

HCD REVIEW

RELATIONSHIP BETWEEN HUMAN CAPITAL DEVELOPMENT AND EQUITY IN THE REPUBLIC OF MOLDOVA

European Training Foundation
January, 2011



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FOREWORD

This report is the outcome of the Human Capital Development (HCD) Reviews project initiated and funded by the European Training Foundation (ETF). The project aims to foster evidence-based policies on HCD and provide a basis to learn from the evidence.

The main remit of the project was to develop and implement an HCD Review framework for the analysis and interpretation of trends, opportunities and challenges in HCD at country level. In order to produce this framework, the ETF team defined the scope of the Reviews and identified consistent research questions as a basis for the design of appropriate components for analysis methodology.

Within the Reviews, human capital was defined as: ‘[those] skills and competences for gainful employment that contribute to the socio-economic development of the country’. Education, training and other forms of learning - notably those occurring in the context of labour markets - are instrumental in increasing human capital and these were used by researchers as input measures. The thematic scope of the project therefore covered education, learning, acquired competences and the application of these to the labour market.

The chosen definition allows for the lifelong dimension of HCD to be captured by removing limits on the age of learning, and, thereby, explores far beyond the boundaries of ‘educational attainment’ as a single indicator of the human capital of a country.

A second important element was the innovatory move to adopt equity as the focus for analysis. The study used this perspective to explore: whether human capital is developing in an equitable manner; if people are in a position to seize a variety of opportunities to deepen their knowledge and extend their competences; and whether the options on offer were at the expected level of quality. This new definition of equity was seen to embrace the three dimensions of fair access, choice and quality of learning opportunities. Although the association between equity and education is not new, there have been few overviews of the lifelong development of human capital and deployment in the labour market, and none has covered the three cited dimensions of equity to date.

Human capital is central to social and economic development. Quality of competences and employment are important factors in economic innovation and potential competitiveness, whereas comparative analyses show that social and economic achievements remain low where human development, including education, is also low. Hence, the negative impacts of unharnessed human capital appear to provide a convincing indicator of the need for open access to multiple and good quality opportunities of HCD.

While there is a link between knowledge, skills, gains in productivity, competitiveness and innovation, the dynamics of this relationship are complex and far from deterministic in nature, making them hard to measure. The level of complexity prompted us to opt for a mixed methodology, blending quantitative and qualitative assessment of human capital and its prospective development.

The present report contains the results of HCD Review in the Republic of Moldova and it is published in parallel to the report from the HCD Review in Tajikistan (ETF, 2010). The two reports are based on the ETF framework and methodology, build on relevant research undertaken in this thematic area, add new evidence and elaborate the innovative concept of equity in learning opportunities through access, choice and quality.

These publications convey a message on the importance of contextualising policy design and implementation in the specific country situations. The data and information used all came from the most recent available statistical sources and individual and collective feedback obtained in interviews and focus groups. We highly commend both country reports for the wealth of information provided and the inspiring analysis. They represent a sound resource for policy makers, researchers, practitioners and all those concerned with policies on learning and links between education and the labour market.

Acknowledgements

The EXPERT-GRUP independent consultancy worked with ETF on the country analysis for the Moldovan component of the project. Ana Popa, Alex Oprunenco, Adrian Lupusor and Valeriu Prohntichi carried out the field study and are the authors of the present report, though have accepted to incorporate our comments and suggestions. The success of the project is also due to the professionalism of a team whose knowledge contributed greatly to the quality of the final outcome.

We would also like to thank: Minister of Economy Valeriu Lazar for his invaluable feedback on this report; Deputy Minister of Labour, Social Protection and Family Sergiu Sainciuc for his support of the project from the outset and for his valuable comments; the Deputy Minister of Education Loretta Handrabura; and members of the Parliamentary Committee on Education who provided us with some very useful feedback prior to finalisation of the study.

Our gratitude is also due to those local authorities who made themselves available for interview during surveys in urban and rural areas and to the individuals and institutions that answered our questions and participated in focus groups to discuss the preliminary findings. Many have facilitated our work, we would like to thank in particular: Ala Supac, head of the Agency for Employment of the Chisinau municipality; Tatiana Nagnibeda-Tverdohleb, head of the General Direction of Education, Youth and Sport of the Chisinau municipality; and Vladimir Vizdoaga, chairman of the Anenii Noi District Council.

All ETF team members gave important contributions: Franca Crestani, Anastasia Fetsi, Jens Johansen, Manuela Prina, and Manfred Wallenborn were helpful in sharing their expertise on lifelong learning and human capital, labour market and mobility, equity-oriented analyses and survey methodology, and in ensuring that the work remained centred on the context and institutions of the two countries. Doriana Monteleone dramatically improved the quality of survey and data processing tools. Cristiana Burzio and Nadezda Solodjankina deserve special mention for the professional assistance they provided at all stages of this challenging project. I have coordinated the entire project and the focus on equity for the HCD Reviews was my choice.

The feedback of European Commission colleagues, international experts and peer organisations has provided us with great encouragement and the motivation to expand the boundaries of consolidated knowledge. Comments on methodology and suggestions for improvement have been gratefully received from within and beyond the ETF, through reviews, exchanges and discussions, both formal and informal.

Siria Taurelli
HCD Reviews Team Leader,
November 2010

INTRODUCTION

The current situation of the HCD in the Republic of Moldova has mainly been determined by the changes of the transition period when factors such as the modification of the economic structure, liberalization in educational service provision and population migration affected trends in HCD. Positive trends like the higher overall educational attainment of the population and the increasing propensity to invest in education were accompanied by negative trends such as a widening gap between rural and urban opportunities due to increased urban-based economic growth. While a comparatively high 8.2% of GDP is spent on education, its use is inefficient and does not necessarily lead to a better quality of learning. Graduates often lack the skills needed on the market and are unprepared to face the widespread economic and technological changes of an increasingly global economy. The consequent mismatch between skill supply and demand leads to uneasy school-to-work transition, particularly in terms of transition to quality employment.

Continuous learning is essential for HCD. Motivated by the pressure of competitiveness, the private sector has increased investment in training and retraining to a sizeable extent – although from a low starting point – while in comparative terms the public sector has reduced its commitment to staff development. Good practice in adult learning definitely exists, but these ideas are not shared and disseminated partly due to the low level of collaboration between enterprises within each sector.

This report, commissioned by the ETF, aims to identify the main trends in HCD in the Republic of Moldova over the last two decades using both quantitative and qualitative indicators. It was also designed to identify inequity within and between population groups in terms of access to education, choices of learning opportunities and the quality of education and training. The study also looked at adult training, its role and contribution to the human capital in the country. Lifelong learning is an increasingly important element of HCD that has become inevitable in some sectors due to the rapid rate of technological and procedural change that is also related to economic restructuring.

The report makes use of the statistical data provided by the National Bureau of Statistics (NBS) and administrative data reported by the Ministry of Education and Ministry of Finance. EXPERT-GRUP conducted additional surveys to provide complementary qualitative information presently missing from official data sources. The first was a Survey on Initial Education (SIE) with a sample size of 140 respondents (between 15 and 45 years old). The SIE is not statistically representative and was conducted in two territorial-administrative units only (Chisinau, the capital city area and Anenii Noi, a rural district with outlying villages around a town that forms the district centre) but it provides background to the situation that is not available elsewhere and data on: the quality of education; differences between rural and urban areas; general public perceptions of education; willingness to invest in education and other issues.

The other was the Survey on Adult Training (SAT) collected information about State and private involvement in adult training and included responses from 24 companies, 6 policy makers and 2 training providers. It identified the most important areas where training was being provided, differences in the level of training by sector, a comparison of needs for additional training in rural and urban areas and various economic sectors.

EXPERT-GRUP also conducted two separate focus groups in the mentioned urban and rural districts to discuss the main findings of the study with key stakeholders (policymakers, teachers, parents, employers and employees). These focus-groups were very useful in validating the survey results, identifying general expectations on human capital development amongst the population and discussing potential policy options for improved human capital in the short and long-term.

The report is structured in three chapters:

- **Chapter 1. The state of human capital in the Republic of Moldova.** This chapter analyses the evolution of human capital over the transition period in terms of the literacy rate and educational attainment of the population. These have both improved throughout the period as a general trend but more detailed analysis identifies some disadvantaged groups. Another important aspect referred to in this chapter is the link between education and the labour market and performance in terms of matching demand and supply. Lastly, there is detailed analysis of emigration from an HCD perspective.
- **Chapter 2. Human capital formation for the future: Access to education and youth training.** This chapter refers to important aspects including access to available education opportunities. It examines trends in educational attainment among the population and identifies leading incentives and to investment in education such as better job opportunities and higher revenues against disincentives like decreasing quality and high costs. It also studies funding of the education system and the role of non-budgetary resources, the implications of these on the quality of education and the barriers to education generated by them for students from different social classes.

- **Chapter 3. Human Capital Formation for the Present: Education and Training for Adults.** This chapter analyses the adult training aspect of HCD. The role of the state and private sectors in adult training is addressed, with an assessment of their adaptation to the changing economic structure and to the reduced level of preparation in new graduates. A report of public opinion on the need and willingness to invest in additional training is given as expressed by the survey respondents.

The report closes with the main conclusions on HCD trends and equity in education in the Republic of Moldova, in terms of access, choice and quality of education during the transition period.

1. THE STATE OF HUMAN CAPITAL IN THE REPUBLIC OF MOLDOVA

1.1 HUMAN CAPITAL DEVELOPMENT TRENDS

HCD in the Republic of Moldova (hereafter Moldova) has experienced some contradictions in recent years with positive trends in access to education and negative trends related to the uneven quality of education and performance of human capital. The use of human capital in the labour market and returns to investment have been mixed. These recent developments are mainly associated with the reduced status and competence of teachers and inadequate infrastructure that is often in serious need of upgrading, despite a sustained high proportion of GDP expenditure on education. Secondly, the uneven quality of education goes in parallel to the poor response of the education and training system to new demands, especially from the labour market. Thirdly, human capital is not always viewed as a competitive factor by economic sectors in the labour market, hence the selection and remuneration of human capital remains at below potential. Finally, but equally importantly, there are insufficient incentives for continuing adult learning and this oversight reveals the absence of any effective HCD strategy.

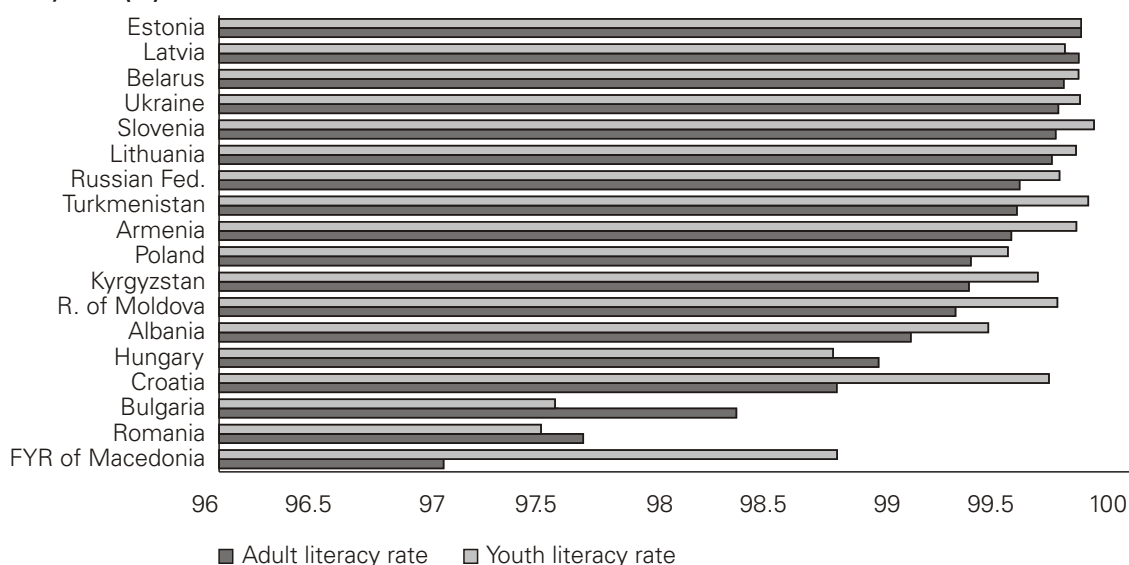
The evidence presented in this report shows that equity issues have taken a new shape in Moldova. During the deep crisis of the early 1990s a gap started to widen between school children who were able to continue their education after primary and lower secondary education and those who were not. This gap has not yet been closed and is most visible in the comparative rate and geographical distribution of early school leavers.

Literacy

The literacy rate in Moldova increased from 97.9% in 1999 to 98.9% in 2008.¹ However, this increase was mainly the outcome of demographic shifts not directly related to access to primary education. While there was a constant decrease in the share of people with no education in the total population of over 65s from 14.66% in 1999 to 5.72% in 2008, the same indicator for people in the 25-64 age group decreased by only 0.1%, from 0.42% to 0.32%. The recent increase in literacy rate was therefore largely determined by the decrease in the share of people born before the Soviet period when primary education was not mandatory and many children had no primary education.

This factor also explains the disparity between youth and adult literacy rates (99.69% and 99.24%).² Youth and adult literacy rates are higher than the regional average in Moldova (**CHART 1**). The youth literacy rate is higher by 0.31 p.p.

CHART 1. ADULT AND YOUTH LITERACY RATES IN MOLDOVA AND OTHER COUNTRIES IN THE REGION, 2008 (%)



Source: UNESCO database

¹ NBS, the indicator is calculated as the share of population with at least primary education in the total population above 10 years old.

² UNESCO database, 2007.

(99.69% in comparison with 99.38%), while the adult literacy rate is higher by 0.1 p.p. (99.24% in comparison with 99.14%). Most of the countries ranking below Moldova have large Roma minorities who have a complex relationship with the educational system. However, Moldovan adult and youth literacy rates are low when compare with countries with no significant Roma minorities, revealing the difficulties encountered by various categories of the Moldovan population in accessing basic education (especially the rural poor).

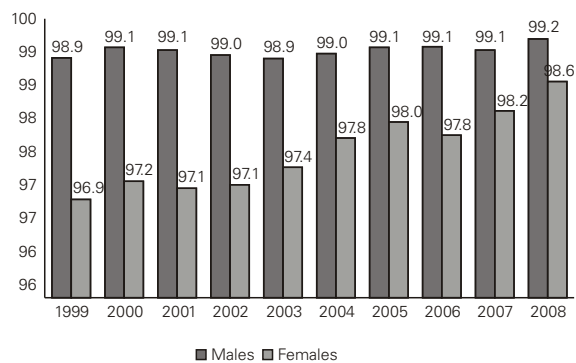
Gender differences in enrolment resulting from conservative family values in the pre-Soviet period and rural to urban variations still have a marginal impact on the gap in literacy rates (see **CHART 2** and **CHART 3**). However, the biggest discrepancy in literacy rates between areas of residence is registered for the 25-34 year age group where the share of population with no education is 0.22% for urban areas and 0.7% for rural areas. This figure is illustrative of both current income disparities between rural and urban areas and deficiencies in access to education for disabled children during the Soviet period.

Educational attainment of the population

The economic transition had a significant impact on the educational attainment of the population. During the early transition period the enrolment rate in non-mandatory education followed a downward trend as the economy declined and poverty rates rose. Non-mandatory education became more affordable for the population in the wake of the economic recovery of 2000. The share of the population attaining upper or post-secondary non-tertiary education and tertiary education levels increased (**CHART 4**) in line with the public propensity to invest more private resources in education.

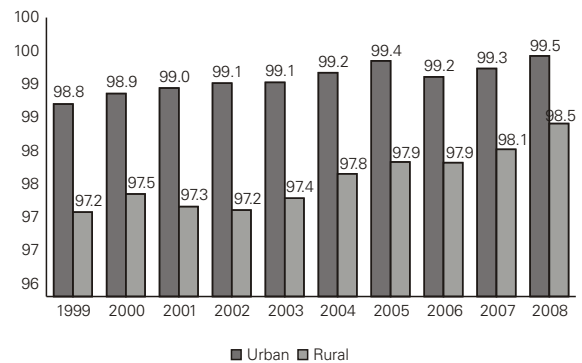
Analysis of educational attainment by age group helps explain the increasing share of people with lower secondary education (**CHART 5**). The early transition crisis squeezed incomes and reduced the financial ability of the population to

CHART 2. EVOLUTION OF LITERACY RATE BY GENDER (%)



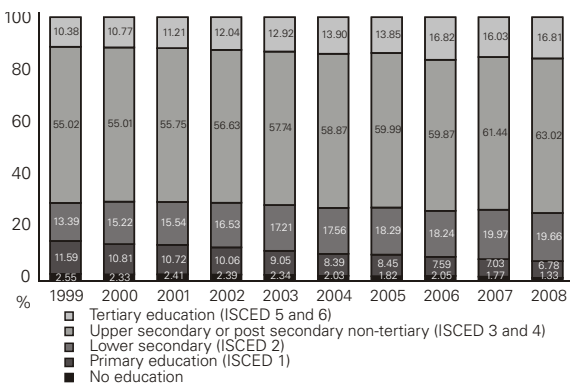
Source: NBS

CHART 3. EVOLUTION OF LITERACY RATE IN RURAL AND URBAN AREAS (%)



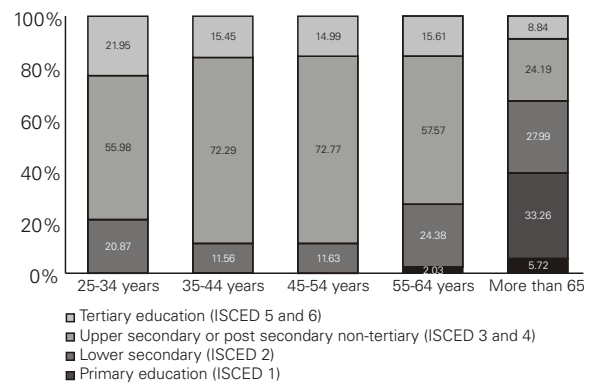
Source: NBS

CHART 4. EDUCATIONAL ATTAINMENT LEVEL OF THE POPULATION ABOVE 25 YEARS OLD (%)



Source: NBS

CHART 5. EDUCATIONAL ATTAINMENT LEVEL BY AGE GROUP, 2008 (%)

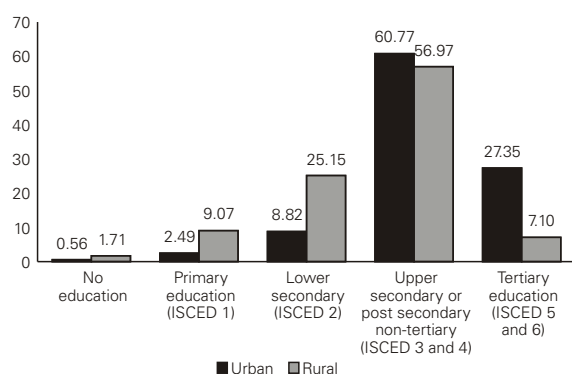


Source: NBS

continue with higher levels of education. This population is now in the 25-34 year-old category. Another significant educational attainment gap can be observed between rural and urban areas (**CHART 6** and **TABLE 1**).

