Czech University of Life Sciences Prague

Faculty of Tropical AgriSciences

Department of Sustainable Technologies



Diploma Thesis

The impact of remittances on school attendance: the evidence from the Republic of Moldova

Author: Bc. Tereza Pilařová

Supervisor: Ing. Alexander Kandakov, Ph.D.

Prague 2015

Declaration

I hereby declare that I have written and presented this masters' thesis **"The impact of remittances on school attendance: the evidence from the Republic of Moldova"** by myself with help of the literature listed in the references section of this thesis.

L

Prague, 22 April 2015

.....

Bc. Tereza Pilařová

Acknowledgement

I would like to express my sincere gratitude to my supervisor Ing. Alexander Kandakov, Ph.D. For his professional guidance, valuable advice and comments throughout the writing of this thesis.

I want to thank Mgr. Martina Kratochvílová from Caritas Czech Republic for providing me with the data from the project and also for her help and advice.

I would also like to thank people who helped me with administering the questionnaires in Moldova, especially to the local expert Mrs. Diana Cheianu-Andrei, Ph.D, the vice-rector for International Relations of the State Agrarian University of Moldova, Cosciug Cristina, Ph.D, to the vice-rector of the Academy of Economic Studies of Moldova professor Ala Cotelnic, Ph.D and to MilleniuM NGO.

I would also like to express my gratitude to Andrei Gheorgita, Irina Busuioc, Elena Costiug and Katka Svrčková for help with the translation and to all of the respondents for their answers.

Abstract

This thesis examines the effect of remittances on the high school attendance of youth 16-20 years old in the Republic of Moldova in the districts of Causeni, Floresti, and Straseni and in the municipalities of Balti and Chisinau. Using an instrumental variable (IV) approach it was found that remittances have an insignificant effect on high school attendance. When the education level of mother seems to play an important role in a youth's education the father's level education had no significant effect on high school attendance. The higher number of siblings and place of residence in rural area had negative effect on school attendance. For the district, where the household is situated estimates were not significant. The remittances can improve household budget and access to the education, but the negative effect of parental absence eliminates this effect. Moreover, results showed that almost ³/₄ of surveyed young people intend to migrate abroad mainly due to economic reasons such as lack of suitable and well-paid jobs. Lack of motivation of youth is another challenge, which should be taken into account.

Key words: The Republic of Moldova, labor migration, education, remittance, district Causeni, district Floresti, district Straseni, municipality Balti, municipality Chisinau

Abstrakt

Tato práce se zabývá vlivem remitencí na školní docházku mládeže ve věku 16-20 let studující střední školu v Moldavské republice v okresech Causeni, Floresti a Straseni a obcích Balti a Kišiněv. Použitím metody instrumentálních proměnných (IV) bylo zjištěno, že remitence mají zanedbatelný dopad na docházku na středních školách. Zdá se, že úroveň vzdělání matky hraje důležitou roli v oblasti vzdělávání mládeže, na druhou stranu úroveň vzdělání otce neměla významný vliv na docházku střední školy. Vyšší počet sourozenců a bydliště na venkově mělo negativní vliv na školní docházku. Pro oblasti, kde se domácnost nachází, odhady nebyly významné. I když remitence mohou zlepšit rozpočet domácností a přístup ke vzdělání, negativní vliv rodičovské absence eliminuje tento efekt. Navíc výsledky ukazují, že téměř ³/₄ dotázaných mladých lidí má úmyslu migrovat do zahraničí především z ekonomických důvodů, jako je nedostatek vhodných a dobře placených pracovních míst. Nedostatek motivace mládeže je dalším problémem, který je třeba vzít v úvahu.

Klíčová slova: Moldavská republika, pracovní migrace, vzdělání, remitence, okres Causeni, okres Floresti, okres Straseni, obec Balti, obec Chisinau

Content

I.	Introduction	1
II.	Literature review	2
2	2.1. General information	2
	2.1.1 Economic situation	2
	2.1.2. Remittances	3
	2.1.3. Demography	4
	2.1.4. Education and child labour	5
2	2.2. Migration in Moldova	6
	2.2.1. Definition migration and its duration, migrants	6
	2.2.2. Migration waves and estimates of situation	7
	2.2.3. Determinants of migration	8
	2.2.4. Migration patterns	8
2	2.3. Impact of migration on education of children and youth left- behind	. 10
	2.3.1 Remittance effect	. 11
	2.3.2. Absence effect	. 12
	2.3.3. Network and knowledge effect	. 12
2	2.4. Determinants influencing the educational achievements of children and youth	. 13
2	2.5. Impact of migration on education of children and youth in Moldova	. 14
	2.5.1 Remittance effect	. 14
	2.5.2 Absence effect	. 15
2	2.6 Determinants influencing educational achievements of youth in Moldova	. 16
III.	Objectives	. 17
IV.	Methodology	. 18
4	1. 1. Data sources	. 18
	4.1.1. Secondary data sources	. 18
	4.1.2. Primary data sources	. 18
4	1.2. Description of study area	. 20
4	I.3. Target group	. 25
4	1.5. Data analysis method	. 26
4	4.5.1 Regional, household and individual characteristic	. 28
4	l.6. Limitation of the study	. 30

V.	Results	
5.1	. Descriptive statistic results	
5.2	. Impact of remittances on the school attendance – IV model results	
5.3	. Questionnaire survey results – Local experts	
VI.	Discussion	
VII.	Conclusion and recommendation	42
7.1	. Conclusion	42
7.2	. Recommendation	42
VIII.	References	
IX.	Annex	59

List of acronyms

2SLS	Two-Stage Least Squares
CBS-AXA	Centrul de Investigatii Sociologice si Marketing
CIS	Commonwealth of Independante States
CIVIS	Centre of Sociological, Politological and Psychological Analysis
	and Investigations
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GMM	Generalized method of moments
IASCI	International Agency for Source Country Information
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization for Migration
IV	Instrumental Variable
LIML	Limited-Information Maximum Likelihood
MLSPF	Ministry of Labour, Social Protection and Family
NBS	National Bureau of Statistics of the Republic of Moldova
NDHS	National Demographic and Health Survey
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary least squares
SADI	Small Area Deprivation Index
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WB	World Bank

List of tables

Table 1.	Share of children with biological parents living abroad			
Table 2.	Gender and regional differencies in the net secondary and net primary			
	attendance			
Table 3.	Timeframe of diploma thesis			
Table 4.	Variables included in the limited-information maximum likelihood estimation			
Table 5.	Limited-information maximum likelihood estimator (LIML) results			
Table 6.	Results of the tests of weakness of instruments			

List of figures

Figure 1.	Distribution of migration by age and sex (%)
Figure 2.	The impact of migration on the children left- behind
Figure 3.	Description of study area of the research
Figure 4.	Description of study area – South region
Figure 5.	Description of study area – Central region
Figure 6.	Description of study area – North region
Figure 7.	Descriptive statistic result- level of parental education
Figure 8.	Descriptive statistic result- destination of migration of household members
Figure 9.	Descriptive statistic result – remittances consumption
Figure 10.	Characteristics influencing high school attendance - local expert's opinion

I. Introduction

The Republic of Moldova is the poorest country in Europe (UNDP, 2014). It is estimated that 80% of all migrants left the country after the huge financial crisis in The Russian Federation in 1998, when the situation in the Republic of Moldova deteriorated (Cuc et al., 2005) and today there are approximately 770,000 emigrants living abroad, which is equivalent to of 21.5 per cent of the Moldovan population (Ratha et al., 2011). In the Republic of Moldova the high level of labor migration of economically active proportion of the population is an important demographic phenomenon that has a significant impact on the many aspects of human. On average, every fifth family with children has at least one member of the household working abroad (MLSPF, 2010). The migration of adult household members can influence the education of children left-behind in several ways (Hu, 2013). Firstly, remittances sent by a parent working abroad can improve the economic situation of a poor household which can lead to an improvement in the access to education (Calero et al., 2009). On the other hand parental absence and lack of supervision can contribute to lower educational achievements of members left-behind (Amuedo-Dorantes and Pozo, 2010). In the Republic of Moldova it was found that being in a family receiving remittances increases the probability of attaining higher education around 33% (Matano and Ramos, 2013). Migration can also cause a lack of control and support which in turn leads to low or occasional attendance (Cheianu-Andrei et al., 2011). The main aim of thesis is to examine the impact of migration and remittances on the high school attendance of youth left- behind in the Republic of Moldova and to determine the characteristics which influence youth's education in the Republic of Moldova. As previously noted the size of the household entails, the number of very young children decrease in high school attendance when having a personal computer and the migrant level of education has a positive effect on high school attendance (Matano and Ramos, 2013). But there is no evidence, to support the claim that the residential district and plans to migrate influence high school attendance in the Republic of Moldova.

II. Literature review

2.1. General information

In the Republic of Moldova the high level of labor migration of the economically active population has a significant impact on the many aspects of human life. The primary reason attributed to labour migration was mainly poverty (IOM, 2012).

2.1.1 Economic situation

The Republic of Moldova is the poorest country in Europe (UNDP, 2014; WB, 2014). Where the Human Development index equals 0.663 Moldova is considered as country with medium human development on a worldwide scale (UNDP, 2014) and despite economic growth it is the country with the lowest GDP per capita in Europe. The GDP per capita in 2013 was 7 times higher than in 1999 after the Russian economic crisis (WB, 2014). The Russian economic crisis deeply affected Moldova's economy, since more than half of its exports were exported to Russia (Pantiru et al., 2007). It is reported that 80% of all migrants left the country after 1998, when the situation of the poorest country in Europe has deteriorated further (Cuc et al., 2005). It is estimated that 65.1% of Moldovan citizens lived on less than \$2.00 a day and 35.7% on less than \$1.25 a day in 1999. The recent statistic shows that only 2.8 % lives on less than \$2.00 a day and 0.2% on less than \$1.25 a day (WB, 2014).

