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MONGOLIA

BUILDING THE SKILLS FOR THE NEW ECONOMY

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WEIGHTS AND MEASURES

Metric System

ACRONYMS AND ABBREVIATIONS

CEM	Country Economic Memorandum	LSMS	Living Standards Measurement Survey
CIVED	Civic Education Study	MCA	Millennium Challenge Account
CMP	Child Money Program	MEA	Mongolian Education Alliance
DANIDA	Danish International Development Agency	MECS	Ministry of Education, Culture and Science
ESF	Employment Support Fund	NASA	National Assessment of Students' Achievement
ESMP	Education Sector Master Plan	NDC	Notional Defined Contribution
FDI	Foreign Direct Investment	OLS	Ordinary Least Squares
FSU	Former Soviet Union	PPPs	Public-Private Partnerships
GDP	Gross Domestic Product	R&D	Research and Development
GTZ	German Technical Cooperation (Deutsche Gesellschaft fuer Technische Zusammenarbeit	SME	Small and Medium Enterprises
HIES	Household Income and Expenditures Survey	SOE	State Owned Enterprise
ICA	Investment Climate Assessment	STVP	Skills Training Voucher Program
ICS	Investment Climate Survey	TGs	Teacher's Guides
IDB	Inter-American Development Bank	TIMSS	Trends in International Mathematics and Science Study
ILO	International Labour Office	TVE	Technical and Vocational Education
INEA	National Institute for Adult Education	TVET	Technical and Vocational Education Training
JICA	Japan International Cooperation Agency	VTCs	Vocational Training Centers
LP	Lesson Plans		

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EXECUTIVE SUMMARY

This report examines the challenges in the labor market in Mongolia as the economy has undergone a transformation into a market economy. It identifies three major interrelated challenges—joblessness, informality and skills mismatch. The inability to find productive employment has important poverty implications, as labor is the main asset of the poor. But along with the skills mismatch, they also affect efficiency, and thus economic growth, by preventing the economy from using the available human capital to its fullest potential.

The second part of this report explores the factors underlying these challenges in order to identify policy and market failures, and thus the challenges for policy. International best practices are then discussed to provide policy options to address these challenges. Table 1, at the end of the executive summary, provides a summary of labor market challenges, underlying causes and proposed policies. The report shows that a key constraint for future growth from the perspective of human resources is the failure to provide adequate learning opportunities, school curricula and teaching for producing the skills that are in high demand. But even if the supply of skills and labor were to be appropriate to market needs, access to productive employment would still be limited by a poor investment climate for firm growth.

The challenges in the labor market

Prior to the transition, all working age Mongolians were guaranteed a job for life. School graduates were assigned to jobs according to the needs of the planned economy. All Mongolians had free access to education, whose curricula and fields of specialization were designed to serve the needs of the regime. Mongolia suffered a “transformational recession” during 1990-93. Restructuring and privatization of state enterprises resulted in massive layoffs and most workers lost their right to a pension. Since 1993, however, the Mongolian economy has grown continuously.

Unable to find a job—unused human capital. But economic growth has not generated enough employment in the private sector. There are persistently high rates of joblessness among the working age population—27 percent are out of work and out of school. This mainly reflects idleness—about 21 percent of the working age population is idle, defined as not looking for a job and out of school. Idleness rates are consistently high across different groups but it hits harder on urban residents with no general or vocational education. Idleness rates remain high throughout working life and peak just before retirement, reflecting the impact of incentives for early retirement in Mongolia—41 percent of 45-54 year old women and 42 percent of 55-59 year old men are already receiving pensions.

Getting stuck in ‘bad’ jobs—job informality. And while many people have not been able to find jobs in the new economy, those who do find employment have been increasingly segmented into ‘bad’ jobs—low productivity jobs with no social security benefits and limited or no labor protection, and ‘good’ jobs. Most workers (60 percent)

are ‘informal’ and most informal workers (92 percent) are low skilled self-employed workers in agriculture, who lost the universal ‘right’ to a pension in 1995. While overall informality is declining, because of the decreasing share of agriculture in total employment, the share of salaried workers with no social security benefits is increasing. Informality is very high among youth (80 percent) and many get stuck in low productivity-low benefit jobs. Workers with low levels of education are more likely to be informal, but informality is also high among the more educated.

Bringing skills that are inadequate to market needs—skills mismatch. The Mongolian economy is changing and so is the demand for skills. The changes in the structure of the economy, greater openness and competition, as well as greater use of technology have all resulted in increased demand for skilled labor, although from a low base—Mongolia is far from being a high skill-intensive economy. But so (and more importantly) has the nature of the skills demanded changed towards more general skills that allow workers (and firms) to ‘survive’ and quickly adapt to changes in demand. The skills that are in increasing demand include thinking skills, behavioral skills, practical knowledge (English and IT) and technical skills. In today’s complex and changing environment, the challenge is to build skills that allow young people to think critically and creatively, to process information, to make decisions, to manage conflict, and to work in teams.

But the supply of skills has not responded to these changes in demand, resulting in a mismatch between the skills that workers bring to the labor market and those demanded by the labor market. About 30 percent of firms in the ICS report the supply of skilled and educated workers as a major or severe concern. Firms have a hard time filling vacancies for skilled workers, which is mainly due to the lack of required basic skills of applicants, particularly among vocational education graduates. Most workers feel they lack the skills to make the most of their jobs, particularly ‘general’ skills—93 percent of workers report critical and creative thinking and behavioral skills (communication skills, work discipline, leadership and team work) among the three types of skills they lack the most in doing their jobs.

Options for addressing the challenges in the labor market

Joblessness, job informality and skills mismatch are all interrelated challenges. This report shows that the common factor is the skills supply. In particular, the same lack of relevant skills that prevent people from getting a formal job also make workers unable to perform well the tasks required by employers.

Improving the skills for work. Despite high enrollment numbers, the education preparation of youth is poor, just as demand for skills and knowledge is rising. This report shows that a key constraint for future growth from the perspective of human resources is the (policy) failure to provide adequate learning opportunities, as well as school curricula and teaching, for producing the skills that are in high demand. This includes the lack of learning opportunities for those who have already left school and do not have the skills needed to be productively employed in the new economy. So why isn’t

the private sector more involved in the provision of education and training to produce the required skills? Because of the lack of a proper quality assurance system (a policy failure), which has resulted in a proliferation of poor quality private institutions.

To improve the skills of young people for work and life, education opportunities must be made more relevant to the needs of all young people. This involves improving educational preparation for adolescence, meeting the growing demand for postbasic skills, and providing second chance learning opportunities for young people who have already left school and do not have the skills needed to be productively employed in the new economy.

Educational preparation for adolescence can be improved by providing quality basic education for all. Eighty-one percent of adolescents complete lower secondary school, but learning achievement is low, particularly in the skills that have the greatest demand, such as complex and problem solving tasks, where the average student only gets 35 percent of answers correct. As the education system expands to 12 years in 2009, it is crucial that curriculum and teaching practices are adapted to the new standards already developed, which rightly emphasize thinking and behavioral skills as well as practical subjects. To do that, teachers need to be properly trained on how to use student-centered methods and be provided with adequate materials (including IT) to implement the curriculum. And regular student assessments need to be conducted to inform education policy and make the education system accountable for performance. Improving basic education should target rural areas in particular to close the gap in learning and access to postbasic education between rural and urban areas.

The growing demand for postbasic skills can be met by providing diverse and flexible learning options in upper secondary and tertiary education. This basically involves making vocational education a real alternative—currently, it only accounts for 10 percent of total enrollment in postbasic education—and connected with higher education. It also involves reaching out to the private sector to expand and improve postbasic education, particularly in upper secondary and vocational education. But this participation must be subject to a proper quality assurance system that is compulsory to all institutions, including vocational schools. The current accreditation system only covers universities and technical colleges, it is voluntary and weak in terms of the assessment done. This has resulted in the proliferation of many small and poor quality private institutions.

Meeting the growing demand for postbasic skills also involves implementing a relevant curriculum that teaches practical subjects and programs, thinking skills, and behavioral skills. In the case of vocational and technical education, standards need be developed in collaboration with employers for fields that are in demand, along with the corresponding testing and certification system. This should be accompanied by the development of a modular, competency-based curriculum to achieve these standards. And meeting the demand for the new skills also requires blending the academic and vocational curriculum—vocational education students need general skills such as IT, English, thinking and behavioral skills as much as upper secondary student need more practical subjects. In higher education, new standards have been developed, but not yet

implemented. More practical programs have been introduced in higher education, but new and old programs need to be subject to more quality control.

Meeting the growing demand for postbasic skills also involves connecting school and work. This involves strengthening the partnership between industry and schools by: (1) involving employers in the development of standards and curriculum design; (2) establishing partnerships with local employers to provide work-based learning opportunities; and (3) establishing collaborations between educational institutions and local industry through joint projects and technology transfers or even establishing firms to commercialize their own inventions.

Finally, to improve the skills of young people for work and life, second chance learning opportunities need to be provided for young people who have already left school and do not have the skills needed to be productively employed in the new economy—about 38 percent of 18 to 35 year-olds left school without completing basic education. These are individuals who have been adversely affected by the changes in the demand for skills, as they lack the skills to ‘survive’ and quickly adapt to these changes. It is not possible to fully remedy what was missed, but Mongolia cannot afford to neglect these people.

Second chance programs need to meet the diverse needs of out-of-school youths in terms of skills acquired, age and local environment. Addressing diversity, while scaling up enrollments, requires reaching out to the private sector and NGOs, with the role of government being that of standard setter, regulator, and funder, and less of a provider. A policy and organizational framework for second chances needs to be developed.

For those children and youths who are still in school but performing poorly, or have dropped out recently, one policy response is to offer remedial education to put them back on track. Programs for out-of-school youth must appeal to them. In the case of equivalence programs—which offer instruction and certification equivalent to formal education certificates, this involves using more practical curricula and more flexible schedules than formal schools. The effectiveness of these programs relies on a strong partnership between the formal education sector, private providers, and prospective employers. And for out-of-school individuals for whom the opportunity cost of engaging in equivalence programs is high, skills training may be a good option. As with vocational education, standards, testing, certification and a modular, competency-based curriculum need to be developed. And to be effective, job training needs to be combined with life skills training and other services that youth need to be productively employed.

Enhancing productive employment opportunities. But even if the supply of skills and labor were to be appropriate to market needs, access to productive employment would still be limited by other policy failures—poor investment climate, restrictive labor market institutions, and restrictive mobility of migrants—and market failures—lack of information about jobs available and access to credit to start up a business. This report finds that the key demand-side constraint is the poor investment climate for firm growth. Previous work has found corruption, high taxes and limited access to (and high cost of)

financing as key constraints to job creation by the private sector. High corporate and social security taxes also induce labor market segmentation, and so does the current use of temporary contracts—high social security taxes induce firms to overuse (and misuse) temporary contracts and hire workers without contracts.

Recent changes in the tax code and the proposed reductions in social security contributions are steps in the right direction. Temporary contracts should be part of the system, but their use should be more controlled through labor inspections. Also, while keeping the flexible nature of these contracts, temporary workers should be granted more protection and be integrated in the social security system.

Active labor market policies are already in place to promote productive employment, but coverage is too low to make a difference. Up until the 2006 amendments to the Labor Law, these programs have been limited to those registered as unemployed—about 54 percent of the total unemployed in 2002. The amendments increase coverage and try to improve the labor market relevance of these programs—but it is too early to evaluate them. The most important change in the law refers to the support to small businesses, which become the focus of labor market programs.

Table 1: The ‘Clinical’ Matrix: Labor Market Challenges, Underlying Causes and Proposed Policies

LABOR MARKET CHALLENGES		UNDERLYING CAUSES		POLICIES	
Symptoms	Details	Causes	Details	General	Details
High rates of joblessness	Mostly explained by idleness	<u>Unresponsive supply of skills</u>		<u>Make the supply of skills more responsive</u>	
	Idleness is particularly high among urban people with no education or vocational education	Inadequacy of skills to market needs (see skills mismatch)		Improve the skills for work (see skills mismatch)	
	Idleness peaks right before retirement age	Social welfare programs discourage work	High minimum pensions and incentives for early retirement	Design social welfare programs that do not discourage work	Benchmark the minimum pension to the minimum living standard; eliminate incentives for early retirement
		<u>Insufficient opportunities for productive employment</u>		<u>Enhance productive employment opportunities</u>	
		Investment climate hinders job creation by firms	Corruption; limited access to financing; high corporate and social security taxes	Improve the investment climate	Reform tax code and inspection to make them more pro-business growth; reduce social security contributions
		Possible distortionary effect of public sector pay policies	Across the board increases in public wages can generate unemployment	Eliminate distortionary public pay policies	Make increases in public wages more tied to responsibilities and performance
High incidence of bad jobs	Most workers are in low productivity jobs with no social security benefits	<u>Unresponsive supply of skills</u>		<u>Make the supply of skills more responsive</u>	
	The share of salaried workers with no social security benefits is increasing	Inadequacy of skills to market needs (see skills mismatch)		Improve the skills for work (see skills mismatch)	
	Informality is very high among youth and workers with low levels of education	<u>Insufficient opportunities for productive employment</u>		<u>Enhance productive employment opportunities</u>	
		Investment climate hinders creation of productive	Corruption; limited access to financing; high corporate and	Improve the investment climate	Reform tax code and inspection to make them more pro-business

		employment by firms	social security taxes;		growth; reduce social security contributions
		Not all labor market flexibility is good	Misuse of temporary contracts contributes to increased informality	Adequate use and protection of temporary contracts	Temporary contracts under the Labor Law and be granted some social security benefits
		Possible distortionary effect of public pay policies	Across the board increases in public wages can increase job informality	Eliminate distortionary public pay policies	Make increases in public wages more tied to responsibilities and performance
Skills mismatch	<p>Unmet increase in the demand for critical and creative thinking, behavioral skills, practical knowledge and technical skills</p> <p>Many firms have a hard time finding workers with these skills</p> <p>Most workers feel they lack these skills to make the most of their jobs</p>	<u>Inadequacy of skills to market needs</u>	<p>Inadequacies of the public education system in terms of curricula, teaching and provision of adequate learning opportunities</p> <p>The private sector has not addressed this unmet demand because of the lack of proper of quality assurance system</p>	<p><u>Improve the skills for work</u></p> <p>Improve educational preparation for adolescence</p> <p>Meet the growing demand for postbasic skills</p> <p>Provide second chance learning opportunities for out-of-school youth</p>	<p>Adapt curriculum and teaching practices to new standards</p> <p>Make vocational education a real alternative; reach out to the private sector with proper quality assurance</p> <p>More teaching of practical, thinking, and behavioral skills; develop a qualifications framework for TVET; improve connection between school and work</p> <p>Develop policy framework; partnership with the private sector and NGOs</p> <p>Programs need to meet diversity—remedial, equivalence and skills training</p>

PART I. Challenges in the labor market

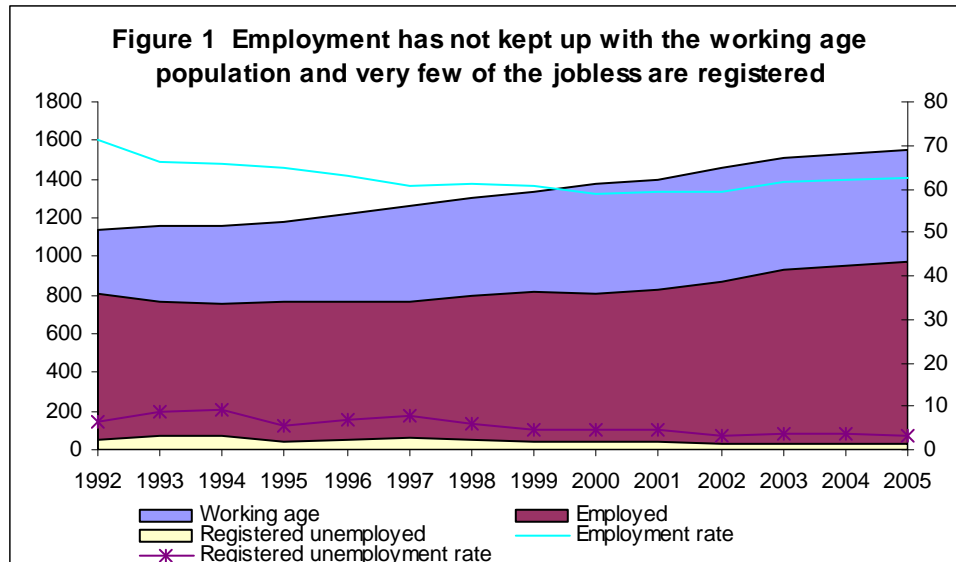
Prior to the transition period in the 1990s, all working age Mongolians were guaranteed a job for life, which was the main safety net for most of the population. School graduates were assigned to jobs according to the needs of the planned economy. All Mongolians had free access to education, whose curricula and fields of specialization were designed to serve the needs of the regime. Mongolia, like most planned economies, suffered a “transformational recession” during 1990-93 following the withdrawal of transfers from the Former Soviet Union (FSU), which led to a cumulative decline in real output of some 20 percent.

