 35				33.39	8.87	57.73
36 to 44				39.38	9.93	50.69
45 to 59				39.02	6.73	54.24
Highest level of education						

None				41.24	6.71	52.05
Primary				43.93	7.31	48.76
Secondary				36.09	9.39	54.52
Complete secondary				30.07	9.21	60.72
Technical vocational				31.16	11.57	57.26
Higher				37.33	5.46	57.21
Household head				41.07	11.91	47.01
Child Money Program						
Total	45.81	3.13	51.06	67.4	5.23	27.36
Gender						
female	34.06	2.44	63.5	62.07	3.15	34.78
male	50.93	3.43	45.64	73.27	7.52	19.21
Age group						
15 to 35	45.81	3.13	51.06	63.6	5.21	31.19
36 to 44				73.65	5.44	20.91
45 to 59				69.03	4.97	26
Highest level of education						
None	57.91	1.85	40.25	69.06	4.24	26.7
Primary	59.86	2.36	37.78	74.71	4.15	21.15
Secondary	45.85	3.32	50.83	66.92	6.26	26.82
Complete secondary	30.31	3.75	65.94	61.09	6.47	32.45
Technical vocational	32.07	7.07	60.87	68.23	6.33	25.44
Higher	40	0	60	73.32	3.17	23.51
Household head	64.52	0	35.48	75.18	7.01	17.82

Source: Estimates based on SW/PMT data.

Table D 11. Social welfare program recipients that are currently working by program and type of work

SW beneficiaries by programs and type of work	Direct beneficiaries		Indirect beneficiaries	
	Frequency	Percentage	Frequency	Percentage
<i>Social Welfare Pension</i>				
employers	91	1.27	401	1.0
family business	641	8.96	2,740	6.9
farmer	8	0.11	56	0.1
herder	1,748	24.44	10,301	26.1
other	408	5.71	1,844	4.7
unpaid work	913	12.77	5,952	15.1
wage worker	3,342	46.73	18,238	46.1
Total	7,151	100	39,532	100.0
<i>Social Welfare Allowance</i>				
employers	158	1.14	488	1.1
family business	1,323	9.52	3,257	7.3
farmer	29	0.21	82	0.2
herder	4,005	28.83	10,812	24.3
other	637	4.58	2,027	4.6
unpaid work	2,613	18.81	6,119	13.7
wage worker	5,129	36.92	21,800	48.9
Total	13,894	100	44,585	100.0
<i>Community-Based Welfare Service and Specialized Care Services</i>				
employers	4	1.04	44	1.1
family business	55	14.32	339	8.8
farmer	1	0.26	8	0.2
herder	39	10.16	409	10.6
other	19	4.95	269	7.0
unpaid work	19	4.95	132	3.4
wage worker	247	64.32	2,647	68.8
Total	384	100	3,848	100.0
<i>Assistance to the Elderly</i>				
employers	2	0.77	580	1.4
family business	24	9.2	2,771	6.9
farmer			75	0.2
herder	68	26.05	5,445	13.5
other	9	3.45	2,229	5.5
unpaid work	40	15.33	4,154	10.3
wage worker	118	45.21	25,141	62.2
Total	261	100	40,395	100.0
<i>Allowance for the Elderly with State Merits</i>				
employers			17	1.8
family business			58	6.0
farmer			5	0.5
herder			52	5.4
other			52	5.4
unpaid work			53	5.5
wage worker	2	100	726	75.4
Total	2	100	963	100.0
<i>Assistance and Concessions for the Disabled</i>				
employers	34	1.67	300	1.2
family business	234	11.47	1,832	7.6
farmer	2	0.1	33	0.1
herder	385	18.87	3,925	16.3
other	100	4.9	1,254	5.2
unpaid work	224	10.98	2,555	10.6
wage worker	1,061	52.01	14,199	58.9
Total	2,040	100	24,098	100.0
<i>Allowance for Mothers and Children</i>				
employers	680	0.9	2,811	1.1
family business	5,377	7.09	16,821	6.7
farmer	103	0.14	398	0.2
herder	13,550	17.86	58,073	23.0
other	2,187	2.88	10,657	4.2
unpaid work	19,333	25.48	36,005	14.3
wage worker	34,638	45.66	127,339	50.5

	Total	75,868	100	252,104	100.0
The Food Stamp Program					
	employers			64	0.5
	family business			218	1.8
	farmer			13	0.1
	herder			4,016	33.0
	other			448	3.7
	unpaid work			3,071	25.2
	wage worker			4,360	35.8
	Total			12,190	100.0
Child Money Program					
	employers	8	0.27	8,667	1.5
	family business	44	1.48	48,123	8.4
	farmer	4	0.13	754	0.1
	herder	925	31.13	114,264	20.0
	other	60	2.02	27,401	4.8
	unpaid work	1,496	50.35	61,147	10.7
	wage worker	434	14.61	311,279	54.5
	Total	2,971	100	571,635	100.0

Source: Estimates based on SW/PMT data.