Poverty in rural areas

The highest level of poverty was registered in rural areas. The rural population is, therefore, the most vulnerable segment of society in terms of welfare and security. The poverty in rural areas is associated with a low level of modernization and economic life dominated by agriculture (IMF, 2011). The poorest are the families with workers involved in agricultural individual activities and those who are employed in the agricultural sector (Ministry of Economy, 2012).

People living in large households, with five members or more, are at a higher risk of poverty. More than half of the households with three or more children fall under poverty incidence (IMF, 2011). The poverty rate varies according the household head from 4.1

percent for households headed by persons with higher education to 46.7 percent for households, in which the household head has secondary education and to 57.0 percent for households headed by persons without any education (IMF, 2011).

Regional differences

Significant discrepancies continue to exist between regions with respect to the poverty level. The poorest region in Moldova is the southern region, being followed by the central region, the northern region and municipality of Chisinau. Poverty in the southern part of Moldova is currently 1.7 percentage points higher than in the central region of the country, 6.4 percentage points higher than in the northern region, and 10 times higher than in the municipality of Chisinau (Ministry of Economy, 2012).

2.1.2. Remittances

The share of remittances in the GDP has constantly increased since the late 1990s. For example, according to data from WB, in 2013 remittances represented 24.9 % of Moldova's GDP. This is a significant increase relative to 1998 when the share of remittances was only 8%. In 2010, Moldova was ranked third in the world (after Tajikistan and Kyrgyzstan) by the share of remittances as a proportion of GDP (WB, 2014). Due to the intensity of the migration phenomenon and the domestic economic situation The Republic of Moldova is one of the world leading countries with a very high dependence on remittances. The importance of these remittances is enormous, approximately one quarter of Moldovan households depend them for their daily on and basic consumer needs (Lücke el al., 2007; Orozco, 2008).

Migrant remittances have significant effects on household consumption in recipient countries Esquivel and Huerta-Pineda (2007), Giannetti et al. (2009). According to Lücke et al. (2007) and Salah (2008) the largest share of migrant's remittances are used for household expenses such as food and clothes and also for passive investments, especially house or apartment procurement or the purchase of cars.

Remittances patterns

Migrants that are working in EU countries have higher wages and tend to remit more than those who work in Russia because CIS migrants usually have seasonal jobs and spend a shorter period of time in the host country. Also CIS migrants tend to remit a higher share of their earnings in comparison with EU migrants due to lower living and travel costs (Lücke et al., 2007). Temporary migrants remit around 30% more per year than permanent migrants do (Pinger, 2010). The amount of remittances is generally positively correlated with the age of the migrant and negatively with the year of first departure, indicating that the amount remitted decreases with the length of stay (Cuc et al., 2005; Ruggiero, 2005).

Remittances and poverty reduction

Besides increasing household consumption several studies conclude that remittances significantly reduce poverty in recipient countries (Esquivel and Huerta-Pineda, 2007; Brown and Jimenez, 2008). In the republic of Moldova remittances have also contributed to decreasing poverty in the households benefiting from remittances (IOM, 2012). The transfers from abroad contribute to the decrease in poverty by 11.7 percentage points in rural areas this impact is even higher (Ministry of Economy, 2010). The share of households benefiting from remittances under the poverty line was twice lower than the respective share among non-migrant households (IOM, 2012).

2.1.3. Demography

The total population of Moldova is estimated at 3,557,634 (NBS, 2014c). The population pyramid for Moldova has a narrow bottom, which is illustrative of a low fertility rate and bulges out towards the top, which is indicative of an aging population (NBS, 2014d). Indeed, the median age in Moldova is estimated to be quite high, at 36.4 years and 16.4 percent of the population is aged 66 or older. Children represent 23.6 % of the total population (UNDP, 2014). One quarter of the total population are young people between the ages of 15-29 years old. The younger generation is constantly decreasing, especially in case of the 15-19 age cohort, where the share has decreased from 31.8% to 26.0% during the period 2009-2014. The number of persons aged 20-24 years also decreased (NBS, 2014a).

Children left- behind

On average, every fifth family with children has at least one member working abroad (MLSPF, 2010). It is estimated that about 177,000 children have parent working abroad, of whom 22,000 children had both parents abroad; the majority of these children live in rural areas (Vladicescu, 2008). When both parents migrate, children remain in the care of elderly in 91% of the cases, and when one parent migrates - in 36% of the cases (HelpAge, 2010). Table 1 show the share of children which live in household with parent (s) abroad.

	Children with member abroad (%)	Mother abroad (%)	Father abroad (%)	Both parents abroad (%)
North region	24.5	5.6	12.3	6.6
Central region	21.5	6.5	10.0	5.0
South region	24.8	7.1	11.1	6.5
Chisinau m.	9.4	1.7	6.5	1.2

Table 1. Share of children with biological parents living abroad

Source: UNICEF, 2014

2.1.4. Education and child labour

Compulsory education in Moldova is comprised of 10 years of school that consists of one year of pre-school, four years of primary school (grades 1-4) and five years of gymnasium (grades 5-9). Children may attend preschool at ages 3-6 and they normally start primary school at age of seven, so they should have completed their compulsory schooling by age of 16 (15 for students who start school at the age of 6). After completing their compulsory education, children can enrol in a lyceum (three years of general education geared towards preparing students for higher education), a general secondary school (two years), a vocational secondary school (three years), or a secondary professional school or college (two-to-five years) (ILO, 2010).

Gross primary school attendance is estimated at 94%, secondary school attendance is 75% and tertiary school attendance is 38% (UNDP, 2014). During the last 5 years, the number of children enrolled in the primary and general secondary education institutions decreased. At the beginning of the 2013/2014 school year, there were 353,200 students, showing a decrease, by 15% if compared with the 2009/2010 school year. Also in the case of high

school students has decreased. In the 2013/2014 school year 97,285 students were enrolled in higher education institutions (NBS, 2014b).

School attendance by gender, the rate of girls is higher than those of boys, with the largest gender gap among children attending non-compulsory schooling. The growing gender gap beyond compulsory schooling implies that the opportunity cost of attending school is higher for boys than for girls (ILO, 2010). Table 2 represent gender and regional differences between the north region, central region, south region and municipality Chisinau.

Net primary attendance (%) Net secondary attendance (%) female female male male 98.4 98.3 86.9 80.9 North region Central r. 98.8 99.1 87.9 81.9 South r. 97.5 98.3 87.5 83.8 Chisinau m. 98.8 99.2 93.4 92.4

 Table 2. Gender and regional differencies in the net secondary and net primary attendance

Source: UNICEF, 2014

About 16.3% of total children are performing work within the age range of 5-14 (UNDP, 2014). Children are involved in household chores on average 6.4 hours a week (ILO, 2010). However, young people aged 15-24 the employment rate is only 18.1%, while those aged 25-29 recorded a rate 2.4 times higher at (44.2%), This is even higher than the country average (NBS, 2014a). Overall, the employment rate in the Republic of Moldova decreased from 54.8% in 2000 to 39.3% in 2014. The rural areas are the most affected in this regard (NBS, 2014e).

2.2. Migration in Moldova

2.2.1. Definition migration and its duration, migrants

According to OECD (2001) and the recommendations of the United Nations (1998), migrants can be divided into four groups : the long-term migrants, temporary migrants, residents in or returning to work after a period abroad and nomads. Migration can also be classified according to four criteria, namely: the internal versus international, temporary

versus permanent, compulsory versus voluntary, legal versus illegal (Bailey, 2001; Castles and Miller, 2003).

Görlich and Trebesch (2008), Pinger (2010) and Borodak and Piracha (2010), suggest that temporary migrants represent a significant and growing share of Moldovan emigrants. According to Görlich and Trebesch (2008), over 40 per cent of Moldova's international migrants in 2004 were abroad temporary (their migration duration was less than a year). Migration duration is mainly determined by individual characteristics (age, education level), household characteristics (family composition) and migration monetary costs (Borodak and Tichit, 2014).

2.2.2. Migration waves and estimates of situation

Today we can identify three waves of mass migration (WB, 2010). The first wave "Business migration "was economically motivated and has a commercial character (buying goods on foreign markets and marketing them in Moldova). However the introduction of the visa regime together with the complicated customs checks and balancing prices in the post-communist countries, business migration has become less advantageous for individual migrants. As a result business migration has gradually replaced labour migration (Mosneaga, 2009). The financial and economic crisis of the Russian Federation in 1998 launched a second wave of mass migration from Moldova. This wave of migration is response to acute poverty. The third wave- today is the migration of Moldovan population motivated by opportunities in the external labour market (Eskola, 2007).

Migration estimates

Various estimates of the number of migrants range from 25 per cent to up to 50 per cent of the economically active population (Cuc et al., 2005; Munteanu, 2005). According to the 2005 Demographic and Health Survey it was found that 17 percent of households had at least one migrant member (NCPM, 2006). In 2010, the stock of emigrants living abroad was estimated at 770,000, equalling 21.5 per cent of the Moldovan population (Ratha et al., 2011). Schwartz (2007) also estimates that the number of Moldovans abroad may exceed 800,000 persons. The Estimated number of labor migrants among young people is 135,500 (NBS, 2014a).

2.2.3. Determinants of migration

The main push factor for Moldovan migrants is poverty, lack of adequate employment opportunities and low salaries (IOM, 2012). According Cuc et al. (2005) it is reported that 80% of all migrants left the country after 1998, when the situation of the poorest country in Europe deteriorated. According to the Moldovan National Demographic and Health Survey (NDHS) conduced in 2005 labour was the main reason for migration for 83 per cent of females and 91 per cent of males (NCPM, 2006).