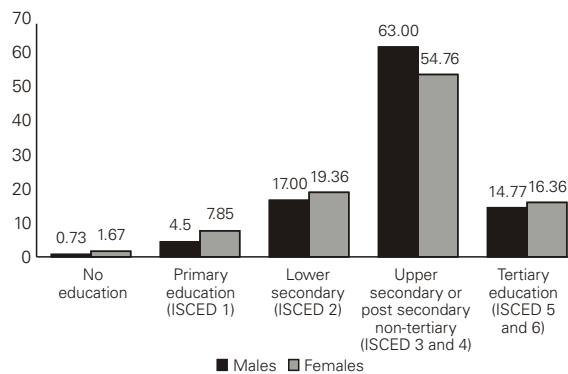
Women tend to have a slightly less advanced educational profile than men (**CHART 7** and **TABLE 1**), but these discrepancies manifest mainly in the 55+ age groups, with a greater concentration in those 65+ years old. For the younger age groups the gender gap in attainment of non-mandatory educational is reversed, with more girls than boys achieving, although the gap is less significant. The smallest gap is in the youngest age group (25-34 years). Moreover, the lower share of women attending upper or post-secondary non-tertiary education can be adequately explained as the profile of specializations offered at this educational level are largely vocational training in areas

CHART 6. EDUCATIONAL ATTAINMENT BY URBAN AND RURAL AREAS, 2008 (%)



Source: NBS

CHART 7. EDUCATIONAL ATTAINMENT OF MEN AND WOMEN, 2008 (%)



Source: NBS

TABLE 1. NUMBER OF LOW EDUCATED INDIVIDUALS BY AGE GROUP, GENDER AND RESIDENCE AREA, 2008 (THOU.)

Age group	Level of educational attainment	Total	Urban	Rural	Men	Women
25-34	No education	2.3	0.5	1.8	1.7	0.6
	Primary education (ISCED 1)	3.5	0.7	2.8	1.9	1.6
	Lower secondary (ISCED 2)	101	15.9	85.1	53.5	47.5
35-44	No education	1.5	0.4	1.1	0.6	0.9
	Primary education (ISCED 1)	1.9	0.2	1.7	1.4	0.6
	Lower secondary (ISCED 2)	57.9	10.4	47.5	29.6	28.2
45-54	No education	0.8	0	0.8	0.6	0.2
	Primary education (ISCED 1)	2.5	0.2	2.3	1.5	1.1
	Lower secondary (ISCED 2)	65.2	12.1	53.1	29.1	36.1
55-64	No education	1.4	0.3	1.1	0.5	0.9
	Primary education (ISCED 1)	6.9	1.9	5	1.6	5.3
	Lower secondary (ISCED 2)	82.9	18.6	64.3	27.5	55.4
Over 65	No education	21.9	4.2	17.7	4.3	17.7
	Primary education (ISCED 1)	128.1	20.8	107.3	40.9	87.1
	Lower secondary (ISCED 2)	107.6	27.3	80.3	38.9	68.8

Source: NBS

traditionally seen as more suitable for men. Conversely, women in Moldova are currently more inclined than men to enrol in tertiary education.

1.2 HUMAN CAPITAL ON THE LABOUR MARKET

Employment

Despite the growing share of working-age population in Moldova, the employment rate has decreased constantly over recent years. Moreover, the employment rate in Moldova is one of the lowest in the region due to a series of structural economic problems and emigration.

Employment rates for men and women have both maintained a gradual fall, although the employment rate for men has traditionally been higher than that of women (45.2% and 40.1% respectively in 2008). This reveals some extent of latent forms of discrimination against women and restricted access to the labour market. Many employers are reluctant to hire young women and they tend to prioritise men in order to avoid the direct and indirect costs related to maternity entitlements. Thus, the gender gap in employment rates is higher for the 15-24 year age group, when the likelihood of maternity is statistically highest. The employment rate for men is also higher than that of women in the 55-64 year-old group, reflecting differences in the retirement age at 57.5 for women and 62.5 years for men.

The rural-urban employment profile has undergone some structural changes. Prior to 2002, the employment rate was higher in rural areas, but this situation has reversed since 2003. This development was mainly the outcome of constraint factors derived from a downward economic trend in rural areas where most jobs are in the low-paid agricultural sector. The agricultural sector is also highly vulnerable to the vagaries of foreign markets and climatic variations due to the high geographical concentration of Moldovan agri-food exports. In such a system, events such as the Russian trade ban on Moldovan alcoholic beverages and some vegetable products in 2006 can cause steep decline in employment in rural areas, further widening the urban-rural employment gap.

Over the period studied (1999-2008), the employment rate decreased at various intensities for all age groups except those aged 55-64 years. During the 1999-2002 period, the employment rate for this age group increased as the retirement age was raised and many would-be pensioners apparently postponed retirement due to the fear of low pensions in 2003-2008. Meanwhile, the noticeable decline in the employment rate for the younger population category (15-24 years) can be explained by an increasing propensity to continue with post-secondary or higher education (**TABLE 2**).

TABLE 2. EMPLOYMENT RATES OF THE POPULATION OVER 15 YEARS IN MOLDOVA (%)

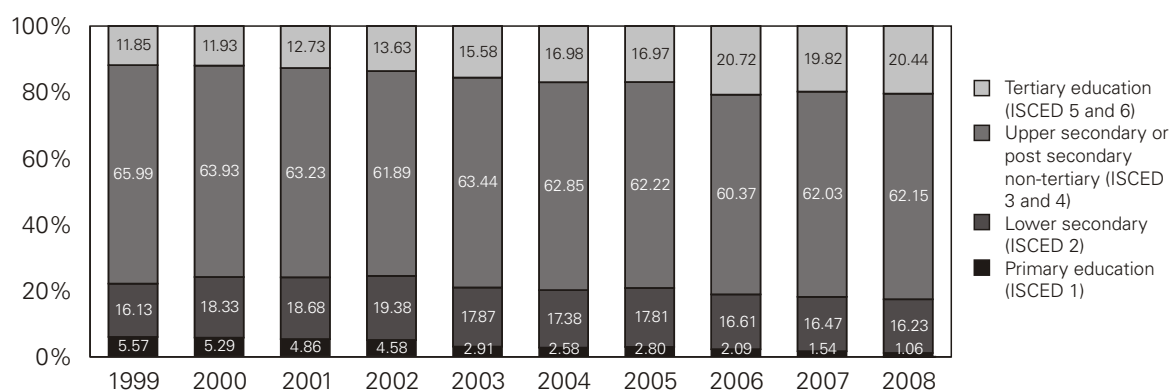
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total	54.5	54.8	53.7	53.3	47.5	45.7	45.4	42.9	42.5	42.5
By gender										
Men	57.6	57.7	56.2	55.1	49.3	46.6	46.0	45.5	44.8	45.2
Women	51.8	52.2	51.4	51.7	46.0	44.9	44.8	40.5	40.5	40.1
By residence area										
Urban	48.3	48.6	48.2	49.4	48.1	46.5	46.6	45.2	43.8	44.5
Rural	59.2	59.4	57.7	56.2	47.1	45.0	44.5	41.2	41.6	41.0
By age										
15-24 years	32.7	30.4	27.6	26.6	20.1	18.0	17.7	18.9	17.6	18.5
25-34 years	65.1	62.7	58.8	60.4	49.8	46.9	45.7	44.1	45.6	52.5
35-44 years	77.3	77.8	78.3	76.6	74.5	72.4	69.8	64.2	65.0	61.6
45-54 years	79.4	82.2	82.8	77.6	75.4	71.4	72.5	70.1	66.9	63.3
55-64 years	44.4	46.6	46.9	52.4	46.8	51.5	54.3	49.9	51.5	49.8
65+ years	20.9	22.2	21.2	22.9	15.8	15.8	16.9	12.7	12.2	10.6

Source: NBS

Changing student preferences for higher education resulted in a decrease in the share of employees with upper-secondary non-tertiary education and a corresponding increase in the share of employees with tertiary education (**CHART 8**).

In recent years, non-participation became an important feature for the Moldovan population as the share of the economically inactive population rose from 38.7% in 1999 to 55.7% in 2008. This was mostly determined by demographic trends and particularly by accelerated population ageing. The propensity toward an intensification of tertiary education led to an increase in the number of students, which, together with the growing number of pensioners accounted for most of the high non-participation rate of the Moldovan population (**TABLE 3**). Additionally, migration has led to a decrease in the size of the working age population while the rate of remittances the reservation wage to the families of migrants back in Moldova grew. The migration phenomenon caused an apparent paradox as it simultaneously decreased both employment and unemployment rates. In the event, insufficient employment opportunities inside the country were counterbalanced by opportunities for jobs abroad. The outflow of Moldovan citizens working abroad eased pressure on the domestic labour market and helped maintain an unemployment rate among the lowest in the region.

CHART 8. STRUCTURE OF THE EMPLOYED POPULATION BY EDUCATIONAL ATTAINMENT (%)



Source: BNS

TABLE 3. SIZE AND STRUCTURE OF THE ECONOMICALLY INACTIVE POPULATION IN MOLDOVA

	2002	2003	2004	2005	2006	2007	2008
Total (thousands)	1,208	1,381	1,450	1,484	1,575	1,618	1,639
By status (% of total)							
Pupils or students	26.6	26.2	25.8	25.7	25.7	22.9	22.8
Pensioners	37.9	36.2	34.5	33.1	33.1	33.2	33.5
Homemakers	8.2	7.0	7.3	7.2	7.2	7.0	7.1
Migrants	19.1	21.1	24.0	26.6	19.7	20.7	19
Discouraged	6.2	5.5	5.7	4.8	3.7	1.6	1.1
Others	2.0	4.0	2.7	2.6	10.6	14.6	17.7
By gender (% of total)							
Men	43.9	44.3	45.2	45.8	43.4	44.8	44.7
Women	56.1	55.7	54.8	54.2	56.6	55.2	55.3

Source: NBS

Unemployment

TABLE 4 shows the evolution of the unemployment rate in Moldova with a decrease from a relatively high level in 1999 (11.1%) to one of the lowest rates in the region (4.0%) in 2008. This all-time low does not, however, reflect positive qualitative changes in the Moldovan economy as it has evolved alongside a declining employment rate. As was explained previously, these parallel trends are largely determined by the impact of large-scale emigration that eased pressures on the domestic labour market. From this perspective, the decrease in unemployment can be seen as the outcome of positive economic trends in other countries rather than any expansion of the domestic economy in 2000-2008.

The unemployment rate in urban areas has traditionally been much higher than its rural counterpart (5.5% to 2.7% in 2008). This results from the high number of people employed in seasonal agricultural who do not seek work out of season because there are no jobs in rural areas and their labour mobility is constrained by high transport costs and poor road infrastructure.

Unlike the European countries, the unemployment rate for men in Moldova is traditionally higher than that of women as women are more likely to form part of the economically inactive population (see **TABLE 4**). Additionally, the early transition crisis led to steeper decline in the industry and agriculture sectors that traditionally employed men. Although the gender unemployment gap was still significant in 2008 (4.6% for men and 3.4% for women), it had decreased from 10.0% for men and 6.3% for women in 2004. This trend was determined by a rapid expansion of the construction sector which traditionally employs men more intensively than women.

TABLE 4. UNEMPLOYMENT RATES IN MOLDOVA (%)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total	11.1	8.5	7.3	6.8	7.9	8.1	7.3	7.4	5.1	4.0
By gender										
Men	13.3	9.7	8.7	8.1	9.6	10.0	8.7	8.9	6.3	4.6
Women	8.9	7.2	5.9	5.5	6.4	6.3	6.0	5.7	3.9	3.4
By residence area										
Urban	19.1	15.7	13.8	12.1	12.2	11.9	11.2	9.2	6.9	5.5
Rural	5.4	3.4	2.7	3.0	4.5	5.0	4.0	5.8	3.6	2.7
By age										
15-24 years	22.3	15.8	16.3	15.2	18.1	19.7	18.7	17.1	14.4	11.2
25-34 years	12.4	9.8	8.2	7.3	9.0	9.2	7.8	8.6	5.8	4.4
35-44 years	9.7	8.2	6.6	6.4	7.6	7.4	7.0	6.1	4.2	2.9
45-54 years	8.6	7.1	5.5	5.2	6.0	6.4	5.6	5.6	3.4	3.1
55-64 years	3.8	2.6	2.5	2.0	3.0	3.1	3.4	3.4	2.7	2.3
By education										
Primary (ISCED 1)	1.4	0.8	1.6	2.5	4.3	3.3	3.0	3.1	6.2	0.0
Lower secondary (ISCED 2)	10.9	7.3	7.1	5.9	8.0	8.5	7.6	9.9	6.4	3.7
Upper or post-secondary (ISCED 3 & 4)	14.5	10.8	8.9	8.3	9.6	9.9	8.9	8.6	5.2	3.9
Tertiary (ISCED 5 and 6)	9.7	7.8	6.2	6.4	6.2	6.0	5.3	5.1	5.1	4.6

Source: NBS

As with other countries in the region, youth unemployment has the highest rate of all age groups in Moldova (11.2% for the 15-24 year age group in 2008). The traditional explanation is that employers are reluctant to hire employees with no work experience. This argument appears to be confirmed by the fact that the unemployment rate for the older population, who would reasonably be expected to have wider professional experience, is far lower. Moreover, most of the companies that participated in the survey argued that many young employees lack the technical skills they need and this has a severe negative impact on their productivity and quality of output.

Some further insight into the skills gap can be gained from a closer look at two small surveys executed by EXPERT-GRUP. While the sample sizes and number of responses are insufficient to be considered statistically valid for extension to the whole of Moldova, the outcomes provide insight into some of the pertinent issues facing the country.

A Survey on Initial Education (SIE) was conducted on a small sample of 140 respondents in the capital Chisinau and the rural district of Anenii Noi and a separate Survey on Adult Training (SAT) was carried out amongst 24 companies, 6 representatives of policy makers and 2 training providers. Although the latter survey sought to broadly represent all the organized elements in Moldova involved in adult training, the outcomes provide only a general idea of the situation.

According to the SIE results, 21.1% of employed respondents stated that they lack technical abilities and 16.7% reported their inability to use technology skills. The same respondents recognized that employers value technical abilities (82.2%) and the use of technology skills (68.9%).

There was a sharp decrease in the unemployment rate for those with lower secondary and upper or post-secondary education in 2008 (from 9.9% and 8.6% in 2006 to 3.7% and 3.9% in 2008). This change was determined by the increasing propensity of this population to stay on in education with the expectation of improving their job prospects. At the same time, the number of employed with tertiary education increased by 3.4%, while the numbers of employees with lower educational levels either decreased or remained relatively constant, indicating that people with tertiary education are less exposed to the risk of being unemployed. However, this is not necessarily a reflection of real demand of for workers with higher education in the economy, it simply suggests that many employees with higher education perform tasks that could easily be accomplished by employees with lower qualifications, at least in the first few years of their professional career.

Quality of Employment

Analysis of the share of employees willing to change either their job or some aspects of their workplace provides a proxy measurement for the evolution of quality of employment. In 2008, the share of employees who wanted to change something in their job increased to 24.1% of the total number of employed from 23% in 2007. In most cases, this related directly to employee dissatisfaction with levels of remuneration. Some 62.4% stated that they would like better pay per hour (60.7% in 2007) and a further 15.0% would like to work more hours with a respective increase in total income (14.5% in 2007). This swelling trend reflects a worsening situation of low wages in the Moldovan labour market and extended underemployment. The greatest degree of dissatisfaction with remuneration was expressed by those with tertiary education (75.7%), confirming again that many university graduates are performing tasks that could be easily accomplished by lower-qualified graduates who are generally less well-paid. People with only primary education appear to be those least concerned about remuneration per hour.

Another aspect in quality of employment is whether the field of study matches the field of work. Administrative staff have the biggest share of employees whose occupational field does not correspond to their educational background at 36.5% along with those employed in services, housekeeping, trade and other similar activities. These are followed by high-ranking administrators in local public bodies and other socio-economic units (23%), unqualified staff (21.6%) and qualified workers (21.5%). Most of these employees are educated to a level that is higher than that of the professional activities they perform (66.2%) (NBS, 2009). This can be partly explained by the lack of distinct specializations within vocational or upper secondary non-tertiary educational institutions (housekeeping and other activities related to trade and services) but may also be due to the low quality of education provided to graduates in universities. In the case of heads of local public administrations and other socio-economic units, however, the level of educational background is lower than their level of occupation.

According to the SIE, the largest share of employees working in fields unrelated to their specialization (61.1%) corresponds to the youngest age group (15-24 years). One explanation may lie in the fact that many of these people are employed on a part-time and/or temporary basis whilst studying, but a second proposition suggests young graduates face many difficulties when entering labour market.

The SIE illustrates that the quality of employment of men is lower than that of women (45.5% of working men and 41.7% of employed women do not work in a field related to their studies). This is largely explained by the fact that men are more involved in agricultural labour or other activities requiring intensive physical effort; sectors where employee specialization is generally unrelated to the field of study. Another possible interpretation is that men as the main bread winner of many families may be unwilling to accept the low paid jobs that correspond to their specialization, preferring to seek higher wages in other spheres. In rural areas, the share of employees whose work does not correspond to their

studies is relatively high (59.4% in comparison with 40% in the capital city). The rural to urban employment quality gap can be explained by the degree of economic diversification of local communities, as rural areas are economically undiversified and mainly reliant on agricultural activities. The survey also revealed a positive correlation between the level of studies and quality of employment. Thus, the lowest shares of employees with a specialization that does not correspond to their field of study are seen amongst those with tertiary education (26.3%).

According to the SIE, only 63.7% of employed respondents stated that their skills are fully used in their current job, while the skills of 31.9% are partially used and 4.4% are not used at all. The highest share of employees whose skills are not used at all (11.5%) are amongst post-secondary non-tertiary graduates, while the share for workers with tertiary education is only 2.6%. These data confirm, again, that a higher education level correlates to a higher quality of employment. The data also imply that the highest educated expect their level of qualification to be reflected in their salary and their current dissatisfaction is attributed to a perceived present shortfall in pay.

The survey sheds some light on why employees whose skills are not fully applied do not change job. Despite the low total number of observations, it is clear that the main problem in rural areas is the lack of available jobs on the labour market (11 respondents of the 12 eligible). At the same time, 9 respondents from the 19 eligible in the capital city stated that they have opportunities to improve their skills in their current job. Therefore, employees from rural areas are more constrained by the lack of employment opportunities and are more exposed to the risk of becoming unemployed.