Table D 12. Reason for inactivity of social welfare program recipients

SW beneficiaries distributed by not working status	Direct beneficiaries		Direct and indirect beneficiaries		Direct and indirect beneficiaries FSP	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
student	1,596	2.3	13,243	4.8	318	1.7
retired	5,331	7.6	11,584	4.2	233	1.2
health reason	3,001	4.3	9,381	3.4	848	4.5
looking after family/pregnant	30,991	43.9	95,740	34.9	4,995	26.6
Seasonal/temporary work	809	1.2	6,997	2.6	406	2.2
low salary	334	0.5	2,428	0.9	117	0.6
no suitable job	18,644	26.4	90,597	33.1	8,189	43.6
poor qualification	884	1.3	3,970	1.5	496	2.6
other	8,960	12.7	40,178	14.7	3,189	17.0
Total	70,550	100.0	274,118	100.0	18,791	100.0

Source: Estimates based on SW/PMT data.

Table D 13. Multinomial model of labor market participation (base: inactive)

Independent variables	<i>marginal effects</i>			
	Currently active		Usually active	
	Complete pcc distribution	Bottom 50% of pcc distribution	Complete pcc distribution	Bottom 50% of pcc distribution
Male	0.0514*** (0.009)	0.0529*** (0.012)	0.0264*** (0.006)	0.0351*** (0.008)
Age	0.0419*** (0.002)	0.0358*** (0.003)	0.001 (0.002)	0.00723*** (0.003)
Age sq	-0.000560*** (0.000)	-0.000495*** (0.000)	-0.0000371* (0.000)	-0.000125*** (0.000)
Married	0.0510*** (0.008)	0.0230** (0.011)	-0.007 (0.006)	0.005 (0.008)
Household head	0.0461*** (0.008)	0.0749*** (0.012)	-0.0373*** (0.006)	-0.0580*** (0.009)
Education level: higher secondary school or more	0.106*** (0.010)	0.136*** (0.014)	-0.006 (0.007)	-0.011 (0.010)
Interview during quarters 2 & 3	0.0242*** (0.006)	0.0355*** (0.009)	-0.0182*** (0.004)	-0.0226*** (0.007)
HH belongs to the bottom 50% of per capita consumption distribution	-0.102*** (0.007)		0.0274*** (0.005)	
HH belongs to the bottom 20% of per capita consumption distribution		-0.109*** (0.010)		0.0430*** (0.007)
HH size (ln)	0.0711*** (0.011)	0.122*** (0.017)	-0.008 (0.007)	-0.0210* (0.012)
HH has at least one child below 6 years old in infant school	-0.0320*** (0.008)	-0.0369*** (0.011)	-0.002 (0.005)	-0.003 (0.008)
HH has at least one child below 6 years old NOT in infant school	-0.0887*** (0.008)	-0.0784*** (0.011)	-0.0108* (0.006)	-0.0171** (0.008)
HH has at least one child in school age	-0.0248*** (0.008)	-0.0220** (0.011)	0.007 (0.005)	0.005 (0.008)
HH has at least one elder	0.0371** (0.015)	0.0410* (0.022)	0.010 (0.010)	0.012 (0.016)
HH has at least one disabled member	-0.0464*** (0.013)	-0.0620*** (0.017)	0.0208** (0.009)	0.0319*** (0.012)
HH dwelling is ger type	-0.007 (0.007)	0.003 (0.010)	0.002 (0.005)	-0.006 (0.007)
HH has electricity supply	-0.201*** (0.016)	-0.222*** (0.020)	0.0999*** (0.013)	0.125*** (0.018)
HH has centralized heating	0.0388*** (0.009)	0.0369** (0.016)	-0.0260*** (0.007)	-0.0257** (0.011)
HH has centralized water supply and protected well	-0.011 (0.007)	-0.0318*** (0.010)	0.004 (0.005)	0.011 (0.007)
HH has toilet	-0.319*** (0.019)	-0.350*** (0.024)	0.105*** (0.014)	0.0861*** (0.018)
Other urban areas	-0.0154** (0.008)	-0.0248** (0.012)	0.0367*** (0.005)	0.0491*** (0.008)

Rural areas	0.0482*** (0.008)	0.0519*** (0.012)	0.0145** (0.006)	0.0202** (0.009)
HH is recipient of SW	-0.0476*** (0.007)	-0.0338*** (0.010)	0.0209*** (0.005)	0.011 (0.008)
HH is recipient of aid from relatives and/or friends	-0.0711*** (0.009)	-0.0859*** (0.015)	0.0186*** (0.006)	0.010 (0.011)
HH has at least one pensioner	-0.0763*** (0.013)	-0.0699*** (0.021)	0.000 (0.010)	-0.001 (0.015)
pseudo R-sq				
N	23,097	11,389	23,097	11,389

Standard errors in parentheses * p<0.10, **p<0.05, *** p<0.01

Source: Estimates based on HSES 2012.