Among the pull factors that motivate the Moldovan population to leave the country include in particular : higher income level in the host country, a better living standard, better opportunities for personal development and social networks already established migrants abroad - relatives, friends and close friends (Walewski et al., 2008). High wage differences (the gross monthly salary is almost two and a half times smaller than in Romania and the Russian Federation, about two times smaller than in Bulgaria) and perceiving of good saving/remittances are really important factors for labour migrants (IOM, 2012). Another pull factors are the low cost and the ability to travel visa-free travel to the CIS (Lücke et al., 2007).

2.2.4. Migration patterns

Differences between urban and rural area

Women from wealthier and more educated urban households migrate mainly to Italy and Spain, where they work in the home, health care, and tourism industries (Ruggiero, 2005). Surveys conducted by Pinger (2010) and Borodak and Piracha (2010) show that migrants who lived in urban households or have a higher education are more likely to permanent migration. It is estimated that one third of migrants are highly qualified university graduates who have not found jobs in their home country (Pantiru et al., 2007).

Men from poorer rural households resort mainly to seasonal migration to Russia or other Commonwealth of Independent States (CIS) and work in construction (Ruggiero, 2005). According Görlich and Trebesch (2008) poor families have a higher propensity to migrate than richer households. Poor rural households are often not able to finance the transition to EU countries and instead sent migrants in Russia and the CIS (Munteanu, 2005).

Legality

According to Pinger (2010) and Borodak and Piracha (2010) permanent migration is moretypical for migrants who resident legally in the host country and for instance Dustmann (2003) mentions that with legal status along with an increase in employment opportunities and wages can initiate them for the permanent residence. Borodak and Piracha (2010) states that migrants residing illegally in the host country tend to return to their home country. According to Lücke et al. (2007), one in four migrants travel illegally to the host country, and one in three face illegal residence or employment status.

Age of migrants

Figure 1 represent age and gender distribution of migrants from the Republic of Moldova. The majority of migrants are in economically active age.



Figure 1. Distribution of migration by age and sex (%)

Source: NBS, 2014a

Poverty

The perception of poverty has a considerable influence on the likelihood of migration. If a household perceives itself to be poor, it has a much higher probability (up to 52%) to cope with this situation via sending a migrant than households with a more positive perception of their economic situation (Görlich and Trebesch, 2008).

Networks

Networks are of considerable importance, because Moldovans that want to leave their country often have lack of resources and information to make the first move and instead rely on Moldova's well-established migration networks (Görlich and Trebesch, 2008). According to the research conduced by Cheianu-Andrei et al. (2013) about 65 percent of Moldovan migrants find the existing social networks to be an important factor for their integration in the labour market.

Sectors of work

The main sectors of employment of Moldovan migrants abroad include construction (51.6%), transportation (10.8%), care and cleaning (7.8%), trade (11.6%), services (21.4%), industry and mining (5.5%) and agriculture (3.9%) (Lücke et al., 2007). This distribution however varies depending on the host country. Thus, in Russia 68.0% of migrants worked in the construction sector (in the EU only 28.6%) while almost a half (47.3%) of persons working in the EU was employed for domestic services in private households. The commercial sector is also more practiced in Russia than in the EU (NBS, 2009).

2.3. Impact of migration on education of children and youth left- behind

A growing number of studies have investigated the impact of migration and remittances on the educational achievements of children left- behind in recent years (Antman, 2012; McKenzie and Rapoport, 2010; Calero et al., 2009). Some authors have examined the effects of international migration and remittances on the education of the migrant's children (Amuedo-Dorantes and Pozo, 2010; Arguillas and Williams, 2010) when another one are more focused on the effect of internal migration (Hu, 2013; Hu, 2012; Meyerhoefer and Chen, 2010). Some studies suggested that emigration positively affected children's schooling and improved their school performance (Curran et al., 2004). In contrast to other studies have demonstrated a negative impact (Lopez-Cordova, 2005; Giannelli and Mangiavacchi, 2010) or a neutral impact of migration on schooling (Arguillas and Williams, 2010; Borraz, 2005).

The migration of adult household members can influence the education of children leftbehind in several ways which are shown below in Figure 2.



Figure 2. The impact of migration on the children left- behind

Source: Based on Hu, 2013

2.3.1 Remittance effect

Firstly remittances sent by parent working abroad can improve economic situation of poor household and, can reduce the economic vulnerability of the original households (Azam and Gubert, 2006) it also might play an important role for poor households in alleviating budget constraints (Bredl, 2011). It has been found that remittances are not only used to compensate emigration-related expense and income lost by left-behind household, but are also used by left-behind household to meet the daily needs and to improve living conditions (Jones and Kittisuksathit, 2003). Many studies confirm that remittances are spent on the education of migrant's children, their health or as investment on goods (Adams, 2011; Adams and Cuecuecha, 2010; Yang, 2008). Increased expenditures on education via sending remittances has been linked to improvement of access to education, to lower schools drop-out rates and to increased school enrolment (Calero et al., 2009). Nakamuro (2010) found that boys of compulsory school age in households receiving remittances were significantly more likely to be enrolled, whereas those in migrant households but not receiving remittances were significantly less likely to be enrolled in school. Koska et al. (2013) find that remittances positively affect school attendance and enrolment and reduce the likelihood of engaging in paid work. The income effect from remittances can reduce the need for the income generated from child work and decrease incidence of child work (Alcaraz et al., 2012; Acosta, 2011b; Calero et al., 2009; Brown and Poirine, 2005). Yang (2008) also suggests that remittances can contribute to prevent child labor in the Philippines. Remittances can affect the choice of school type and can led to a net substitution from public to private schooling (Calero et al., 2009)

2.3.2. Absence effect

On the other hand family migration might have a disruptive effect on children's schooling. Absence of household members as a result of migration can have negative impact on children's educational achievements and can result in the lower attendance of children in school (Amuedo-Dorantes and Pozo, 2010) or in higher rate of drop outs from school. Remittances can partially compensate for this loss (Hu, 2012). Absence of household member (s) can lead to a lack of parental care, to lack of their supervision and support to children and it can result in poorer school performance (Cheianu-Andrei et al., 2011). Children left-behind face increased household responsibilities and obligations, which may restrict him/her access to school (Jones et al., 2004). Single parenthood generally has a negative effect on educational attainment in developed, as well as in developing countries children often have replace (Park, 2008), because to the work done by the missing parent. Lahaie et al. (2009) find that the migration of a caregiver-spouse is significantly associated with academic and behavioural problems for children left behind in Mexico. Parental absence may negatively affect the left-behind child's psychological wellbeing, can develop psychological problems which lead to lower performance and higher drop-outs from school (Xiang, 2007).

2.3.3. Network and knowledge effect

The third way, the migration experience of household members can provide job-related information and lower migration costs of children left-behind through network effects. Having a parent abroad may facilitate the migration of children left-behind, which could have negative impact on their education, since the opportunity costs of staying at school would be rather high (de Brauw and Giles, 2008). The Fourth way, parents working abroad

learn more about the importance of investing in education and how educate the children in their own household and it can have positive impact on school performance of children (Lee and Park, 2010).

2.4. Determinants influencing the educational achievements of children and youth

Many factors are considered important in influencing children's success in schooling. Of these, family structure, household resources, numbers of siblings competing for those resources, and parents' own educational attainment are argued to be particularly important (Arguillas and Williems, 2010).

Parental education seems to be the most consistent determinant of a child's education (Ersado, 2005). More educated parents tend to invest more in children's education (Hu, 2012; Zhao and Glewwe, 2010; Brown, 2006; Smits and Hoşgör, 2006) and they have a better understanding of the future benefits of education and value education more than less educated parents (Amin et al., 2006). For educational enrolment of girls, education of the mother might be especially important (Shu, 2004). Emerson and Souza (2007) find that father's education has a greater positive impact on sons' school attendance whereas mother's education has a greater positive impact on daughters' school attendance. In contrast some authors mention that remittances have positive effect on children schooling when their mothers are educated to a lower standard (Borraz, 2005).

The gender of the head of the household has also been found to have an influence on a child's schooling. The head of the household generally holds more bargaining power and can influence the allocation of resources within a household. Male and female heads may have different household priorities and preferences with studies showing that femaleheaded household put a higher priority on their children's education (Lloyd and Blanc, 1996).

While male migration has null or slightly positive impact in terms of school enrolment rates, female migration apparently reduces the likelihood that a particular child stays at school (Acosta, 2011b). Jampaklay (2006) finds that long-term maternal absence negatively affects children's education in Thailand, while father absence does not. Semyonov and Gorodzeisky (2005) showed that Filipino male overseas workers remit more money than do women. But on the other hand female workers tend to remit a greater share

of their earnings than male and they remit more likely to their female relatives rather than to their fathers, brothers and husbands (Rahman et al., 2009). In addition, women migrants have been shown to remit more regularly and consistently than male migrants since women tend to retain stronger links with their families (Hugo, 2002).

Studies on the effects of household size, in particular number of children, have found differential impact on schooling based on birth order and gender. Higher number of children implies that households' resources have to be shared and the competition among siblings can have a negative impact on their schooling; especially on girls (Hu, 2013). Birth order is likelv to be causally related to educational attainment (Härkönen, 2014; Black et al., 2005). Later born children have lower educational attainment (Härkönen, 2014; Kristensen and Bjerkedal, 2010; Kantarevic and Mechoulan, 2006; Black et al., 2005).

Studies conducted in developing countries show consistently that household wealth significantly improve children's chance of school enrolment (Rankin and Aytac, 2006) their education attainment (Pal, 2004). Investments in schooling are constrained by family's economic resources such that children from economically better off families have higher probability of attending and remaining at school than children from poor families (Glewwe and Jacoby, 2004).