Returns to investments in education

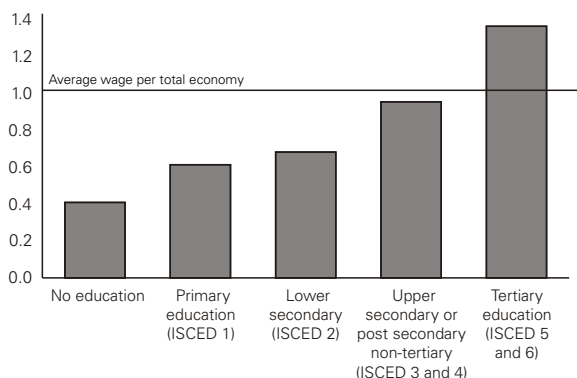
The average monthly wage per employee in Moldova in 2009 was MDL 2,747.6 (EUR 177), the lowest level in Europe. This is the outcome of a protracted process of economic reforms, combined with an extensive informal economy that affects official wage statistics. The highest wages are earned by employees in sectors such as: financial activities (215.3% of the national average); electrical and thermal energy, gas and water (170.6% of the average); and mining and quarrying (147.8% of the average). Employees in high-growth sectors prior to the crisis (construction, transport and communications) also earned relatively high wages in comparison with the average (137.1% and 139.7% respectively). The lowest private sector wages are registered in fishing (54.1% of the average) and agriculture, hunting and forestry (58.7%), while some public sectors fare little better: education (66.0%); other public social and personal services (79.6%); and health and social work (89.6%).

According to recent analysis of the returns to education in Moldova (Bozu et al, 2007), in 2006 an additional year of education increased income by 9.5%, all else being equal, a relatively high rate in comparison with other countries in the region. Returns are also higher for each additional level of completed education when controlled by economic sector, ownership and years of experience (TABLE 5 and CHART 9). CHART 10 illustrates that the rate of return to education started to increase from 2004, indicating that the lack of human capital may have started to form a major constraint on economic growth in Moldova, thus forcing employers to improve salaries in order to attract the best educated. This must also be viewed in relation to the previously mentioned dissatisfaction with salaries amongst the well educated.

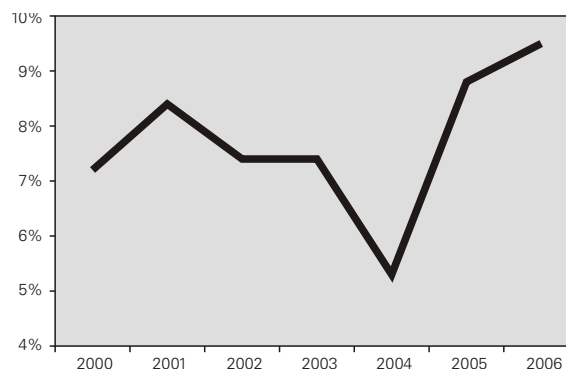
TABLE 5. REGRESSIONS OF LOG OF HOURLY WAGE ON EDUCATION LEVELS (WHEN CONTROLLED BY YEARS OF EXPERIENCE, SECTOR OF ECONOMIC ACTIVITY AND OWNERSHIP)

Variable	Value
Higher education	1.121
	(6.64)***
Vocational education	0.487
	(3.09)***
Secondary complete	0.318
	(2.01)*
Secondary incomplete	0.081
	(0.47)
Observations	10433
R²	0.212

Note: t statistics in parentheses * significant at 10%; *** significant at 1%
Source: Bozu et al, 2007

CHART 9. RATIO BETWEEN THE AVERAGE ACCORDING TO THE LEVEL OF EDUCATION AND AVERAGE SALARY IN THE TOTAL ECONOMY, 2008

Source: NBS

CHART 10. RATE OF RETURNS TO ONE YEAR OF EDUCATION (%)

Source: Bozu et al, 2007

Although there are no data available on the average monthly earnings in rural and urban areas, it is clear that wages are much lower in the former regions. This is implicit in the fact that the lowest wages are earned in agriculture, hunting, forestry and fishing; precisely those areas where most of the rural population is employed.

A closer look at the gender gap in wages shows that the incomes earned by women are worth only 73.3% of the average income earned by men. The biggest differences were noticed in industry (69.5%), education (80.2%), health and social work (80.9%), construction (82.1%), agriculture (83.3%) and financial services 70.0%. One probable explanation is that men are usually employed in the higher-ranking positions and are better paid accordingly.

1.3 INTERNATIONAL MIGRATION FLOWS

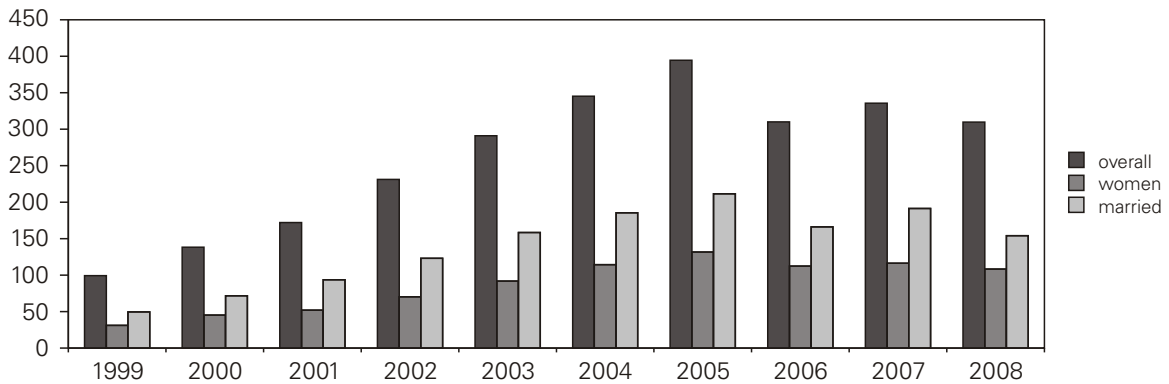
International labour migration has been one of the remarkable features in the development of Moldova over the last decade. Even as the global financial crisis continues to undermine the world economy and worsen prospects for migrants, this specificity of the country can reasonably be expected to continue for the foreseeable future. There is already quite an extensive body of research on migration and its impact on economic and human development in Moldova and the present study will simply highlight the most important trends.

Migration began to form a significant element in Moldova from the end of 1990s in the aftermath of prolonged economic recession. This was compounded by the dire effects of the Russian financial collapse which resulted in a shrinking economy, falling incomes and labour shedding. Migration therefore presented the most logical solution to overcome poverty and ensure a decent standard of living for many Moldovan households. In the early stages, migration was mostly shaped by push factors related to the lack of economic opportunities and widespread poverty at home. It should be mentioned that the nation had already begun to experience 'brain-drain' from the Research and Development sector prior to the first wave of migration at the end of 1990s. This development was mainly caused by a steep drop in state funding for this sector as a share of GDP against a background of severe economy-wide recession. One of the earlier National Human Development Reports (UNDP, 2005) noted that in the first years after independence the National Academy of Science lost over 760 associate researchers and 100 PhDs. If these earlier migration events had been included in our figures the impact of migration on HCD would appear even stronger.

While estimates of the scale of migration vary, it is clear from all the figures that migration increased from 1999, reaching a peak in 2006-2007. The NBS methodology changed after 2005, making the data for 2006 and 2007 not comparable; however, data from surveys by IOM-Moldova show that outward migration peaked in 2007 (**CHART 11**). Migrant stock rose overall more than three-fold in that period, reaching around 340,000 in 2007 or 16% of the working age population according to official estimates.³ Migration flows were predicted to stabilize in 2008, but the number of migrants actually fell by almost 8%. This decrease has mainly been the outcome of legalization campaigns that have made it easier for Moldovan migrants to make occasional visits to their home country. This became most obvious in 2008 when the migration survey was timed for Easter and the number of migrants at home for holidays led to registration of 26.5% fewer migrants than were shown in annual figures. This hypothesis is partly supported by the figures for the first half of 2009, where the number of migrants fell in the first quarter by 14%, year-on-year, but

³ Data from the National Bureau of Statistics, Annual Labour Force Surveys 1999-2008 (3 quarters), supported also by Luecke et al (2009).

CHART 11. TOTAL MIGRATION AND MIGRATION BY GENDER (WOMEN) AND MARITAL STATUS (MARRIED – BOTH MEN AND WOMEN), 1999–2008 (THOU. PERSONS)



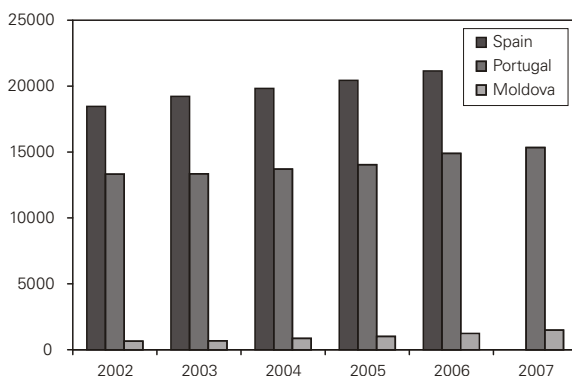
Source: NBS

rebounded somewhat surprisingly in the second quarter to +16.8%, year-on-year. However, this percentage of growth took place from a comparatively low base rate, as the number of migrants had fallen dramatically in the second quarter of 2008. The majority of migrants are young and aged between 20 and 49 years, and over a third are women. The share of married and single migrants is almost equal; figures that again emphasize the enormous stress on families and children in particular. It is no surprise that family issues are the most widely cited reason for a return home by migrants. These figures reflect a situation where the human capital created in Moldova is often put to use abroad as it is 'unwelcome' in the home economy forcing the population to leave at the most economically productive age in order to find decently paid jobs.

The migrant stock continued to grow even against the background of economic recovery in Moldova from 2000-2007; a situation that can be explained by a particular set of factors. Firstly, there is always some time lag before the benefits of economic recovery trickle down to the ordinary population. Secondly, although economic growth was quite strong throughout the period, this was mainly a process of jobless recovery that often offered few or no new openings, or even shed jobs in many sectors (the agricultural sector is quite illustrative in this respect). Thirdly, the economic growth was to large extent based on internal consumption that was mostly fuelled by remittances from Moldovan migrants. Finally, the wage gaps between Moldova and migrant host countries remained significant and this increased the role of pull factors behind outward migration from Moldova (**CHART 12**).

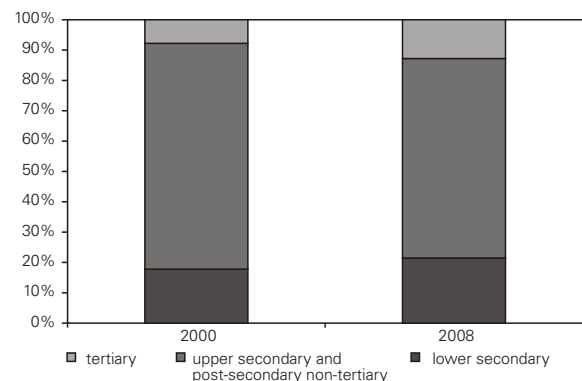
These developments led to some changes in the profile of Moldovan migrants from a consistent picture of mostly migrants with lower levels of education to a slight tendency toward well-educated migrants or prospective migrants in the last couple of years (**CHART 13**). At the same time, the data available show migrants do not necessarily view higher levels of educational attainment as a pre-condition to facilitate migration abroad.

CHART 12. GROSS AVERAGE ANNUAL EARNINGS BY COUNTRY, (EUR), 2002-2007



Source: Eurostat, NBS, authors' calculations.

CHART 13. EDUCATIONAL ATTAINMENT OF MIGRANTS, 2000 AND 2008



Source: NBS

TABLE 6. MOLDOVA EMIGRATION RATES BY AREA OF RESIDENCE, 2001-2008, (%).

	2001	2002	2003	2004	2005	2006	2007	2008
Urban	4.6	5.3	6.0	7.2	7.6	6.3	7.0	6.6
Rural	4.8	7.1	9.4	11.2	13.3	10.3	11.1	10.1

Data: BNS, LFS data.

TABLE 6 shows most migrants come from rural areas, which is only reasonable given that economic opportunities are scarcer and poverty is more widespread here. However, the share of urban migrants has also started growing in recent years; a development that can also be attributed to the increasing role of pull factors in labour migration from Moldova.

Unfortunately, no official data is available on the skill profile of migrants. Some survey data is available, but this has not been updated since it was first published (ETF 2008 and 2009). This information was fully explored in previous reports, and the key findings regarding the skills of migrants were:

- Migrants do not expect their skills to be used abroad, thus most migrants, including the well-educated, end up in menial jobs;
- Prospective migrants pay little or no attention to pre-departure training, ignoring the potential opportunities for better paid jobs as a result of such training. Younger urban migrants seem to be more aware of such opportunities but the training they undertake mostly consists of language courses;
- The mismatch between skills of migrants and jobs taken abroad may widen further as the share of migrants with higher education increases.

All in all, migration continues to exert a somewhat negative influence on HCD in Moldova. This influence can be better explained through consideration of the following features:

- Most migrants are relatively young or of working age;
- The share of well-educated migrants is growing;
- The model of economic growth in Moldova is not conducive to job creation and many people are forced to leave in order to ensure a decent income;
- Migrants are employed in low-skilled jobs and lose the skills they acquired back home.

Furthermore, migration has a negative impact on the social and family fabric, as many children are left without parental care which may indirectly lead to lower educational attainment by the children of migrants, especially in the earlier stages of education. Even though migrant parents tend to spend more on educating their children the provision does not necessarily lead to higher quality education.

There was some expectation that the short-term perspective of a negative impact on human capital from migration would be countered in the long-term by returning migrants contributing newly acquired skills and entrepreneurial spirit. Although there are cases of returning migrants, it is too early to draw consistent conclusions.

Moldova continues to offer scarce job opportunities against a background of a redundant labour force, rising youth unemployment and persistent mismatch between labour market needs and education system outcomes, meaning it appears that migration will be inevitable for a number of years to come. The Government should approach this issue by helping to facilitate the legal labour migration of Moldovan migrants while holding on to the long-term aim of revitalizing the domestic economy to ensure that economic growth brings new decently paid jobs. If this policy is not adopted, the investment in education and HCD will largely benefit the migrant host countries rather than Moldova itself.

Additional consistent efforts are needed in this area. Moldova currently has only 6 agreements on labour migration with other countries, namely: the Russian Federation, Ukraine, Belarus, Azerbaijan, Italy and Portugal. There are no agreements with other important destination-countries, such as Spain, Greece or France. Moreover, Moldova has no agreement with Romania, which is both a destination and transit country for Moldovan labour migrants.

Another important issue is recognition of Moldovan diplomas in migrant host countries. This issue is widely discussed and the International Organization for Migration reports that it is often raised by representatives of the Moldovan diaspora abroad. In 2010 the Ministry of Education signed bilateral agreements with Hungary and Ukraine, and revised the existing protocol with Romania. Extended positive outcomes in this area depend on bilateral negotiations and agreements with individual countries.

The Mobility Partnership between Moldova and European Union (EU)⁴ from 2008 is an indication of the importance of migration. Irrespective of the political instability of 2009, the progress made on this initiative reflects the will of EU member states and the Moldovan government to facilitate regular migration. As was stated in Section 1.2 the availability of well-paid jobs in Moldova is a necessary pre-condition to achieving circular migration, alongside the dismantling of the formal barriers that impede circular migration. Legal and protected migration would not only mean that Moldovan migrants are properly treated and protected, but it will also result in higher incomes, as legal labour migration would lead to Moldovan migrants finding jobs more relevant to their skills and educational backgrounds.

KEY FINDINGS ON THE STATE OF HUMAN CAPITAL IN MOLDOVA

- Moldova inherited an advanced degree of human capital from the Soviet period. However, this legacy was undermined by the economic collapse, poverty and brain drain early in the transformation, with lasting consequences.
- In the last decade, the general educational background of the population has improved to some extent, as is suggested by the growing share of population with upper secondary and post-secondary education. This improvement is largely due to the combined effect of demographic evolution and a favourable tendency toward longer education, especially in urban areas.
- Breakdown by age, however, shows a skewed educational background for 25-34 year-olds: with a higher than average share of tertiary education and higher than average share of lower secondary education providing testimony of growing inequalities in access to education. Rural males are the worst affected group in this age cohort.
- The depletion of human capital in rural areas should be viewed as a foremost concern by the Moldovan government. The gap between rural and urban areas has widened significantly in terms of both economic prosperity and human capital.
- Rural areas experience a combination of low employment quality, a high share of agriculture and low diversification of economic activities. The employment rate has declined seriously, from 59.2% in 1999 to 41.0% in 2008, due to heavy dependence on the agriculture sector, low agricultural productivity and the lack of alternative economic opportunities.
- Human capital does not always find openings on the domestic labour market, as is suggested by the decade-long declining employment rate. The employment rate for women has consistently been significantly lower than that of men, implying persisting discrimination that leads to unequal employment opportunities and wastage of female human capital (moreover recent trends show that more Moldovan women than men are enrolling in university education).
- Low quality employment is translating into environments where human capital is practically unable to develop further. Indicators of low quality employment include: mismatch between formal qualifications and skills demanded; under-employment and the waste of human capital; and low wages. Official wages in Moldova are the lowest in Europe and do not appear to duly reward the private investment made in education. Income in certain sectors may reflect low labour productivity.
- This study revealed a positive correlation between level of education and quality of employment, with tertiary education graduates more appropriately employed than lower graduates from among the interviewed people. They registered the lowest level of mismatch between training and employment with only 26.3% saying their specialization does not correspond to their current professional activity and only 2.6% said their skills are not used at all in their job.
- The highest wages were earned by employees in sectors registering high-rate growth (construction, transport and communication, financial activities and energy) while the lowest were in the public sector.
- Non-participation has been on the increase in the Moldovan population as a consequence of ageing, emigration and the increased propensity to invest in education, with a varied impact on HCD.
- Migration has provided opportunities for human capital to become manifest abroad if not at home. In its early stages the migration phenomenon had a clear brain-drain effect, with many highly-educated individuals leaving Moldova in search of a better life. Later on, the picture has become more mixed, for while migration has positive economic effects, its dimension forms a drain on Moldova's human resources, attracting those migrants who are young and increasingly well-educated. Most of them end up employed in menial jobs and there is therefore a risk they will lose the skills acquired in Moldova. Circular migration should be facilitated without delay.

⁴ This initiative offers an opening to foster the development of regional labour migration policies as it implies a sustainable cooperation framework with 16 EU member states. It also includes a series of initiatives aimed at consolidating institutional capacities promoting legal circular migration, the creation of favourable opportunities for investing migrant remittances and the reintegration of returning migrants.

2. HUMAN CAPITAL FORMATION FOR THE FUTURE: ACCESS TO EDUCATION AND YOUTH TRAINING

2.1 ACCESS TO EDUCATION

Moldova entered the transition period with relatively high enrolment rates in primary and lower secondary education due to compulsory enrolment at these levels during the Soviet period. These levels of education remained mandatory after independence and while the enrolment rate for basic education is still high, a decreasing trend has been noted. Enrolment in non-mandatory levels of education has evolved in a more significant manner; initially decreasing in the early transition period as a result of economic decline, increasing poverty rates and unaffordable additional household expenses. By 2000, the enrolment rate in upper secondary education had decreased to 60% and the negative trend was only seen to reverse as economic recovery set in 2001, recovering to 84% in 2007 (**CHART 14**). The same trend has been seen in the tertiary education enrolment, which has increased by 10% since 2001 to 41.2%.