The industrial sector, particularly manufacturing, bore the brunt of adjustment. Restructuring and privatization of state enterprises resulted in massive layoffs. The recession was, however, shorter than most other transitional economies because of the lower degree of overindustrialization that had to be overcome—the majority of the working population was engaged in animal husbandry and agriculture. In any case, social protection programs, including unemployment insurance and job training, were introduced to cope with the social impact of the recession, including the loss of employment. Since 1993, and despite a number of setbacks, the Mongolian economy has done well in terms of real GDP per capita, outperforming most other transition economies (CEM 2007).¹

But the number of employed people only increased slightly over the period, an increase that was insufficient to keep up with the working age population (Figure 1). This resulted in employment rates that are currently lower than in 1992. At the same time registered unemployment rates have been consistently going down after peaking in 1994 (9 percent) and the banking crisis in 1997 (8 percent), reaching a low of 3 percent in 2006. However, official statistics show that very few of those who are not employed are registered as unemployed, and thus reported as being out of the labor force.² The next section shows that many of these people are idle workers. But this segment of the working age population may also include some ‘informal’ workers, as those are not always recorded by local authorities.

¹ Mongolia Country Economic Memorandum (CEM), World Bank (2007).

² The employment information is based on what households report to the local authorities.



Source: National Statistical Office of Mongolia

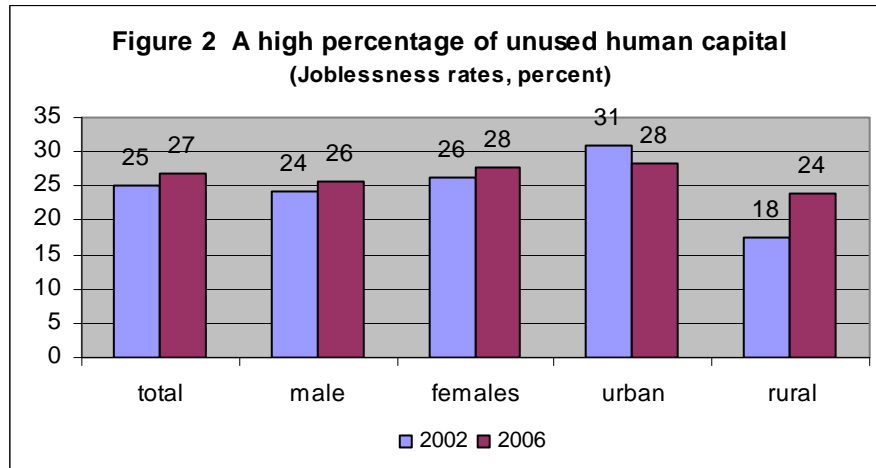
In fact, while many people have not been able to find jobs in the new economy, those who do find employment have been increasingly segmented into ‘bad’ jobs—low productivity jobs with no social security benefits and limited or no labor protection, and ‘good’ jobs—higher paying jobs with social security benefits and labor protections. Most workers are ‘informal’ and most informal workers are low skilled self-employed workers in agriculture, who lost the universal ‘right’ to a pension in 1995. While overall informality is declining, because of the decreasing share of agriculture in total employment, the share of salaried workers with no social security benefits is increasing.

The Mongolian economy is changing and so is the demand for skills. This implies a declining demand for certain skills and labor and an increasing demand for others. The demand for more skilled workers is increasing. But so (and more importantly) is the nature of the skills demanded towards more general skills that allow workers (and firms) to ‘survive’ and quickly adapt to changes in demand resulting from increased openness and competition in the economy. But the supply of skills has not responded to these changes in demand resulting in a mismatch between the skills that workers bring to the labor market and those demanded by the labor market. This phenomenon is clearly related to joblessness and informality because the same lack of relevant skills that prevent people from getting a formal job also make workers unable to perform well the tasks required by firms.

Inability to find a job: Unused human capital

A very high percentage of the working age population are jobless and out of school—and there are no signs of improvement in recent times. In 2006, 27 percent of

the working age population was out of school and out of work.³ This high percentage of unused human capital has increased somewhat relative to 2002 (25 percent). In this regard, Mongolia fares worse relative to other East Asian countries—except Indonesia—and shares the same joblessness problem of most Central Asian countries (Table A1). Joblessness rates are similar for men and women and higher in urban areas.



Source: Household Income and Expenditures Survey (HIES) for 2006 and the Living Standards Measurement Survey (LSMS) for 2002. Employment status in the LSMS follows the international standard and refers to the seven days prior to the survey interview, whereas employment status in the HIES is as of the time of the survey. More generally, only the LSMS follows international conventions in labor related questions.

Most jobless people are not even looking for a job (idle). The LSMS 2002 allows a close examination of the sources of joblessness—following international conventions—which include those looking for a job (unemployed), and those who are not looking for a job and are not in school (idle). About 21 percent of the working age population is idle (Table 2). This does not include engagement in domestic duties, as males and females have similar idleness rates (20 percent and 22 percent, respectively).

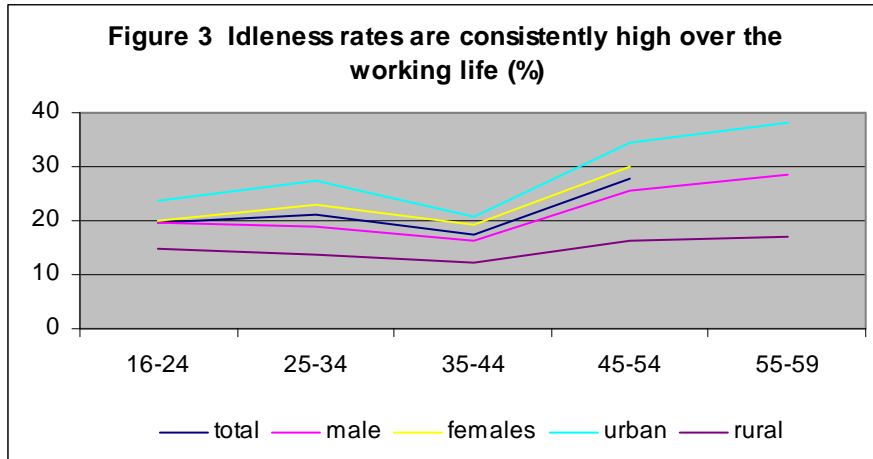
Table 2: Most Jobless People are Idle, Particularly in Urban Areas (5)

	Urban	Rural	Male	Female	Total
Labor force	56	76	67	62	65
Of which unemployed	9	4	7	7	7
Of which employed	91	96	93	93	93
Of which employee	71	21	43	48	45
Of which self employed	29	79	57	52	55
Idle	26	14	20	22	21

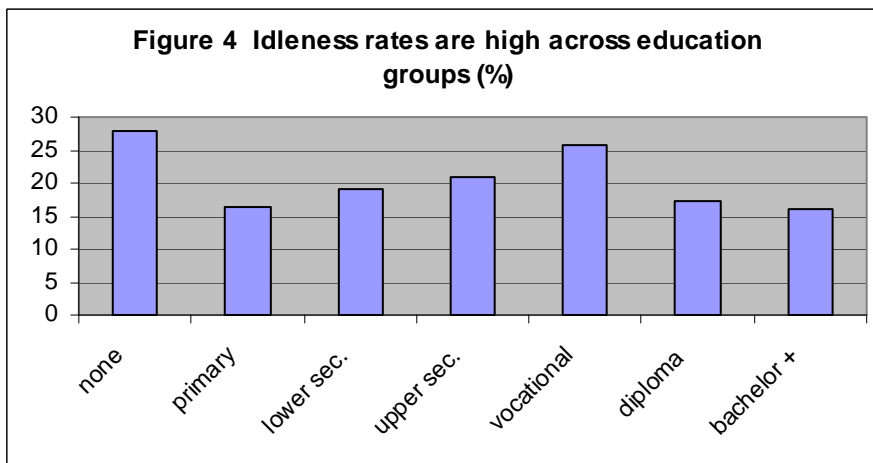
Notes: Working age population is by Mongolian definition: 16-59 for men, 16-54 for women self employment includes unpaid family labor. Source: LSMS 2002, based on the employment status in the seven days prior to the survey interview.

³ This is referred to in the literature as joblessness rate. It measures the degree of underutilization of human capital in a country. This measure is more comparable across countries than unemployment and idleness rates as it is not sensitive to definitions of active search, which vary from across surveys.

And it is consistently high across different groups, but it hits harder on urban people with no education or vocational education. Idleness is not a rural phenomenon—idleness rates are in fact significantly higher in urban areas (26 percent versus 14 percent in rural areas). Nor is it a temporary problem of youth—idleness rates remain high throughout working life and peak just before retirement, reflecting the impact of incentives for early retirement in Mongolia—41 percent of 45-54 year old women and 42 percent of 55-59 year old men are already receiving pensions. Idleness rates are high across education groups, but they are particularly high among workers with no education (28 percent) and vocational education graduates (26 percent) (Figure 4).



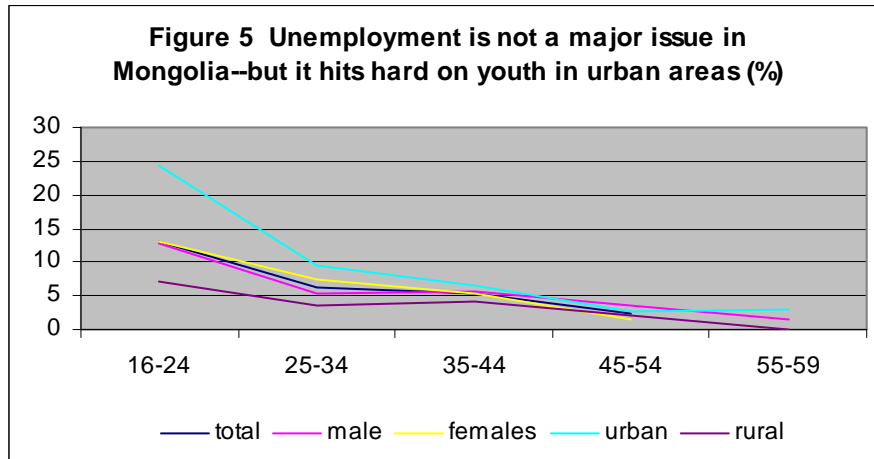
Note: see notes to Figure 1.



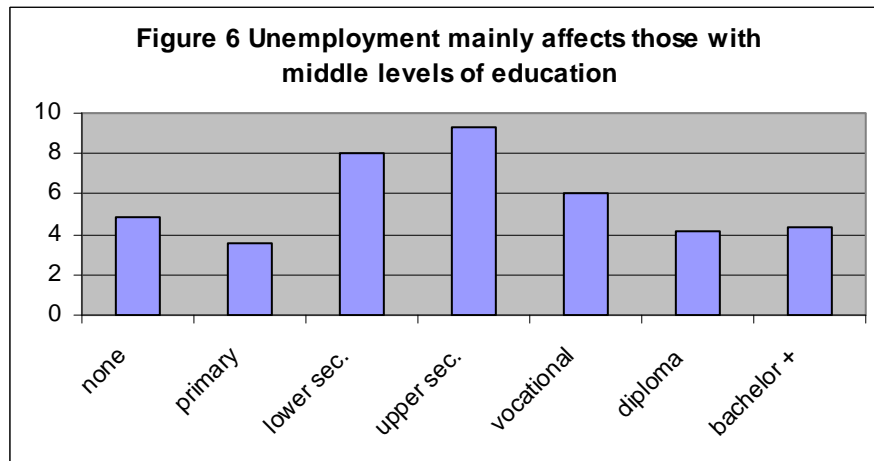
Note: see notes to Figure 1.

Unemployment is high among young people with secondary education living in urban areas—but overall not a major issue in Mongolia. About 7 percent of the labor force is unemployed, which is higher than the official figures based on registered unemployment (only about 50 percent of the unemployed are actually registered as such), but not high by international standards (Figure A.2). Unemployment mainly affects young people (Figure 5). The unemployment rate among the 16 to 24 year-olds is 13 percent, accounting for 40 percent of the unemployed, and the ratio of youth to adult

unemployment is 2.6. Unemployment rates, however, do fall quite dramatically at later ages. Unemployment is significantly higher in urban areas (9 percent) than in rural areas (4.2 percent). Unemployment affects mainly those workers with secondary education (9.3 percent of upper secondary graduates)—but vocational graduates don't do well either (6 percent) (Figure 6).



Note: see notes to Figure 1.



Note: see notes to Figure 1.

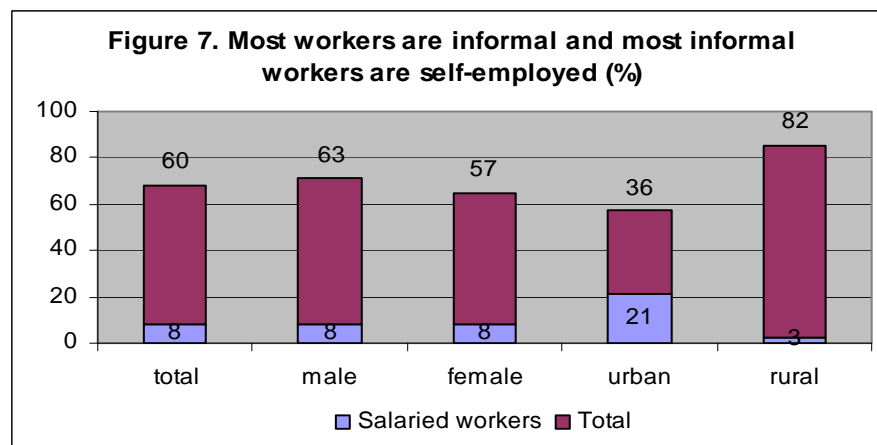
In sum, there are persistently high rates of joblessness among the working age population, which mainly reflect idleness. Figure 5 suggests that this is clearly related to poor education. But the high rates of joblessness among educated workers suggest that it is also about the relevance of the skills they bring to the labor market as well as other supply- and demand-side factors. Indeed, later in this report we explore the role of skills and other supply-side factors, such as high reservation wages caused by a generous pension system.⁴ We will also explore the role demand-side factors such as the investment climate, institutional characteristics of the labor market and the availability of active labor market programs.

⁴ The reservation wage is the minimum wage at which an individual is willing to work.

Getting stuck in ‘bad’ jobs: Job informality

The transition to a market economy also brought about a segmentation of the labor market between low productivity jobs with no social security benefits and limited or no labor protection, and higher paying jobs with social security benefits and labor protections. An informal worker is defined as someone who has a low productivity job or someone who is not covered by social insurance.⁵ Low productivity workers are defined as unskilled self-employed workers (all self-employed workers other than professionals, and excluding employers). Unskilled self-employed workers lost the universal ‘right’ to a pension in 1995 and are currently not covered by social insurance. Among salaried workers, those whose employers do not pay social insurance for them are also considered informal workers. The following figures are mainly based on the LSMS 2002-03.