Table D 14. Determinants of work effort

Independent variables	<i>marginal effects</i>											
	Hours worked: Low (2-39 hours per week)				Hours worked: Middle (40-54 hours per week)				Hours worked: High (55 hours per week or more)			
	Complete pcc distribution		Bottom 50%		Complete pcc distribution		Bottom 50%		Complete pcc distribution		Bottom 50%	
	Oprobit for employed	Heckman Oprobit	Oprobit for employed	Heckman Oprobit	Oprobit for employed	Heckman Oprobit	Oprobit for employed	Heckman Oprobit	Oprobit for employed	Heckman Oprobit	Oprobit for employed	Heckman Oprobit
Wage per hour worked (ln)	-.098*** (0.004)	-.082*** (0.004)	-.145*** (0.007)	-.045*** (0.006)	-.097*** (0.004)	-.111*** (0.005)	-.071*** (0.005)	-.162*** (0.008)	.194*** (0.006)	.193*** (0.006)	.216*** (0.009)	.207*** (0.009)
Wage per hour worked (ln) sq	.013*** (0.000)	.011*** (0.001)	.019*** (0.001)	5.6e-03*** (0.001)	.013*** (0.000)	.014*** (0.001)	9.1e-03*** (0.001)	.02*** (0.001)	-.026*** (0.001)	-.025*** (0.001)	-.028*** (0.001)	-.026*** (0.001)
Male	-.058*** (0.005)	-.047*** (0.005)	-.076*** (0.010)	-.023*** (0.004)	-.057*** (0.005)	-.064*** (0.006)	-.037*** (0.005)	-.083*** (0.011)	.115*** (0.010)	.11*** (0.010)	.114*** (0.014)	.106*** (0.014)
Age	-7.6e-03*** (0.002)	-7.1e-03*** (0.002)	-8.7e-03*** (0.003)	-3.0e-03*** (0.001)	-7.5e-03*** (0.002)	-9.7e-03*** (0.002)	-4.2e-03*** (0.001)	-0.11*** (0.004)	.015*** (0.003)	.017*** (0.004)	.013*** (0.004)	.014*** (0.005)
Age sq	1.0e-04*** (0.000)	9.8e-05*** (0.000)	1.3e-04*** (0.000)	4.6e-05*** (0.000)	1.0e-04*** (0.000)	1.3e-04*** (0.000)	6.5e-05*** (0.000)	1.7e-04*** (0.000)	-2.1e-04*** (0.000)	-2.3e-04*** (0.000)	-2.0e-04*** (0.000)	-2.1e-04*** (0.000)
Married	-0.007 (0.005)	-8.7e-03** (0.004)	-0.014 (0.009)	-6.7e-03** (0.003)	-0.007 (0.005)	-.012** (0.006)	-0.007 (0.005)	-.031** (0.011)	0.014 (0.010)	.02** (0.010)	0.021 (0.014)	.031** (0.013)
Household head	-.026*** (0.006)	-.023*** (0.005)	-.044*** (0.011)	-.014*** (0.004)	-.025*** (0.006)	-.031*** (0.006)	-.022*** (0.005)	-.053*** (0.012)	.051*** (0.011)	.053*** (0.011)	.066*** (0.016)	.067*** (0.015)
Education level: higher secondary school or more	-.023*** (0.005)	-.011*** (0.004)	-.022*** (0.008)	-0.002 (0.003)	-.022*** (0.005)	-.015*** (0.005)	-.011*** (0.004)	-0.007 (0.009)	.045*** (0.010)	.025*** (0.010)	.033*** (0.012)	0.009 (0.011)
Interview during quarters 2 & 3	-0.004 (0.004)	-5.1e-03* (0.003)	0.001 (0.007)	-0.001 (0.002)	-0.004 (0.003)	-6.9e-03* (0.004)	0.001 (0.003)	-0.002 (0.007)	0.008 (0.007)	.012* (0.007)	-0.002 (0.010)	0.003 (0.009)