2.5. Impact of migration on education of children and youth in Moldova

2.5.1 Remittance effect

Matano and Ramos (2013) found that being in a family receiving remittances increases the probability of attaining higher education of around 33%. Thus family members who benefit from remittances more often choose to continue their studies after the secondary general level of education compared to children from the families that do not receive any money from abroad (57.9 per cent vs. 29.7 per cent) (Sintov et al., 2013). Remittances sent by parents also facilitate children's access to post-secondary education (HelpAge, 2010), but at the gymnasium and lyceum levels there is no significant difference in expenditures on education between families that do and do not receive remittances (Salah, 2008). There are also no differences in school attendance of children at this level (HelpAge, 2010). A college/specialized secondary student beneficiary of remittances would spend 1.5 times more money for one year of studies compared to a non-beneficiary colleague. The difference in case of university students is 1.3 times (Sintov et al., 2013). The enrolment rate in higher education institutions had increased due of investment to education more in case of the households with migrants from urban areas than from rural areas. In urban areas, remittances represent probably an additional income source and increase the likelihood of investment in education. While, in rural areas, remittances may be the only households' significant source of income to be spent mainly on food and other basic products (ETF, 2010). Remittances also substantially contribute to preparing the child for the new school year and for daily school activities (Cheianu-Andrei et al., 2011). In contrast Luecke and Stoehr (2012) found no significant change in schooling expenditures between household with or without migrant members, but they mention that remittances improve nutrition and living standards. Well-fed and properly more likely to have better schooling outcomes clothed children are also (Luecke and Stoehr, 2012). Approximately one half of the students/graduates benefiting from remittances choose to be trained in a certain profession only/mainly due to these financial sources, otherwise they would be forced to choose other, less attractive study fields (Sintov et al., 2013). Children in migrant households spend significantly less time on household chores and wage work. This finding suggests a decreased necessity to work due to higher household income attributable to remittances (Luecke and Stoehr, 2012).

2.5.2 Absence effect

According to participants of a survey conducted in 2006 the absence of parents has a negative impact on the moral and academic education of children (Salah, 2008). Children whose parents are working abroad have a less healthy and nutrition diet, their school achievements are lower (Vladicescu, 2008). While many migrants stay in contact with their family members, children may still lose the care, emotional support and guidance of one parent (Cheianu-Andrei et al., 2011; Salah, 2008). The lack of control and support leads to low or occasional attendance (Cheianu-Andrei et al., 2011). Teenagers left without parental supervision are particularly exposed to social risks. Having significant financial resources generated by remittances sent by parents, they often do not continue their education (Vremis et al., 2009). Caring for their little brothers/sisters is another aspect that takes a lot of the children's time and influences their school results (Cheianu-Andrei et al., 2011). In contrast Luecke and Stoehr (2012) find no effect of migration on grade retention, that is, children in migrant households do not repeat grades more often that do children in households without migrants and no statistically significant effect on average attendance rates (Luecke and Stoehr, 2012). In terms of employment rates, while 37.7 percent of children from households with at least one absent member work, only 26.0 percent of children from households with no absent members work. There is no appreciable difference between the school attendance rates of working and non-working children of compulsory school age, among children beyond the age of compulsory schooling, the attendance rate of working children is significantly lower than those of non-working children (ILO, 2010).

2.6 Determinants influencing educational achievements of youth in Moldova

Luecke and Stoehr (2012) investigated that migration has no effect on enrolment up to the age of 15 but for higher secondary and lower tertiary education we find a significant negative difference only in the enrolment rates of boys who live in households with current migrants in Russia or the Ukraine. However, for girls with family migrants to the West, we find a higher likelihood of continuing education (Luecke and Stoehr, 2012). Gassmann and Siegel (2013) also didn't find gender differences in educational well-being up to age of 17. The size of the household entails a negative impact on the probability of attending higher education, as well as, the number of very young children. On the other hand the number of adults in the family increases this probability. Having a computer in the house increases the probability of attending higher education, while both the income level and owning land or a car do not appear to have a significant impact. The migrant level of education has a strong, positive and significant impact (Matano and Ramos, 2013).

III. Objectives

3.1. Main objective

The main aim of thesis is to examine the impact of migration and remittances on the high school attendance of youth left- behind in the Republic of Moldova and to determine characteristics which influence youth's education in the Republic of Moldova.

3.2. Specific objectives

The main objective of the thesis will be accomplished through more specific objectives:

- (i) Analysis of the possible effects of migration on the education of children and youth left-behind
- (ii) Analysis of factors influencing the education of children and youth left-behind.
- (iii) Determination of main factors which have impact on the high school attendance of youth in the Republic of Moldova.
- (iv) Analysis of opinions of students and local experts about the impact of migration on school achievements based on questionnaire survey and interviews.

The first research question focuses on the impact of remittances on the high school attendance. The question is whether recipients of remittances have easier access to high school due to increased household budget.

The second research question focuses on the influences of regional characteristics and migration characteristics on the high school attendance. The question is whether the district where is household is situated and preference to migrate influence high school attendance of the youth.

IV. Methodology

4.1. Data sources

In case this thesis was to be used as the base for further study two types of data sources were utilised. Secondary data sources contributed to better understanding of the topic before the field survey. During the primary data collection, several methods were used.

4.1.1. Secondary data sources

The main types of sources were scientific journals such: Journal of development economics, International Journal of Educational Development, World Development, International Migration Review; Journal of Development Economics research papers, reports, statistic databases such as National Bureau Statistics of the Republic of Moldova and World Bank. Databases used for data search were mostly the Science Direct, the Web of Science and EBSCO find the information, keywords such as remittances, migration, education, school attendance, left- behind were used. Sources used for literature review were in English and Romanian languages.

4.1.2. Primary data sources

For more accurate information several data collection methods were used. Structured questionnaires, interviews with a target group and direct observations were used as primary data collection methods and led to a better understanding of the issue. A triangulation method was used as a tool for testing the data validity. In the annex 4 and 5 are included photos from questionnaire survey and observation in the district Straseni.

Structured questionnaire

The present questionnaire was designed according to five main objectives: the first part describes the basic information about respondents, the second part presents educational information about the respondents and their parent, third part is focused on migration patterns, fourth present information about remittances and the last, fifth part shows the information about household and household wealth. Questionnaires were elaborated in English and Romanian language (see Annex 2).

Questionnaire content:

- (i) **Basic information:** gender, age, area, citizenship, region, number of siblings.
- (ii) Educational information: school attendance in school year 2013/2014, level of completed study, reasons for not attending school, parental completed education.
- (iii) Migration patterns: experience with migration, household member's migration, destination of migration, duration of migration and type of migration, preference of migration.
- (iv) **Remittances information:** household consumption of remittances.
- (v) **Household information:** household head, household activities, labour information, household wealth.

After completion of draft the concept, the questionnaire was able to approach pilot testing. Pilot testing was undertaken in the area during the first week of the field survey, in combination with the observations in the area. Questionnaires were tested by 10 respondents in the Chisinau municipality. Consequently, the structure of questionnaire was modified. After adjusting the pilot questionnaire, the final model of questionnaire was designed. Questionnaire consist 35 questions.

The questionnaire survey covered 284 young people that were selected by using a random sampling method. Regarding number of youth, the author calculated size of respondents in Raosoft sample size calculator (Raosoft, 2004).

Interviews with local expert and questionnaire

Besides the questionnaire survey of youth's, a personal interview was carried out with local expert Diana Andrei-Cheianu. To gain a better understanding of the issue the online questionnaire was prepared.

The questionnaire was distributed to local experts (n=15) in following fields:

- (i) Representatives of local NGOs or organisations focused on youth.
- (ii) Local researchers and experts.
- (iii) High school and lyceum professors.
- (iv) Representatives of organisation focused on migration and Diasporas.

The questionnaire (see annex 3) was developed in the English language and there included 6 questions. Some of them were open-ended and the respondent should specify his/her opinion on several questions when in another question the respondent should rate factors which can influence the education of youth or decide if there are some differences between youth with a family member working abroad and without.

Observations

Formal observation was undertaken in the Straseni district and Chsinau municipality. Information obtained by attentive and observant perception of respondent surroundings made it possible to add a more realistic picture of the migration issue.

4.2. Description of study area

The present research took place in Causeni district in the southern region, in Floresti district and in the municipality of Balti in the northern region, in Straseni district in the central region and in municipality Chisinau in the Republic of Moldova (Figure 3).



Figure 3. Description of study area of the research

Source: Author's compilation, 2015

Figure 4 shows location of southern region and the district Causeni, Figure 5 shows location of central region, the district Straseni and the municipality Chisinau and Figure 6 represent location of northern region and district Floresti and municipality Balti.

The research area was chosen based on following criteria:

- (i) 4 development regions included in research (northern, southern, central) and municipality Chisinau.
- (ii) Rural areas and urban areas included (Straseni, Causeni, Floresti x Balti, Chisinau).
- (iii) Areas with seasonal migration mainly to CIS countries and areas with permanent migration mainly to EU are chosen (Causeni, Floresti, Balti x Chisinau, Straseni).
- (iv) Distance to high school (each district is relatively close to main cities- distance is not barrier for high school attendance)

4.2.1 South region

It is the smallest region in the Republic of Moldova which includes eight districts: Basarabeasca, Cahul, Cantemir, Causeni, Cimislia, Leova, Stefan-Voda, and Taraclia (NBS, 2014c). The population of the region was 536,000 people in 2014. The great majority of the population lives in the rural areas (NBS, 2014c). According to SADI in 2009, 42,076 residents were temporarily absent, accounting for 7.7% of the region's population. There is the low share of health expenses (6.7% of the total) and particularly for education - only 1% (South Regional Development Agency, 2012). The number of students is decreasing continuously, on the average by 4% annually. The main causes affecting the education in the region are characteristic for the entire Republic of Moldova: massive emigration, including of teachers, decreasing birth rate, insufficient funds for education, etc. (South Regional Development Agency, 2012).