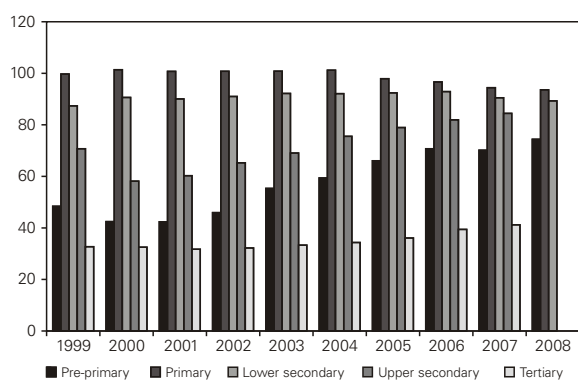
Differences in enrolment between population groups

Despite legal stipulations on compulsory enrolment in primary and lower secondary education (GoM, 1995), not every child attends basic education. Also, many respondents to the SIE did not give a positive view of access to education. Only 16% of respondents fully agree that there are mechanisms that guarantee access to education for all, 36% only partially agree and 48% mostly disagree with the statement. This outcome reflects very low public confidence in the State capacity to guarantee universal access to education.

Significantly lower enrolment rates in rural compared with urban areas reflect income differences between these two populations, the shortage of schools or excessive travel distances to school in some rural areas and the work performed by rural children that bars them from full enrolment in educational system (**TABLE 7**). Gender disparity is not significant in enrolment in basic education (**CHART 15**) and here equal access to education is a reality. This view is also confirmed by the SIE results, where 87.8% of respondents disagree with the statement that girls have limited access to education.

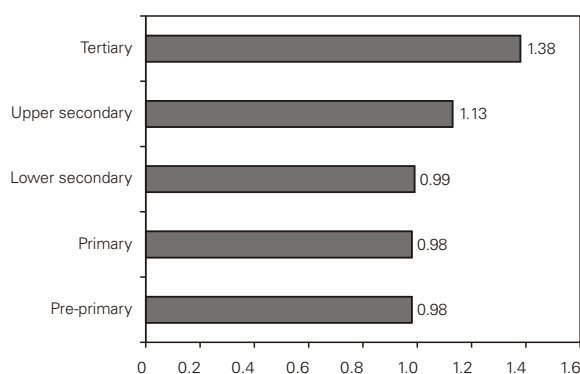
Opportunities for children with special needs (children with disabilities) are limited, as is borne out by both the SIE and focus groups. Only 3,792 of the 14,861 registered disabled children are enrolled in schools.⁵ According to the SIE about 35% of respondents do not think that children with disabilities can be integrated into the educational system, and only 30% fully agree that they can be integrated. These children usually study in specialized schools or at home and very

CHART 14. GROSS ENROLMENT RATIO BY LEVEL OF EDUCATION (%)



Note: Data for 2008 are from NBS
Source: UNESCO database

CHART 15. GENDER PARITY INDEX FOR ENROLMENT IN EDUCATION, 2007



Source: UNESCO database

⁵ These figures come from two separate sources: data on disabled children from the National Office of Social Insurance and data for enrolled children from National Bureau of Statistics.

TABLE 7. GROSS ENROLMENT RATIO BY LEVEL OF EDUCATION, RESIDENCE AREA AND GENDER (%)

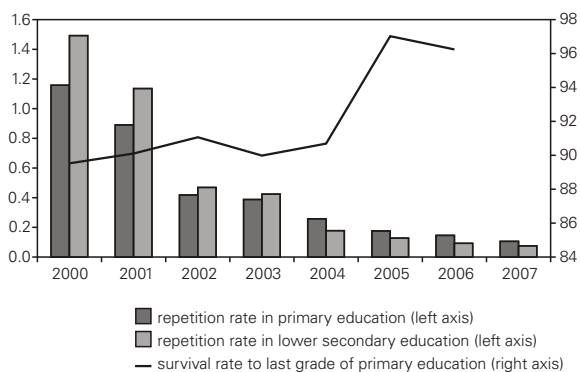
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Pre-primary									
Total	38.5	42.4	52.4	58.7	63.7	68.6	68.5	71.1	72.7
Male	39.8	43.1	52.5	59.6	64.5	69.1	69.0	71.5	73.2
Female	37.1	41.7	52.3	57.7	62.8	68.1	67.9	70.6	72.3
Urban	56.5	58.6	71.9	77.8	82.0	86.7	85.4	87.4	89.2
Rural	29.1	33.8	44.8	49.0	54.2	59.1	59.4	62.0	63.5
Primary									
Total	93.5	92.4	92.7	92.4	91.0	87.8	87.6	87.7	87.5
Male	99.4	99.7	99.7	100.1	98.6	97.2	95.2	95.0	94.4
Female	99.4	99.2	99.3	99.6	97.2	96.1	93.6	93.0	92.7
Urban	101.3	101.3	101.7	104.0	102.8	102.4	100.5	100.9	101.6
Rural	98.3	98.5	98.3	97.7	95.5	93.7	91.4	90.5	89.4
Lower secondary									
Total	90.2	91.1	92.3	92.2	92.5	93.0	90.5	90.1	89.3
Male	89.7	90.5	91.6	91.5	92.5	92.5	90.9	90.3	89.8
Female	90.7	91.7	92.9	92.9	92.5	93.4	90.1	89.8	88.8
Urban	95.6	95.1	95.9	95.6	96.6	97.7	95.4	95.4	95.1
Rural	86.7	88.5	90.0	90.1	90.1	90.3	87.9	87.3	86.3
Population aged 16-18									
Total	62.4	66.7	69.2	71.0	75.4	75.9	79.7	76.7	80.2
Male	57.2	61.5	65.3	67.5	70.7	71.9	76.0	72.3	74.6
Female	67.8	72.2	73.1	74.5	79.9	79.9	83.5	81.1	86.0
Urban	72.9	76.5	77.7	80.6	84.0	84.1	87.2	87.2	89.7
Rural	55.2	60.2	63.7	65.4	70.4	71.3	75.4	71.0	73.1

Source: NBS

rarely in mainstream schools. The subject of integrating children with disabilities in mainstream schools is much debated and many teachers are hostile to the process. The poor physical infrastructure provides a further barrier in access to education for children with physical disabilities.

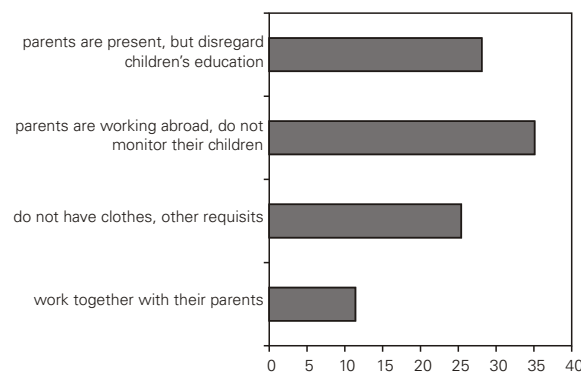
Survival rate to the last grade of primary education has improved since 2005 and is relatively high at 96.2% (**CHART 16**). The drop-out rate in primary education fell from around 10% before 2004 to 3-4% afterwards. Repetition rates in primary and lower secondary education have decreased significantly, but it must be stressed that the decline in repetition rates does not represent improved student performance, so much as changes in legislation that allow promotion to the next grade with insufficient progress made. Since 2005, the repetition rate in Moldova has decreased significantly on previous rates and in comparison with the countries of Central and Eastern Europe.⁶

CHART 16. SURVIVAL AND REPETITION RATES (%)



Source: Trans MONEE and UNESCO Database

CHART 17. REASONS FOR NON-ENROLMENT IN BASIC MANDATORY EDUCATION IN RURAL AREAS (%)



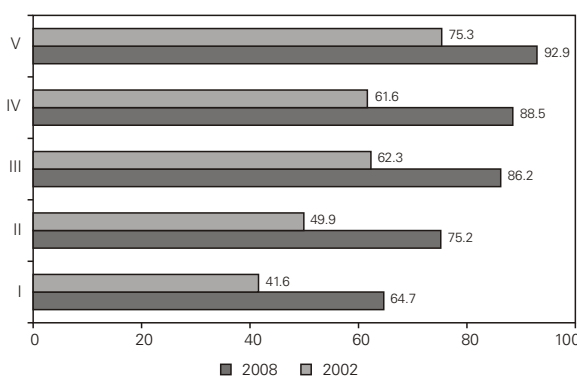
Source: Institute of Education Sciences of Moldova, 2007

Low income is not considered a main cause of non-enrolment in basic mandatory education by all sources. According to a survey conducted by the Institute of Education Sciences on teachers and school managers in 128 rural settlements in Moldova,⁷ parental neglect and incompetence, especially among emigrants, play a major role in non-enrolment (CHART 17). However, as the survey sample only covered the supply side of education this could represent a biased view as the opinions of parents (the demand side) might have presented a stronger picture of such barriers like the high cost of education. Moreover, rural areas experience a form of 'hidden non-enrolment', where children are formally enrolled but rarely attend classes.

Rural – Urban divide

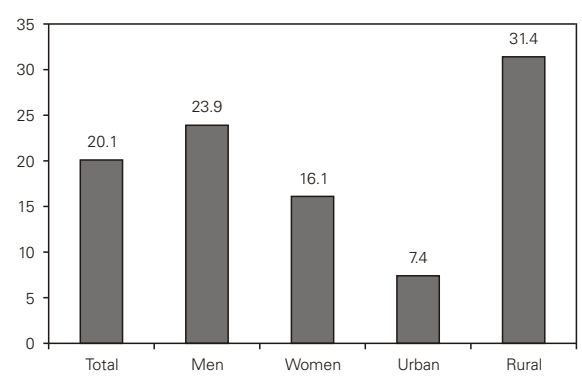
The disparity between rural and urban enrolment rates deepens further in the higher levels of education. There is no disaggregated rural to urban data available on enrolment rates, but the NBS does provide data on enrolment of 16-18 year-olds; the normal age for upper secondary level students. According to these data, enrolment is much higher in urban zones (89.7%) than rural areas (73.1%) (TABLE 7) and the gap has widened during the last decade. The higher concentration of low income households in rural areas is apparently the main determinant of lower enrolment (see enrolment ratio by income quintiles of population in CHART 18) and the gender difference in enrolment rates becomes more significant at this age when enrolment rates for girls exceed those of boys (see TABLE 7). Boys from poorer families tend to enter the labour market earlier as there are limited financial resources for continued education.

CHART 18. ENROLMENT RATIO OF POPULATION 16-18 YEARS OLD BY INCOME QUINTILES (%)



Source: NBS

CHART 19. EARLY SCHOOL LEAVER RATE, 2008 (%)



Source: NBS

7 Institute of Education Sciences (2007) quoted in UNDP and IPP (2010).

The gap increases even further for the population aged above 18. The early school leaver rate⁸ is more than 4 times higher in rural than urban areas (**CHART 19**) and the difference between groups has increased in recent years. The SIE identifies low interest in education as a leading reason for rural individuals to leave the educational system.

Wider enrolment of urban students in higher levels of education is not necessarily a testimony of better performance in general schools as final test results for graduation at general secondary education (lyceums) are better in rural than urban areas (**CHART 20**). This is a surprising outcome in view of the fact that the average students in rural areas come from poorer families and often face greater difficulties in studying as they usually have other work to undertake within the household. The higher grades in rural areas may also not reflect true performance, as close relations or kinship between the inhabitants of small communities (relatives, friends and neighbours) may have an influence on the grading. In addition, teachers tend to assess students in comparison to others in the class. Therefore, the grades of less well-prepared students from a weaker class in the rural area might be higher than those of students with better knowledge in the more competitive classes of urban areas. This feature was confirmed in the focus groups and was backed by the statement that teachers may grade the effort made by students rather than the outcome and that rural teachers who have a better connection with their students may mark higher accordingly.

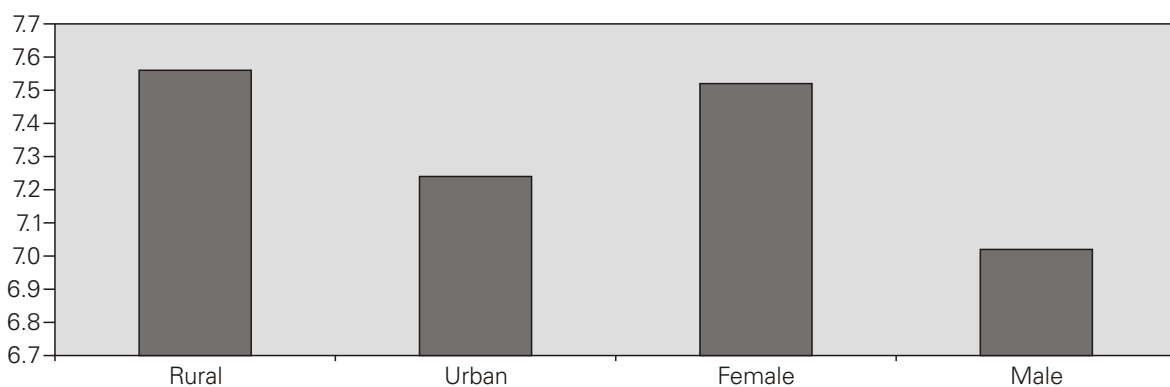
The government sets quotas for enrolment in state-funded places at post-secondary non-tertiary and tertiary education for rural and urban populations (and for other disadvantaged groups such as the disabled and orphans) in order to ensure equal opportunities for students of all origins in the higher levels of education. However, the tuition fees only represent a fraction of the cost of continued education and the cost of living is often far higher than the fees. This represents a disadvantage for students from outside Chisinau and means, in practical terms, that tertiary education is not affordable for many rural students.

Changing preferences in education: higher education versus vocational education

Rural and urban students make different choices for non-mandatory levels of education. Vocational education is currently mainly an option for lower income groups that cannot afford university, as the educational attainment of the population by area of residence illustrates, knowing that lower income households are more common in rural areas. Also, the SIE shows that 5 out of 7 respondents who graduated from vocational school agree with the statement that this was the most economical solution for them and that they could not afford any other option. Another explanation may be that children's education is influenced by their parents' education: whereby the lower average educational background of the rural population would explain why the share of students enrolled in vocational education is higher for rural populations and the share of students enrolled in higher education is greater for the urban population.

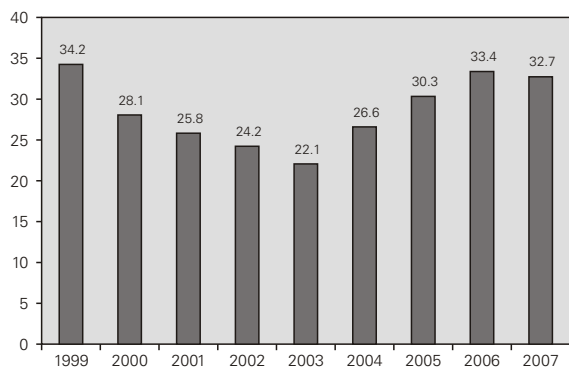
The demand for vocational education decreased tremendously during the transition period. The number of students enrolled in vocational education is five times lower than the number of students enrolled in higher education, while these were equal during the Soviet period. Enrolment in vocational education represented 32.7% of total secondary education in 2007 (**CHART 21**) after peaking in 2006 following government efforts to promote vocational education by increasing public funding and strict limits on enrolment in tertiary education. This measure aimed to address the imbalance in the labour market where employers continually complained of the scarcity of skilled workers while the demand for vocational education amongst students was constantly decreasing. If vocational education was to become more attractive, there was a clear need for updated curricula and equipment in vocational schools along with improved living and learning conditions

CHART 20. AVERAGE GRADES FOR GRADUATION TEST IN LYCEUMS IN 2008 (MAXIMUM GRADE OF 10)

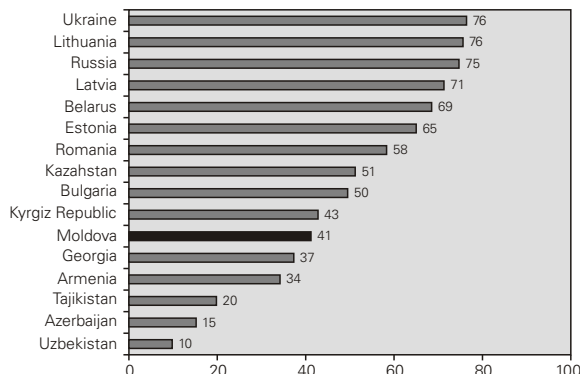


Source: Ministry of Education and Youth, quoted in National Human Development Report 2008, forthcoming

⁸ Early school leaver rate is calculated as the percentage of the population aged 18 to 24 with at most lower secondary education and not in further education or training.

CHART 21. ENROLMENT IN VOCATIONAL EDUCATION AS % OF TOTAL ENROLMENT IN ISCED 3, 2007

Source: UNESCO Database

CHART 22. GROSS ENROLMENT RATIO IN HIGHER EDUCATION IN SOME COUNTRIES OF THE REGION (%)

Source: World Bank, World Development Indicators, 2007

for students. So far, initiatives have not yet produced the desired results and positive outcomes are unlikely given that the basis of the approach is misleading: Moldova should be recruiting more students in both vocational education and training (VET) and higher education rather than attempting to redress the balance between the two sectors of education.

Enrolment in higher education increased over the last decade on the basis of a few fundamental contributory factors. Firstly, fee-based enrolment in higher education was almost unlimited after 2000, offering increasing opportunities to enter higher education. State-based enrolment in higher education (non-fee paying) represented only between 20-25% of the total while the remaining 80% of students are paying tuition fees of less than USD 1,000 per year; a rate that has become more affordable to many families as migration flows have increased. However, there is an interesting relationship between migration and investment in education as enrolment in higher education has increased more for urban students even though most migrants are from rural areas. This demonstrates that remittances are put to different uses by the two populations. This may be because in urban areas they represent an additional source of income that increases the propensity to invest in education; while they are the sole or most significant source of income for households in rural areas where they are used to pay for food and to meet basic needs.

The gross enrolment ratio in higher education in Moldova remains lower than in most of the countries in the region (**CHART 22**) and despite increased enrolment in higher education, this is still not affordable for a large share of the population. This is partly due to tuition fees, but also to the additional expenditure involved even where state-funding is available.

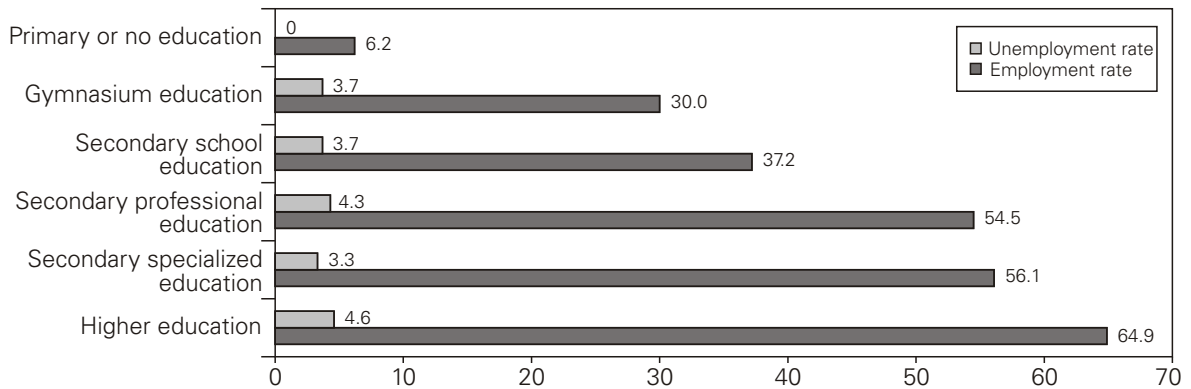
2.2 INCENTIVES FOR EDUCATION

Better opportunities

Despite the shortcomings of the Moldovan educational system (decreasing quality, increasing costs), the educational profile of the population has improved over the last decade as a result of the better 'general' opportunities that education offers. Some 86.4% of respondents to the SIE agreed that education is the key to a good life. This is confirmed by the fact that higher education appears to provide greater employment opportunities with the employment rate increasing further up the scale of education (**CHART 23**).