HH belongs to the bottom 50% of per capita consumption distribution	.043*** (0.004)	.036*** (0.004)			.043*** (0.004)	.049*** (0.005)			-.086*** (0.008)	-.085*** (0.008)		
HH belongs to the bottom 20% of per capita consumption distribution			.047*** (0.007)	.016*** (0.003)			.023*** (0.004)	.057*** (0.008)			-.069*** (0.011)	-.073*** (0.010)
HH size (ln)	-.017*** (0.006)	-.014*** (0.005)	-.03** (0.012)	-9.3e-03** (0.004)	-.017*** (0.006)	-.019*** (0.007)	-.015*** (0.006)	-.034** (0.014)	.033*** (0.012)	.032*** (0.011)	.045** (0.018)	.043** (0.018)
HH has at least one child below 6 years old in infant school	0.004 (0.004)	5.7e-03* (0.003)	-0.001 (0.008)	0.002 (0.002)	0.004 (0.004)	7.7e-03* (0.005)	0.000 (0.004)	0.006 (0.008)	-0.007 (0.008)	-.013* (0.008)	0.001 (0.011)	-0.008 (0.011)
HH has at least one child below 6 years old NOT in infant school	0.000 (0.005)	0.001 (0.004)	-0.008 (0.008)	-0.002 (0.002)	0.000 (0.005)	0.002 (0.005)	-0.004 (0.004)	-0.007 (0.009)	0.000 (0.009)	-0.003 (0.009)	0.012 (0.012)	0.009 (0.011)
HH has at least one child in school age	0.003 (0.004)	0.002 (0.003)	0.002 (0.008)	0.001 (0.002)	0.003 (0.004)	0.003 (0.005)	0.001 (0.004)	0.003 (0.009)	-0.005 (0.008)	-0.005 (0.008)	-0.004 (0.012)	-0.004 (0.011)
HH has at least one elder	-0.014 (0.009)	-.013* (0.008)	-0.014 (0.017)	-0.006 (0.005)	-0.014 (0.009)	-.017* (0.010)	-0.007 (0.008)	-0.021 (0.019)	0.029 (0.018)	.03* (0.018)	0.021 (0.025)	0.026 (0.024)
HH has at least one disabled member	-0.002 (0.009)	0.003 (0.007)	-0.016 (0.015)	-0.002 (0.005)	-0.002 (0.009)	0.003 (0.010)	-0.008 (0.008)	-0.008 (0.017)	0.004 (0.017)	-0.006 (0.017)	0.023 (0.023)	0.010 (0.022)
HH is recipient of SW	0.001 (0.004)	0.002 (0.003)	-0.006 (0.008)	-0.001 (0.002)	0.001 (0.004)	0.003 (0.004)	-0.003 (0.004)	-0.003 (0.008)	-0.002 (0.008)	-0.005 (0.008)	0.009 (0.011)	0.004 (0.011)
HH is recipient of aid from relatives and/or friends	-.011* (0.006)	-0.006 (0.005)	-.033*** (0.012)	-6.6e-03* (0.004)	-.011* (0.006)	-0.008 (0.006)	-.016*** (0.006)	-.024* (0.013)	.021* (0.011)	0.013 (0.011)	.049*** (0.018)	.03* (0.017)
HH has at least one pensioner	0.002 (0.008)	0.005 (0.007)	0.006 (0.016)	0.004 (0.005)	0.002 (0.008)	0.006 (0.009)	0.003 (0.008)	0.014 (0.017)	-0.005 (0.017)	-0.011 (0.016)	-0.008 (0.023)	-0.018 (0.022)
N	24,247	23,097	11,764	11,389	24,247	23,097	11,764	11,389	24,247	23,097	11,764	11,389