Figure 4. Description of study area – South region Source: Author`s compilation, 2015

Causeni district

Causeni district is located in the south-east of Moldova and the total area is 116,300 ha. It is bordered by Stefan Voda, Anii- Noi, Cimislia, as well as Tarutino district of Odessa region in Ukraine (Consiliul raional Causeni, 2015). Most of the youth's live in rural areas (NBS, 2014c). According to the general census of 2004, about 9,599 residents of Straseni were "temporarily absent" and the main destination of emigration was Russia, Italy and Ukraina. For the most of people was labour main reason of emigration (NBS, 2004). In Causeni is 34 primary and secondary educational institutions with 9,545 students in 2014 (NBS, 2014b).

4.2.2 Central region

The central region is located in the central part of Moldova ensuring connection between other regions (Central Regional Development Agency, 2012). Central region includes 12 districts: Ungheni, Telenesti, Rezina, Orhei, Calarasi, Nisporeni, Straseni, Criuleni, Dubasari, Anenii Noi, Ialoveni and Hincesti (NBS, 2014c). In 2014 the region's population was 1,060,400 people which is about 30% of total population). According to the NBS (2014c) that 80.5 % residents live in rural areas and 19.5% in urban areas. There

are three main migration flows occurring with a different degree of intensity: rural - urban migration within the region, central region - Chisinau migration (especially students of higher education institutions from Chisinau and living in the capital) and migration abroad (Central Regional Development Agency, 2012).



Straseni district

Straseni is located in the center of the country, located 23 km from the capital city Chisinau. The main branches of the economy are agriculture and manufacturing district (Consiliul raional Straseni Republica Moldova, 2015). Most of youth lives in rural areas (NBS, 2014c). According to the general census of 2004, about 7,618 residents of Straseni were "temporarily absent" and the main destination of emigration was Russia, Italy, Portugal and Spain (NBS, 2004). In Straseni is 36 primary and secondary educational institutions with 9,553 students in 2014 (NBS, 2014b).

4.2.3 Northern region

The Northern region includes Balti municipality, 11 districts: Briceni, Edinet, Donduseni, Drochia, Falesti, Floresti, Glodeni, Ocnita, Riscani, Singerei, Soroca (NBS, 2014c). The region's population in 2014 was 994,844 people (25% of the country population). The population structure shows no major imbalances in terms of gender. The share of urban population in the region is higher compared to the central and southern regions

(NBS, 2014c). According to the general census of 2004, about 86,000 residents of the northern region were "temporarily absent" (NBS, 2004). These represent about 9% of the region's population, and according to the latest data of the northern region about 14%. There is also a low percentage of health care expenses (4% of total) and, in particular, for education - only 1%, which is 2.5 times less than in the capital city (Northern Regional Development Agency, 2012).

Floresti district

The district's population in 2014 was 88,718 people. Most youth's lives in rural areas (NBS, 2014c). According to the general census of 2004, about 9,057 residents of Floresti were "temporarily absent" and the main destination of emigration was Russia and Italy (NBS, 2004). In Floresti is 50 primary and secondary educational institutions with 8,625 students in 2014 (NBS, 2014b).



Figure 6. Description of study area – North region

Source: Author's compilation, 2015

Balti municipality

The municipality Balti's population is 149,784. Most of youth live in urban areas (NBS, 2014c). According to the general census of 2004, about 8,593 residents of Balti were "temporarily absent" and the main destination of emigration was mainly Russia. For the 84% of people was labour abroad main reason for emigration and for 8.6 % the reason of emigration was to study (NBS, 2004). The 3 universities in the municipality

of Balti had 6,050 students in the academic year 2013-2014, of which 1,544 students have graduated (NBS, 2014b).

4.2.4 Chisinau municipality

In the municipality of Chisinau the population is 804,476. Most of youth live in urban areas (NBS, 2014c). The poverty level in this zone is 7 times lower than the average registered for the country, and is only 2.5% (Ministry of Economy, 2012). According to the general census of 2004, about 27,380 residents of Chisinau were "temporarily absent" and the main destination of emigration was Russia, Italy and Greece, Portugal and Romania (NBS, 2004). For the 76.8% of people was labour abroad main reason of emigration and for 13.6 % the reason of emigration was study (NBS, 2004). In the municipality Chisinau is 26 higher educational institutions with 87,522 students of which 24,848 graduates in 2014 (NBS, 2014b).

4.3. Target group

I focused on youth from 16 up to 20 years old living in the Republic of Moldova in Causeni district, Straseni district, Floresti district and in the municipality of Chisinau and Balti.

The respondents were chosen based on following criteria:

- (i) To have Moldovan citizenship.
- (ii) To reside within one of the 5 districts/municipalities mentioned above.
- (iii) To be literate and to speak Romanian.
- (iv) To be only one respondent per household.

The total number of respondents surveyed was 284. The descriptive statistics of the target group divided into the districts/municipalities you can see in the Annex 1.

4.4. Timeframe

Table 3 shows the duration of the three main phases and the duration of the writing of this thesis. The first phase was the preparatory phase when the objectives and methodology of thesis were formulated. The second phase was the data collection phase completed directly in the Republic of Moldova (only the survey with local experts was undertaken in the Czech Republic). The third phase included data cleaning, data analysis in Stata 12 and data interpretation.

Table 3. Timeframe of diploma thesis

	November 2013- June 2014	July 2014- September 2014	October 2014- November 2015	January 2015-April 2015
Secondary data analysis				
Formulation of objectives				
Formulation of methodology				
Establishment of questionnaire				
Pilot testing				
Data collection in Moldova				
Observation				
Interview				
Survey-local experts				
Data cleaning and coding				
Data analysis				
Data interpretation				

4.5. Data analysis method

Following Amuedo-Dorantes and Pozo (2010) I estimated this model:

School attendance*
$$_{if} = y *_{if} = \alpha + \beta R_f + X_{if} \gamma + \varepsilon_{if},$$
 (1)

$$y_{if} = I(y_{if}^* > 0),$$

where $y^{*_{if}}$ is the unobserved or latent likelihood of attending school by child *i* in family *f*. The function $(y_{if}^{*} > 0)$, is the indicator function taking on the value one if $y_{if}^{*} > 0$, and zero otherwise. R_f is a dummy variable denoting whether the household currently receives international remittances. The vector X_{if} includes information important determinants of children's schooling according to earlier studies which are shown in Table 4.

Because one or more variables should be endogenous, the Durbin (1954) and Wu-Hausman (Hausman 1978; Wu 1974) test for endogenity were done. The null hypothesis of the Durbin and Wu–Hausman tests is that the variable under consideration can be treated as exogenous (StataCorp., 2015). In the presence of endogenous variables the OLS estimation is inconsistent. One common strategy to adequately address endogenity concerns is to use instrumental variables (IVs) methods (Sargan, 1958; Reiersøl, 1945). The method of instrumental variables (IVs) is a general approach to the estimation of causal relations using observational data (Stock, 2001). There is several IVs methods such as two-

stage least squares (2SLS), limited-information maximum likelihood (LIML) and generalized method of moments (GMM) (StataCorp., 2015).

In case of the small sample size limited-information maximum likelihood (LIML) estimation is the most appropriate estimator (Blomquist and Dahlberg, 1999). The LIML estimation, IV proposed by Anderson and Rubin (1949),is an method based on a maximum likelihood estimator (Greene, 2003). The advantage of this estimation is that it is median unbiased: the median of its sampling distribution is generally close to the population parameter (Anderson et al., 1982), under the assumption of normal distribution of the error term (Anderson, 1977). With many weak instruments, LIML estimation performs better than 2SLS estimation (Bekker, 1994).

Instrumental variable tests

There are several criteria which should be checked to eliminate a biased result. Estimations with weak instruments (instruments with low correlation between the endogenous regressors) may perform bad and even poorer than OLS (Stock et al., 2002). If at least one instrument is endogenous then the 2SLS and LIML estimators are inconsistent (Stock, 2001). Basically if instruments are both weak and not exogenous, 'IV estimation may lead to very poor results' (Hahn and Hausman, 2003). The relevance of the instruments is tested in the first-stage regression.

Test of weakness

The F-statistic of joint significance of selected instruments at the first stage should generally be more than 10, according to the rule of thumb proposed by Staiger and Stock (1997). Another test of weakness of instruments is Cragg-Donald statistic (Stock et al., 2002; Cragg and Donald 1993). This characterization defines a set of instruments to be weak if a Wald test at the 5% level can have an actual rejection rate of no more than 10%, 15%, 20%, or 25% (StataCorp., 2015).
Instrument exogeneity

One of the most important requirements is that instrumental variables had to be correlated with the endogenous regressors, the instruments must also be uncorrelated with the structural error term. If the model is overidentified (the number of instruments exceeds the number of endogenous regressors), then we can test whether the instruments are uncorrelated with the error term (StataCorp., 2015). A likelihood ratio test for overidentification condition based on maximum likelihood procedures was given by Anderson and Rubin (1950). This version of test requires computation of LIML. This was later modified by Basmann (1960) so that it could be based on the 2SLS procedure. The both tests are used for testing of exogenity of instruments in the thesis. A statistically significant test statistic at the 5% significance level always indicates that the instruments may not be valid (StataCorp., 2015). Failing a test of overidentifying restrictions suggest that at least on of excluded IVs correlates with disturbance (Paxton et al., 2011).

4.5.1 Regional, household and individual characteristic

I used an array of control variables: child characteristics, household demographics, regional characteristics, parents 'education status. First, because education choices are believed to be taken collectively in the family, household characteristics have a direct impact on schooling and therefore should be controlled for (Mansour et al., 2011). Following other authors I included in analysis following characteristics which are mentioned in the Table 4.