Also, additional education is seen to ensure better paid jobs by 57.1% of SIE respondents, which is confirmed by statistical information on population distribution by quintiles of salaries and of expenses and by educational attainment (**CHART 24** and **CHART 25**). Empirical analysis on returns to investments in education conducted for 2006 showed a rate of return of 9.5% for an additional year of education; a rate that had increased in comparison to 2003, indicating that human capital is becoming more of a constraint for Moldova (Bozu et al, 2007). Consequently, poverty risk is highly correlated with level of education, as is confirmed by data on poverty rates by level of education of head of household (**CHART 26**).

CHART 23. EMPLOYMENT AND UNEMPLOYMENT RATE BY LEVEL OF EDUCATION – 2008 (%)



Source: NBS

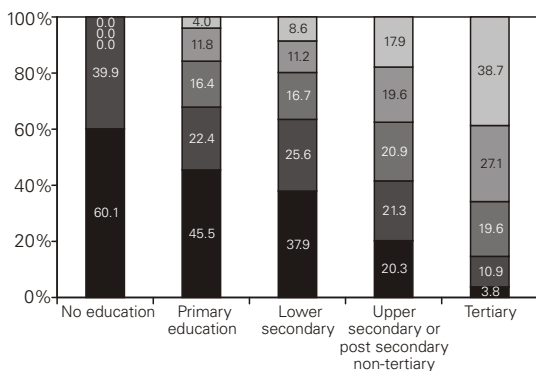
Affordability of education

Despite the general understanding that more education offers better opportunities in life, this option is simply not affordable to many citizens. Some 86.3% of SIE respondents think continuing beyond basic education is too expensive and 21.2% of respondents were unable to continue to a higher level of education because of the cost (CHART 27).

Urban populations are more inclined to invest in education. This is confirmed by statistical data and by the SIE outcomes where only one of the 33 respondents in the urban area intends to stop studying at general upper secondary education level, while 2 of the 19 rural respondents plan to do so. Also, the overall number of students willing to continue with post-graduate studies is increasing. This is partly due to implementation of Bologna system in tertiary education since 2006, which has made it easier to acquire an academic degree.

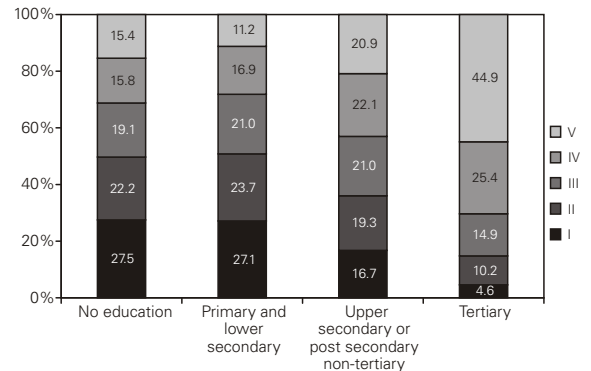
The SIE also shows that despite the perceived high price of education, half of the respondents would like to pursue additional education, while around 70% are willing to invest on average 32% of their income in education. Parents are willing to invest even more than this on the education of their children (45% of their income on average) and the population in rural districts is willing to invest more in their children’s education than their urban counterparts (49% to 38% on average). This does not necessarily mean a higher nominal value of investment or higher interest in investment in education among the rural population. It simply reflects the comparatively lower revenues of rural families; and, that it proves more expensive for rural individuals to pursue their education due to the fact that much of the offer of education is only available in towns or the capital city. Another reason is that rural parents are willing to invest in their children’s education, in the belief that their children will have a better life than them.

CHART 24. DISTRIBUTION OF EMPLOYED POPULATION BY WAGE QUINTILES AND LEVEL OF EDUCATION, 2008



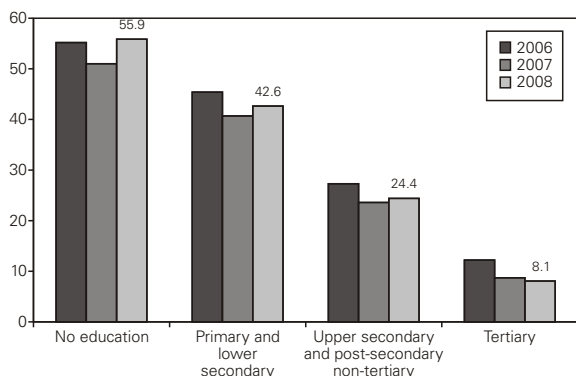
Source: NBS

CHART 25. DISTRIBUTION OF POPULATION BY CONSUMPTION QUINTILES AND LEVEL OF EDUCATION, 2008



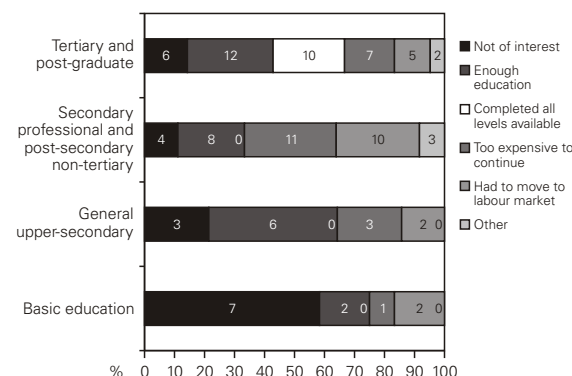
Source: NBS

CHART 26. POVERTY RATE BY LEVEL OF EDUCATION OF HEAD OF HOUSEHOLD, 2008 (%)



Source: NBS

CHART 27. DISTRIBUTION OF RESPONSES TO THE QUESTION "WHY DID YOU STOP EDUCATION AND NOT CONTINUE TO THE NEXT LEVEL?"



Source: SIE, 2009

Attractiveness of fields of study

Another important factor in the demand for education, especially tertiary education, is that studies in fields like the social sciences, business and law, where the majority of students are enrolled (more than 50%), are not very demanding while a diploma in these areas renders similar or even higher social prestige than a diploma in science or engineering. According to the SIE, 48% of respondents with higher education graduated in the social sciences, business and law, while 60% of those in vocational education and post-secondary non-tertiary education graduated in engineering, manufacturing and construction. Despite the high interest in social sciences, business and law, the SIE shows there was no clear guarantee that graduates would find a job afterwards and 21% completely disagreed with the statement that this would be the case. Most students cited their choice of field was based simply on their interest in the subject.

However, the SIE also shows that not all students are happy with the field of study in which they graduated. About 26% of social science, business and law graduates would opt for another field of study if they had to choose again, because it was below the expected level. The share of engineering, manufacturing and construction graduates who would not repeat the same field of study is even higher at 40%. However, these are mostly vocational graduates rather than tertiary education and their dissatisfaction can be explained by the outdated curricula and impracticality of the knowledge and skills acquired. Having said that, the social science, business and law graduates more frequently than others (52%) stated that what they had learned at school had given them insufficient knowledge for their job. However, 24.5% of those respondents who said they would change their initial field of studies would have chosen the social sciences, business and law and 46.9% would have chosen the humanities and arts.

Most of the respondents still enrolled in education think their job will be related to their field of studies (75%) and that education will help them to find a job. This contrasts with the fact that they rate the skills they acquire in education as middling in value, apart from communication and ability to learn skills, which they rate highly.

Some 58% of urban residents would choose the same field of study because it is close to what is needed on the labour market while only 27.5% of rural residents gave this reason. Also, there are gender differences in the inclination towards the same field of study, for while 77% of male respondents would choose the same field of study, only 66% of females would do so. Although male graduates usually rate education higher, this could be a knock-on effect from employment patterns where male graduates find jobs more easily, especially in the 25-34 age group.

In summary: personal interest is the most common motive behind the choice of field of study along with good reputation of the fields of study. Many students in engineering, manufacturing and construction opted for this as the cheapest solution, and this motive mainly applies to students of vocational schools and colleges. Thus, many students choose their educational institution according to personal interest without any career guidance while parents are usually ready to invest in their children' education with no clear idea of the labour market situation, sometimes being unaware of how it may have changed since their own graduation.

Quality of education: incentive or disincentive?

Low quality of education may represent a disincentive to investment in education. A proxy measurement can be seen in the 30% of SIE respondents who disagreed with the statement that the quality of secondary education is high, while 30.1% fully agreed with the statement. PIRLS and TIMSS data on average scores for mathematics, science and reading show slightly diverging situations, but the latest data cover only 2003 and 2006 as Moldova did not figure in the latest reports (**TABLE 8**).

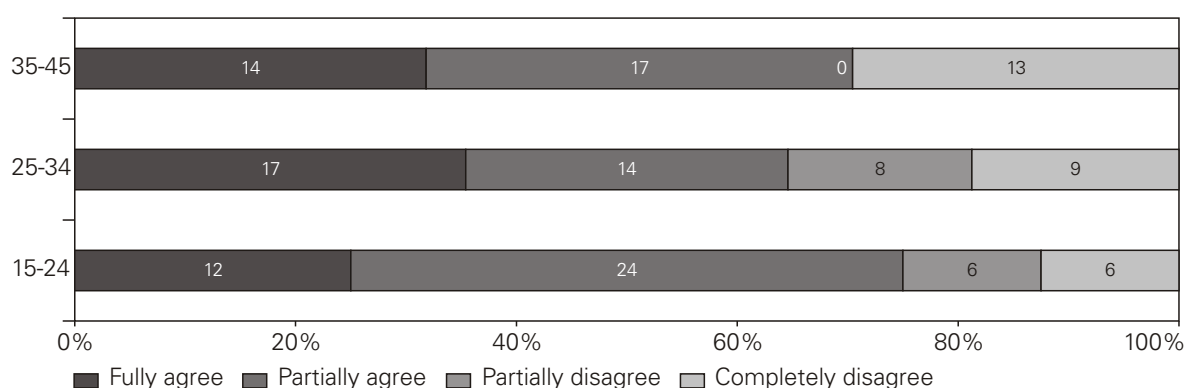
Surprisingly, respondents from rural areas appear to be more satisfied with the quality of secondary education, despite evidence indicating that the quality of education is lower in rural areas; an element also confirmed by the focus groups. Also, the general level of satisfaction with the quality of education is higher for the 25-34 age group and lower for the other two groups (**CHART 28**). This denotes the decreasing quality of education, as respondents in the 15-25 age group who studied more recently had the lowest share of full agreement with the statement that secondary education is of high quality. The share of respondents in the 35-45 age group fully satisfied with the quality of education is also lower, as these are people with children enrolled in secondary education.

TABLE 8. STUDENT ACHIEVEMENT IN MATHEMATICS, SCIENCE AND READING, 2006

	Mathematics achievement (grade 8) average score	Science achievement (grade 8) average score	Reading achievement (grade 4) average score
International average	467	474	500
Moldova	460	472	500
Estonia	531	552	
Latvia	508	512	541
Russian Federation	508	514	565
Lithuania	502	519	537
Armenia	478	461	
Romania	476	470	489
Bulgaria	475	479	547

Source: TIMSS and PIRLS International Study Center, 2006

CHART 28. DISTRIBUTION OF ANSWERS TO THE STATEMENT "THE QUALITY OF SECONDARY EDUCATION IS HIGH" BY AGE GROUPS (NO.)



Source: SIE, 2009

Other indicators of the quality of education can be seen in the preparation of graduates at their entry point on the labour market and the data collected via SIE are not bright on this score. Thus, vocational school graduates feel they have high or medium preparation levels with flexibility, communication and independence skills, while they rate their technical skills and the use of technology less highly. In post-secondary non-tertiary and higher education the level of flexibility, communication and independence is rated high on average, while the level of technical skills, use of technology and foreign languages is medium. This is an indication of the role of this institution in creating an environment where students are prepared for life challenges rather than being taught a high level of the knowledge and skills needed on the labour market.

2.3 EDUCATIONAL INFRASTRUCTURE

School infrastructure

Over the last decade the number of students in primary and secondary general education has decreased by about 30% as a result of a shrinking school-age population. This was reflected in a consequent reduction in the number of schools and teachers (**TABLE 9**). According to the Ministry of Education there are 116 schools with less than 100 students and 414 schools with 101-200 students in Moldova. This means there are only 56,355 students in schools with a capacity of 115,501 places (UNDP and IPP, 2010). These schools form a large drain on resources, at the same time if they were not there, students from small settlements would be disadvantaged and additional barriers would be created in access to education. Despite the small distances between communities in Moldova, non-existent or poor transport systems and very poor road infrastructure do not allow for daily transportation of students from one community to another. Moreover, the mayors of these small communities are among the strongest opponents of school closure which they view as the first step in the liquidation of the mayoralty.

The average class size and student to teacher ratio decreased from 2000 (**TABLE 10**), but the expected collateral increase in quality did not occur. Firstly, the number of students decreased disproportionately across the country with

TABLE 9. NUMBER OF STUDENTS, TEACHING STAFF AND EDUCATIONAL INSTITUTIONS IN PRIMARY AND GENERAL SECONDARY EDUCATION

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ >2009
Number of students (thou)	631.2	620.3	605.2	580.5	548.5	519.0	493.5	462.8	436.1
Number of teachers (thou)	42.4	42.6	41.7	42.7	41.1	41.0		38.6	
Number of educational institutions	1,573	1,584	1,587	1,583	1,577	1,558	1,546	1,541	1,526

Source: NBS

TABLE 10. AVERAGE CLASS SIZE AND STUDENT TO TEACHER RATIO

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009
Average class size	23	23	22	22	22	21	21	20	19
Pre-primary	22	22	20	20	20	20	20	18	18
I-IV	23	22	22	21	20	20	19	18	18
V-IX	24	24	23	23	22	22	21	21	20
X-XII	22	22	23	23	22	22	21	20	20
Students to teacher ratio	15		14	14	13	13	12	12	12
I-IV	21	20	19	19	18	17	17	16	16
V-IX	14	13	13	12	12	12	12	11	11

Source: NBS

higher average class sizes in rural to urban areas (24 to 20 students per class in lower secondary education and 23 to 18 students per class in general upper secondary education) (UNDP and IPP, 2010). This is largely due to the unwillingness of young graduates to teach in rural areas where the quality of life is limited and subject to constraints. There is also a significant difference from one district to another. In the Chisinau and Balti municipalities, the average number of students is more than 25 while it is less than 25 in other districts (Ionita, 2009). The Law on Education stipulates that class size in primary, lower secondary and general upper secondary education should not exceed 20 students, but this is not respected in most schools where the number of students may exceed 35. This is especially the case in those schools in Chisinau with a good reputation. Despite the difference in the number of students per class, teachers still rely on the same teaching methods and are not retrained when they have to work with a different number of students.

The Law on Education, meanwhile, does not stipulate a minimum number of students per class, with reference made only to primary classes in rural areas that may have less than 20 students. The lack of such a stipulation allows for very small classes to continue, generating highly inefficient public spending on education in some rural areas. This is sometimes due to the fact that there are insufficient children to form a larger class, but in many cases also to the unwillingness of the local public authorities and school directors to lay off teachers employed in these areas who would be unable to find alternative jobs. Interviews and focus groups revealed that school directors are partly responsible for the poor quality of education as they sometimes keep on teachers who do not fit the professional criteria, obstructing the entrance of the few young graduates who are willing to return to rural areas.

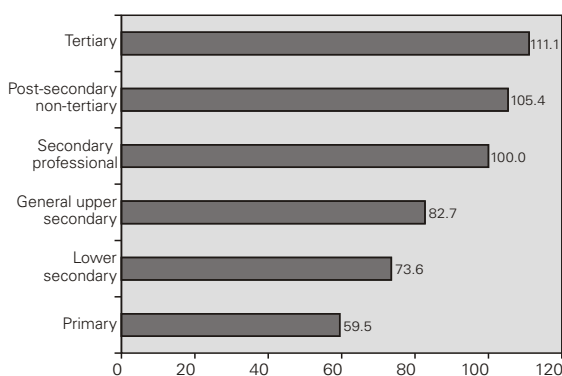
Teaching staff – the main determinant of quality of education

The decreasing number of students is not the only cause of the declining number of teaching staff. Low wages in the education sector, at only 66% of the average wage (CHART 29), provide little incentive for students to go into the education field and work in the sector. There was an annual total of between 2,000 and 3,000 vacancies in the educational system in 2003-2004, although the number of children has decreased somewhat more recently and there are not so many vacancies. However, the problem will resurface more acutely in the near future, as demographic statistics show the number of students is set to rise while the number of teachers is falling and very few young professionals are entering this field. Most teachers (59%) have over 18 years of work experience. The share of teachers over the retirement age is constantly increasing, while the share of fresh graduates is decreasing (CHART 30). The share of teachers with a first degree is relatively low (9.1%) (UNDP and IPP, 2010).

The Government made an attempt to tackle the issue of ageing teaching staff and other specialists and the higher turnover of teachers in rural areas through a programme offering free housing and financial support to new university graduates and post-graduates in order to tempt them back to rural areas (GoM, 2008). The outcome of the programme is not visible yet as the implementation period has been short. However, the scheme has already drawn complaints as only specialists returning to rural villages can benefit from the scheme, while the economic situation in some small towns is no better than in villages. The programme could be revised following economic assessment of the municipalities and analysis of local presence of specialists.

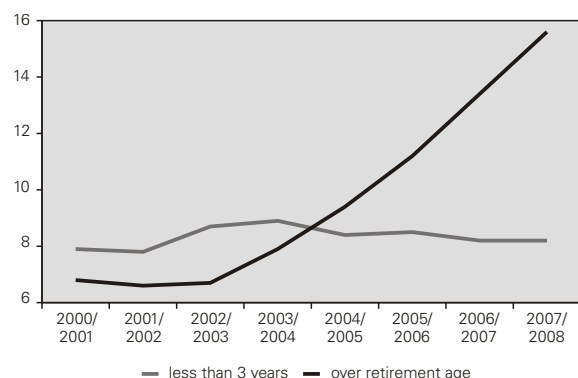
Rural areas are significantly disadvantaged. Almost 90% of SIE respondents think some areas (meaning rural areas) are highly disadvantaged. This is reflected in the number of students per class or teacher, but also in other outcomes. Analysis of the difference in shares of students studying English as a foreign language gives one example of the

CHART 29. WAGES OF TEACHING STAFF BY LEVEL OF EDUCATION COMPARED TO AVERAGE WAGE PER ECONOMY, 2008 (%)



Source: NBS

CHART 30. SHARE OF TEACHERS IN PRIMARY AND GENERAL SECONDARY EDUCATION BY YEARS OF EXPERIENCE (%)



Source: NBS

limitations of many schools as this subject provides greater opportunities for further studies but is unavailable in poorly equipped schools despite student interest (CHART 31).