Source: Estimates based on HSES 2012.

Table D 15. Models estimating the determinants of the hourly wage [ln(wage/hour)], employed adults only

Independent variables	coefficients					
	Complete pcc distribution			Bottom 50% of the pcc distribution		
	OLS	Heckman	Tobit	OLS	Heckman	Tobit
Main equation						
Male	0.264*** (0.058)	-0.108* (0.064)	0.635*** (0.125)	0.404*** (0.076)	0.022 (0.087)	1.131*** (0.197)
Age	0.208*** (0.015)	-0.0376** (0.019)	0.475*** (0.035)	0.191*** (0.020)	-0.034 (0.024)	0.517*** (0.055)
Age sq	-0.00268*** (0.000)	0.000474* (0.000)	-0.00616*** (0.000)	-0.00252*** (0.000)	0.001 (0.000)	-0.00681*** (0.001)
Married	0.530*** (0.063)	0.242*** (0.067)	1.047*** (0.133)	0.584*** (0.084)	0.196** (0.093)	1.401*** (0.216)
Eduaction level: no education	-0.263** (0.123)	-0.531*** (0.128)	-1.456*** (0.349)	-0.265** (0.135)	-0.506*** (0.140)	-1.515*** (0.443)
Education level: complete secondary	0.692*** (0.058)	0.885*** (0.062)	1.699*** (0.133)	0.597*** (0.070)	0.776*** (0.076)	1.574*** (0.187)
Education level: vocational or associate	1.335*** (0.077)	1.437*** (0.082)	3.020*** (0.168)	1.266*** (0.105)	1.416*** (0.114)	3.157*** (0.263)
Education leve: higher degree	2.651*** (0.071)	2.817*** (0.077)	5.030*** (0.152)	2.175*** (0.102)	2.539*** (0.111)	4.668*** (0.252)
Interview during quarters 2 & 3	0.0799* (0.042)	0.105** (0.044)	0.194** (0.091)	0.175*** (0.056)	0.189*** (0.061)	0.480*** (0.148)
HH belongs to the bottom 50% of per capita consumption distribution	-0.348*** (0.046)	0.158*** (0.051)	-0.592*** (0.100)			
HH belongs to the bottom 20% of per capita consumption distribution				-0.384*** (0.059)	-0.097 (0.067)	-0.855*** (0.158)
HH dwelling is ger type	-0.173*** (0.051)	-0.315*** (0.055)	-0.238** (0.108)	-0.140** (0.065)	-0.363*** (0.072)	-0.190 (0.163)
HH has electricity supply	1.069*** (0.078)	1.540*** (0.078)	4.049*** (0.219)	0.953*** (0.092)	1.400*** (0.092)	4.259*** (0.313)
HH has centralized heating	-0.036 (0.064)	-0.058 (0.067)	-0.373*** (0.131)	-0.093 (0.104)	-0.106 (0.116)	-0.451* (0.251)
HH has centralized water supply and protected well	0.271*** (0.049)	0.350*** (0.052)	0.635*** (0.104)	0.352*** (0.062)	0.543*** (0.068)	0.933*** (0.157)
HH has toilet	1.202*** (0.082)	1.635*** (0.083)	5.102*** (0.246)	0.985*** (0.096)	1.405*** (0.096)	4.658*** (0.338)
Other urban areas	-0.272*** (0.057)	-0.508*** (0.061)	-0.419*** (0.116)	-0.419*** (0.082)	-0.817*** (0.093)	-0.746*** (0.196)
Rural areas	-0.746*** (0.058)	-1.266*** (0.063)	-1.431*** (0.120)	-1.126*** (0.080)	-2.018*** (0.090)	-2.463*** (0.196)
HH is recipient of SW	-0.126*** (0.044)	0.000 (0.047)	-0.187** (0.095)	-0.093 (0.058)	-0.050 (0.063)	-0.104 (0.152)
HH is recipient of aid from relatives and/or friends	-0.387*** (0.065)	0.047 (0.074)	-0.669*** (0.141)	-0.475*** (0.095)	0.025 (0.114)	-0.983*** (0.249)
HH has at least one pensioner	-0.437*** (0.059)	-0.170** (0.067)	-0.916*** (0.130)	-0.336*** (0.078)	-0.082 (0.091)	-0.795*** (0.206)
se			5.974***			6.464***

			(0.047)			(0.082)
<i>Constant</i>	-3.180***	1.516***	-18.22***	-2.629***	2.294***	-19.33***
	(0.301)	(0.366)	(0.726)	(0.379)	(0.461)	(1.104)
Selection equation =employed						
Male		0.125***			0.140***	
		(0.026)			(0.036)	
Age		0.157***			0.139***	
		(0.007)			(0.010)	
Age sq		-0.00208***			-0.00193***	
		(0.000)			(0.000)	
Married		0.043			0.115	
		(0.060)			(0.070)	
Eduaction level: no education		0.0572**			0.011	
		(0.026)			(0.033)	
Education level: complete secondary		0.235***			0.167***	
		(0.035)			(0.049)	
Education level: vocational or associate		0.444***			0.303***	
		(0.033)			(0.048)	
Education leve: higher degree		0.165***			0.229***	
		(0.026)			(0.036)	
Household head		0.376***			0.448***	
		(0.030)			(0.041)	
Interview during quarters 2 & 3		0.0698***			0.0845***	
		(0.019)			(0.027)	
HH belongs to the bottom 50% of per capita consumption distribution		-0.348***				
		(0.022)				
HH belongs to the bottom 20% of per capita consumption distribution					-0.385***	
					(0.029)	
HH size (ln)		0.187***			0.339***	
		(0.032)			(0.049)	
HH has at least one child below 6 years old in infant school		-0.105***			-0.123***	
		(0.024)			(0.032)	
HH has at least one child below 6 years old NOT in infant school		-0.248***			-0.219***	
		(0.025)			(0.033)	
HH has at least one child in school age		-0.026			-0.029	
		(0.023)			(0.032)	
HH has at least one elder		0.166***			0.157**	
		(0.043)			(0.062)	
HH has at least one disabled member		-0.149***			-0.176***	
		(0.040)			(0.051)	
HH dwelling is ger type		0.035			0.0817***	
		(0.023)			(0.030)	
HH has electricity supply		-0.694***			-0.739***	
		(0.044)			(0.055)	
HH has centralized heating		0.0538*			0.072	
		(0.029)			(0.047)	
HH has centralized water supply and protected well		-0.0500**			-0.104***	
		(0.022)			(0.029)	

HH has toilet		-0.942***		-1.016***	
		(0.050)		(0.063)	
Other urban areas		0.021		-0.009	
		(0.026)		(0.037)	
Rural areas		0.109***		0.0969***	
		(0.026)		(0.036)	
HH is recipient of SW		-0.0866***		-0.0738**	
		(0.022)		(0.031)	
HH is recipient of aid from relatives and/or friends		-0.288***		-0.335***	
		(0.029)		(0.043)	
HH has at least one pensioner		-0.343***		-0.302***	
		(0.039)		(0.057)	
<i>Constant</i>		-0.938***		-0.869***	
		(0.146)		(0.199)	
<i>athrho constant</i>		0.0836**		0.064	
		(0.037)		(0.045)	
<i>Insigma constant</i>		1.054***		0.975***	
		(0.006)		(0.008)	
R-sq	0.23		0.203		
pseudo R-sq			0.071		0.073
LR test Prob > chi2		0.1573		0.0347	
N	23,097	23,097	23,097	11,389	11,389

Source: Estimates based on HSES 2012.