Variables	Type of variable Literature			
	Dependent variable			
School attendance	Binary variable (yes $= 1$)	Amuedo-Dorantes and Pozo (2010),		
		Hu (2012), Matano and Ramos		
		(2013),		
	Independent variables			
Age of child	Discrete variable	Matano and Ramos (2013), Amuedo-		
		Dorantes and Pozo (2010), Mckenzie		
۲.		and Rapoport (2010)		
Boy	Binary variable (yes $= 1$)	Matano and Ramos (2013), Hu		
		(2013), Hu (2012) , Amuedo-Dorantes and Poze (2010) , Calara et al. (2000)		
Number of siblings	Discrete variable	ACSER (2013) Mansour et al		
rumber of storings	Discrete variable	(2011).		
Firstborn	Binary variable (yes $= 1$)	Mansour et al. (2011), Amuedo-		
		Dorantes and Pozo (2010)		
Mother's education	Ordered variable	Matano and Ramos (2013), ACSER		
		(2013)		
Father's education	Ordered variable	ACSER (2013), Mansour et al. (2011)		
Preference of migration	Binary variable (yes $= 1$)			
Rural area	Binary variable (yes $= 1$)	Matano and Ramos (2013), Hu, 2013,		
		Mansour et al. (2011), Calero et al.		
		(2009)		
District	Ordered variable			
	Endogenous variable	N		
Remittance	Binary variable (yes $= 1$)	Matano and Ramos (2013), Hu		
		(2013), Amuedo-Dorantes and Pozo		
(2010)				
Number of old poople	Discrete verieble	Matana and Pamos (2012) Mansour		
Number of old people		(2013), Mallsour et al (2011)		
Bank account	Binary variable (ves – 1)	Matano and Ramos (2013) Mansour		
Buink account	Diffuily variable (yes = 1)	et al. (2011)		

Table 4. Variables included in the limited-information maximum likelihood estimation

Instrumental variables:

Based on previous research I included as an instrumental variable the ownership of a bank account in the home country and number of older person (60 <).

(i) Bank account: A dummy for families having a bank account which represents one of the means through which remittances can be received was already used by Matano and Ramos (2013) and Mansour et al. (2011). The ownership of bank account facilitates the process of sending remittances and it influences the remittance decisions (Matano and Ramos, 2013). (ii) Number of old person: Having a family with a higher number of older members can influence the decision of relatives abroad on sending remittances due to the need of medical care for these members and due to the declining productivity of the family (Matano and Ramos, 2013; Mansour et al., 2011).

4.5.2. Data processing

After first preparation, data were transcribed into the statistical program Stata 12 where they have been subsequently cleaned. Secondly, the data set was categorized, coded and organized for further processing and analyses. Both descriptive as well as inferential statistics were applied.

4.6. Limitation of the study

Certain study limitations have to be mentioned. Undeniably there was a significant language barrier. Although interpreters were used to fill out the questionnaires there was still a chance of misunderstanding of the questions or lack of openness from the side of respondents. Because of this and the size¹, scope, budgetary and time restraints of this study, this thesis does not claim to provide a comprehensive answer to the question of remittances and educational attendance across a whole country but rather to provide a snapshot of the main influences. As such this study should be seen as a base, springboard or a point of reference for further study on this topic.

¹ Total number of respondents: 284 ; Confidence level : 95%, Margin error: 6%

V. Results

5.1. Descriptive statistic results

Education and labour of youth

The result show that 53 % percent of respondents attended high school in school year 2013/2014. The main reason for non- attendance was labour (45%), lack of money (29%), household activities (20%), take care of siblings (3%) and other (3%). Just a few respondents repeated class during the study. The information about school attendance of respondents in each district is presented in the Annex 1. About 35% of youth was employed during their study. Most of the respondents were engaged in some household activity. Generally 32 % of respondents worked in agriculture and 24 % respondents cared about their siblings and 84% percent helped with household duties. Almost 50 % of parents were tertiary educated (see Figure 7).





Remittances and migration patterns

Almost 3/4 of surveyed young people intend to go abroad, of which for 60% would be the first experience and for 40% a repeated experience, and 26% do not intend to leave the country. Figure 8 shows that the main destinations of the migration were Russia, Italy, Romania, Ukraine, Portugal and United States. Moreover, 37% respondents had experience with mother's migration and 47% respondents had experience with father's migration. The father's migration was mainly seasonal when in case of mother's migration 41% of them migrate permanently and 59% of them seasonal. In most of cases migrated more than one member of household.



Figure 8. Descriptive statistic result- destination of migration of household members

Remittance consumption

More than 68% of respondents receive remittance. Figure 9 shows that remittances were mostly spent on payment of bills, food, clothing, education, medicines and on the improvement of housing (see Figure 9). In case of goods the migrants most often send/bring clothing, electronic, food, toys and medical equipment.



Figure 9. Descriptive statistic result – Remittances consumption

Youth's perception of the impact of migration on children-left behind

The majority of youth mentioned that lack of supervision, lack of parental care and lack of support have negative effect on the education of children and youth left- behind. According to 15% of respondents, youth without parental supervision and guidance are exposed to social risk such as consumption of alcohol and drugs which can influence school attendance. Parental absence also can cause psychological problems such as depression and lack of motivation. Just few respondents mentioned that migration has positive effect due to improvement of economic situation by remittances sent by member working abroad.

5.2. Impact of remittances on the school attendance - IV model results

Do remittances sent by member working abroad promote youth's high school attendance? According to the figures in Table 5 the receipt of remittances had insignificant effect on the school attendance in the districts of Causeni, Floresti, and Straseni and in the municipalities of Balti and Chisinau. The key factors (characteristics) which had statistically significant effect on the school attendance of youth were education of mother, number of siblings and household area when the higher number of siblings, to live in rural area and had negative effect on the school attendance and mother's level of education had the positive one. For the districts where the household is situated estimates were not significant. Age of youth, being the oldest children a preference to migrate did not appear to have significant impact on youth's high school attendance.

First-stage results indicated that education of father, and being the oldest child had significant effect on the probability of receiving of remittances. To be the oldest children decreased the probability of receiving of remittances. The number of old people and the ownership of bank account had significant effect. The both instrumental variables were significant at least at 5% significance level.

	Coefficient	SE
Second-stage results (school attendan	ce)	
Household receives remittances	0.002	0.131
Boy	- 0.087	0.057
Age	- 0.017	0.020
Number of siblings	- 0.114 ***	0.032
Firstborn	- 0.045	0.059
Education of mother	0.112 ***	0.038
Education of father	0.064	0.045
Preference of migration	0.059	0.066
District	0.000	0.020
Rural area	- 0.104*	0.058
First- stage results (remittances)		
Boy	0.055	0.049
Age	-0.001	0.019
Number of siblings	-0.018	0.028
Firstborn	-0.102**	0.049
Education of mother	0.003	0.033
Education of father	0 .099***	0.037
Preference of migration	0.075	0.058
Rural area	0.034	0.050
District	0.017	0.017
Bank account	0.444***	0.054
Number of old people	0.060**	0.027
Number of observation		284

Table 5. Limited-information maximum likelihood estimator (LIML) results

Note: ① All regressions include a constant term. ②Bank account and number of old people were used as instruments for remittances.

- * Significant at 10% level
- ** Significant at 5% level
- *** Significant at 1% level

Test of endogenity

First I determined whether endogenous regressor (remittance receipt) in the model is not in the fact exogenous. I use for the verification. In both cases, if the test statistic was significant on the 5% test level, then the tested variables must be treated as endogenous.

> **Durbin test:** 6.22 (p = 0.01) **Wu-Hausman:** 6.09 (p = 0.01)

Both test statistics were significant at the 5% test level (0.01 > 0.05), which means that variable remittance receipt must be treated as **endogenous**. Because of endogenity it was used IV (Instrumental Variable) model.

Test of weakness of instruments

The F-statistic of joint significance of selected instruments at the first stage should generally be more than 10. As we can see, the F-statistic was 38.86, so we can consider the instruments as strong (38.86> 10). I also tested weakness also by Cragg- Donald Wald F statistic for testing of weak instruments. As we can see in Table 6 all of Cragg- Donald statistics were above the critical value of 10% of the maximal IV size (38.86 > 8.68), which indicates that the **weak instruments have been rejected**.If the F-statistic is not significant, then the additional instruments have no significant explanatory power. The F-statistic is significant (0.00 < 0.05).

Table 6. Results of the tests of weakness of instruments

	10%	15%	20%	25%
LIML Size of nominal 5% Wald test F (2,272): 38.86	8.68	5.33 Prob >	4.42 • F: 0.00	3.92

Test of exogenity and validity of instruments

Anderson and Rubin test and later modified Basmann test was used. A statistically significant test statistic at the 5% significance level always indicates that the instruments may not be valid. Both tests are not significant at the 5% significance level.

Anderson-Rubin
$$chi2(1)$$
: 0.18 (p = 0.68)

Basmann F(1, 272): 0.17 (p = 0.68)

5.3. Questionnaire survey results – Local experts

All experts surveyed (n=15) mentioned that parental migration has impact on the school attendance and on the enrolment of youth left-behind. Generally the opinions were very similar to the opinions of youth. Local experts mentioned that the parental absence have negative effect on the motivation to study and that the majority of students although attend the school, do not consider education as a priority. Another problem based on the survey result is with behaviour and morality of youth left- behind. One respondent mentioned that parental migration is important, because of many children and youth left Moldova in the last 10-15 years, in order to join their parents.

According of all of the respondents there are differences between youth with parent abroad and youth without migrant in case of school attendance, school retention and in the ownership of ensuring materials for study. Most of them also mentioned differences in school results, level of drop-outs and motivation to study.



Figure 10. Characteristics influencing high school attendance - local experts opinion

Based on the opinions of local experts the main reason for non -enrolment for university was poverty, corruption, lack of proper parental guidance, lack of motivation to study, lack of opportunities to get a job and get a good salary and the main reasons of migration of youth are mainly economic: poverty in the Republic of Moldova, better paid jobs abroad, better life condition and access to more quality health and social services, to join to family abroad.