Choices for education

The quality of education is not satisfactory in secondary specialized and higher education institutions either according to the SIE respondents. Around 24% of graduates would not choose the same educational institution mainly because it does not provide the expected level of education (CHART 32). However, the share of graduates who would choose the same school is also very high at 76%. For lower secondary and general secondary education the rates are even higher at 93% and 87.5% respectively. This is not a perfect indicator of the quality of education, but rather demonstrates the limited options available to students. Most students would choose the same school on the basis of its usefulness at preparing students for the challenges of life in both rural and urban districts. The lack of choice available to rural children is evident in the responses relating to non-subject activities and the learning environment as a basis for choice of school, with a negligible number of rural children selecting this option.

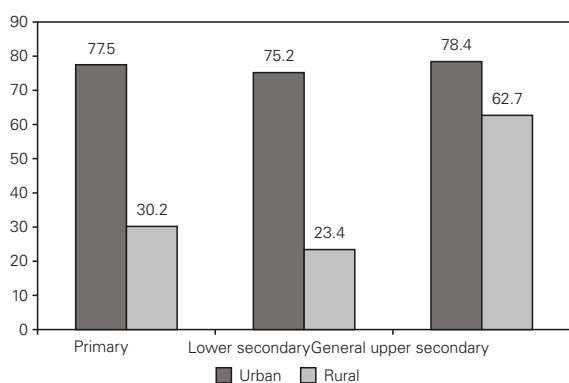
Most students in rural areas therefore fully agreed with the statement that they went to a certain school because it was the most economic solution (74%) and because there were no other options available (61%). Some urban children displayed the same pattern but this was not prevalent. Interestingly, teaching skills were not considered a valid basis for choosing the same school in either urban or in rural areas. This may be due to widespread student dissatisfaction with the quality of teachers or the fact that they think of teachers as given constant that does not vary from one school to another.

In vocational education, the quality of teachers is the main reason for choice of the same school (reported by 4 out of 5 graduates). The small sample size makes it difficult to draw strong conclusions about graduates from vocational schools, but it is clear that most do not feel it prepares them for life challenges or that the subject or non-subject materials are useful. They indicate that vocational education provides them with skills below the level expected and required on the labour market.

Graduates of post-secondary non-tertiary educational institutions are those least likely to choose the same school again (60%). The main reason cited for this is that schools are below the expected level. Half of the graduates who would not choose the same college would go for higher education as it offers the greater opportunities seen in employment statistics. Most respondents that would choose another school opt for more education, most of them for higher education (18 out of 28), with a larger share in the 25-34 age group and among urban residents.

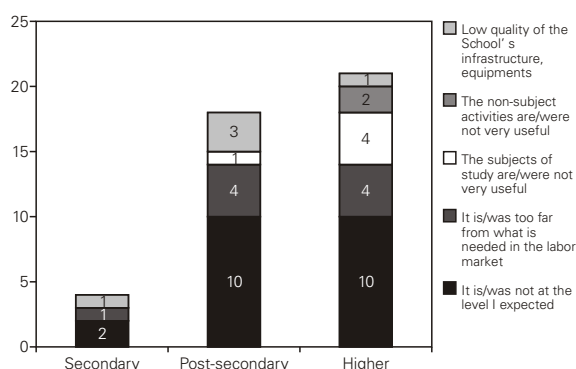
In tertiary and post-tertiary education, 77% of students are satisfied and would choose the same educational institution again. The main reasons cited for their choice are that the school prepared them for the life challenges and that the subject and non-subject materials were good. However, educational supply in tertiary education is limited and concentrated in certain institutions according to the field of study. As a result, students interested in a certain field of study may have a very limited choice or, indeed, no choice of educational institution. The figures also show that the learning environment and teachers do not represent an incentive to choose the same school and around about 80% of those who would not choose the same educational institution cite a lower than expected level of education.

CHART 31. SHARE OF STUDENTS STUDYING ENGLISH AS A FOREIGN LANGUAGE BY LEVEL OF EDUCATION AND AREA OF RESIDENCE – 2007 (%)



Source: NBS

CHART 32. REASONS FOR NOT CHOOSING THE SAME SCHOOL AGAIN



Source: SIE, 2009

The general opinion is that dissatisfaction with the quality of education is set to increase in the short- and medium-term as those students currently enrolled in education will be unable to find jobs or perform well at their jobs. Adult training will therefore become an important option in the future and efforts by the State and private enterprise will have to be directed towards the requalification of the graduates of today.

This outcome is broadly anticipated in view of the fact that outdated equipment in some vocational schools means the practical abilities of graduates are not applicable on the labour market. In higher education and colleges, the number of students per member of teaching staff has increased and classes for some fields of study (social sciences, business and law) are overpopulated to the extent that the student no longer fit in the class rooms. These issues have not been adequately addressed so far, but should be made a government priority in order to increase the quality of education, provide incentive for investment in education and strike the balance between demand and supply on the labour market.

Social environment and activities outside educational institution

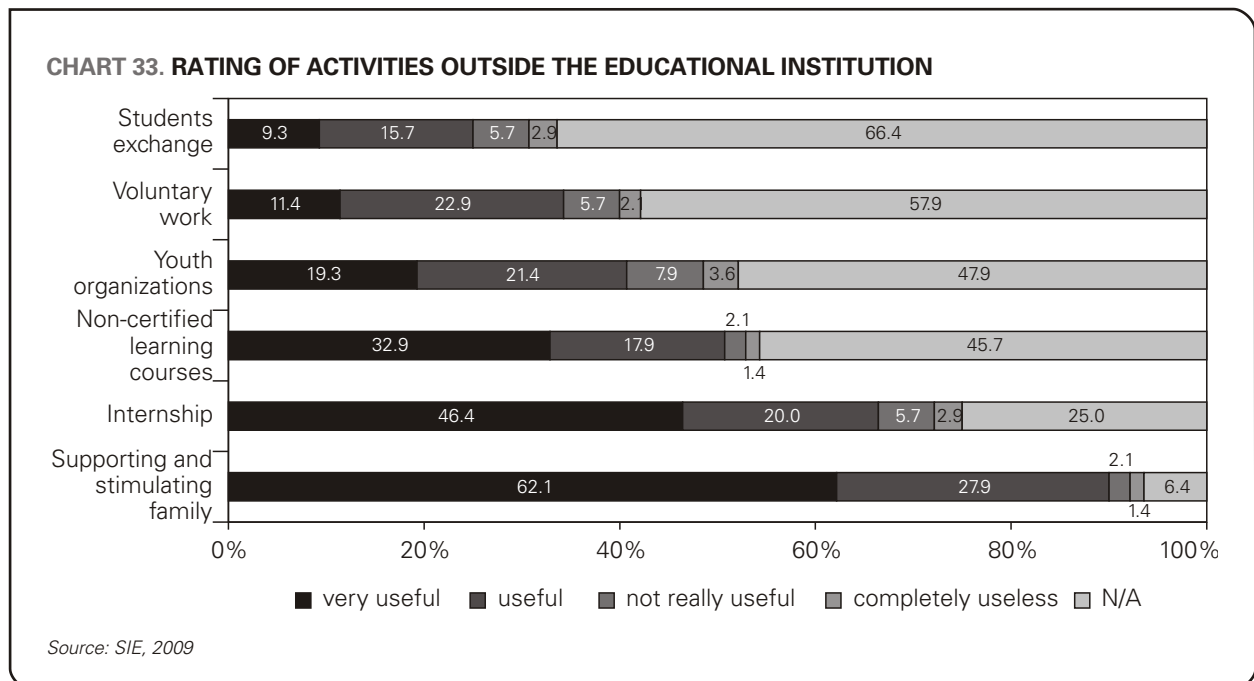
The differences between rural and urban areas are determined not only by differences in the quality of education and professional efficiency of the teaching staff, but also by the level of information in the community. The further the locality is from Chisinau, the lower the level of information in the locality (media, internet, libraries).

These differences between rural and urban areas already generate phenomena such as the depopulation of some localities, and focus groups participants believe these will continue together with the intensification of anti-social phenomena if serious action is not taken. They call for measures such as investment in rural infrastructure, increased teacher salaries, improved teacher qualifications and implementation of a sound teacher certification system.

Respondents rated experience outside the educational institution highly (**CHART 33**). Both the SIE and focus groups confirmed that respondents from urban areas generally participated more intensively in such activities. At the same time, rural respondents tended to rate this type of experience higher. This might be due to the difficulties in accessing such openings and the higher valuation of these opportunities, or may be due to them comparing favourably with the quality of education. Even if extra-curricular activities are mostly undertaken at higher levels of education, when students are already in urban areas, rural students find it difficult to integrate and take part in such activities, as they concentrate harder on their basic studies than urban students.

The number of participants in such activities shows an increasing trend, when analyzed by age groups. Indeed, the respondents who took part in such activities are more in the 15-24 and 25-34 age groups compared to the 35-45 group. Even though no progress can be seen between the 15-24 age group compared to the 25-34 group, this does not necessarily mean the situation has worsened. Many of these activities are undertaken at higher levels of education, especially tertiary education, whereby many of the younger respondents are still waiting for the opportunity to become involved further on in their education.

Students in the social sciences, business and law are most active in outside school activities on average and they tend to rate them higher. Most of this group graduated from tertiary education and have a less heavy curriculum meaning



they have more time available to become involved in such activities as a student. Internship is, however, better rated by graduates and students in other fields of studies, the highest ratings for internship actually come from post-secondary non-tertiary graduates. This is indicative of the weakness of the social sciences in Moldova, where students are taught general subjects and are not prepared to the labour market demands.

Female respondents tended to benefit from activity in youth organizations, non-certified courses and student exchanges, while male students had more experience related to part-time jobs and voluntary work. This fits with the general tendency of men getting jobs earlier than women.

2.4 INVESTMENT IN EDUCATION

Public expenditures on education

Over the last decade, public expenditure on education in Moldova has increased both as absolute value and as a share of GDP (**CHART 34**). Although the Law on Education states that the government must spend no less than 7% of GDP on education annually (with no clear explanation of the set limit) the State was unable to meet the commitment after the 1998 regional crisis and an amendment was passed to cancel this. Public expenditure on education in 2009 was 9% of GDP; a rate higher than the average for the OECD countries (5.7% in 2006).

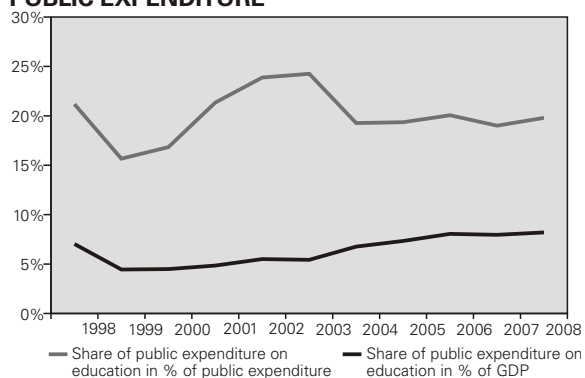
Average public per student expenditure also increased three-fold on average (**TABLE 11**). Public expenditure per student in vocational education is the highest, partly in line with findings in other countries, but also due to inefficiency. Vocational education is expensive due to the need for expensive materials as well as smaller class sizes. Also, only a limited amount of additional funds are available for vocational education as it is mainly an option for students from low

TABLE 11. AVERAGE EXPENDITURE PER STUDENT BY LEVEL OF EDUCATION (MDL)

	2003	2004	2005	2006	2007	2008
pre-primary	2,388	2,920	3,647	4,832	6,410	7,757
primary and general secondary	1,378	1,669	2,178	3,220	3,933	4,032
vocational	3,708	3,991	4,432	6,122	7,267	9,258
post secondary	2,135	1,527	3,366	4,333	4,576	5,393
tertiary	1,561	1,403	1,795	2,100	2,687	3,267

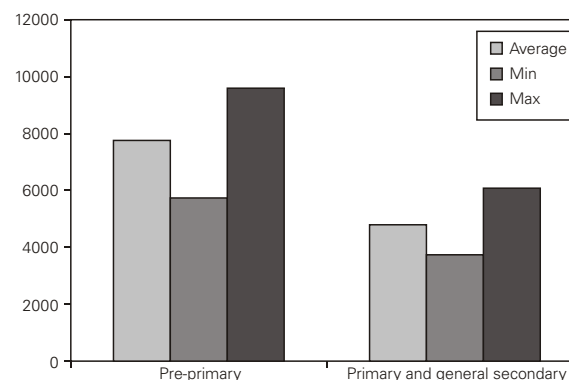
Source: EXPERT-GRUP calculations based on data of Ministry of Finance

CHART 34. PUBLIC EXPENDITURE ON EDUCATION AS SHARE OF GDP AND TOTAL PUBLIC EXPENDITURE



Source: NBS

CHART 35. ANNUAL EXPENDITURE PER STUDENT IN THE COUNTRY. 2008 (MDL)



Source: EXPERT-GRUP calculations based on Ministry of Finance data

income families who are not willing to pay tuition fees. Public spending per student enrolled in higher education is lower than in vocational and post-secondary non-tertiary education, but the high contributions made by students mean the real cost of tertiary education is far higher.

There are significant differences in per student expenditure across the country (**CHART 35**). Despite stipulated norms for per student expenditure in pre-primary, primary and secondary education, the final overall amount per student is different in district towns and adjacent rural localities. This may be the outcome of slight differences in norms for pre-primary education and oversight of such criteria as class size and school size, and of varying first tier local authority contributions to education funding. Rural authorities are less likely to be able to fund financial support as local revenues are low, therefore they are more dependent on transfers from higher levels of government. Differences in financing are reflected mainly in school infrastructure as salaries are set and paid equally across the country.

Private expenditure on education

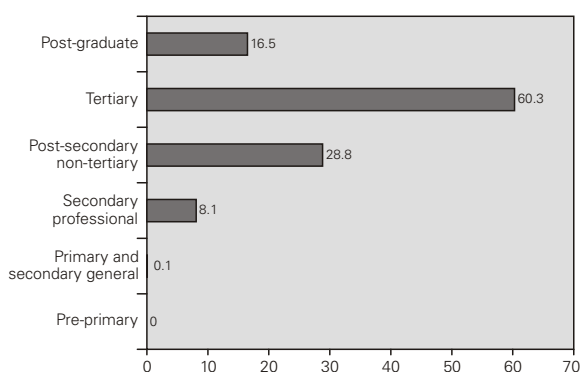
Public expenditure per student has increased at all levels recently. However, this is still insufficient to ensure good pay for teaching staff, adequate learning infrastructure in all educational institutions and the required quality of education. Unsurprisingly, the national public budget for education has been bolstered by funds from other sources that made a significant contribution to the educational system. Income known as 'special means' from 'services provided' (tuition-fees), rent, grants and donations accounted for a total of 12% of all funding in the educational system, with the rate lowest in mandatory education and varying upwards to 60.3% in other levels of education (**CHART 36**). The major source of non-public funding comes from tuition fees, as a high percentage of students in post-secondary non-tertiary and tertiary education pay these (**CHART 37**).

The major share of expenditure at each level of education goes on wages (**TABLE 12**). In tertiary education a significant proportion of the pay is funded from the 'special means' of the institutions, and rates of pay would otherwise be very low. Non-teaching staff earn less than teachers on average, but their high numbers mean correspondingly high salary costs. In 2002, non-teaching staff represented 37% of all staff in general schools and 48% in vocational schools, compared with the OECD average of 27%. The ratio is high in vocational schools because of the number of support staff involved in caring for students outside of school hours, mostly in the student accommodation (WB, 2005). More than half the capital investments and capital maintenance in tertiary education institutions is also funded by 'special means' in both private and public universities.

Financial support to students is assigned on the basis of student performance (average grades per semester) and represents a large part of the costs funded from public money. This type of expenditure increased more recently, especially in professional education where government policies aimed to stimulate enrolment.

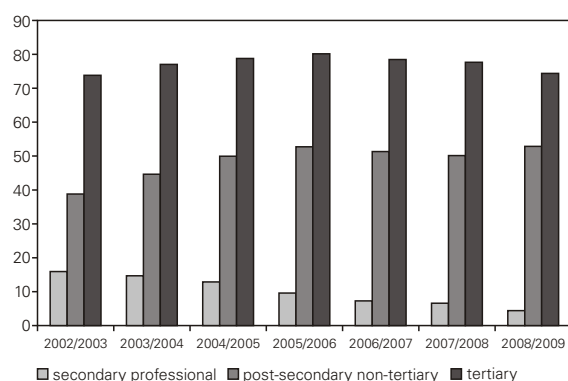
Tuition fees are not the only barrier to education for some students. While these fees are included in special funds and reported to the Ministry of Finance there are many other formal and informal payments that add to the cost and help generate inequity in access to education. Although no data is available on these informal payments, the general opinion is that these are higher in urban areas and the focus groups reported that rural parents' associations have a lower capacity for revenue collection. This results in a degree of disadvantage for children from poor urban families and also creates a barrier for children from rural communities who would like to move to an urban school in pursuit of a better education. Formal payments include book rental fees and payments for living in student accommodation. The lack of sufficient accommodation means potential additional costs again for students resident outside Chisinau (**TABLE 13**).