Table D 16. Determinants of social welfare program receipt (probit models; SW=1/0)

Dependent variables	<i>marginal effects</i>					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
HH belongs to the bottom 50% of per capita consumption distribution	.029*** (0.010)	.041*** (0.010)	-.071*** (0.010)	-.068*** (0.010)	-.068*** (0.010)	-.067*** (0.010)
Male		-.103*** (0.017)	-.1*** (0.016)	-.097*** (0.016)	-.097*** (0.016)	-.09*** (0.016)
Age		4.6e-03** (0.002)	-5.4e-03*** (0.002)	-5.4e-03*** (0.002)	-5.4e-03*** (0.002)	-4.7e-03** (0.002)
Age sq		0.000 (0.000)	8.8e-05*** (0.000)	8.7e-05*** (0.000)	8.7e-05*** (0.000)	7.7e-05*** (0.000)
Married		.057*** (0.016)	-.06*** (0.016)	-.059*** (0.016)	-.059*** (0.016)	-.057*** (0.016)
Education level: higher secondary school or more		0.0067 (0.010)	-0.012 (0.010)	-.02* (0.010)	-.02* (0.010)	-0.013 (0.011)
HH size (ln)			.295*** (0.013)	.292*** (0.013)	.292*** (0.013)	.296*** (0.013)
HH has at least one child below 6 years old in infant school			-.081*** (0.011)	-.084*** (0.011)	-.084*** (0.011)	-.082*** (0.011)
HH has at least one child below 6 years old NOT in infant school			.107*** (0.012)	.108*** (0.012)	.108*** (0.012)	.112*** (0.012)
HH has at least one child in school age			-.073*** (0.010)	-.072*** (0.010)	-.072*** (0.010)	-.071*** (0.010)
HH has at least one elder			.063*** (0.015)	.063*** (0.015)	.063*** (0.015)	-0.0066 (0.023)
HH has at least one disabled member			.676*** (0.030)	.671*** (0.030)	.671*** (0.030)	.664*** (0.030)
HH dwelling is ger type				0.0053 (0.011)	0.0053 (0.011)	0.0038 (0.011)
HH has electricity supply				.065*** (0.016)	.065*** (0.016)	.063*** (0.016)
HH has centralized heating				-0.016 (0.012)	-0.016 (0.012)	-0.014 (0.013)
HH has centralized water supply and protected well				.023** (0.010)	.023** (0.010)	.025** (0.010)
HH has toilet				-0.012 (0.017)	-0.012 (0.017)	-0.018 (0.017)
Other urban areas						.061*** (0.011)
Rural areas						.031*** (0.012)
HH is recipient of aid from relatives and/or friends						.114*** (0.012)
HH has at least one pensioner						.084*** (0.022)
N	12,803	12,803	12,803	12,803	12,803	12,803

Source: Estimates based on HSES 2012. Standard errors in parentheses; * p<0.10, **p<0.05, *** p<0.01

Annex E- Assessing the quality of matching

To ensure that the matching estimators identify and consistently estimate the treatment effects of the treated, two assumption must be verified: (i) the conditional independence assumption, which implies that the potential outcomes are independent of the treatment status after controlling for a set X of covariates, observable to the researcher; and (ii) the common support condition, which requires that for each value of X a positive probability of being in the treatment group or in the control group exists.

Balance

An important step in assessing the quality of matching is to perform tests that verify that treatment is independent of unit characteristics after controlling for a set of observed covariates. These tests verify whether the propensity score adequately balances characteristics between the treatment and comparison group units. For that, Stata14 provides the command *tebalance summary*, used after *teffects psmatch*, which calculates for each covariate the standardized difference, that is, the size of the difference in means of a conditioning variable (between the treatment and comparison units), scaled by (or as a percentage of) the square root of the average of their sample variances, and the variance ratio.

In this study, after estimating the ATT, using *teffects psmatch*, *tebalance summary* was used. The resulting statistics presented in Table E 1 appear to indicate that most of the standardized differences and variance ratios, calculated for the covariates, are closer to the expected values of zero and one. However, the ratio of variances for some covariates might be of concern³⁰. They are: age (*age*), age squared (*age2*), household size (*lnsize*), HH has at least one elder (*d_elder*), HH with at least one disabled member, other urban areas, rural and HH is recipient of aid from relatives and/friends (*d_aid*).