Most workers are informal and most informal workers are self-employed (mainly in agriculture). About 60 percent of (working-age) workers are considered informal (Figure 7). Job informality affects more males than females and it is significantly higher in rural areas. The latter is not surprising as 92 percent of informal workers are actually self-employed, mostly in agriculture. Agriculture is low skill-intensive (small scale and low technology). The importance of agriculture is declining, but it continues to be the main sector of employment, accounting for 40 percent of total employment. Informal salaried workers are mainly found in urban areas and account for 21 percent of total informality.

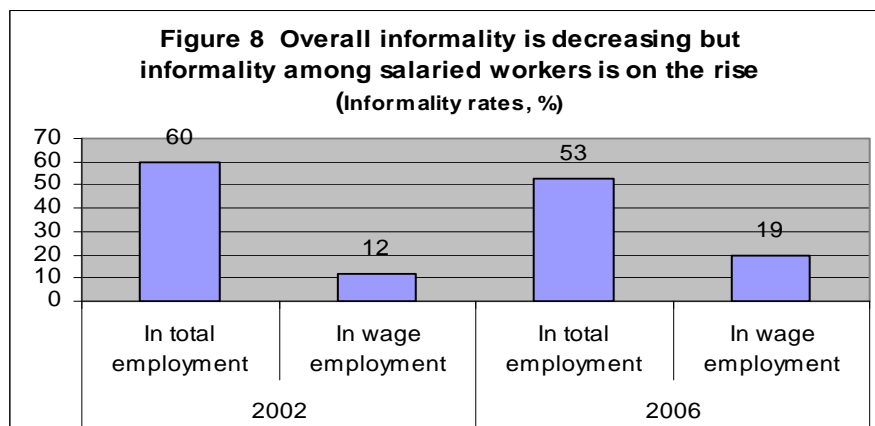


Source: LSMS 2002-03.

And while overall job informality seems to be declining (because of the decreasing share of agriculture in total employment) informality among salaried workers is on the rise. The HIES does not have the information needed to compute informality rates as previously defined. However, we can construct a close enough approximation of the definition that includes professionals among the self-employed (since there is no information on occupation) and categorizes informal salaried worker as those with no contract or ‘contract’ worker (and thus without social security contributions from employers). Using this approximation, overall informality seems to decrease as the share

⁵ World Bank (2006b). Informality in Latin America and the Caribbean”.

of agriculture in total employment decreases (Figure 8). However, the share of workers without social security benefits is increasing.



Sources: LSMS 2002-03 and HIES 2006.

And there is probably more job informality than what household surveys are able to capture, as more itinerant households and individuals are unlikely to be covered. A recent ILO survey (ILO 2006) shows that there are about 46,000 people engaged in informal gold and fluorspar mining at the national level—17 percent are children and 49 percent live in the mining sites under very hard working and living conditions (Box 1).⁶

Box 1: The hard working and living conditions of ninja miners in numbers

There are about 46,000 people engaged in informal gold (90 percent) and fluorspar mining at the national level, 17 percent of which are children between the ages of 5 and 17. Adult miners tend to relatively young (early 30s) and males. Most adult miners live with their families. About 43 percent of adult miners did not reside in the soum where they are currently mining 5 years ago. Mining tends to be a temporary activity—only 2 out of 5 working adults work in mining all year long.

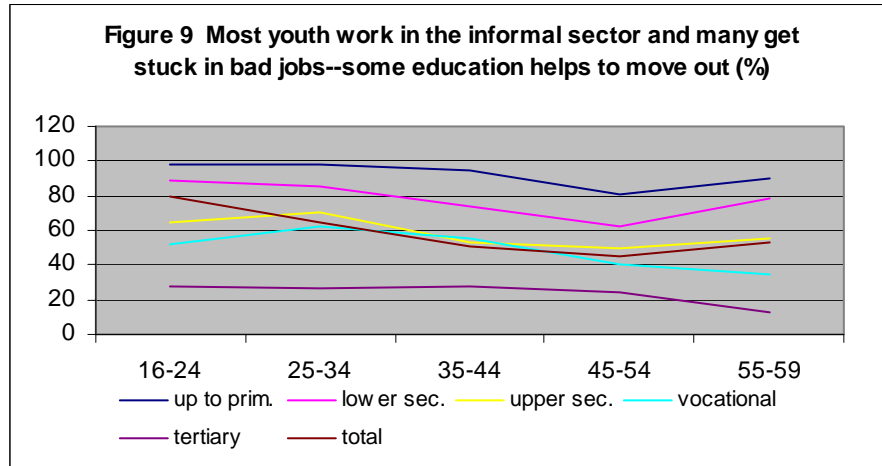
About 49 percent work in the mine under very difficult working and health conditions for them and their families. Mines become small settlements where only limited services are provided (mainly shops). Only 12 percent of adults (and 7 percent of children) engaged in informal gold mining report drinking water from a protected well. About 19 percent of children working in gold mines live in a dwelling not suited for housing. One in four working children are not attending school. Child workers participate in such hazardous activities as digging mercury, amalgamating with mercury, and working with explosives and chemical substances. About 16 percent of working children work regularly at night.

About 30 percent of working children have fallen ill while working, mostly with respiratory and arthritic genito-urinary system diseases, while 21 percent of those working in gold mines (and 14 percent adults) have had accidents at the workplace at some point (mostly from falling down into pits). About 43 percent of working children who fell ill or were injured were not able to access medical services. Most adult workers in gold mines do not know about safety of mining operations and hygienic standards (70 percent). Consumption of alcohol is also widespread among miners.

Source: ILO 2006

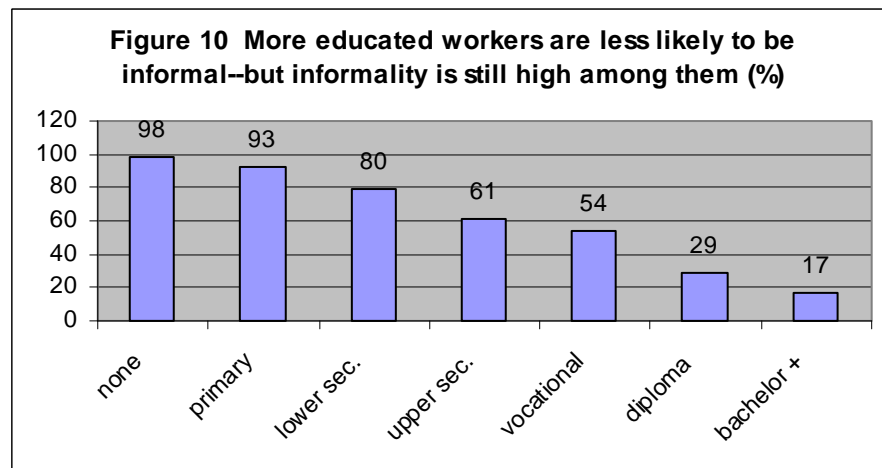
⁶ Informal mining is from alluvial and rock deposits that are generally left unexploited by mining companies. When resources are exhausted informal miners move to other parts of the mine or other mines.

Informality is very high among youth and many get stuck in low productivity-low benefit jobs. About 80 percent of 16-24 year olds work in the informal sector (94 percent in rural areas) (Figure 9). Job informality decreases for older groups of people, but even at its lowest point, among the 45-54 year olds, it still affects 45 percent of workers. And it even increases among the 55-59 year olds, which is explained by (early) retirement from formal employment (46 percent of informal workers are receiving pensions).



Source: LSMS 2002-03.

More educated workers are less likely to work in the informal sector, but informality is also high among them and only some basic education seems to help to move out of 'bad' jobs. More than 9 out of 10 workers with primary education or less are in the informal sector (Figure 10). Job informality decreases with the level of education, about 1 out of 3 diploma holders are working in the informal sector. More educated workers are less likely to start in the informal sector, but only secondary education (relative to primary education or less) seems to clearly help to move out of informality by ages 35-44.



Source: LSMS 2002-03.

To sum up, most workers are informal and overall informality is decreasing, but informality among salaried workers is on the rise. The high and persistent informality rates among more educated workers suggests that, in some cases, the skills these workers bring to the market do not allow them to get a job in the formal sector or to move out of informality. As with joblessness, informality also depends on the investment climate (e.g., social security taxes), labor market institutions and the availability of active labor market programs that allow people to move out of low productivity jobs.

Bringing skills that are inadequate to market demands—skills mismatch

Along with joblessness and informality, there is another interrelated labor market challenge in Mongolia: **the mismatch between the skills that workers bring to the labor market and those demanded by the labor market**. While there are many cases where workers are doing jobs requiring (at least in theory) education levels well below theirs (educational overqualification), it is unclear whether these mismatches actually reflect skills overqualification. In most cases, however, skill mismatches actually reflect the opposite: the inadequacy of the skills supply by workers to the needs of the labor market. This is clearly related to joblessness and informality, because the same lack of relevant skills that prevent people from getting a formal job also make workers unable to perform well the tasks required by employers. The Mongolian economy is changing and so is the demand for skills. This implies a declining demand for certain skills and labor and an increasing demand for others. So the question (to be addressed later) is why is the supply of skills not responding to this changing demand?

The Mongolian economy is changing and so is the demand for skills

The changes in the structure of the economy, greater openness and competition, as well as greater use of technology have all resulted in increased demand for skilled and educated labor. But these changes occur from a low base—Mongolia is far from being a high skill-intensive economy. The skills that are in increasing demand include analytical skills, behavioral skills, practical knowledge (English and IT) and technical skills (Definition 1). In today’s complex and changing environment, the challenge is to build skills that allow young people to think critically and creatively, to process information, to make decisions, to manage conflict, and to work in teams.

Definition 1: Skills and Knowledge

Following the 2007 World Development report (World Bank 2006a), the types of skills discussed here include *thinking skills* (critical and creative thinking), *behavioral skills* (perseverance, self-discipline, teamwork, the ability to negotiate conflict and manage risks), *specific knowledge* (including numeracy and literacy), and *vocational skills* (a mix of specific knowledge and skills to perform jobs that rely on clearly defined tasks). Together, thinking skills and behavioral skills are often referred to as “life skills.”

Basic skills denote the set of minimal abilities needed for further learning, work, and life, including numeracy and literacy and basic levels of behavioral skills such as perseverance, self-discipline, and self-confidence. *Postbasic skills* include thinking skills, higher order behavioral skills (decision-making skills, teamwork, the ability to negotiate conflict and manage risks), specific knowledge applied to real-life situations, and vocational skills.

The standard sources of demand for skilled labor—technology, trade, foreign direct investment (FDI) and the intensity of firm-provided training—are gaining strength. The use of new technology requires skilled workers because of the skills-technology complementarities. Openness to foreign trade and technology are thought to induce skills-biased technological change by raising the relative price of skill-intensive products and thus the wages of skilled workers relative to unskilled workers.⁷

Trade has expanded rapidly, but exports continue to be narrowly-based on low skill intensive sectors—garments and mining. Mongolia embraced an open trading system early on in its transition to a market-based economy. As a result, trade expanded rapidly as reflected in the trade to GDP ratio which increased from 15 percent in 1990 to 120 percent at the end of 2005. In the early 1990s more than half of all exports were accounted for by copper. The second half of the decade also saw the emergence of two new export products—cashmere garments and gold—which have contributed to diversify Mongolia’s limited export basket (CEM 2007). Overall garments and mining are the biggest exporters, with the latter accounting for 71 percent of all exports in 2005. However, only 14 percent of the firms in the 2004 Investment Climate Survey (ICS) (which excludes mining) export some of their sales. Also, the skills content in garments and mining is low and lower than the average for all sectors, so the surge in exports in these two sectors is unlikely to have contributed to the increase in the demand for skills.

There has also been a fivefold increase in foreign direct investment (FDI) inflows since the 1990s—from average of US\$15million during 1992-99 to US\$85 million during the 2000-05 period, or about 4 percent of GDP in 2005. During the 1990s, FDI flows mainly went, in similar shares, to non-mining activities,⁸ with FDI in mining only accounting for about a quarter of all FDI (CEM 2007). This situation saw a dramatic shift during the period 2000-05 with mining FDI double its share in overall FDI and of trade, transport and tourism becoming dominant sub-sectors in non-mining FDI.

Technology use and innovation among Mongolian firms appear to be on the rise. About 75 percent of firm in the ICS provide computers to their workers, although most of them (73 percent) provide computers to less than 25 percent of their workers. By sector, IT firms are the most computerized with all their workers having access to a computer, followed by accounting and communication. Most workers in ICS firms (72 percent) report that the use of computers is important or very important for their work. About one third of firms invest in R&D, with advertising and marketing being the biggest investors, followed by IT. To capture technology-induced changes in the demand for skilled labor, Table 3 also reports the percentage of firms that have recently introduced a new technology that has substantially changed the way the main product of the firm is produced. About 41 percent of firms report such new technology, with communication and manufacturing firms being the most innovative.

⁷ However, the extent to which more trade leads to higher relative demand for skills depends on the skill content of the goods that are traded. The impact of FDI on the overall demand for skills relies on sufficient spillover effects between the firms receiving the FDI and the rest of the economy.

⁸ Light industry, trade transport and tourism, garments (mainly cashmere), banking information technology and construction.

Table 3: Technology Use and Innovation are on the Rise

	Computer	R&D	New Technology
Accounting and related services	81.6	9.1	18.2
Advertising & marketing	35.0	100.0	25.0
Business logistics	26.5	22.2	2.8
Communication services	65.4	37.5	62.5
Construction	15.6	33.7	39.8
IT	100.0	50.0	21.4
Manufacturing: textiles	9.0	37.5	43.8
Manufacturing: wood products	8.7	33.3	44.4
Manufacturing: food products and beverages	11.2	38.8	50.0
Manufacturing: wearing apparel	2.7	24.4	48.9
Tanning, dressing of leather bag	6.2	18.2	54.6
Tourism	44.2	41.7	20.8
Total	20.6	33.1	38.8

Note: Computer refers to the percentage of workers in the sector with computers. R&D refers to the percentage of firms in each sector that spend on R&D. New technology refers to the percentage of firms that have recently introduced a new technology that has substantially changed the way the main product of the firm is produced. Source: ICS 2004.

Most firms provide some training to workers, particularly to skilled workers in higher tech firms. About 51 percent of the firms in the ICS provide training for their workers (Table 4). On average, firms train 26 percent of their workers. The most technologically-advanced sectors provide the most training—advertising & marketing, communication, accounting and IT firms. The complementarity between the skill base and firm-provided training, on the one hand (skills beget skills), and skills and technology, on the other hand, is further reinforced by the fact that in most cases firms only train skilled and professional workers. It also shows that the government cannot rely on firms for providing training to low skilled or unskilled workers. As shown below, this demand for training is explained in part by the lack of relevance of the skills that workers bring to the workplace. It also shows that the government cannot rely on firms for providing training to low skilled or unskilled workers.

Table 4: Most Firms Provide Training, Particularly to Skilled Workers in Higher Tech Firms

	Firms	Workers	Skilled
Accounting and related services	72.7	69.4	100
Advertising & Marketing	75	43.3	95.2
Business logistics	40	25.9	96
Communication services	75	48.9	88.5
Construction	56.1	23.6	87.4
IT	66.7	42.4	93.8
Manufacturing: textiles	62.5	19.1	71.7
Manufacturing: wood products	22.2	14.6	70
Manufacturing: food products and beverages	50	26.1	73.2
Manufacturing: wearing apparel	46.7	19.4	65.8
Tanning, dressing of leather bag	54.6	19.3	83.3
Tourism	45.8	-	-

Note: *Firms* represents the percentage of firms in each sector that provide training. *Workers* represents the average percentage of workers receiving training in each sector. *Skilled* is the average percentage of skilled and professional workers trained out of trained workers in each sector.