Figure 10 shows that according to local experts the factors which really influence high school attendance of youth were migration and parental support during the study, duration of parental absence, remittance and destination of migration and youth's work in agriculture. The region where the household is situated and gender of youth did not play role in youth's school attendance. Among other factors mentioned by local experts which have an effect on school attendance or on the motivation to study were that the school are not optimised, that teacher and staff are unqualified and there is large exodus of young teaching staff from the educational system. The lack of new technologies and not efficient school financing mechanisms were also mentioned.

VI. Discussion

Based on the result, the remittances have insignificant impact on high school attendance in the districts of Causeni, Floresti, and Straseni and in the municipalities of Balti and Chisinau. The insignificant effect of remittances on school attendance was already found in several countries such as The Dominican Republic (Amuedo-Dorantes and Pozo, 2010; Acosta et al., 2007)², in Salvador (Acosta, 2011a), in Macedonia (ACSER, 2013) and Jamaica (Acosta et al., 2007). The insignificant result should be caused because of not separation of parental absence effect and remittance effect. As mention Hu (2013), (ACSER, 2013) and Amuedo-Dorantes and Pozo (2010), it is important to separate disruptive effect of contemporaneous migration of household member and the income effect of remittances. When remittances have positive effect on school attendance, the presence of negative effect of parental absence can reduce this effect. Another explanation is there are no significant differences in expenditures in this level of education. This idea is supported by study of Salah (2008) where authors also mention that at the gymnasium and lyceum levels there is no significant difference in expenditures on education between families that do and do not receive remittances, but on the other hand remittances sent by parents can facilitate children's access to post-secondary education (HelpAge, 2010). Cheianu-Andrei et al. (2011) also mention that remittances contribute to improving the education for children left behind. especially access to in universities. It can be reason why Matano and Ramos (2013) by using instrumental variable profit model found, that living in family receiving remittances increase the probability to attend higher level of education about 33 percent in the Republic of Moldova.

Characteristics which had statistically significant effect on the school attendance of youth were mother's level of education, number of siblings and area of residence. The higher number of siblings have negative effect on the school attendance when the mother's education have positive one. The father's educational level had not statistically significant effect. More educated parents tend to invest more in children's education then less educated parents (Devereux, 2014) and that mother's education seems to be more important than the father's one (Brown, 2006). It is supported by finding of IOM (2012) who confirm that the

² Amuedo- Dorantes and Pozo (2010) found insignificant effect when focused on all respondents

mother has larger role in children's education and life attitude in the Republic of Moldova.

Based on the result the number of siblings has a negative effect on the high school attendance. Some articles such as Hu (2012), Albania (ACSER, 2013) confirm that larger number of siblings decrease school attendance of children and youth. The one explanation already mentioned by Hu (2012) can be that the large number of siblings means tougher competition for the educational opportunities and probably because in the larger families size the available resources have to be divided among more children and child to receive fewer share of the resource (Monfardini and See, 2011).

Living in rural areas has a small but significant negative effect on high school attendance. In several countries was found that in the rural areas children have lower access to education (FAO, 2003) and for that reason the absence effect (Hu, 2012; Hu, 2013) and remittance effect (Hu, 2013; Hu, 2012; Calero et al., 2009) is in the rural areas higher than in urban areas. Matano and Ramos (2013) find negative but statistically insignificant effect of living in urban area on school attendance in the Republic of Moldova. For the district where the household is situated estimate is not significant.

Hanson and Woodruff (2003) argue that the birth order of a child in a family can influence the investment that is put into that child's education. This idea was confirmed by Amuedo-Dorantes and Pozo (2010) in case of the Dominican Republic. They found that school attendance significantly differs by birth order and that firstborns are more likely to attend school than their younger siblings and that is why the income effect from the remittances can be significant for younger siblings and not for firstborns. The reason why firstborn have higher school attendance is that they are placed in a more privileged position than higher order of birth children in many cultures. I do not find significant effect to be the oldest child in family on the school attendance. It seems that children birth order do not influence school attendance in the Republic of Moldova.

Based on my results I find no significant effect of gender of youth on high school attendance. In many countries such as China (Hu, 2013; Hu, 2012), Ecuador (Calero et al., 2009), the Dominic Republic (Amuedo-Dorantes and Pozo, 2010) the positive effect of remittances on the high school attendance /enrolment is found to be significant for girls but no for boys when in other countries such as Jordan and Syria there was confirm significant effect for boys (Chaaban and Mansour, 2012). The one reason why I found insignificant effect of gender on high school attendance should be that in the Republic of Moldova there is not the gender gap in the access to high school education (UNDP, 2014).

Age of children/youth seems to play important role. Some authors found the positive effect of remittances was found in the number of youth at university level (Mansour et al., 2011) when the ones found the income effect from remittances statistically significant in of high school level (Amuedo-Dorantes and Pozo, 2010). Matano and Ramos (2013) found that the age of youth has a significant negative effect on school attendance but I do not confirm these findings. The result can be different because I focused just on youth aged 16-20 years old when the Matano and Ramos (2013) focused on youth aged 16-30 years old. The share of students decrease in higher levels of education (NBS, 2014b) and which can be the reason why my results differ.

For the preference of migration in the future estimates are not significant which means that the plan to migrate in the future do not have effect on high school attendance. Almost ³/₄ of students intend to migrate in the future although most of them attend the school. Moreover, Pantiru et al. (2007) found that one third of migrants are tertiary educated. According Gaugas (2004) the lack of connection between the educational system and the labour market lead to the increasing of migration of higher education graduates and lack of work positron is important push factor which force skilled citizens to work abroad. Based on the result it is important to motivate youth to do not migrate, otherwise the brain drain will be problem also in the future.

Based on the opinions of youth and on the opinion of local experts' parental migration have negative effect on the school attendance. Most often respondents mention that parental absence lead to lack of parental care, support and supervision and that parental absence can cause psychological problems such as lack of motivation or depression. This effect was already mentioned in in the Republic of Moldova (Cheianu-Andrei et al., 2011) as well in countries worldwide (Pottinger, 2005; Jones, 2004). Battistella and Conaco (1998) have suggested that migration does not have negative impact for the children left-behind if it is not the mother who migrates. Based on my results from questionnaire survey 37 % percent of youth have experience with a mother's migration and 47% of them with father's migration. In case of a father's migration there was a

prevalence of seasonal migration, but more than 40 percent of mothers stay abroad permanently (more than one year). When we take account that children are negatively affected by absence of the mother rather than the father (ACSER, 2013; Mansour et al., 2011; Jampaklay, 2006) it can also be the reason why due to long term mather's absence the remittances effect mentioned above is insignificant. This idea is supported by (ACSER, 2013) who investigated that years of the mother abroad in long term negatively affects the education level of the child (especially for girls in Albania).

The absence of parent (s) represents a psychological challenge for children left behind in other ways. When parent (s) migrate many' children have the responsibility to maintain the household. Domestic activities, as well as no supervision and parental support can leads to a decrease in educational attainment (Cheianu-Andrei et al., 2011). Another most often mentioned opinion is that youth are exposed to social risk such as consumption of alcohol and drugs which can also influence school attendance. Also based on the interviews provided by Salah (2008) with local leaders the lack of parental supervision and care can lead to alcohol and drugs consumption and to irresponsible behaviour of children.

VII. Conclusion and recommendation

7.1. Conclusion

Do remittances sent by members of a family working abroad promote youths' high school attendance? Using the instrumental variable method, I found that the remittances sent by member working abroad do not have a significant effect on the high school attendance of youth in the districts of Causeni, Floresti, and Straseni and in the municipalities of Balti and Chisinau. On the other hand, the results showed that a mother's education plays an important role in youths' education. The father's education does not seem to have effect on high school attendance of youth. The higher number of siblings and living in rural area have negative significant effect on the high school attendance when for the district of household and preference to migrate in the future were estimates insignificant.

It seems to be important to distinguish the disruptive effect of contemporaneous migration of household members and the income effect of remittances. When the remittances can improve household budget and access to education, the negative effect of parental absence eliminate this effect. The negative effect of parental absence such as lack of parental care and supervision during the study was often mentioned by youth and by local experts. According of 15% of surveyed youth, young people without parental supervision and guidance are more exposed to the social risk such as consumption of alcohol and drugs which can influence school attendance.

More than 3/4 of surveyed young people intend to migrate abroad. Based on the opinion of local experts and on the previous research, the migration is motivated mainly by the economic reasons such as lack of suitable work positions and well-paid jobs. Lack of motivation is another challenge, which should be take account. The majority of students although attend the school, do not consider education as a priority.

7.2. Recommendation

In order to diminish the negative effect of the migration on the youth, it is necessary to implement several steps which could improve the current situation. One of the most important issues is to motivate young generation during their study due to improvements of school system and to offer them suitable work positions corresponding with their specialization. Based on opinions of local experts the quality of the education is still low and there is lack of new technologies and lack of qualified teachers. Low wages and imperfect mechanism for the remuneration of the teaching staff which is not based on performance of teachers lead to the exodus of young teaching staff from the educational system and it has consequences on the quality of education. Lack of an efficient mechanism for the motivation of performance and the large number of older teaching staff affect youths' attitude to the education and for this reason seems to be necessary to focus on the modernization of system and on the improvement of school financing mechanisms.

Mass migration is motivated mainly by the economic reasons such as lack of suitable work positions and well-paid jobs. Providing of attractive work possibilities to young people after their graduation could eliminate migration of young generation abroad. The local labor market structure affects the perceived benefits of education so if the conditions will be improved for absolvents of schools the motivation to study should be higher. Internships or short-term contracts should be encouraged as post-graduation forms of on-the-job training in order for fresh graduates to acquire sufficient professional skills for the labor market competition.