Stata's command *tebalance summary*, when used after *teffects psmatch*, does not provide standard errors on these statistics, therefore, no formal conclusions can be drawn. The overidentification test provided by Stata14 (*tebalance overid*), which tests whether the model-adjusted means of the covariates are the same between groups, is not applicable after *teffects psmatch*. As an alternative, the matching estimators provide diagnostic kernel density plots using the matched distributions (Figure E 1). The plots using the matched data appear to be balanced, with exception of the covariate for household size.

Despite this result, household size was kept in the model due to its relevance characterizing participation in Social Welfare Programs. The household size has a positive and significant effect on one's probability of receiving Social Welfare benefits (See results from *probit* model in Annex D, Table D- 1).

Overlap or common support condition

Verifying the common support or overlap condition is another essential step in ensuring the validity of the propensity score matching estimated. Lack of overlap is a more serious problem when compared to balance, because it corresponds to a lack of data that limits the causal conclusions that can be made without uncheckable modeling assumptions. This assumption is automatically tested when estimating the ATT using *teffects psmatch*, and the estimator is not identified when the overlap assumption is violated. Visual examination of the propensity score distribution in Figure E 2 also suggests that its densities curves are more

³⁰ Considering the range [0.96; 1.04], from the 2.5th and 97.5th percentiles of the F-distribution, for the variance ratio.

similar after matching. Even though there are large masses around 0 and 1, the plot for the propensity score before matching (raw) also reveals a clear overlapping of the distributions.

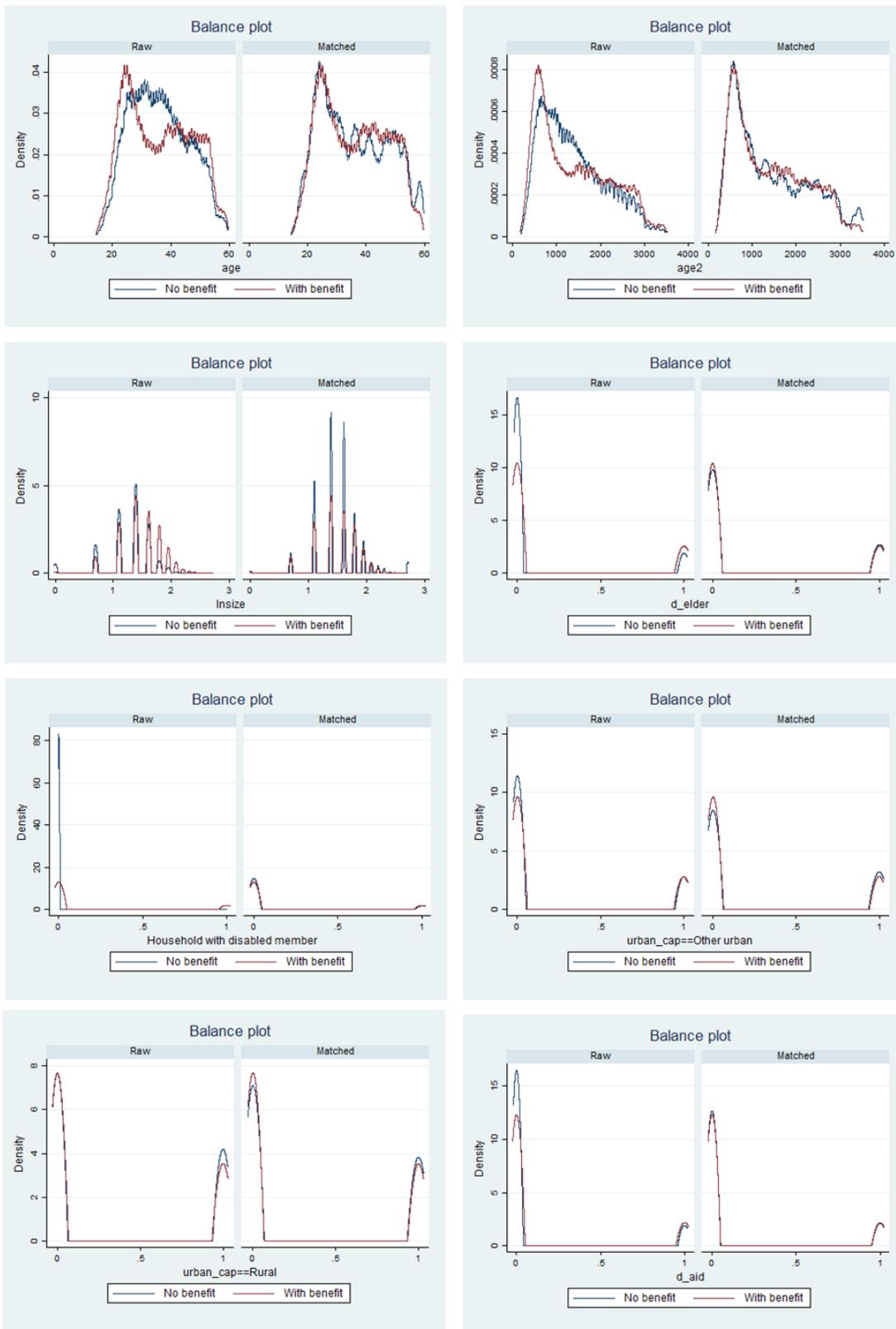
A common strategy used to improve the quality of the matching is to specify a caliper for the matching, which stipulates the maximum distance at which two observations are a potential match. This technique was tested for the sample including all abled-bodied adults and not students. When using caliper=0.001, the ATT could not be identified because the overlap assumption was violated by some observations. Dropping these observations would allow the estimation of the ATT, however, it would also change the parameter in order to fit the data. For caliper=0.01, the ATT could be identified, but its value and standard error were equal to the ATT calculated without caliper restriction.