Out of all the standard sources of demand, computer use is the only factor that is significantly associated with the demand of skilled labor. A 10 percentage point increase in the share of workers with a computer is associated with a 1.7 percent increase in the share of skilled labor in a firm’s workforce and a 9 percent increase in the proportion of workers with higher education.⁹

But these changes in the demand for skills occur from a low base—Mongolia’s economy is far from being skill-intensive. Mongolia’s rural and urban labor markets are clearly differentiated. Most workers are informal and most informal workers are unskilled self-employed workers, particularly in agriculture (Figure 7). As the share of agriculture in employment (Table 11) has decreases so has the proportion of informal workers (Figure 8). But agriculture continues to be the main sector of employment (40 percent) and it is mostly low skill-intensive (small scale and low technology). And the sectors that have increased the most in terms of employment (mining, construction and retail & wholesale trade) are not high skill-intensive and are below average in terms of skill content (Table 5). More generally the skill content of non-agricultural jobs is relatively low. About 47 percent of employees hold skilled occupations.¹⁰ The highest proportion of skills jobs is in health, education, public administration and business activities sectors.

Table 5: Schooling and Skill Content of Non-agricultural Wage Sectors

	Urban		Rural		National	
	Skilled Occupation (%)s	MYS	Skilled Occupation (%)s	MYS	Skilled Occupation (%)s	MYS
Mining & Quarrying	25.2	11.6	8.1	10.4	20.3	11.25
Manufacturing	14.0	10.8	17.9	10.9	14.5	10.82
Electricity, water supply	36.2	11.4	22.7	11.6	34.2	11.39
Construction	21.9	10.6	3.0	7.1	20.2	10.32
Wholesale & Retail trade	39.5	12.1	12.7	9.8	36.3	11.83
Transport & Communication	21.7	11.2	18.1	10.8	21.0	11.1
Business activities	61.6	12.7	46.3	11.7	59.9	12.55
Public administration	59.1	12.9	62.3	11.5	59.9	12.54
Education	76.2	13.2	68.5	12.1	73.5	12.81
Health	85.0	12.9	68.6	11.4	80.4	12.49
Other services	22.9	11.2	27.3	11.4	23.4	11.27
Others	49.7	12.1	20.0	8.7	46.0	11.7
Total non agricultural wage sector	46.6	12.1	49.0	11.3	47.1	11.9

Notes: MYS refers to mean years of schooling. Source: LSMS 2002.

⁹ These results are based on OLS regressions of the share of skilled labor in a firm’s workforce and proportion of workers with higher education on FDI (whether firm is owned in some percentage by foreigners), exporter (whether firm exports some of its sales), R&D (whether firms invests in R&D), computer (percentage of the workforce using computers), new technology (whether new technology has been adopted) training (percentage of the workforce receiving training).

¹⁰ Skilled occupations are: legislators, senior officials, managers, professionals, technicians and associated professionals. Unskilled occupations are: clerks, service and sales workers, craft and related trade workers, plant/machine operators and assemblers, and elementary occupations.

The high returns to higher education could be ‘signaling’ demand for the skills firms are interested in. Education only starts paying off after completing upper secondary education and returns are particularly large for higher education graduates working in the urban private sector (Table 6). This high premium attached to higher education seems, in part, to be driven by demand, despite the demand for higher education implied by the structure of production being low relative to the large supply of higher education graduates. Of the total vacancies submitted in 2005 by employers to the Labor and Social Welfare Assistance Division, 17 percent are for higher education graduates, 22 percent for vocational graduates and 51 percent for secondary education graduates. Anecdotal evidence suggests that this demand responds to the signaling effect of higher education—rather than demand for specific higher education degrees. In particular, employers tend to hire higher education graduates because they signal the skills employers are really interested in (IT, English, thinking and behavioral skills).¹¹

Table 6: There Are Large Returns to Higher Education
(returns relative to primary education or less) (%)

	National	Urban	Rural	Private	Public
Lower secondary	0	0	0	58	0
Upper secondary	32	37	24	65	0
Vocational	38	42	31	74	0
Diploma	66	71	61	121	32
Batchelor	85	93	69	147	51

Note: Estimates are based on log monthly wage regressions for wage earners aged 25-65. Regressions include controls for education level completed, potential work experience and its square and location indicators. Source: LSMS 2002-03.

In fact when looking at the determinants of wages among workers in the selected group of ICS firms, only those with higher education make significantly more (about 40 percent more) than workers with primary education or less. But there are significant returns to firm-provided training (13 percent) and computer knowledge and use (the daily use of computers increases hourly wages by 19 percent).¹²

But these changes in the demand for skills are not met by supply—skills mismatch¹³

Many firms identify the inadequacy of skills to their business needs as a key constraint to their operations. The ICS data allows an assessment (albeit limited) of the

¹¹ Unfortunately, there is no information on wages by education level over time which, along with the data on changes in supply of workers with different levels of education, could provide some insight into the changes in the relative demand for skilled and educated workers.

¹² These results are based on an OLS regression of the log of hourly wages on education level completed, job experience and its square, an indicator for whether the worker received training and another indicator for whether the worker uses the computer on a daily basis. This regression looks at the variation of wages within firms.

¹³ This section presents some direct evidence on skills mismatch using (primarily) the 2004 Investment Climate Survey (ICS). This survey covered a representative sample of 400 non-agricultural registered firms (mostly private) in urban areas as well as workers in these firms. This is a relatively small but rapidly growing sector that represents the more formal, modern and skill-intensive segment of the labor market, and thus not representative of the larger labor market in Mongolia.

adequacy of skills from the perspective of both firms and workers. On the firm side, about 30 percent of firms in the ICS report the supply of skilled and educated workers as a major or severe concern, particularly wearing apparel, IT, tourism and business logistics (Table 7). Large firms tend to be more affected than smaller companies.

Table 7: Intensity of the Skill and Education Constraint (%)

	None	Minor	Moderate	Major	Severe	<i>N</i>
Total	37.1	13.6	19.4	16.1	13.8	391
<i>Sector</i>						
Accounting and related services	45.5	18.2	9.1	9.1	18.2	11
Advertising & Marketing	50.0	0.0	25.0	25.0	0.0	4
Business logistics	33.3	25.0	8.3	11.1	22.2	36
Communication services	50.0	12.5	12.5	12.5	12.5	8
Construction	38.0	15.0	19.0	17.0	11.0	100
IT	21.4	14.3	21.4	21.4	21.4	14
Manufacture of textiles	37.5	25.0	18.8	6.3	12.5	16
Manufacture of wood and wooden products	37.1	7.4	33.3	7.4	14.8	27
Manufacturing of food products and beverages	42.4	8.2	24.7	18.8	5.9	85
Manufacturing of wearing apparel	25.0	9.1	13.6	27.3	25.0	44
Tanning, dressing of leather goods	40.9	18.2	27.3	4.6	9.1	22
Tourism	37.5	12.5	12.5	16.7	20.8	24
<i>Industry</i>						
Construction	38.0	15.0	19.0	17.0	11.0	100
Manufacturing	37.1	10.8	23.2	16.5	12.4	194
Services	35.6	19.2	12.3	13.7	19.2	73
Tourism	37.5	12.5	12.5	16.7	20.8	24
<i>Size of firms</i>						
Micro (less than 10 employees)	43.0	12.8	17.5	16.1	10.7	149
SME (10 to 99 employees)	35.8	13.5	19.8	16.4	14.5	207
Large (equal or more than 100 employees)	20.0	17.1	25.7	14.3	22.9	35

Source: ICS 2004.

Another indication for the inadequacy of skills is the higher rate of vacancies for skilled occupations and the greater length of time it takes to fill them, as compared with vacancies for unskilled workers. Over 30 percent of firms had vacancies for skilled occupations—particularly wearing apparel, advertising & marketing and IT—while only 19 percent had vacancies for unskilled workers. Also, while it takes 23 days on average to fill a vacancy for a professional (and 18 days for a skilled production workers), it takes 13 days to find an unskilled worker.

In most cases the inability to fill vacancies is due to the lack of required basic skills of applicants, particularly among vocational education graduates. About 37 percent of firms report the lack of required basic skills as the most important reason for vacancies, while 13 percent say lack of required technical skills is the most important reason (Table 8). As noted later, these basic skills include things such as communication skills, work discipline, and teamwork. This has important implications for education policy because these basic skills are supposed to be produced (at least in part) by the general education system. Also, about 74 percent of firms report the quality of public vocational training institutions graduates they hired in 2003 is low or very low.

Table 8: The Most Important Reason for Vacancies (%)

	Lack of required basic skills	Applicants demand high wage	Universities are not producing sufficient number of graduates	Applicants lack of required technical skills	High turnover of new recruits	Others	N
Total	36.5	18.7	16.7	12.8	9.2	6.1	359
Sector							
Accounting and related services	30.0	20.0	20.0	0.0	30.0	0.0	10
Business logistics	30.8	30.8	15.4	11.5	11.5	0.0	26
Construction	29.6	21.4	24.5	11.2	2.0	11.2	98
IT	53.8	30.8	7.7	7.7	0.0	0.0	13
Manufacturing: textiles	33.3	20.0	0.0	26.7	13.3	6.7	15
Manufacturing: wood and wooden products	51.9	18.5	3.7	14.8	7.4	3.7	27
Manufacturing: food products and beverages	33.8	20.3	14.9	14.9	8.1	8.2	74
Manufacturing: wearing apparel	33.3	11.9	4.8	21.4	23.8	4.8	42
Tanning, dressing of leather goods	40.0	0.0	30.0	5.0	20.0	5.0	20
Tourism	52.2	17.4	26.1	4.3	0.0	0.0	23
Industry							
Construction	29.6	21.4	24.5	11.2	2.0	11.2	98
Manufacturing	37.1	15.7	11.2	16.3	13.5	6.2	178
Services	40.0	23.3	16.7	8.3	11.7	0.0	60
Tourism	52.2	17.4	26.1	4.3	0.0	0.0	23
Size of firms							
Micro (less than 10 employees)	44.2	15.5	15.5	13.2	9.3	2.4	129
SME (10 to 99 employees)	34.2	18.4	18.4	12.8	7.1	9.2	196
Large (equal or more than 100 employees)	20.6	32.4	11.8	11.8	20.6	2.9	34

Source: ICS 2004

In sectors such as construction and mining, firms have responded to the inadequacy of skills of the local labor force by hiring foreign workers (particularly Chinese workers). About 37 percent of firms report Mongolian skilled technicians perform worse than their foreign counterparts (22 percent say they are better). Foreign workers are regulated by law (also covering Mongolians working abroad) since 2001. The number of employment permits issued (or renewed) to foreign workers in 2005 was 14,210, with a total of 5,628 foreign workers working in Mongolia at the end of 2005. However, authorities admit the actual figure of foreign workers is likely to be much larger since there are a lot of illegal immigrants. Employment by foreign is highly seasonal (mainly between the months of April and June), which reflects the seasonal nature of the sectors they are mostly employed in (construction, roads works and, particularly, mining, which accounts for 60 percent of foreign workers). Technicians make up the largest group of foreign workers (41 percent). Chinese workers are the main group (27.6 percent), followed by Russians (26 percent).

The high incidence of firm-provided training may also reflect the poor relevance of the skills that workers bring to the workplace. As Table 5 shows, most firms in the ICS provide training for their workers, particularly the higher tech firms, and a sizable proportion of workers get trained in these firms. This high incidence of training may reflect the standard skills upgrading to respond to changes in technology, products, etc.,

but it may also be the response of firms to the poor relevance of the skills that workers bring to the job.

Most workers feel they lack the skills to make the most of their jobs, particularly ‘general’ skills. About 73 percent of workers say that they would perform better if they possessed additional knowledge and skills (Table 9). In terms of the skills they lack the most, 93 percent of workers report the lack of analytical skills (critical and creative thinking) and behavioral skills (communication skills, work discipline, leadership, team work) as among the three types of skills they lack the most in doing their jobs (Table 6). The other two big gaps are in practical knowledge [English (59 percent), IT (37 percent)] and technical/professional skills (23 percent). So in most cases, the skills that workers lack the most are general skills that are supposed to be produced by the general education system.

Table 9: What Are the Three Most Important Skill Workers Lack in Doing Their Job?

Skills	Percentage of Workers by Occupation					Total
	Management	Professional	Skilled Production	Unskilled Production/ Apprentice	Non-Production	
English language proficiency	76.8	72.4	51.9	47.2	53.9	58.6
IT skills	39.3	37.9	36.8	31.7	41.5	36.8
Technical / professional	14.3	27.1	21.7	26.7	18.5	22.6
Creativity/ innovation skills	15.28	15.8	16.1	14.9	15.4	15.6
Time management skill	16.1	12.8	15.3	16.8	20.0	15.4
Professional communication skills	8.0	6.9	15.6	23.6	12.3	14.0
Leadership skills	8.0	12.8	12.6	13.0	21.5	12.8
Social skills	8.9	11.8	12.4	18.0	6.25	12.4
Numerical skills	9.8	3.5	13.3	5.6	10.8	9.3
Adaptability	8.0	8.4	8.2	8.1	9.2	8.3
Problem solving	7.1	5.9	9.9	8.1	4.6	8.0
Team working	4.5	5.4	7.4	6.8	4.6	6.3
<i>Observations</i>	<i>112</i>	<i>203</i>	<i>405</i>	<i>161</i>	<i>65</i>	<i>946</i>

Education overqualification

As a result of past successes in education policy, **Mongolia produces a large number of school graduates every year**—77 percent complete lower secondary school or higher—**relative to labor market demands** (more on that below). This naturally produces some friction in the labor market whereby many young graduates end up doing jobs requiring skills and education levels below theirs.

There is some evidence of educational overqualification, particularly among vocational education graduates. About 22 of secondary school graduates and 13 percent of college graduates feel their jobs require a lower level of education than theirs (Table 10). About 9 percent of workers with higher education degrees are in non-skilled occupations (23 percent who are not in managerial or professional occupations). There is also anecdotal evidence that employers tend to hire college graduates, because they signal the skills employers are really interested in rather than the direct value of their higher education degree to their business (more on that below). Most workers with vocational

education (81 percent) feel they are overqualified. However, overqualification in terms of education level does not necessarily reflect skills overqualification.

Table 10: What Is the Most Appropriate Level of Education for Your Work?
(% by education level completed)

	Tertiary	Vocational	Complete Secondary	Incomplete Secondary	Primary	None	<i>Obs.</i>
<i>Education level</i>							
Tertiary	87.2	0.9	8.7	2.1	0	1.1	437
Vocational	18.8	0	57.3	15.9	2.2	5.8	138
Complete secondary	10.2	0.5	66.8	13	1.8	7.6	567

Source: ICS 2004

Large numbers of higher education graduates go abroad in response to the lack of good job opportunities at home. Between 1990 and 2003 about 120,000 Mongolians, representing 5 percent of Mongolia’s population, emigrated abroad (mainly South Korea and Japan) in search of better employment opportunities. Worker remittances constitute an important source of foreign exchange for Mongolia. Remittances have grown rapidly since 1997 and peaked in 2004 at \$202 million (nearly 13 percent of Mongolia’s GDP). Based on a sample of Mongolian citizens working abroad, a recent study shows that most migrants are young (about 60-70 percent are between the ages of 20 and 35) and educated (60 percent of those working in the US, and 50 percent of those in the Republic of Korea, have higher education degrees).¹⁴ Migration tends to be temporary (3.7 years).

There is a specific law that regulates the employment of Mongolians abroad through licensed intermediaries. These regulations do protect migrants, but they often also act as a barrier to migration, or at least legal migration. The flow of Mongolians living and working abroad will continue in the near future and their contribution to the Mongolian economy, through remittances and improved skills upon return, will continue to be crucial. It is thus important to facilitate this process.