CHART 36. SHARE OF SPECIAL MEANS IN TOTAL FINANCING OF EDUCATION BY LEVEL OF EDUCATION, 2008 (%)



Source: Ministry of Finance

CHART 37. SHARE OF STUDENTS PAYING TUITION FEES BY LEVEL OF EDUCATION (%)



Source: NBS

TABLE 12. STRUCTURE OF EXPENDITURE ON EDUCATION BY LEVEL OF EDUCATION, 2008 (%)

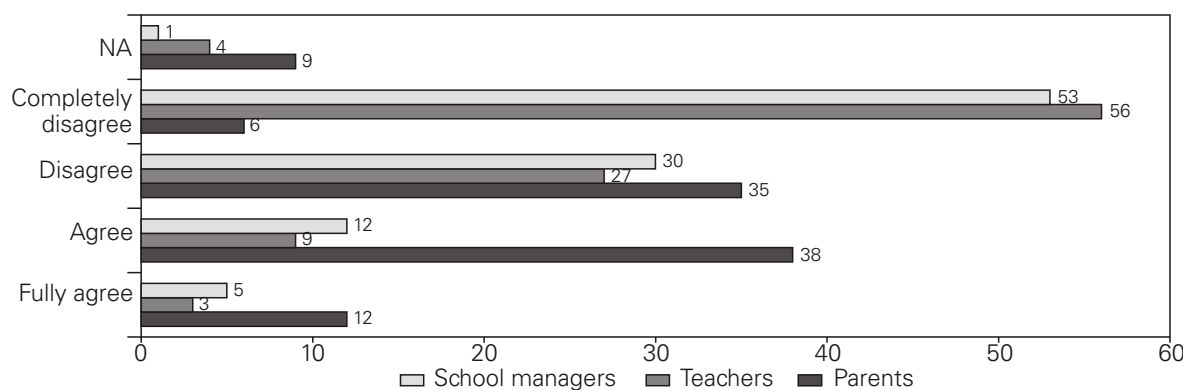
	Pre- primary	Primary and secondary general	Secondary professional	Post- secondary non-tertiary	Tertiary	Post- graduate
Pay of specialized staff (including teaching staff)	15.3	36.0	26.1	33.3	32.8	26.6
Pay of non-teaching staff	21.1	15.2	12.3	14.7	17.1	12.0
Social and medical mandatory contribution	9.4	13.1	10.0	12.3	12.9	9.7
Utilities	12.0	8.6	10.0	7.6	7.5	6.3
Books and other publications	0.1	0.3	0.2	0.2	0.3	0.0
Food	21.0	7.1	7.6	0.4	1.5	0.5
Capital investment and maintenance	10.7	9.3	1.7	5.1	12.4	11.1
Scholarships	0.0	0.0	18.9	14.8	10.1	26.8
Other expenses	10.4	10.4	13.2	11.6	5.4	7.0

Source: Ministry of Finance

TABLE 13. SHARE OF STUDENTS LIVING IN STUDENT ACCOMMODATION BY LEVEL OF EDUCATION (%)

	2003	2004	2005	2006	2007	2008
secondary professional	38.9	51.6	54.4	46.3	45.9	45.5
post-secondary non-tertiary	0.0	1.3	30.9	29.9	33.7	30.1
tertiary	20.7	16.2	17.5	14.4	17.0	16.6

Source: Ministry of Finance

CHART 38. RESPONSES TO THE STATEMENT “CHILDREN FROM POOR FAMILIES ARE DISADVANTAGED, BECAUSE THEY CANNOT AFFORD ADDITIONAL PAYMENTS FOR SCHOOL”

Source: Informal payments in pre-university education and equal access to education, Institute for Public Policy, 2007

Moreover, informal payments for renovation, additional lectures and even bribes for higher grades and/or exam passes are common in Moldova (IPP, 2007b). Additional lectures are common practice in all schools and the demand for them is artificially created by teachers in order to increase their income. Despite the rhetoric of fighting corruption and eradicating informal activities, the current system of formal and informal payments in education may be seen as ultimately convenient for the government of Moldova, reducing pressure to increase teacher pay as this is boosted by informal payments.

A survey conducted by the Institute of Public Policy in 2007 showed that expenditure on pre-university education runs at an average of 17% of total expenditure in those households (IPP, 2007a). Additional payments at secondary level accounted for 13.3% of public funding for secondary education. This obviously implies that children from poor families have fewer opportunities, as was confirmed by 50% of parents, 12% of teachers and 17% of school managers (**CHART 38**).

Although formal payments in school create inequality and undermine equal access to education, some participants in the focus group saw them as a way to improve the quality of education (in secondary education). They believed that educational institutions that collect money from students place greater emphasis on teacher qualifications, while those institutions that act only with public funding offer a lower quality of education delivered by less well-qualified teaching staff.

KEY FINDINGS ON FORMATION OF HUMAN CAPITAL THROUGH EDUCATION

- Rural children start forming their human capital from a position of disadvantage, with an education enrolment rate much lower than that of children in urban areas. While the rural-urban gap for pre-primary education narrowed somewhat in the last decade, it widened for the primary education and stayed unchanged for the upper levels. The disparity between enrolment rates deepens as education level increases and it looks set to increase in future in correlation to the current gap in primary education.
- Three barriers limit access to education for rural children: low income of rural households; the lack of schools or considerable distances to travel to schools in some rural areas; and child labour. Many rural students find it is too expensive to continue beyond basic education and compulsory official and unofficial payments at different levels of education levels place significant constraints on access.
In the opinion of teaching staff, parental neglect represents another impediment to access. This applies especially to the families of emigrants, where children are left without proper supervision, most commonly in rural areas. The situation of disabled children is of particular concern as many attend specialized institutions rather than being integrated into mainstream schools. Other families, children and teachers have negative opinions that add to the inadequate physical infrastructure. Feedback from the survey and focus groups revealed that marginalization of disabled children is more common in rural environments.
- Choice in rural areas is limited and children may have to move to towns or cities in pursuit of better education. They more often abandon school before completing basic education or opt for secondary vocational schools. The amount of payment requested is a factor that heavily influences the choice of educational institution. The intention of continuing to higher education is a dominant criterion in choosing a secondary school, and in rural areas children are unlikely to continue to university for economic reasons and also due to the correlation with the educational background of their parents.
- Good quality was often appreciated by SIE respondents. Education generates positive expectations, in terms of both economic and social returns, and private expenditure has increased in Moldova alongside the propensity to study up to university level. Adult respondents referred to their teachers, the school environment, or extra-curricular activities as positive learning factors while younger respondents were less optimistic in their opinions.
SIE results also demonstrate that quality matters when choosing an institution. The reputation of educational institutions and the field of studies are amongst the main criteria in formulating choices. University education is still a preferred option due to the better chances of finding a decent job, the higher remuneration earned on the labour market and the 'wider horizons' offered in life.
- Dissatisfaction with the quality of education is also present, with low quality generally referred to in terms of insufficient updating of teaching staff. An acute lack of young teachers is noted in rural zones, and there are no teachers to cover some subject areas (for example very few students are offered the chance to learn English in rural areas). Access to extra-curricular activities, which are as important as formal studies, is also limited. These disparities result in reduced opportunities and undermine HCD in rural children.
- Another important association is made between low quality education and mismatch with the labour market. For vocational education in particular, insufficient and irrelevant skills and low social prestige are quoted. Many of those interviewed at this level of education said they would not choose the same fields of study and institutions again. They cited reasons that included the dated curricula, obsolete technological provision, low teacher interest, the worthlessness of knowledge and skills and poor social environment. The skills acquired in vocational schools prove irrelevant on the labour market, especially in the more requested fields, and many graduates end up migrating abroad.

- Investment in education does not always lead to the expected return in Moldova. Expanded higher education attainment, notably in urban areas, does not always lead to better use of human capital in the labour market. The recent phenomenon of university graduates migrating abroad or performing jobs that are below their level of formal preparation seems to indicate a trend that is going to stabilize. Career guidance does not exist in schools, so the choice of level of education and field of studies are not matched to demand. Students prefer higher education, especially the social sciences, business and law, while labour market demand is for skilled qualified workers and technical specialists. The enrolment in vocational education has decreased tremendously during the transition period, mainly in consequence of the obsolescence that makes it unattractive. Universities on their part are not responding to the current demand for technical qualifications.
- For such a poor country, Moldova invests a great deal of public money in education (9% of GDP). Whether the resources are used efficiently is however questionable.

3. HUMAN CAPITAL FORMATION FOR THE PRESENT: EDUCATION AND TRAINING FOR ADULTS

Human capital is not static. It must be maintained and individuals must continuously update their skills as technologies and work processes change. The last chapter will examine how education and training in Moldova reaches the population that has already left the formal education system. Spending on training is increasing, but it has started from a very low level.

3.1 ADULT TRAINING

Adult training is performed by specialized institutions in Moldova that design and follow educational programmes according to the area of specialization and the methodological norms established by the Ministry of Education (GoM, 2004). There are several types of such institutions:

- Academy for Continuous Professional Training;
- Institute for Continuous Professional Training;
- Specialized centres or faculties for continuing professional training created within universities;
- Qualification and re-qualification programmes for people with secondary and tertiary education within universities or institutions of post-secondary non-tertiary institutions;
- Qualification and re-qualification programmes for employees conducted by institutions of vocational education or by trade union training centres;
- Corporate courses for improving qualification of some categories of employees organized by companies;
- National network of distance learning based on Internet applications.

The institutions that provide adult training are oriented toward the professional needs of employees and are designed to facilitate access to education. Thus, the target groups of these institutions are: the already employed who aim to improve their professional qualifications; unemployed people; homemakers; individual workers; people returning to work after a long period of unemployment; returning migrants; pensioners; people with disabilities; and anybody wanting to improve or change their qualifications.

The focus groups conducted under this study support the opinion that the activity of these institutions is quite inefficient. Participants argued that the impact is limited by the lack of a modern technical basis for supplying quality training programmes. Additionally, bureaucratic barriers to curriculum change make the training rigid and irrelevant to current market needs. As a result, the current supply of adult training programmes does not always ensure quality qualification or requalification of the labour force.

Many participants in the focus group conducted in the rural district stated that the Government does not contribute to adult training at all and that this function is performed by the private and non-profit sectors.

According to the SIE, 35.4% of those who would like to change job stated that they lack the knowledge specific to their ideal job and 27.7% said they lacked the personal abilities. This goes some way toward explaining why most companies adapt training programmes for new employees to concentrate on technical skills. The same survey revealed that the biggest share of these employees are educated to post-secondary non-tertiary level (30.4%) and have elementary occupations (52.2%) mostly in the agriculture and construction sectors. The biggest share of employees who stated that they lack the personal abilities for their ideal job have tertiary and post-graduate education (77.8%) and are mainly professionals (33.3%). Therefore, we can observe that employees with higher education, working in highly labour intensive sectors (e.g. services), have different constraints in comparison with those involved in agricultural and construction work who have lower educational attainment.

Most respondents (57%) see additional training as the best way to acquire the skills they lack for their ideal job. Another group of employees stated that they can access those skills in their current job (27.8%). These are indicators of the positive perception that the population as a whole has of the benefit and necessity of adult training programmes to an extent that is similar for all employees irrespective of educational attainment. However, there are some differences related to employee occupation. Thus, the majority of respondents performing elementary occupations in agriculture and construction, professionals and technicians stated they can acquire the skills they lack from training providers while

most of the respondents classified as ‘legislators, senior officials, and managers’, ‘clerks’ and ‘service workers and shop and market sales workers’ (according to ISCO classifications) considered they can acquire those skills in their current job.

More women than men said they can acquire the skills they lack from training providers (62.5% in comparison with 53.2%), while more men stated they can get those skills in their current job. Women also seem more inclined to undertake additional education or training (74% of women respondents in comparison with 64.7% of men). The same survey revealed an apparent paradox in the perception of adult training in rural areas; for while 61.3% of respondents here stated the skills they lack can be obtained from training providers (a bigger share than the 52.5% in the capital district), 46.6% of them stated they would not like to undertake additional education or training (a share much bigger than the 20.6% in the capital city). This possibly confirms the view that the rural population perceives the importance of adult training and education but cannot afford it, meaning that the rural versus urban income gap is the main reason behind discrepancies in rural to urban access to additional education and training.

Surprisingly, while most employed respondents would like additional education or training (70.8%), the unemployed would not like it (63.6%). This can be explained by the fact that educational attainment level is not the main constraint on an individuals’ integration into the labour market. For example, many of the unemployed have a high reservation wage (returned migrants or family members of migrants). Also, many of the unemployed cannot afford additional education or training and are sceptical in terms of the outcome.

The demand for adult training programmes is high, confirming the value Moldovans place on education and training and the need to update competences acquired through formal education. The outcome of formal education does not match employer demands, as was concluded in the previous chapter and in the ETF labour market study of 2008 (ETF, 2009). The majority of respondents who would like additional education or training are also willing to pay for it (31.2% are willing to pay all of it and 43% for some of it). The survey revealed that the propensity to invest in education depends on an individual’s financial situation with the majority of the unemployed (62.5%) and inactive population (50%), as well as self-employed workers⁹ (50%) stating that they are not willing to pay for additional education or training. Respondents are willing to invest an average of 23.6% of their own income in additional training.

Despite the fact that most entrepreneurs are reluctant to invest large amount of money in training programmes, most of those who provide training stated that these programmes are very important for increasing employee productivity and for more efficient use of technologies. The same surveys showed the achievement of marketing objectives as a result of adult training programmes were less important, meaning their impact on maintaining or increasing the market share is less significant.

Only a few companies of those questioned allocate funds for training programmes abroad. This mostly relates to big companies, usually with foreign capital, where the training is conducted in the partner mother company located outside the country.

Another illustrative fact is that out of the 24 surveyed companies just one, operating in the banking sector, had resources from international donors and none of them received financial support from the public authorities. The most common reasons cited by respondents were a lack of information on grants for funding training programmes, along with what many companies perceived as the small chance of winning a contest for a grant.

Local public administrations do not participate actively as training providers partly due to their low fiscal autonomy and poor local budgets. The Law on Local Public Administration also does not specify the responsibilities and functions of local governments in providing training for different categories of the population, and this is another obstacle. Local budgets allocate only symbolic amounts for training, which is devoted to civil servants and focused on general abilities, such as use of a personal computer (PC), and training programmes are not open to outsiders. Local public administrations also often participate as beneficiaries of training programmes organized by international organizations and local NGOs. Local level training for the unemployed is performed by the regional offices of the National Employment Agency (NEA).

3.2 PRIVATE SECTOR INVOLVEMENT IN THE SKILL FORMATION PROCESS

Public and private expenditure on adult training

Expenditure on adult training by public authorities and the private sector grew more than two-fold in real terms in the last ten years, with the private sector playing the lead role (**CHART 39**). Private sector expenditure on professional training soared, while that of local public budgets barely doubled. However, expenditure from the national budget also

9 The majority of the self-employed work in the agricultural sector.

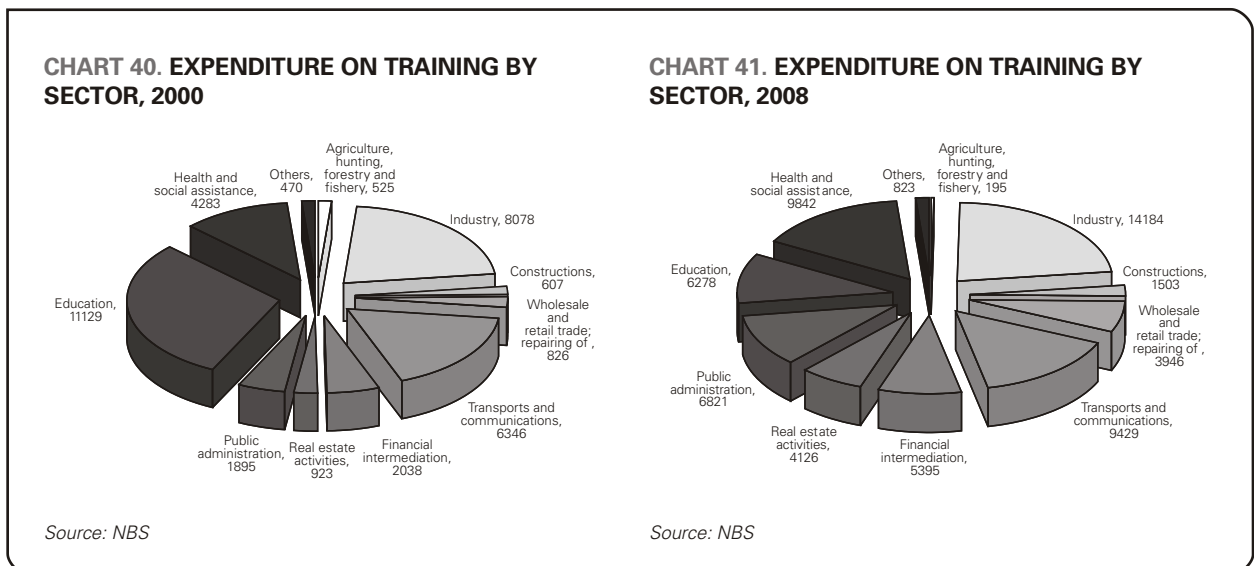
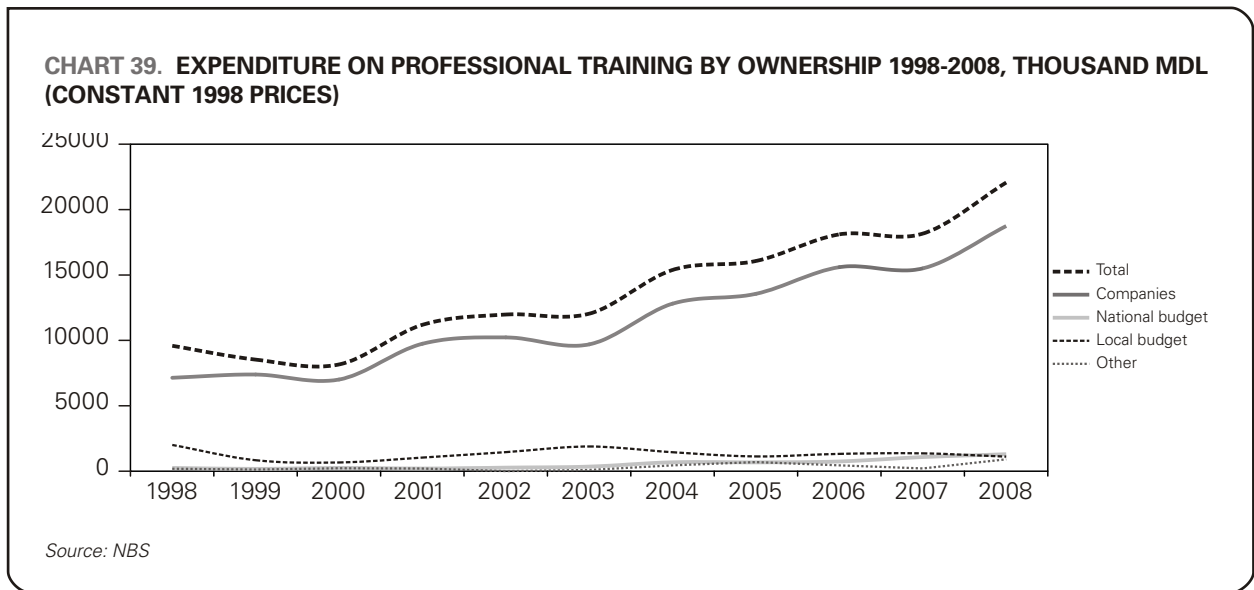
expanded robustly although from a very low base rate. Most expenditure from both national and local budgets is directed toward the training of public servants.

Private sector expenditure on training is not distributed evenly across the sectors. Expenditure on training in some sectors increased considerably, while it lagged in others (CHART 40 and CHART 41). Charts 40 and 41 show that while expenditure on training grew at a healthy rate in the services, industry and public administration sectors, it actually fell in agriculture. This official data is supported by the information obtained in the companies survey conducted as part of this research.

This survey data shows that the majority of companies provide training for employees, a fact that indirectly supports the official data on spectacular increases in company expenditure on training. However, there is a clear divide between urban and rural businesses, with the latter being less inclined to provide worker training. This observation is particularly relevant in the case of agricultural companies.

Agricultural companies: little focus on training

None of the four agri-companies interviewed provide training for employees, although two were involved in donor-led short-term training programmes three or four years ago. The most cited reasons for not providing such trainings are: 'lack of funds' and 'never considered providing training'. At the same time, most of these companies recognized training needs of their employees, such as on technical skills, and they were aware that training would have positive effects on labour productivity, lead to better technology use and help maintain or extend market share. Unsurprisingly, most of the companies stated they would be interested in providing training for employees in the future. Many of these companies have little awareness of the training fund opportunities offered by NGOs or donor organizations.