Table E 1. Covariate balance summary

Covariates	Standardized differences		Variance ratio	
	Raw	Matched	Raw	Matched
Male	-0.021	0.004	0.999	1.000
Age	-0.006	-0.004	1.283	0.926
Age sq	0.029	-0.016	1.266	0.896
Married	-0.177	-0.004	1.173	1.003
HH head	-0.181	0.002	0.942	1.001
Education level: higher secondary school or more	0.002	0.017	0.998	0.982
Survey interview in the summer	0.007	-0.071	1.000	1.010
HH belongs to the bottom 50% of per capita consumption distribution	0.115	-0.030	1.006	1.003
HH size (ln)	0.597	0.005	0.893	1.044
HH has at least one child below 6 years old in infant school	-0.113	0.073	0.888	1.100
HH has at least one child below 6 years old NOT in infant school	0.305	-0.114	1.278	0.961
HH has at least one child in school age	-0.006	0.023	0.999	1.004
HH has at least one elder	0.270	-0.048	1.724	0.933
HH has at least one disabled member	0.535	0.088	25.887	1.225
HH has electricity supply	0.116	0.025	0.741	0.932
HH has toilet	0.063	0.020	0.846	0.946
Other urban areas	0.073	-0.111	1.109	0.880
Rural areas	-0.082	-0.076	0.944	0.948
HH is recipient of aid from relatives and/or friends	0.139	0.021	1.367	1.043
HH has at least one pensioner	0.303	-0.035	1.631	0.962
N	1,341,354	1,065,028		
Treated obs	532,514	532,514		
Control obs	808,840	532,514		

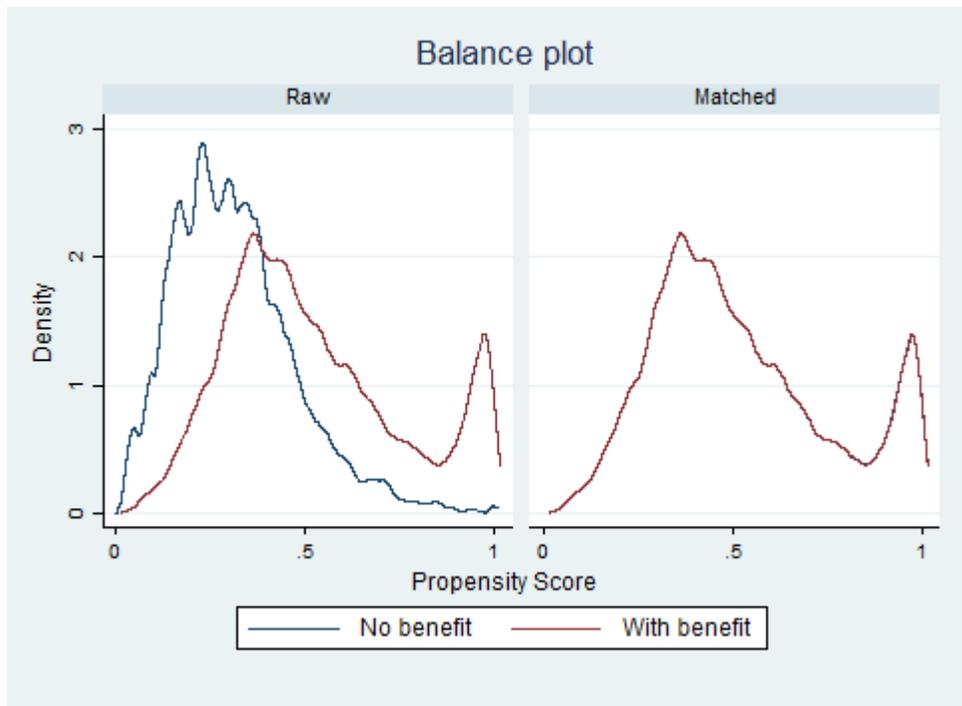
Source: Estimates based on HSES 2012.

Figure E 1. Covariate density distribution



Source: Estimates based on HSES 2012.

Figure E 2. Propensity Score Distribution



Source: Estimates based on HSES 2012.