PART II. Options for addressing the challenges in the labor market

The second part of this report explores the factors underlying the labor market challenges described above in order to identify policy and market failures, and thus the challenges for policy. International best practices are then brought in to provide policy options to address these challenges.

Joblessness, job informality and skills mismatch are all interrelated challenges. This report shows that the main common factor is the skills supply. In particular, the same lack of relevant skills that prevent people from getting a formal job also make workers unable to perform well the tasks required by firms. The Mongolian economy is changing and so is the demand for skills. The demand for more skilled workers is increasing. But so (and more importantly) is the nature of the skills demanded towards more general skills that allow workers (and firms) to ‘survive’ and quickly adapt to changes in demand resulting from increased openness and competition in the economy. But the supply of skills appears to be unresponsive to these changes. In order to identify policies to address this

¹⁴ The Mongolian Population and Development Association (2006).

unresponsiveness, this second part of the report examines the policy and market failures that lead to it.

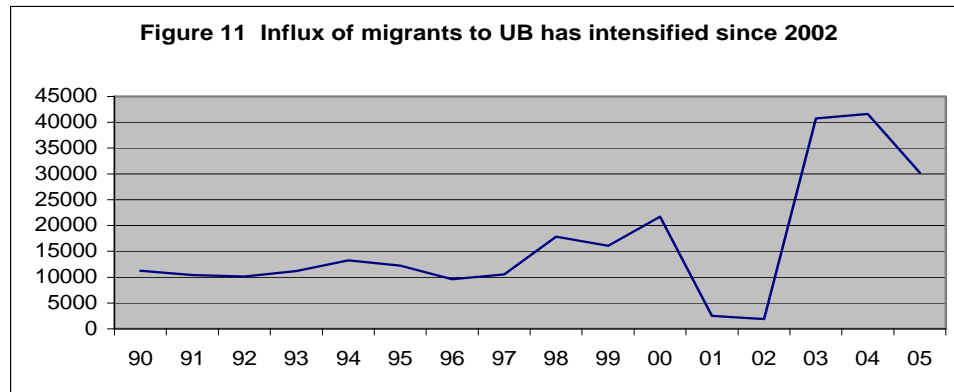
This report shows that a key constraint for future growth from the perspective of human resources is the (policy) failure to provide adequate learning opportunities, as well as school curricula and teaching, for producing the skills that are in high demand. This includes the lack of learning opportunities for those who have already left school and do not have the skills needed to be productively employed in the new economy. This policy failure naturally brings the next question: why is the private sector not more involved in the provision of education and training to produce the required skills when the public system is failing and there seems to be a good business opportunity. This report finds no evidence of entry barriers (a potential policy failure), but rather the lack of a proper quality assurance system (a policy failure) to respond to the limited knowledge by consumers of what private providers offer (an informational market failure). This lack of information is used by (some) private providers and has resulted in a proliferation of poor quality private institutions.

And there are market failures that could also help to explain the lack of supply responsiveness: lack of access resources to finance higher education (credit constraint) and poor information about the skills being demanded in the labor market. The analysis of these factors is beyond the scope of this report. While these two factors may be present, however, the problem right now is not the shortage of people with higher education degrees, but rather the shortage of graduates with the right skills. The constraining nature of the lack of information and resources relies on having a responsive education and training system.

Poor relevance of skills keeps workers out of productive jobs, but the social welfare system can indeed discourage working-age individuals from entering the labor market by increasing their reservation wage. In particular, a generous pension system, along with a culture of pooling and sharing resources within the household, appears to explain some of the observed job idleness in Mongolia.

But even if the supply of skills and labor were to be appropriate to market needs, many working-age individuals may still find themselves unable to find productive employment because of policy failures—poor investment climate, restrictive labor market institutions, and restrictive mobility of migrants—and market failures—lack of information about jobs available and access to credit to start up a business. Previous work has found corruption, high taxes and limited access to (and high cost of) financing as key constraints to job creation by the private sector. High corporate and social security taxes also induce labor market segmentation, and so does the current use of temporary contracts. And distortionary public sector pay policies are generating a non market-based public wage premium that could potentially have serious consequences on employment and the allocation of skills and labor (efficiency). Active labor market policies are already in place to promote productive employment, but coverage is too low to make a difference.

Migration is (potentially) the main way to move out of informality. Migration flows to urban areas, particularly the capital, have intensified, particularly since 2002 (Figure 11). Although there do not seem to be administrative barriers to migration—and there are clearly some implicit subsidies, such as free land, limited access to jobs and social services could also hamper migration. Also, the lack of opportunities for migrants for skills development could also limit their ability to find productive employment and thus the contribution of migrants to economic growth. The very limited information on migrants and their access to jobs and social services, however, prevents an analysis of migration issues and policies in this report.



Source: National Statistical Office of Mongolia (2006).

Enhancing productive employment opportunities

Improving the investment climate

Economic growth benefits most participants in the labor market. When labor demand is strong idleness and unemployment tend to decrease. Because the private sector should lead job creation, a good investment climate is needed to allow firms to form and to expand. The World Development Report 2005 (World Bank, 2005) argued that governments should create a better investment climate by tackling unjustified costs, risks and barriers to competition. They can do this by ensuring political stability and security, improving the regulatory and tax climate for investment, and providing needed infrastructure.

The recent Investment Climate Assessment (ICA) (World Bank 2006c) finds that **recent growth has not generated enough employment in the private sector**. The Mongolian economy has grown continuously since 1993, and since 2002 it has been at an annual average growth rate of over 5 percent. In fact, in 2004 the economy grew at a rate of 10.6 percent, the highest in the East Asia. However, this growth does not appear to be broad-based. The sectors that have grown the most in terms of GDP share, particularly mining, are not the ones where much employment has been created, as indicated by changes in sectoral employment shares (Table 11).

Table 11: Sector-wise Contributions to GDP and Employment Growth

	Share of employment (%)			Share of GDP(%)		
	2001	2004	Change 2001-04	2001	2004	Change 2001-04
Agriculture, livestock, forestry and fishing	48.3	40.2	-8.2	24.9	21.3	-3.5
Industry						
Mining and quarrying	2.4	3.5	1.1	9.0	17.3	8.3
Construction	2.5	4.1	1.7	2.0	2.6	0.6
Manufacturing	6.7	6.0	-0.7	8.1	5.3	-2.7
Services						
Wholesale and retail trade	10.8	14.1	3.2	26.7	24.6	-2.1
Hospitality	2.0	3.0	1.0	1.3	1.0	-0.3
Transport	4.2	4.4	0.2	13.0	12.7	-0.3
Financial, real estate and business	1.7	2.9	1.2	4.2	5.3	1.1
Others (utilities, social, public)	21.4	21.8	0.4	10.9	9.8	-1.1

Source: National Statistical Office of Mongolia (2005), *Mongolia Statistical Yearbook*.

Also, the growth in job opportunities has been confined to urban areas, mainly UB, and has been fueled by large migration flows from rural areas. In fact, less than half of the firms surveyed in the ICS who were operating by 2001 had added any jobs over the period 2001-2004 (Table 12). Micro-enterprises tended to create jobs at the time of start-up. Small and medium enterprises (SMEs) appear to be the locus of job creation—nearly 60 percent of SMEs added jobs. The incidence of entrepreneurship is very low in Mongolia—entrepreneurs only account for 1.6 percent of the labor force.

Table 12: Have Mongolian Firms Been Creating Jobs?

	Fraction (%) of firms which:				
	Shed jobs	No change	Added jobs	Created jobs through entry	Share of all firms(%)
All firms	17.8	27.1	40.4	14.7	100.0
By industry cluster					
Construction	12.3	31.7	42.8	13.2	25.7
Apparel and textiles	25.9	26.4	43.5	4.2	15.5
Food and beverage products	22.6	18.2	38.5	20.7	21.6
Wood products	8.8	19.2	43.1	28.9	6.9
Hides and leather products	24.6	34.9	40.5	0.0	5.6
Business services	19.9	31.2	36.4	12.5	18.6
Tourism	16.1	20.0	36.7	27.2	6.1
By initial firm size (# of permanent workers)					
Microenterprises (< 10)	7.4	32.9	25.6	34.1	43.0
Small and medium (10-99)	21.4	21.7	57.0	0.0	41.4
Large (>= 100)	37.3	25.5	37.2	0.0	15.6
By ownership status					
Domestic private	16.4	28.5	39.1	16.0	84.1
Foreign	11.0	18.6	59.1	11.3	10.1
Public-sector	49.9	21.8	27.0	1.3	5.8

Source: Mongolia Productivity and Investment Climate Survey, 2004.

The ICA study identifies **corruption, high taxes and limited access to (and high cost of) financing are key constraints to job creation by the private sector**. These three aspects of the investment climate in Mongolia are cited by firms as the most severe to doing business. The high cost of capital stems from vicious competition among

commercial banks to attract depositors and the difficulty they have in assessing credit risk (CEM 2007). Access to capital is limited due to underdeveloped capital markets, and the high collateral requirements for credit. This limited access to capital has a particularly negative effect on entrepreneurship.

Although the average share of total tax payable by Mongolian firms on gross profit is actually lower than in other comparable countries in East Asia and elsewhere in the developing world (32 percent in 2005), **the tax code tends to harm the growth of the private sector by creating incentives for tax avoidance and even informality** (by not having the firm registered); **paying less taxes by staying small; and creating unnecessary disincentives to start-up business**. The top 100 taxpayers provided over 90 percent of the revenues, and nearly half of the firms reported zero or negative profit in 2004. The ICA study found that about a third of the firms appear to be underreporting their sales. Uncertainties also remain as to the expected impact of the new mining taxation regime on the incentives it generates for existing and new entrants in this crucial sector in Mongolia (CEM 2007).

High social security taxes induce underreporting of labor costs, overuse (and misuse) of temporary contracts and hiring of workers without contracts. The current contribution of employers to the pension fund of employees is 19 percent. Altogether social security taxes average 29 percent of a firm's gross wages, which is unusually high for an economy at Mongolia's level of development. The ICA study finds that on average firms report just over a quarter of their true labor costs in an effort to reduce the burden of labor taxes. High social security taxes also encourage firms to overuse and misuse temporary contracts—which do not require contributions by employers and do not have any social security benefits for employees—and even employ workers without contracts. Data from the 2006 HIES shows that altogether workers with temporary contracts ('contract' workers) and workers with no contract account for an equal share of the 19 percent of wage workers, up from 12 percent in 2002.

Fortunately, a major overhaul of the tax code took effect on January 1, 2007 which tries to address a number of major shortcomings of the tax code, including the perverse incentives it causes for firms to avoid paying taxes by staying small. There is also a proposal to amend the current pension laws, including a reduction of the contributions to the pension fund by employers. **But changes in the tax code and reductions in social security contributions only go so far without a good tax administration.** The ICA study finds that part of the burden of taxes on firms actually comes from the inconsistencies in the tax administration, including arbitrary and predatory behavior on the part of tax inspectors. Despite (and perhaps because of) the frequency of tax inspections compliance rates are low.

The tax administration needs to move from a culture of "policing" to a culture of "service" and compliance mentality so that it creates the right incentives. An essential element of the strategy is to adopt a risk-management approach to tax inspections and

audits.¹⁵ **And this improved tax administration should be accompanied by labor inspections to ensure workers have a contract and temporary contracts are properly used.**

Labor market institutions for an integrated labor market

Labor market institutions and regulations are not likely to be major impediment to employment creation. According to the 2007 Doing Business Report (World Bank, 2006c), Mongolia has low indices for hiring and firing difficulties compared to other countries, but fares poorly in term of rigidity of hours. Hiring costs are relatively high, but Mongolia has one of the lowest firing costs in the world.¹⁶ In addition, Mongolia has a low minimum wage (53,000 MNT) relative to the wage distribution and flexible salary scales.

But not all flexibility is good—temporary contracts are a key element of business flexibility, but they are often misused and contribute to increasing informalization of the wage sector. As mentioned earlier, these contracts are largely used in response to the high social security taxes employers have to pay for permanent workers. Temporary contracts are not regulated by the Labor Law but the Civil Code, and so contract workers do not enjoy the protection and benefits that permanent workers do. There is no social security contribution paid by the employer nor do these workers have any social security benefit. Temporary contracts are contributing to creating an increasingly segmented urban labor market, with a segment of permanent workers with good levels of protection and benefits, and an increasing group of workers with no social security benefits and limited or no labor protection. Although there is no direct information, there are claims that this increased informalization is being fueled by the increasing flow of rural migrants to UB.¹⁷

Temporary contracts should be part of the system, but their use should be more controlled through labor inspections. Also, while keeping the flexible nature of these contracts, temporary workers should be granted more protection and be integrated in the social security system.

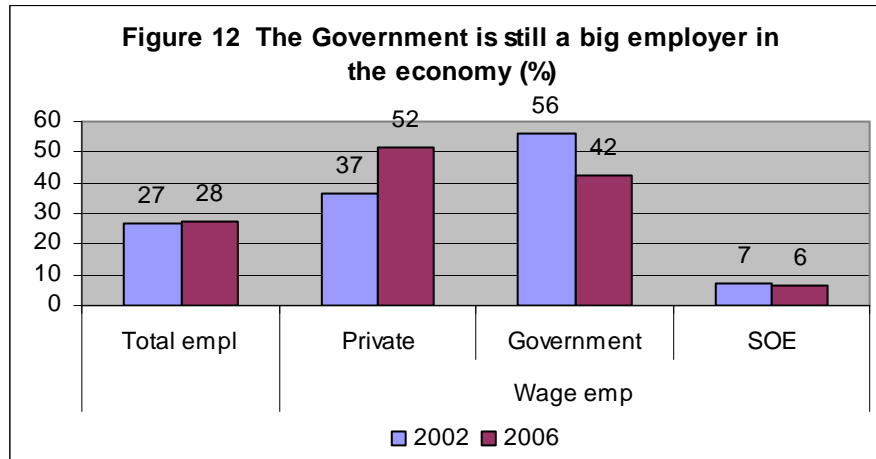
And labor markets are not so flexible—distortionary public sector pay policies could have serious consequences on employment and the allocation of skills and labor. While the share of the public sector in total employment has remained constant around 28 percent, its share in wage employment (all public sector employees are wage earners) appears to have come down from 63 percent in 2002 to 48 percent in 2006 (Figure 12). Much of this is due to the increase in private wage employment, with little change in the absolute number of public sector employees. Most public employees work

¹⁵ Assuming there is more compliance with personal income taxes, it would also be possible to check reported social security contributions of firms against individual tax returns to find evidence of underreporting of labor costs.

¹⁶ This analysis is based on the assessment of labor legislation in Mongolia.

¹⁷ Using the HIES 2006 and approximating migrant households by whether they live in UB district where migrants tend to be concentrated, and live in a ger, 'proxy' migrants are 20 percentage points more likely to be in the informal sector than other UB residents.

for the government (87 percent). According to the LSMS 2002-03, the public sector paid on average similar wages as the private wage sector. And while there were large returns to education in the private sector, particularly higher education, the wage distribution is much more compressed in the public sector—only public employees with tertiary education earn significantly more than others (see Table 6).¹⁸



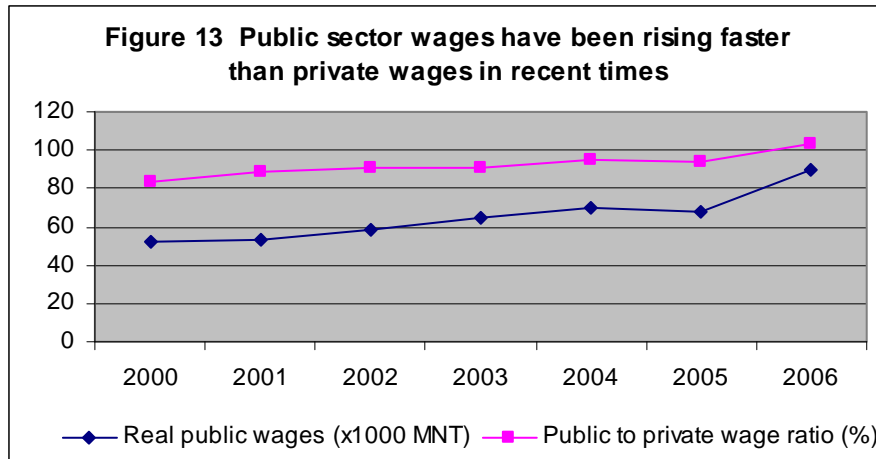
Sources: LSMS 2002-03 and HIES 2006. SOE: State-Owned Enterprise.