As these companies do not provide training, it is reasonable to ask how they ensure the skills they need. Most of the companies either rely on experienced workers (the low level of technology in many Moldovan agricultural companies means experienced workers are easy to find, as most people are used to agricultural labour) to help less experienced workers, or they rely on 'learning-by-doing' techniques. The survey did not find any instances of returning migrants employed in the agricultural sector bringing new skills and knowledge. This can reasonably be explained by the low salaries paid in the sector.

There were also some instances of urban companies that do not provide for employees: one textile producer and one Information Technology (IT) company. The textile company only undertakes simple operations and the simple transfer of skills from more experienced employees to the less experienced apparently fill the skills gap despite high employee turnover. This company has no training plans for the future either.

The IT company has a different outlook, and while it is quite small and lacks the necessary resources for staff development, self-education and 'learning-by-doing' are the main approaches adopted to ensure the company gets the skills it needs. This company has clear understanding of training needs and would be prepared to invest in employee training in future.

This company is probably an outlier though, as IT companies in general are known to invest extensively in human resources and many practitioners from the sector are involved in teaching at Universities in Chisinau.

One obvious conclusion is that we should expect the interest and investment in employee training to increase in accordance with the increase in technology used in the company and sector. Higher-technology production requires more frequent updating of workers' technical skills and more intensive training. Low added value production such as textiles and some types of agriculture do not create the same pressure to undertake investment in training as often.

How companies satisfy the training needs of their employees

Most of the companies providing training to employees do so 'in-house', because this appears to be the most efficient and financially accessible form of training. Far fewer companies provide employee training outside the company within Moldova or abroad. At present, only two of the surveyed companies provide employees with training abroad. These companies either have foreign capital (financial services) or work directly with foreign companies (textiles) and they mostly rely on the help of their foreign partners in organizing training.

The training provided by both of these companies mostly targets new and young employees who lack the skills necessary to start work. Continuing training is by and large lacking in most of the companies surveyed. Companies that do provide outside training most often contract local universities and private training agencies. One important distinct feature of external training demonstrated by the survey data was that companies with foreign capital working extensively with foreign partners mostly rely on private training agencies and private individual trainers rather than public training institutions. This feature may indicate the limited ability of public education institutions to offer the type of modern practical training required by the respective companies. Overall, the companies are positive and appreciative of the quality of training provided and they seem broadly satisfied with this.

Another key feature outlined in the data is the stronger inclination of foreign-owned companies to invest in worker training. This may be partly due to the values of Western corporate culture and to the greater availability of the financial resources needed to invest in quality training for employees.

The most commonly cited impediments to the organization of training activities relate to the lack of funds and the limited number of relevant programmes. Companies generally state that the local market of training services is underdeveloped in terms of organization, training design and content. Some companies face difficulties in convincing employees of the need for training and see limited impact when older employees are involved. Better information on training opportunities would help companies make better use of opportunities to train their workers.

Companies typically organize training provision within working hours and meals or time off in lieu are offered as incentives to participants in few cases. The idea of socializing or enjoying the training location are seldom seen as incentives and this type of event occurs mostly in companies with foreign capital.

As far as programme design is concerned, the survey shows that only companies providing their employees with training abroad apply external expertise on this matter. Companies providing training at the enterprise or in the country usually rely on in-house experience for programme design. 'In-house' training is never opened up to people from outside the company either pro bono or for a fee.

The practical benefits for training participants can be many. All of the companies consider workers become more productive and most of the companies surveyed believe trainees come out better prepared to meet the challenges of the local labour market and increase their income. These enhanced skills do not usually encourage trainees to plan

migration, confirming the outcomes of international studies. There was only one reported case of a construction company trainee who migrated when the global financial crisis impacted strongly on the Moldovan construction sector.

3.3 GOVERNMENT IMPLICATION IN ADULT TRAINING

A series of government acts are in place that support or mention adult training. These vary from national and broad labour policy strategies to specific regulations focused on issues related specifically to the professional training of adults. The strategic documents were adopted recently, while most of the regulations were adopted earlier: all in all, there is no coherent policy approach to adult training. The public authorities apparently see adult training as the premise of private companies and restrict themselves to the role of main controller and standard-setter.

At the macro level Moldova has the National Development Strategy 2008-2011 and National Strategy on Labour Employment Policies 2007-2015. The Labour Code (2002) also contains some important provisions related to adult training.

The National Development Strategy 2008-2011 outlines some objectives on raising the quality of professional education and ensuring equal access to educational services. The fourth priority area: 'Development of human resources, raising employment and promoting social inclusion' also specifically aims at "elaboration and promotion, jointly with social partners, of national policy on continuing professional training, including for ensuring lifelong education".

This objective is perfectly in line with policy direction IV 'Promoting development of the human capital and lifelong education' from the National Strategy on Labour Employment Policies adopted two years before. This Strategy envisages amending the regulatory framework in order to intensify the process of training and retraining in the workplace or in the educational institutions established at the level of economic branch.

The Labour Code (Title VIII) stipulates the rights and obligations of both employer and employee in terms of professional training.

According to the Labour Code the employer is obliged to:

- Provide the conditions necessary and facilitate professional and technical training of employees either in on-the-job training processes or training/studying at educational institutions, without having to leave their job;
- Within each legal entity, the employer, together with the representatives of employees, must draw up and approve annual professional development plans.

The Labour Code also stipulates that at least 2% of the total salary fund of an enterprise should be directed toward the professional training of employees, and the conditions for this training should be established via a collective labour contract or convention. This loophole allows many companies to avoid contributing the respective volume of financial support in the case of individual labour contracts. Our survey shows that many companies do not actually reach this threshold and there are several probable explanations for this finding. Firstly, many smaller companies do not have enough financial resources to provide employee training. Secondly, understanding of the need to for continuing worker training is only slowly making its way into local corporate culture. Thirdly, the fiscal stimuli for conducting training are lacking as companies cannot enter training as tax-deductible expenditure, meaning that money spent on staff training is therefore subject to tax.

The Labour Code also provides the employee with the right to professional training, which can have a legal basis in the professional training contract attached to the individual labour contract. If the employee takes the initiative to participate in training, the employer is free to decide whether or not to provide financial support.

There are also two important regulations governing the professional training of adults:

- On the organization of continuing professional training;
- On the organization of professional training for the unemployed.

The first regulation outlines the types of institutions entitled to provide continuing professional training (inside and outside of enterprises) and the type of training provided. Continuing professional training programmes should be adapted to the methodological requirements of the Ministry of Education (MoE). The MoE also regulates minimal requirements on programme content, while the standards of qualifications obtained as a result of the additional professional training are produced by the training programme providers, bearing in mind the needs of the labour market and with the approval of the relevant ministries.

The regulation also envisages funding for continuing professional training from private business funds (see the provisions of the Labour Code above), trainees own funds, the Unemployment Fund, sponsorships, donations, income from international cooperation, and other legally permitted sources.

Government involvement on the ground remains very limited and is mostly restricted to setting the legislative framework for the organization and funding of adult training (which is not always actually properly enforced). It should be noted also that many companies are not happy with the existing provision and companies want more freedom in deciding the content and frequency of their own training policies (FIA, 2005). Companies also point out that national legislation does not offer proper stimuli for those that invest much more than the mandatory 2% in employee training. Another drawback is that companies are currently unable to recover the costs incurred in training an employee if the latter resigns following the training, and they believe such a clause should be included in a training contract (FIA, 2006). Some companies are also interested in acquiring the right to provide training and issue job competence certificates with a degree of state supervision that would ensure recognition of these certificates throughout the country (FIA, 2009).

Error! Reference source not found. in the previous subchapter shows that government spending on adult training has been far below that of private companies and has mostly been focused on public administration employees. In the short-term, given existing financial and institutional concerns, the Government should focus more on the 'liberalization-for-development' of training provision in Moldova. This could be achieved by: encouraging full use of the 2% provision and eliminating existing limitations; providing additional incentives by bringing the certification system in line with labour market needs; and developing a modern quality assurance system rather than focusing on inputs and regulations. The Government's next steps could also aim at modernization and proper financing of the human and infrastructure capacities of public training. Donor support would be welcome in this respect.

Other regulation focuses on professional training of the unemployed, which is organized through the NEA with funding from the Employment Fund. This is implemented by contracting relevant educational and training institutions in the Ministry of Education (MoE) and other ministries, trade-unions, public and private economic entities and commercial and non-commercial units. This training is tailored toward the needs and demands of the labour market, which are established by the NEA through measures such as company surveys and consultations with social partners. The NEA has produced yearly Labour Market Forecasts from 2008 to enhance the impact of its activities.

Professional training activities were supported by the biggest budget of all the active labour market policies, with around 60% of the total respective budget or over MDL 9.5 million (approximately EUR 575,000 or 0.018% of GDP) in 2007. Apparently this activity is effective as over 70% of trained and retrained individuals find a job after completing the training. This largely positive data was also supported in the interviews held with NEA regional representatives in Chisinau and Anenii Noi.

The NEA professional training and retraining programmes target the unemployed with little or no discrimination on other criteria, such gender, ethnicity and age. However, there have been instances of work with specific target groups, such as women victims of human trafficking in joint projects with international donor organizations. Although the training programmes do not target specific groups, the NEA offers information and career guidance seminars for young people. According to representatives of regional employment agencies, they consider these underfunded activities very important due to the fact that young people generally appear unprepared for the needs of the labour market and there is an acute lack of career guidance in educational institutions.

Training is organized on a regular basis as soon as a group of trainees is formed. In recent years, 9-10% of the unemployed were involved in this kind of activity with NEA training running for at least 3 hours per day over a period ranging from 2-6 months.

The NEA provides various pre-formulated training programmes but its regional offices can also provide training in agreement with local companies that wish to employ people.

Our interviews show that regional NEA offices rely both on State and non-state providers of professional training, such as universities, VET schools, non-governmental organisations (NGOs) and international donors. Although State providers are more often called upon, the quality of their services is seen to be of average quality, as they were formed in the Soviet era and do not offer trainees skills appropriate to the use of modern technologies. There seems to be real need for a complete overhaul and update of State training programmes and providers.

The NEA cooperates closely with international donors, NGOs and micro-credit institutions in providing support for training and retraining activities. This support can take the form of stipends, sets of instruments and the provision of cheaper loans.

All in all, the effectiveness of training and retraining programmes will largely depend on the progress made in improving and modernizing training-providers, but also on investment in capacity development with the NEA staff.

KEY FINDINGS ON ADULT TRAINING

- Adult motivation for training is high due to a range of reasons including: the importance attributed to education in Moldova; economic restructuring that has led to a shift of employment between sectors, with resulting needs for skill development; and awareness of the role of skills in horizontal and vertical mobility in the labour market. The majority of SIE respondents who would like additional education or training are also willing to pay for it. This demand is however unmet, with problems in terms of access and choice.
- Private enterprise spending on training soared over the last decade, growing more than twofold. Companies with foreign capital have been most inclined to invest in training. Local companies appreciate the importance of training especially when they belong to innovative or advanced sectors, such as IT. They acknowledge the increased productivity and motivation of employees as benefits of staff training.
- Many other companies have not yet developed such a business culture; they compromise low productivity in exchange for low or very low salaries. The lack of appeal of training for these companies reflects relatively unsophisticated business processes and obsolete technical capacity, small size or both. All these features lead to an apparent absence of demand. From another perspective, this could be viewed as the outcome of scarce responsiveness in the supply side.
- Training institutions do not regularly complete demand analyses to identify skill needs, nor do they generally undertake regular dialogue with current and potential clients. While the system of public and private institutions for adult training is relatively extensive, it is widely perceived as unable to deliver the services needed on the labour market. Regulations regarding the provision of adult training programmes impose rigid frameworks that actively discourage attempts to improve on the part of providers and limit possibilities for meeting the complex diversity of needs.
- This study showed that there are no active labour market policies implemented in rural areas. Local governments do not contribute to adult training due to financial constraints and the lack of fiscal autonomy. At individual level, the rural population faces significant barriers in access to adult training programmes, mainly due to financial constraints. Rural companies are mainly agricultural concerns that typically have low productivity and do not formulate training needs.
- Very few resources are provided by the government for adult training and the 2% levy on the payroll is not always enforced. The Government could stimulate continuing learning more effectively to increase human capital that could bring the country economic and social returns. By aiming at high quality training standards and promoting a business culture that builds on quality and productivity, the Government could strengthen national competitiveness. Donor contribution of expertise would be highly desirable with a view to developing human capital in Moldova.

GENERAL CONCLUSIONS

The tumultuous nature of the transition period has influenced the development of human capital in Moldova and the present human capital in the country differs significantly from that of 20 years ago. This change has brought about a mix of positive and negative outcomes, and it is not always clear whether human capital is employed more or less intensely.

Some quantitative indicators such as educational attainment, literacy rates and enrolment rates for non-mandatory levels of education show an improvement but they do not reflect the entire process of human capital formation and do not capture the real value of human capital. Such relevant qualitative indicators as quality of education, quality of employment, inequities in access to and choice of education are not easy to collect. However, the information presented from the surveys in this study is consistent with the findings of other reports, notably in that the generally positive trends combine contrasting results in HCD. The chief divergence in results depends on geography (rural versus urban), available household income, health status (disabled children are heavily marginalized) and the business culture of the employer, while gender leads to different returns on education in the workplace.

In summary, the main conclusions on the status of human capital and its perspectives for development are:

- **Education and learning continue to be highly valued in the country forming an important asset in supporting the strategic development of human capital.** Despite the many shortcomings, families have expectations that education will improve the lives of their children, and there is clear evidence that people are prepared to invest in their own education for returns of both an economic and social nature. Adult learning is also sought, but the demand is largely unmet.
- **By contrast, Moldova still has no clear human capital strategy, even though human capital was one of the most valuable national legacies of the Soviet period.** The 1990s have been marked by a human resource drain through emigration. This started at a relatively subdued rate, but consolidated significantly in the following decade and data on migration showed the migrant profile has changed to younger and better educated people. Emigration is increasingly seen as an exit strategy for 'redundant' workers, who are prepared to work in jobs below their level of qualification even when their human capital may be underused abroad as the pay gap is underpinning this choice. Those who find qualified work are least likely to return and employ their newly acquired competence in the domestic labour market, a situation that makes manifest the limited government and market capacity so far to create decent economic opportunities for graduates. The existing provisions in support of HCD are mentioned as a priority in the National Development Strategy 2008-2011 and other key policy documents, but they are actually quite fragmented in nature. Education is not linked to the socio-economic priorities and secondary and higher professional education and training are insufficiently linked to labour market needs. Adult learning is irregular and unsystematic. The draft Education Code of 2010 introduces the lifelong learning concept in a positive manner and the challenges of implementation should be addressed with required vigour once the Code is approved.
- Economic recovery has had a positive impact on access to education since 2000 and the average educational attainment of the population has increased. The gain is visible in non-mandatory levels of education, but **enrolment in mandatory levels of education (primary and lower secondary) has slightly decreased, with a marked disparity between rural and urban areas.** Despite being compulsory, primary and lower secondary education are not provided to every child. In 2008, almost 11% of the rural population had attained primary education at most, and 25% had left education after lower secondary. The most marginalized children effectively lack any education and come from poor or very poor families. These are sometimes children of migrants who are left without proper supervision or children with disabilities. The latter are rarely integrated in mainstream schools, and teachers are among the strongest opponents of integration. In higher education, just above 7% of the rural population had completed university in 2008, compared with 27% among the urban population.
- **Inequity in education is present in terms of choice and quality in Moldova. This inequity mainly reflects the differences between urban and rural areas, but not differences between genders.** Beside the problems of access mentioned above, students from rural areas are more limited in their choice of school as there is usually only one school in the village and the school infrastructure is often weak due to low local government capacity to contribute to the maintenance, renovation and equipment of schools. The quality of education is lower by and large, owing to problems with the teaching staff, smaller parental contributions and poorer school management. Therefore the level of knowledge differs in graduates from rural and urban areas, with collateral effects on opportunities for further education on the basis of these initial discrepancies.
- **The quality of specialized education – vocational, post-secondary non-tertiary and higher – is decreasing.** Employer and employee feedback on the preparation of graduates entering the labour market and the level of skills at graduation denote a decrease in the quality of specialized education. The issue is highlighted by international surveys and was confirmed by surveys in the present study that additionally revealed the assessment to be more negative for the younger generations. Employers point at the skills mismatch in vocational graduates who have poorly developed skills or who have covered content different from that actually needed. From the viewpoint of

students, opting for vocational education is far from advantageous, as the available specializations do not correspond to employment profiles and choosing VET also blocks access to higher education in most cases. The offer of higher education courses is aimed toward non-technical fields, which prove more attractive for general secondary school leavers. The introduction of fee-based enrolment in higher education has generated the paradoxical effect of reducing requirements and standards for certification on the part of the providing institutions.

- **Companies are main drivers of adult training development.** The private sector is playing a crucial role in promoting adult training, while the State has focused on the regulatory framework and modest funding of training for public employees and the unemployed. The legal provision of a 2% payroll tariff to be spent on staff training lacks both clarity and enforcement. Fiscal stimuli to facilitate private investment in adult training could be more varied and effective, they could support the establishment of a much needed business culture and oppose both low productivity and informality. At present, national and foreign investors especially declare the skills shortage in the labour market to be a constraint on the progress of their business. Along with the emergence of differentiated and value-added services and production, adult training is bound to remain a prominent priority for the Moldovan economy in this decade.
- **Moldova spends a relatively large amount on education but the cost structure has remained unchanged despite changed social and economic demands on education.** There is room for improvement in the efficiency and effectiveness of spending by approaching: the number and management of schools; the motivation and preparedness of teachers; attracting private sector funding for vocational education and training; and rationalizing household contributions. This latter issue relates to equity in ensuring that family contributions are proportionate to the capacity of their income. Private funding may be required to complement public financing, but this should not represent a barrier to access for low-income students. Most urban schools manage a fund of parental contributions for various purposes. Such funds also exist in rural areas, but these are less common and the payments are lower to the extent that they have adverse effects on the quality of education. According to our surveys, people agree there should be additional formal payments even in secondary education as teacher salaries are among the lowest in the economy.
- **Costs are increasingly complemented by private financing but public-private partnerships are insufficiently developed.** The governance of education in the Moldova has been characterized by centralization and a lack of dialogue between the public sector and non-governmental actors. It is fair to acknowledge that good practice has emerged throughout the system during the last decade on the initiative of schools and families, schools and enterprises and a number of international projects. Innovation and new forms of collaboration have been quoted by individuals and focus groups. Enterprises that train employees to build their competitive advantage prove the vitality of lifelong learning. In 2010, the Ministry of Education drafted a new Education Code that reinforces the basis for dialogue with social partners in order to improve the relevance of vocational education and training; encourage dialogue with families and other social actors at schools of all levels; and strengthen university-business cooperation. This reform is much needed to systematize and further extend the initiatives piloted by some institutions on a local level.

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Made of paper awarded the European Union Eco-label, reg.nr. FR/011/002, supplied by International Paper.

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