But workers in the public sector are more educated than those in the private sector—59 percent of government employees have a tertiary education degree, but only 33 percent of private sector workers do. So why do educated workers want to work in the public sector? Part of the reason is because the public sector offers higher levels of employment protection and benefits.

But even the wage incentive to work in the public sector has increased in recent times. Administrative data shows that between 2000 and 2005 public wages rose somewhat both in real terms and relative to private wages (Figure 13).¹⁹ But the 30 percent wage increase in the public sector in 2006 put public wages at the same level as private wages. And the 20 percent increase approved in the 2007 budget is likely to have generated a wage differential in favor of public sector employees.

¹⁸ More generally, the wage distribution in the public sector is significantly more equal than that in the private sector. The proportion of workers who are in the bottom quintile of the wage distribution (earning less than 40,000 MNT a month) is higher in the private sector, while the proportion of workers in the top quintile of the wage distribution (making more than 80,000 MNT a month) is much higher in the private sector.

¹⁹ Administrative data on private wages may only give a biased measure of average private wages since only registered workers are considered and there is a lot of underreporting of wages.



Source: Ministry of Finance

These wage increases in the public sector are likely to have created a non market-based public wage premium. The wage increases in the public sector are not related to average productivity gains, nor are they tied to responsibilities and performance, but rather they are across the board. This is likely to have generated a non market-based public wage premium, which is defined as the wage difference between public sector employees and private sector employees that is over and above the differences in productivity-enhancing characteristics of workers or workplaces in the two sectors. So it reflects a market distortion.²⁰ The analysis of this premium and its implications is beyond the scope of this study because there is not recent survey data available with information on wages and employment.²¹ We can, however, draw from the literature to point to the likely impacts of such a public wage premium.²²

What is the likely impact of a non-market based public wage on the labor market at large? It creates an excess supply of labor in the public sector and thus unemployment, particularly among young educated graduates who are willing (and able) to wait unemployed to get a job in the public sector. The wage premium may also pose upward pressure and downward rigidity on the entire wage structure of the formal labor market, contributing to the generation of unemployment (particularly during recessions) and/or shifting employment to the informal sector. And these shifts can also affect skilled and educated workers—low skilled and educated workers are overrepresented in the informal sector to begin with. Some skilled workers who would have found employment in the public sector (or other parts of the formal labor market) find themselves idle or misused in some other jobs (skill mismatch). Unskilled workers just find themselves in informal jobs with low pay and no social security benefits.

²⁰ In fact, to the extent that high public wages reflect the public sector's inability to increase the productivity of its workers—since high firing costs grants them job security—the public wage premium would be an indicator of the relative inefficiency of the public sector (Panizza, 1998).

²¹ This analysis would identify wage differences after controlling for productivity enhancing factors and worker selection into the sector of employment. The analysis of implications of such a premium on employment would require data on wages and employment over time.

²² See for example, chapter 4 of World Bank (2003) and Panizza (2001).

And the downward inflexibility of wages in the public sector may also be partially transmitted to the entire labor market by inducing a disproportionate adjustment to downturns through employment. This effect can be exacerbated by the rigidity of employment in the public sector.

International sound practices in civil service reform suggest that public sector wage growth in Mongolia should be guided by comparable private sector wages and be more tied to performance. And there is abundant evidence showing that merit-based recruitment and promotions provide the right incentives and improve the quality of the public sector.

Well designed active labor market programs that reach those in need

Active labor market programs for employment creation exist, but coverage is too low to make a difference. The system of active labor program is comprehensive and it includes job mediation services, entrepreneurship services, job training, public works and wage subsidies. These services are funded out of the Employment Support Fund (ESF)—entrepreneurship services are the largest item (32 percent of ESF), followed by job training (23 percent) and public works (21 percent). Up until the 2006 amendments to the Labor Law, however, these services have been limited to the unemployed who are registered at the Labor and Social Welfare Assistance Divisions (Table 13), which in 2002 accounted for only 54 percent of the total unemployed (based on the LSMS 2002-03).

Table 13: Employment Services Have Low Coverage

	2001	2002	2003	2004	2005
Registered unemployed	40283	32020	34963	35571	32925
Intermediated to a job	25693	35187	38640	38445	44955
Trained in vocational courses	11846	16918	21008	22265	19493
Involved in public works	8864	13447	19977	18711	17877
Unemployment insurance	5337	4869	6002	6340	7113

Source: MSWL (2006).

The new amendments to the Labor Law have increased coverage and improved the labor market relevance of these programs—but it’s too early to evaluate these changes. The new law allows private firms to provide job mediation services and urges local employment offices to conduct regular labor market surveys. This partnership with the private sector is likely to increase the use of job mediation services by private firms (only 10 of firms recruiting in 2003 use employment services for all vacancies according to the 2004 ICS). The duration of job training is now allowed to vary by field (it used to be one month for all skills training courses), and vouchers given to trainees also vary accordingly. These changes, however, do not address the lack of relevance and impact of vocational training (to be analyzed later). Wage subsidies cover 60 percent of total payments for the first 6 months of employment of people who are registered as unemployed but also household heads of families with four and more children aged below 16, and individuals with disabilities.

The most important change in the law refers to the support to small businesses, which become the focus of labor market programs. Entrepreneurship services are now extended to herders, informal workers and the handicapped, and include micro credit, information and advice as well as training, which are delivered through five regional business incubator centers—a website has been developed for the purposes of advertising activities of these centers. In terms of micro credit, eligible individuals can get a loan for up to 1 million MNT at a subsidized interest rate (where subsidy is paid out of the ESF).

Making the supply of skills more responsive to changes in demand

Design social welfare programs that encourage work (or do not discourage it)

An assessment of social protection programs in Mongolia is beyond the scope of this report. However, some principles emerge from the literature (IDB 2001), including programs should: (1) address the main social risks faced by the different age groups in the population (children, youth, adults and the elderly); (2) reach those who face the different risks; (3) not only mitigate and cope with risks, but also try to prevent them; and (4) be designed to induce individuals and households to take the necessary action to reduce exposure to risk (this is the so-called ‘coresponsibility’). The focus of this report is on (4), in particular the ability of the social welfare system to avoid welfare-dependency and incentivize (or at least not discourage) work.

Mongolia’s social welfare system covers three areas: social insurance, labor markets and social assistance. Social insurance mainly includes pensions and it is mainly funded out of contributions from workers and employers, but it only covers workers in the formal sector. Prior to 1995, no contributions for social insurance were required and all Mongolians had a right to a pension upon retirement. After 1995, only those contributing could qualify for a pension, and so herders and other informal workers lost their ‘right’ to a pension. A new pension system was adopted in 1999, under which pensions depended entirely on contributions. The new system only applies to those born after 1960.

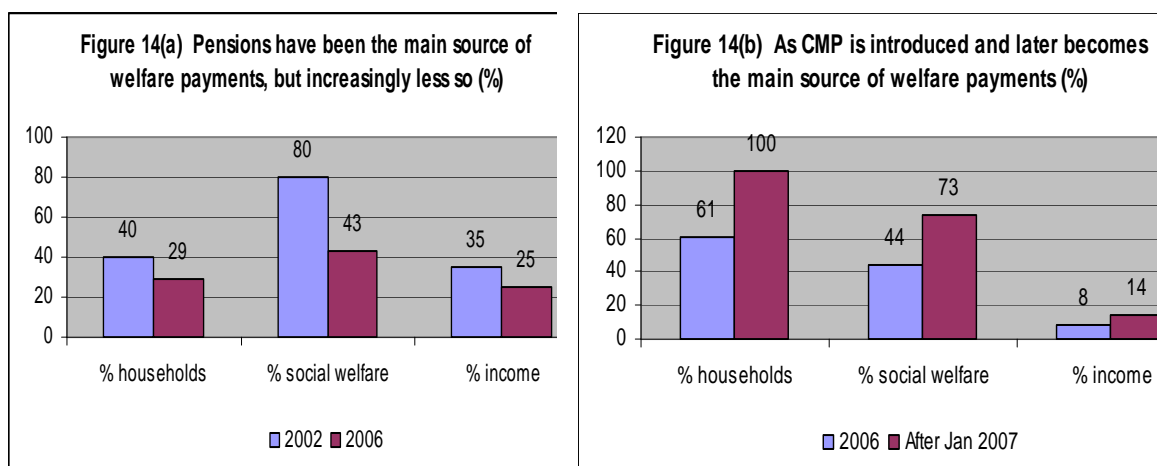
The reform, however, left a number of loose ends that make the system unsustainable in the long run, including low retirement age (60 for men and 55 for women), incentives for early retirement and high minimum pensions (World Bank 2002). Figure 4 showed how incentives for early retirement are reflected into high rates of idleness among men and women in their 40s and 50s. A high minimum pension means that most contributing workers end up receiving the minimum pension, as their Notional Defined Contribution (NDC) pensions will fall below the minimum (Weise 2006). And this creates an incentive to underreport income and work less, and leads to additional costs associated with financing the minimum. Also, as noted earlier, the high social insurance contributions of employers induce underreporting of labor costs (and thus fewer resources for pensions) and informality. The other area that was left unresolved in the 1999 reform was the coverage of non formal workers, which make out most of the labor market.

Social assistance programs were introduced to address the needs of people who lost their traditional safety net—jobs and pensions—and were not covered by social insurance.

Before the Child Money Program (CMP) was introduced, there were (and still are) a multiplicity of small and largely unconnected benefits that are poorly targeted or not targeted at all. An assessment of these programs revealed (i) large leakages to non-poor households; (ii) many poor households are excluded from social assistance; and (iii) social assistance benefits are too small to make a difference.²³

The CMP was introduced in January 2005 to provide cash transfer for children in poor households conditional on children being enrolled in school.²⁴ The program introduced important innovations in the system by conditioning benefit receipt on “positive” behaviors and introducing a proxy-means test for the identification of poor households. Against the advice of the World Bank and others, the program was universalized in July 2006. The benefit per child was also increased in January 2007 from 36,000 MNT to 136,000 MNT per year. Before these changes were introduced, the analysis of HIES 2006 data shows that poorly targeted (many non-poor households were receiving benefits) and not conditional (all school-age children who had dropped out of school continued receiving benefits). The bonanza from mining tax revenues and politics also drove the introduction of a universal one time cash payment for newly weds of 500,000 MNT.

Pensions have traditionally been the main source of welfare for households. In 2002, 40 percent of households received pensions, which on average accounted for 80 percent of all welfare payments to households and 33 percent of their income—43 percent among the households in the lowest consumption poverty quintile (Figure 14(a)). Individual pension benefits were non-negligible—around the poverty line in 2002. But the relative contribution of pensions is significantly lower in 2006 (after the introduction of CMP). And the universalization and benefit increase in CMP are predicted to have made CMP the main source of welfare payments to households receiving welfare (73 percent) and a sizable contribution to income among CMP beneficiaries (14 percent) (Figure 14(b)).



Note: % of households refers to the percentage of households with pension/CMP benefits; % of social welfare refers to the share of pension/CMP income in total social welfare payments; and % income refers to the share of pension/CMP income in total household income among beneficiaries of pensions/CMP. Sources: LSMS 2002-03, HIES 2006.

²³ World Bank (2006e).

²⁴ Other conditionalities included following mandatory immunizations, living with parents and not being engaged in intolerable forms of child labor.

The current pension system appears to explain some of the observed job idleness in Mongolia. Does the social welfare system discourage working-age individuals from entering the labor market? The analysis of LSMS 2002 data shows that having someone else in the household receiving pension income is associated with a 29 percentage point increase in the likelihood of being idle (Table 14).²⁵ The work disincentive effect of having other people in the household receiving pensions can be explained by the generosity of pension benefits after high minimum pensions are factored in and the culture of pooling and sharing resources within the household (and across related households) in Mongolia. From the perspective of working-age individuals, the latter is reinforced by the guarantee of a high minimum pension and the incentives for early retirement.

Table 14: The Pension System Appears to Discourage Many Individuals from Seeking Jobs

	Idleness	Joblessness
With pensioners	53	54.4
Without pensioners	19.4	23.9
Difference	33.6	30.5
Marginal Effect	28.8	27.3

Note: Marginal effect is the percentage change in the probability of being idle/jobless associated from having someone in the household receiving pensions. This is based on a probit reduced-form labor supply model that also includes indicators for education level, age group and location. Source: LSMS 2002.

And the recent trends in social assistance can only discourage work even more. The CMP is currently a very generous consumption subsidy to all families in Mongolia that basically carries no co-responsibility on the part of households. This trend of granting generous universal and unconditional benefits is wasting fiscal resources, creating a fiscal liability down the road and inducing people to stay out of the labor market. While the government and the parliament are working on reforming the pension system, there are little signs that the current approach to social assistance will change any time soon.

Improving the skills for work

Joblessness, job informality and skills mismatch are all interrelated challenges. The same lack of relevant skills that prevent people from getting a formal job also make workers unable to perform well the tasks required by firms. The Mongolian economy is changing and so is the demand for skills. The demand for more skilled workers is increasing. But so (and more importantly) is the nature of the skills demanded towards more general skills that allow workers (and firms) to ‘survive’ and quickly adapt to changes in demand resulting from increased openness and competition in the economy. But the supply of skills appears to be unresponsive to these changes. And this is mainly due to the (policy) failure to provide adequate learning opportunities, as well as school curricula and teaching, for producing the skills that are in high demand.

²⁵ There is no data on individual pension receipt in the HIES 2006.

To improve the skills of young people for work and life, education opportunities must be made more relevant to the needs of all young people. This involves improving educational preparation for adolescence by providing quality basic education for all. It also involves meeting the growing demand for postbasic skills, by providing diverse and flexible learning options in upper secondary and tertiary education; by implementing a relevant curriculum that teaches practical subjects, thinking skills, and behavioral skills; by blending the academic and vocational curricula, and by connecting school and work. And second chance learning opportunities—such as equivalence education and skills training programs—must also be provided for young people who have already left school and do not have the skills needed to be productively employed in the new economy.²⁶

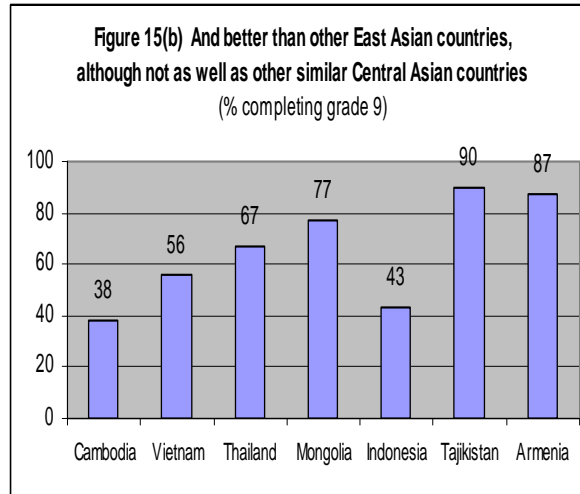
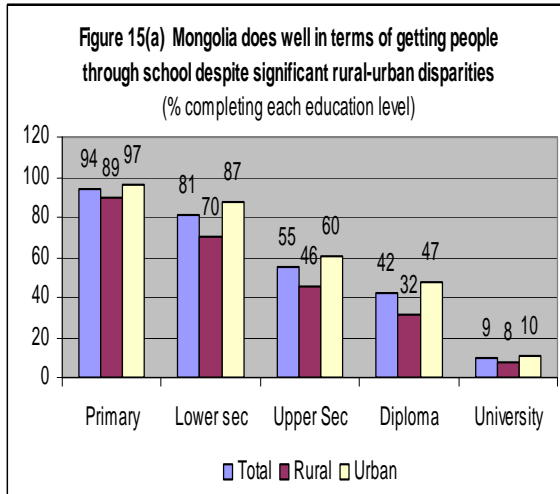
Enhancing education opportunities

Mongolia’s education system does well in terms of getting children and youth through school, although large disparities between urban and rural areas remain.

Overall 81 percent of adolescents complete lower secondary school (which is associated with the end of basic education), 55 percent complete upper secondary school and even 42 percent complete a diploma degree (Figure 15(a)).²⁷ These figures reflect the effect of past education policies, which originated in the Soviet times and focused on getting children through school. And they are better than in other East Asian countries although not as good as in other Central Asian countries under the former Soviet influence (Figure 15(b)). But there are large disparities between urban and rural areas, particularly after lower secondary education. These disparities and the big drop between lower and upper secondary mainly reflect the ‘rationalization’ of general education after 1997, which was introduced to address the scarcity of public resources for education. And because of the poor quality of rural schools, students from rural schools are disproportionately ‘screened’ out of the system (World Bank 2006e)—33 percent of rural students get A or B in math tests compared to 53 of urban students.

²⁶ Much of the framework and examples in this section is taken from the 2007 World Development Report (World Bank 2006a).

²⁷ Prior to the 2004-05 school year general education was composed of 4 years of primary (starting at age 8), 3 years of lower secondary and 2 years of upper secondary. In school year 2004-05, an extra year was added to primary education and children began primary school at age 7. Another year will be added in 2009 when children will start primary school at age 6. Tertiary education is comprised of 2-year diploma degrees and 4-year bachelor degrees (the last two years of bachelor degrees can be accessed after completing a diploma degree). Vocational education can be accessed after completing lower secondary or upper secondary and lasts for 3 years (from lower secondary completion) or 1 year (from upper secondary).



Note: All completion rate estimates are based on the Kaplan-Meier method, which takes into account whether the individual is still in school. Numbers in Figure 15(a) are from the HIES 2006 survey and refers to the population 25 or younger. Numbers from figure 15(b) are from nationally representative household surveys conducted between 2000 and 2002 (including Mongolia's LSMS 2002 to make it comparable with other countries) using the same definitions.

The quality of basic education needs to be improved, particularly in rural areas so as to close the gap in learning and access to postbasic education. Also, the students who do not get into upper secondary school (due to low test scores) should be provided with sound learning alternatives (vocational education), as well as the pathway to higher education. Upper secondary (and the rest of general education) is free of charge and overwhelmingly provided by the state—only 5.5 percent of students are enrolled in private institutions. But the share of private providers (26 percent) suggests there is room for reaching out to the private sector through public-private partnerships (e.g. vouchers to attend private institutions) to be able to expand post-primary education.²⁸ Vouchers are direct payments to students to enroll in the school of their choice, allow enrollment to increase without additional public capital costs, and can be targeted on the basis of needs and merit.

But the education system does not prepare them well for work and life, particularly in rural areas. The educational preparation of adolescents for additional learning, work and life is poor. The National Assessment of Students' achievement (NASA) was conducted in 2005 among students at the end of basic education (8th grade) in mathematics and civic education, based on the adaptation to the local context of two international tests, TIMSS and CIVED.²⁹ These instruments did not only test knowledge but also, and more importantly, the ability of students to apply this knowledge, skills or competencies for work and life. The average learning achievement for mathematics and civic education was 50 percent and 47 percent respectively, with large disparities between urban and rural areas (Table 15). Schools through the quality of instruction,

²⁸ At the moment, private institutions do receive funding for variable cost just like any other public institution, which is not a very efficient (and equitable) way of using scarce public resources.

²⁹ Civic education included domains in politics and democracy, human rights and freedom, state structure and Mongolian history. The number of tasks that were kept from TIMSS and CIVED is small to make a meaningful international comparison. See Education and Evaluation Center (2006) for details.

infrastructure and other inputs, do make a difference in student learning achievement, accounting for about 44 percent of the total variation in test scores.

Table 15: Adolescents are not well prepared for work and life
(Learning achievement by school location, %)

	Urban	Rural	Total
Total score	49.4	42.7	48.6
Civic education	47.0	43.2	46.6
Mathematics	51.3	42.3	50.3
Knowledge + routine tasks	43.2	36.1	42.4
Complex tasks + problem solving	35.8	28.9	35.0

Notes: Learning achievement scores are % of correct answers. Education and Evaluation Center (2006).

Adolescents perform particularly poorly in the skills that have the greatest demand in the labor market. Students performed significantly worse in complex procedures and problem solving tasks (35 percent) than in knowledge items and routine procedures. In terms of complex and problem solving tasks, rural students do not do much better than a straight random guess at the questions. Performance on these important skills is particularly poor in geometry—15 percent for problem solving and 21 percent for complex tasks. And, as already mentioned, Mongolian students also perform poorly in other important life skills such as civic education. Box 2 looks at the factors underlying learning achievement and shows that schools matter the most, but a good home environment for learning can go a long way.

Box 2: Student learning: schools matter the most, but a good home environment is crucial

The single most important factor explaining math test scores is the school that students attend. Schools explain 42 percent of the total variation in test scores. In the context of a linear model for math test scores that also includes student and household characteristics, schools still explain 50 percent of the variation explained by the model. Looking at the sources of variation across schools, rural schools perform significantly worse than urban schools. Schools where the math teacher for the sampled class is young but experienced (ages 31-45) tend to have better performance. Also, overcrowded and evening-shift classes tend to do worse, as do classes where there is always a deficit of training materials and books.

In terms of the variation in test scores within schools, the single most important fact are student expectations and aspirations after graduating from lower secondary. Students that wish to study upper secondary and, particularly, higher education do much better than those who want to go to a vocational school, vocational training or no further schooling or training. The availability of books at home is also very important, as it is doing all the homework and having the help at home to do it. Related to that, more educated mothers tend to have better performing adolescents, but the same is not true for fathers.

The home environment itself (education of both parents, availability of books, homework assistance and learning aids, as well as having peaceful and healthy home environment) explains a lot of the expectations about future schooling. There is evidence in developed countries that aspirations (and other nonpecuniary costs) are the single most important factor determining preparation for and access to higher education (more than liquidity constraints), and that aspirations are shaped by family factors. Classroom climate, as measured by whether students are happy with classmates, is also associated with higher test scores.

Source: NASA based on a nationally representative sample of 4,766 grade 8 students from 147 schools. Carneiro and Heckman (2002).

The low learning achievement shows that schools are failing to prepare adolescents for further study, work and life. As noted earlier, the skills that are in increasing demand include thinking skills (critical and creative thinking), behavioral skills, practical knowledge (English and IT) and technical skills.³⁰ Entrepreneurship also requires thinking skills to solve problems and such behavioral skills as self-confidence and leadership. Thinking and behavioral skills (which are something called life skills) are not only important for young people to succeed in the labor market, but also for developing a healthy lifestyle as well as becoming good parents and responsible citizens.

If accompanied by the right reforms in curriculum and teaching practices, the expansion of the school system to 12 years in 2008 could improve the preparation of adolescents for further learning, work and life by providing them with quality basic education. Mongolia initiated a standards-based curriculum reform in 1998. The Secondary Education Standards were introduced in 2003, and readjusted in 2005 to accommodate the extra year in primary education. These standards emphasize the importance of comprehensive skills—learning to know, learning to perform, learning to exist and learning to socialize. General subject areas do include practical knowledge areas such as science and technology and English. While these standards are consistent with the acquisition of skills that are needed for work and life, the enacted curriculum and teaching practices are not very consistent with these goals (Box 3).

In higher education, new higher education standards are being developed, but not yet introduced. These standards emphasize important skills, such as pluralism, foreign language competence, computer skills and team work skills. In practice, however, the names of academic programs have changed but not their contents, and there is very little quality control over new programs. In vocational education, there has not even been any serious attempt to revise the curriculum to accommodate it to the needs of a market economy. Many of these challenges in education are addressed in the new Education Sector Master Plan (ESMP 2006-2015).

The school curriculum and teaching methods have not kept up with the new demands in the labor market. The curriculum continues to be too theoretical and focused on traditional academic subjects, while teaching continues to be teacher-centered rather than interactive, as well as to encourage memorization rather than critical and creative thinking and individualistic learning rather than teamwork (Box 3). While IT and English language subjects are part of the curriculum, teachers are generally not well prepared to teach them. Also, in many cases, the teaching of IT is very limited by the poor availability of computers in schools.

³⁰ Behavioral skills include motivation, persistence, self-discipline, self-confidence, and the ability to weigh options and come to a decision (decision-making skills). They also include social skills, such as teamwork and the ability to negotiate conflict and to resist peer pressure.

Box 3: Traditional teaching methods are a constraint to the implementation of the new curriculum

Ministry of Education, Culture, and Science (MECS) of Mongolia has launched the Project for Teaching Methods Improvement towards Children's Development in Mongolia (2006-2009) in collaboration with Japan International Cooperation Agency (JICA). The purpose of the Project is to develop the child-centered learning-support teaching methods in accordance with the new education standards introduced in primary and lower secondary education since 2005. The major activity of the Project is to develop the teacher's guides (TGs) to help teachers put in practice the Teaching Methods. A study was conducted in 2006 to collect quantitative and qualitative baseline data from 9 pilot schools.

The study finds that classes are generally taught following the teacher-centered method. Teachers transfer knowledge and students receive it inactively. Teachers do ask questions, but they generally answer them themselves right away without giving students chances to respond. Also, questions are generally of low-level and accept one-word or one-sentence responses mostly from a few "active" students.

It is also observed that there are little attempts to equip students with basic skills of learning such as creative reading, writing, and thinking, cooperating, and expressing thoughts and opinions freely. Teachers lack the techniques to involve students into independent, creative activities. Although some teachers seem to be aware of student-centered methods and use them during the lesson, they often tend to revert to the teacher-centered methods during the lessons. Even when group work is organized, the opinions of 1 or 2 "active" students overshadow that of others in the group or the purpose of the work in groups is unclear or students work with the teacher rather than within their groups.

The two main constraints to the implementation child-centered methods are: (1) lack of teacher knowledge about these methods and how to use them effectively; and (2) poor availability of teaching aids and resources. But current in-service teacher training does not meet the needs of teachers: about half of the teachers are concerned that "although we attend workshops on child-centered methodology and/or contemporary methods, the trainers themselves use the traditional lecture-based methods, so there is nothing to gain even from their way of teaching."

The study reveals that majority of the teachers in pilot schools have attended workshops on the new standards and curriculum. But most school administrators and methodologists note that teachers have not been well-prepared for the new standards. They also note that it is impossible to apply the new standards with traditional teaching methods. Some teachers are aware of student-centered methods and use them effectively in their teaching. This is thanks to the work of the DANIDA project and then the "School 2001" project by the Soros Foundation. These pilots provide a good basis to build from.

Teachers are supposed to prepare lesson plans (LP) according to the new curriculum. It is observed by the team that majority of the teachers prepare LP just for formality, i.e. teachers prepare LP just to show the vice-principals and get paid. Class observations revealed that teachers did not prepare the LP for the lesson. Even when the enacted curriculum is close to the new standards, the lack of textbooks is a major problem—on average between 2 and 3 students share the same textbook.

Source. The study was conducted by the Mongolian Education Alliance (MEA) for JICA based on data collected in June 2006. The report is still being finalized.

The teaching of thinking and behavioral skills should be integrated into every aspect of the curriculum through discovery-oriented teaching methods that include interactive learning, applying knowledge to real-life problems, integrating teamwork and peer tutoring into the learning process, and inviting student input into the structure and subject matter of lessons. The implementation of student-centered teaching methods will take time and will require substantial investments in pre- and in-service training. In the short run, teaching life skills as a separate subject (e.g. health, citizenship, or financial literacy education) can be a good option. Japan and Malaysia have recently included life skills such as health and civic education as subject in their secondary school curriculum.

And to improve the quality of instruction, teachers should also have adequate materials, including IT, and routine assessments of student progress be conducted. These assessments should focus more on the ability of students to use knowledge acquired. The government is currently working on developing such a national assessment system for primary education. And the TIMSS test is being implemented in 2007 for grade 8 students, which will allow a comparison of learning achievement of Mongolian adolescents in mathematics and science to that of other adolescents in over 60 countries. These information on student learning is key for education policy and, by making it publicly available, for making the education system accountable for performance.

Technical and vocational education (TVE) does not represent a true postbasic learning option, nor does it serve the needs of the labor market.³¹ Upper secondary and tertiary education have to accommodate the diverse student needs, interests, and capabilities. Vocational education should be part of a diverse system of learning options. This is particularly important in the case of Mongolia, as the lower secondary graduates who cannot get into upper secondary need to be provided with sound learning alternatives. In Mongolia, vocational and technical education only accounts for about 10 percent of total enrollment in postbasic education, which reflects the heavy bias towards academic university degrees.³²

Also, the system needs enough flexibility to allow students to experiment and develop their full potential. While technical education is fully integrated with higher education, vocational education is a terminal track with no connection with technical colleges or universities. Recent successful reforms in secondary education have upgraded previously terminal vocational tracks, allowing vocational education graduates entry to higher education after taking school-leaving examinations (e.g., Tunisia and South Africa).

There has not been any serious effort to update the existing vocational education curricula to the needs of the labor market. International evidence shows that effective feedback from the labor market and regular consultations with employers and alumni are

³¹ For comprehensive analysis of Technical and Vocational Education and Training (TVET), see Asian Development Bank and the Ministry of Education, Culture and Science (2005) and GTZ (2006). The government is currently working with the Millennium Challenge Account (MCA) on a proposal to reform the TVET sector.

³² Vocational education is generally accessed after completing lower secondary and lasts for 2 years (78 percent of vocational students go this route) but it can also be accessed after completing upper secondary, and it then lasts 1 year. Technical education requires upper secondary and lasts for 2 years.

indispensable for adjusting curricula to meet changing needs, as in Chile, where vocational training institutes are governed by representatives of employers, workers, and the government.

Standard setting and quality assurance is a major weakness of the TVET system. As the experience of Australia and other countries shows, much could be done to improve vocational education by developing a qualifications framework that sets the standards for different fields in accordance with demands from employers, and then tests and certifies these standards. This should be accompanied by the development of a modular, competency-based curriculum to achieve these standards as well as a solid accreditation system for training (and education) institutions.

Vocational fields of specialization are outdated and no comprehensive skills are present in the vocational education curriculum. These comprehensive skills (subject knowledge in IT and English as well as thinking and behavioral skills) are needed for vocational graduates to succeed in today's labor market. Recent successful education reforms are making the academic and vocational curricula more integrated, bringing more vocational content into the general curriculum (Malaysia) and more vocationally relevant academic subjects (Chile) into the vocational curriculum. New curriculum and teaching practices need to be accompanied by improved learning materials and facilities—current facilities and equipment are old and outdated.

To facilitate the transition to work, the connection between school and work need to be improved. This goes beyond vocational education and involves strengthening the partnership between industry and schools. For example, career academies in the United States combine academic and technical curricula around a career theme and establish partnerships with local employers to provide work-based learning opportunities.³³ Universities and research institutes have contributed much to the growth of the Chinese economy. In Beijing, such institutions collaborate with local industry through joint projects and technology transfers and establish firms (spin-offs) to commercialize their inventions. Some of those firms (Lenovo, Tongfang) are among the largest Chinese high-technology firms.³⁴

Higher education institutions do not serve the needs of the knowledge economy. Newly developed standards have not been introduced yet. More practical programs such as business administration—23 percent of total students in higher education—coexist with more traditional programs such as human sciences—12 percent. Contents and teaching of higher education programs, however, have changed very little. Quality control over institutions and new programs is weak. And this occurs at a time when there is growing demand for higher education. The number of students in higher education has increased by 62 percent between 2000 and 2006 (see Table 16 below).

In addition to introducing more student-centered teaching practices and more practical programs, the higher education system needs to be more flexible. Open systems can

³³ Kemple and Scott-Clayton (2004).

³⁴ Chen and Kenney (2005).

facilitate student mobility by recognizing relevant prior experience, degree equivalences, and credits earned elsewhere. In Thailand, for example, all courses in the entire national university system are credit-based. In Colombia, people already in the labor market can get university-equivalent certification through any accredited training institution.

Centralized state entrance exam systems were abandoned in the middle of the 1990s. As a result, institutions (or groups of institutions) organize their own entrance examinations. Consortium of Mongolian Universities and Colleges, which only includes elite public and some private universities, organized very competitive examinations, while access to small private colleges is practically open. Well-designed and unified higher education admission tests are likely to be beneficial, because educating the most capable students can foster innovation, driving the economy. Georgia recently reformed its tertiary entrance exam, which limited access and improved the quality of students. A remaining challenge, however, is to provide alternatives to those students that do not make the cut. A good example is the California higher education system, which combines selective admissions to centers of excellence with more open admissions to other two and four year tertiary institutions.³⁵

The expansion and improvement of TVE and higher education can be greatly facilitated by reaching out to the private sector. Public-private partnerships (PPPs) allow systems to expand in a fiscally constrained environment. The private sector is still very small in technical and vocational education (14 percent of institutions and 5.7 percent of students), but it is well established in the higher education sector (73 percent of institutions and 34 percent of students), with a small but increasing participation of foreign institutions (Table 16). Much of the growth in private sector participation occurred in the 1990s—from 25 institutions in 1993 to 82 in 1999. PPPs can also improve learning outcomes and efficiency overall by increasing choices and injecting competition. For that competition to work, however, public institutions need sufficient autonomy and resources to manage for results and private institutions need to be accountable for meeting well-defined quality standards.

Table 16: Higher Education is Rapidly Expanding along with Private Sector Participation

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Institutions						
Total	172	178	185	183	184	180
Private	134	137	143	135	135	131
Private share (%)	77.9	77.0	77.3	73.8	73.4	72.8
Students						
Total	84,985	90,644	98,453	108,738	123,824	138,019
Private	28,079	30,262	31,619	34,604	39,783	46,264
Private share (%)	33.0	33.4	32.1	31.8	32.1	33.5
Accreditation						
Institutions (%)	15.1	21.9	31.4	37.2	46.2	48.9
Students (%)	59.3	72.4	80.4	79.6	87.5	79.7

Source: Statistical Yearbook 2006, Ministry of Education Science and Culture.

³⁵ See <http://www.cpec.ca.gov/>.

But private higher education institutions have largely grown unchecked, resulting in the proliferation of many small and poor quality institutions. Obtaining a license to run a private college requires meeting several conditions in terms of facility, faculty, library, and financial resources. But these are not hard to meet. And for private entities the establishment of private colleges is a very attractive investment—the demand is high and colleges are exempt from value-added and profit taxes. Universities and technical colleges are subject to an accreditation system since 1998, but this system is voluntary and very weak in terms of the assessment done.³⁶ The share of accredited institutions has grown to about 50 percent, accounting for close to 80 percent of total higher education students. But while most public institutions are accredited only about 15 percent of private institutions were accredited in 2003 for a five year period.

International evidence shows that governments should provide information and quality assurance while promoting diversity. The Philippines and the Republic of Korea set quality standards lower at the entry point (licensing) to give new institutions the chance to grow, and later make the standards more stringent (accreditation) for all public and private institutions to allow fair competition.

Accountability is also about having participatory governing structures. Governing boards of colleges and universities do include representatives from the government, employers, faculty, and students. But in practice boards have little power and rectors have practically unconstrained administrative power over academic and other matters.

And public institutions have little financial autonomy to manage for results. With the recentralization reform, education institutions were given more autonomy. But current funding of vocational schools, colleges and universities is inadequate in its level and form—most of the funding depends on the number of students (per student grants in the case of vocational schools and regulated fees in the case of universities) rather than on performance. The only source of public funding of higher education institutions is through the State Training Fund, which provides grants and loans to needy students. The current accreditation system has very little effect on the public funding that an institution receives. Once this system is improved and made compulsory to all institutions, grants and loans should then be open to all accredited institutions to ensure quality and foster competition. The government could also consider competitive funding, whereby accredited institutions would be invited to formulate improvement projects based on centrally determined eligibility and selection criteria. About 25 percent of the recurrent budget to public universities in Indonesia is allocated through competitive funding.

³⁶ See Asian Development Bank and the Ministry of Education, Culture and Science (2005) for details. Major criteria for accreditation focus on whether an institution has a clear and publicly stated mission, has made progress towards achieving the mission and purposes, has established the extent to which resources of the institution are directed and organized toward achieving educational objectives, and has demonstrated the integrity and commitment to mission accomplishment.

Providing second chance learning opportunities

The failure of supply to respond to changes in the demand for skills is also driven by the lack of learning opportunities for those people who have already left school and do not have the skills needed to be productively employed in the new economy. These are individuals who have been adversely affected by the changes in the demand for skills, as they lack the skills to ‘survive’ and quickly adapt to these changes. This includes people who were trained in very specific fields and worked in routine tasks until they lost their jobs in the transition to a market economy, and then became idle, unable to even market themselves to find a job. More generally, even if the education system were to produce the relevant skills for the labor market, there will always be people that, for a variety of reasons—poverty, economic shocks, and bad schools, leave school without having acquired the basic skills needed for work and life.

It is not possible to fully remedy what was missed the first time around, but Mongolia cannot afford to neglect these people. Without second chances, they would be condemned to poverty along with their families, with additional costs to the society. And their skills development needs cannot be expected to be met by firms, as many do not have a job, work in the informal sector or are not trained by firms because the return is too low—firms mostly train skilled workers. Investments in second chances should target youth in particular, as returns are higher for them than for adults. This is because of their greater ability to absorb knowledge and use it effectively, the longer time span to accrue the benefits of these investments, and because of the effect of skills on other important life transitions youth are undergoing. Education reduces exposure to risky behaviors such as drug abuse, unprotected sex, and violence. Reduced crime accounts for a substantial part of the benefit of the Job Corps program (a second chance program) in the United States.

So improving the skills of young people for work and life also involves providing second chance education opportunities for young people who failed to acquire basic skills the first time around. About 38 percent of 18 to 35-year-olds left school without completing basic education. Even among those who completed basic education, some lack minimal levels of general skills—including numeracy and literacy and basic levels of behavioral skills such as perseverance, self-discipline, and self-confidence, and the technical skills to be productively employed.

Second chance programs need to meet the diverse needs of out-of-school youths. They are diverse because they leave school at different points of the system, with different levels of skill attainment. Even among youths who have the same skills (or lack thereof), the second chances likely to be appealing and effective depend on the age of young people. And second chances also need to be tailored to the local environment, which might be rural or urban.

Addressing the challenge to meet this diversity, while scaling up enrollments, requires reaching out to the private sector and NGOs. Having good arguments for public intervention does not mean that the government has to provide second chance

programs. The role of the government should be more to develop a coherent strategy for second chances, as well as common standards, certification and quality assurance systems, and to provide financing on a competitive basis.

A policy and organizational framework for second chances—clearly linked to the formal school system and informed by the demands from the labor market and society—is missing in Mongolia. In its place are non-formal education and training programs that focus on disadvantaged youths but are not linked to each other or to the school system. Non-formal education programs run in parallel to, and independent from, the formal school system.

For those children and youths who are still in school but performing poorly, or have dropped out recently, one policy response is to offer remedial education to put them back on track. But identifying who needs such supplementary instruction is a key step. In some developed countries, such as Australia, Canada, and the United States, the results of standardized tests trigger a remedial education program. This will be easier to implement with standardized testing. Another option is to ask teachers to informally identify students that were falling behind, as in the successful Balsakhi program in India.

Second chance programs must appeal to the out-of-school youth. To appeal to out-of-school youth, second-chance programs must take into account why young people dropped out or never attended school, the challenges they will face to stay in a program, and how they can be integrated into the formal education sector or find employment. All these vary by age, skill, and the local environment. Equivalence and job training programs may serve different youth populations, but their common aim of providing competencies for work and life requires a more integrated approach: literacy and equivalency programs that include life skills and vocational training, and vocational training programs that include life skills.

Equivalence programs use more practical curricula, more flexible schedules, and less formal instruction methods than regular schools. **And rely on a strong partnership** between the formal education sector, private providers of programs, and prospective employers. Without this partnership, the graduates of equivalence systems will be left holding diplomas that allow neither reintegration into the regular school system nor employment in jobs requiring a certain level of competency.

The mode of delivery must take into account why young people dropped out. For example, to bring programs closer to homes in rural areas of Mexico, the *Telesecundaria* program offers lessons by video. To accommodate the pressure for adolescents to work, the Tutorial Learning System in Colombia allows students in rural areas and their facilitators to determine the preferred schedule and pace.

Successful equivalence programs that hope to reintegrate people in the formal education system often use teaching methods that are similar to those recommended above for formal schools—student-centered learning, regular assessment, and remedial sessions to involve students in their learning progress. Programs for older youth, however, often use

very different approaches. The Mexican National Institute for Adult Education (INEA) has developed an innovative education model for out-of-school individuals 15 years of age or older to learn how to complete the equivalent of primary, lower secondary or upper secondary education. It provides a curriculum based on acquiring skills for work and life through a flexible system of modules—individuals can choose among the modules and the length of the program is attuned to their needs, covering subjects such as health and civic education, and vocational skills.

And for out-of-school individual for whom the opportunity cost of engaging in equivalence programs in high, skills training may be a good option—but public vocational training programs in Mongolia do not really help trainees. As noted earlier, firms cannot be expected to provide the needed training for these out-school-youth. Mongolia has had public vocational training programs since 2000, with very poor results in terms of making trainees more employable. Vocational training is conducted at the vocational training centers (VTCs) in the form of non-credit courses, with duration ranging from one to three months. There are no strict entry qualifications for taking up vocational courses. VTCs are mostly operated by private owners. This active private sector participation has been possible thanks to the Skills Training Voucher Program (STVP), but the potentially positive effects on training quality are minimized by the lack of a formal accreditation system for training institutions. With the new amendments to the Labor Law, the duration of job training is now allowed to vary by field, and vouchers given to trainees also vary accordingly.

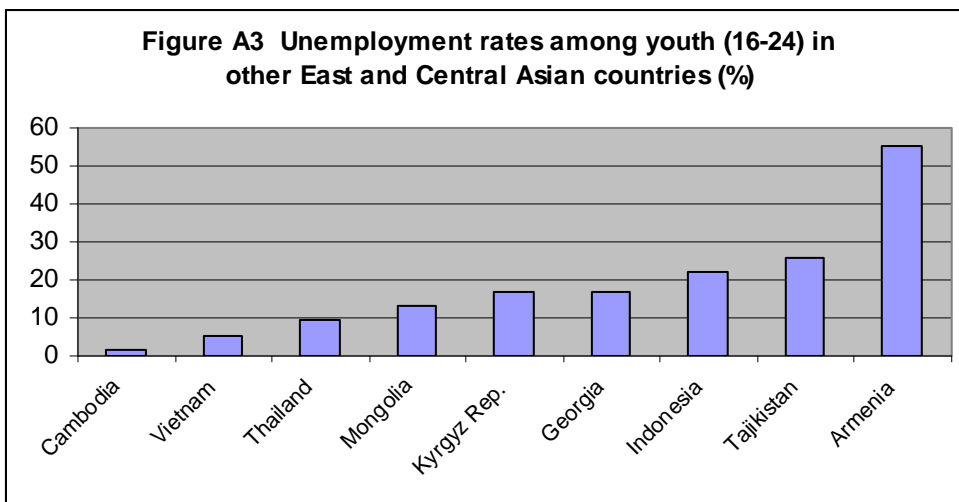
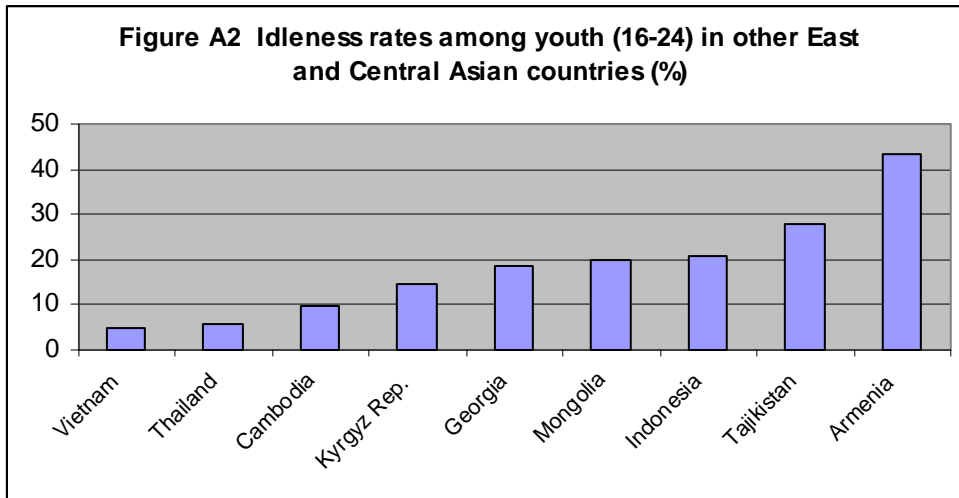
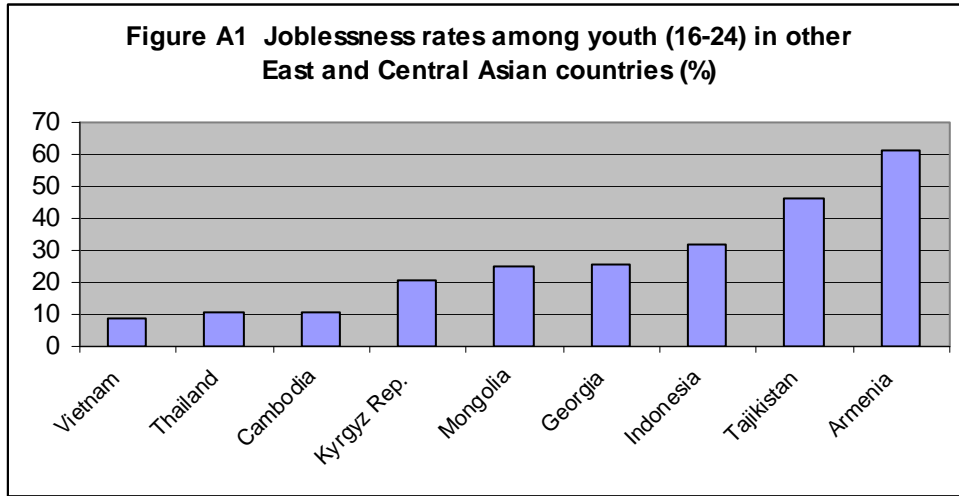
But the recent improvements in public programs do not address the lack of relevance and impact of vocational training. Again, fields of training are outdated and do not reflect the needs in the labor market. Employers need to play a more active role in determining the types and contents of training programs. As with vocational education, standards, testing and certification need to be developed with the active participation of employers. The curriculum needs to be modular and competency-based to attain those standards rather than the current rigid field-based curriculum.

And job training programs need to be combined with life skills training and other services that youth need to be productively employed. The successful experience of skills training programs, such as the *Jovenes* and *Entra 21* programs in Latin America, shows that training in technical skills alone is unlikely to pay off unless combined with life skills, other basic skills such as numeracy and employment services, such as job counseling. And training should not be exclusively to work for others, but to also develop the entrepreneurship spirit of youth. In this case, and as noted earlier, youth need access to credit to be able to start up a business.

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