VIII. References

Acosta P. 2011a. School attendance, child labour and remittances from international migration in El Salvador. Journal of Development Studies 47: 913-936.

Acosta P. 2011b. Female migration and child occupation in rural El Salvador. Population Research Policy Review 30: 569-589.

Acosta PA, Fajnzylber P, Lopez H. 2007. The impact of remittances on poverty and human capital: evidence from Latin American household surveys. Available at http://ssrn.com/abstract=992396: Accessed 2014-05-15.

Adams RH, Cuecuecha A. 2010. Remittances, household expenditure and investment in Guatemala. World Development 38: 1626-1641.

Adams RH, 2011. Evaluating the economic impact of international remittances on developing countries using household surveys: A literature review. Journal of Development Studies 47: 809-828.

Albanian Centre for Socio-Economic Research. 2013. Education outcomes from migration and remittances in Albania and Macedonia. Available at http://www.analyticamk.org/images/stories/files/Education_outcomes_final.pdf: Accessed 2014-11-18.

Alcaraz C, Chiquiar D, Salcedo A. 2012. Remittances, schooling, and child labor in Mexico. Journal of Development Economics 97: 156-165.

Amin S, Quayes S, Rives JM. 2006. Market work and household work as deterrents to schooling in Bangladesh. World Development 34: 1271-1286.

Amuedo-Dorantes C, Pozo S. 2010. Accounting for remittance and migration effects on children's schooling. World Development 38: 1747-1759.

Anderson TW. 1977. Asymptotic expansions of the distributions of estimates in simultaneous equations for alternative parameter sequences. Econometrica 45: 509-518.

Anderson TW, Rubin H. 1949. Estimation of the Parameters of a Single Equation in a Complete System of Stochastic Equations. The Annals of Mathematical Statistics 20: 46-63.

Anderson TW, Rubin H. 1950. The asymptotic properties of estimators of the parameters of a single equation in a complete system of stochastic equations. The Annals of Mathematical Statistics 21: 570-82.

Anderson TW, Kunitomo N, Sawa T. 1982. Evaluation of the distribution function of the limited information maximum likelihood estimator. Econometrica 50: 1009-1027.

Antman FM. 2012. Gender, educational attainment, and the impact of parental migration on children left behind. Journal of Population Economics 25: 1187-1214.

Arguillas MJB, Williams L. 2010. The impact of parents' overseas employment on educational outcomes of Filipino children. International Migration Review 44: 300-319.

Azam J, Gubert F. 2006. Migrant remittances and the household in Africa: A review of evidence. Journal of African Economies 15: 426-462.

Bailey AJ. 2001. Turning transnational: notes on the theorisation of international migration. International Journal of Population Geography 7: 413-428.

Basmann RL. 1960. On finite sample distributions of generalized classical linear identifiability test statistics. Journal of the American Statistical Association 55: 650-659.

Battistella G, Conaco MCG. 1998. The impact of labour migration on the children left behind: A study of elementary school children in the Philippines. Journal of Social Issues in Southeast Asia 13: 220-241.

Bekker PA.1994. Alternative approximations to the distributions of instrumental variables estimators. Econometrica 62: 657-681.

Black SE, Devereux PJ, Salvanes KG. 2005. The More the Merrier? The Effect of Family Size and Birth Order on Children's Education. Quarterly Journal of Economics 120: 669-700.

Blomquist S, Dahlberg M. 1999. Small Sample Properties of LIML and Jackknife IV Estimators: Experiments with Weak Instruments. Journal of Applied Econometrics 14: 69-88.

Borodak D, Piracha M. 2010. Occupational choice of return Migrants in Moldova. Eastern European Economics 49: 24-46.

Borodak D, Tichit A. 2014. Should we stay or should we go? Irregular migration and duration of stay: The case of Moldovan migrants. Migration Studies 2: 415-447.

Borraz F. 2005. Assessing the impact of remittances on schooling: The Mexican experience. Global Economy Journal 5: 1–30.

Bredl S. 2011. Migration, remittances and educational outcomes: The case of Haiti. International Journal of Educational Development 31: 162-168.

Brow RPC, Poirine B. 2005. A model of migrants' remittances with human capital investment and intrafamilial transfers. International Migration Review 39: 407-438.

Brown PH. 2006. Parental education and investment in children's human capital in rural China. Economic Development and Cultural Change 54: 759-789.

Brown RPC, Jimenez E. 2008. Estimating the net effect migration and remittances on poverty and Inequality: Comparison of Fiji and Tonga. Journal of International Development 20: 547-571.

Calero C, Bedi AS, Sparrow R. 2009. Remittances, liquidity constraints and human capital investments in Ecuador. World Development 37: 1143–1154.

Castles S, Miller MJ. 2003. The age of migration: international population movements in the modern world. New York: Guilford Press. 338p.

Central Regional Development Agency. 2012. Regional Development Strategy: CentralDevelopmentRegion.Availableathttp://www.serviciilocale.md/public/files/dezv_regionala/Strategia_de_Dezvoltare_Regionala_Centru-revizuit_2012_en.pdf: Accessed 2014-06-12.

Chaaban J, Mansour W. 2012. The impact of remittances on education in Jordan, Syria and Lebanon. Available at http://www.erf.org.eg/CMS/uploads/pdf/684.pdf: Accessed 2014-05-26.

Cheianu-Andrei D, Gramma R, Milicenco S, Pritcan V, Rusnac V, Vaculovschi D. 2011. Specific needs of children and elderly left behind as a consequence of migration. Chisinau: CEP USM. 248p.

Cheianu-Andrei D. 2013. Available at Maping of the Moldovan diaspory in Italy, Portugal,FranceandUnitedKingdom..2013.Cheianuhttp://www.iom.md/attachments/110_raportfinaleng.pdf:Accessed 2014-05-21.

Consiliul raional Causeni. 2015. Geography and clima. Available at http://causeni.md: Accessed 2014-06-02.

Consiliul raional Straseni Republica Moldova. 2015. District Council Straseni - Moldova. Available at http://crstraseni.md/index.php?l=ro: Accessed 2014-06-11.

Cragg JG, Donald SG. 1993. Testing identifiability and specification in instrumental variable models. Econometric Theory 9: 222-240.

Cuc M, Lundbäck EJ, Ruggiero, E. 2005. Migration and remittances in Moldova. Washington: International Monetary Fund. 79p.

Curran S, Cadge W, Varangrat A, Chung C. 2004. Boys' and girls' changing educational opportunities in Thailand: The effects of siblings, migration and village location. Research in Sociology of Education 14: 59-102.

Devereux PJ. 2014. Intergenerational return to human capital: Better educated parents invest more time and money in their children, who are more successful in the labor market. Available at http://wol.iza.org/articles/intergenerational-return-to-human-capital.pdf: Accessed 2015-04-02.

de Brauw A, Giles J. 2008. Migrant Opportunity and the Educational Attainment of Youth in Rural China. Available at http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-4526: Accessed 2014-05-23.

Durbin J. 1954. Errors in variables. Review of the International Statistical Institute 22: 23-32.

Dustmann C. 2003. Return migration, wage differentials, and the optimal migration duration. European Economic Review 47: 353–369.

Emerson PM, Portela Souza A. 2007. Child labor, school attendance, and intrahousehold gender bias in Brazil. The World Bank Economic Review 21: 301-316.

Ersado L. 2005. Child labor and schooling decisions in urban and rural areas: Comparative evidence from Nepal, Peru and Zimbabwe. World Development 33: 455-480.

Eskola E. 2007. Investing in a Brighter Future Abroad? : The Need for a Domestic Alternative in Moldova. Stockholm: SIDA. 50p.

Esquivel G, Huerta-Pineda A. 2007. Remittances and Poverty in Mexico: A Propensity Score Matching Approach. Integration and Trade 27: 45-71.

European Training Foundation. 2011. HCD Review: relationship between human capital development and equity in the Republic of Moldova. Available at http://www.etf.europa.eu/webatt.nsf/0/BA7D5F578C952346C125789D00373EB5/\$file/Fi nal%20report_Moldova_for%20copying.pdf: Accessed 2014-09-09.

Food and Agriculture Organization. 2003. Education for Rural People as a component of a Rural Development Strategy for Croatia. Available at http://www.fao.org/3/a-ai435e.pdf: Accessed 2015-04-10.

Gassmann F, Siegel M, Vanore M, Waidler J. 2013. The impact of migration on children left behind in Moldova. Available at http://www.merit.unu.edu/publications/wppdf/2013/wp2013-043.pdf: Accessed 2014-06-04.

Gaugas P. 2004. Labour migration in Moldova: Contexts and controls. Higher Education in Europe 29: 343-352.

Giannelli G, Mangiavacchi L. 2010. Children's Schooling and Parental Migration: Empirical Evidence on the `Left-behind' Generation in Albania. Labour 24: 76-92.

Giannetti M, Federica D, Raitano M. 2009. Migrant Remittances and Inequality in Central Europe. International Review of Applied Economics 23: 289-307.

Glewwe P, Jacoby HG. 2004. Economic growth and the demand for education: is there a wealth effect? Journal of Development Economics 74: 33-51.

Görlich D, Trebesch C. 2008. Mass migration and seasonality. Evidence on Moldova's labour exodus. Review of World Economics 144: 107–133.

Greene WH. 2003. Econometric Analysis: 5th edition. New Jersey: Prentice Hall. 827p.

Hahn J, Hausman J. 2003. Weak instruments: diagnosis and cures in empirical econometrics. American Economic Review 93: 118-125.

Hanson GH, Woodruff Ch. 2003. Emigration and educational attainment in Mexico. Available at http://irps.ucsd.edu/assets/022/8772.pdf: Accessed 2014-07-19.

Hausman J. 1978. Specification tests in econometrics. Econometrica 46: 1251-72.

Härkönen J. 2014. Birth order effects on educational attainment and educational transitions in West Germany. European Sociological Review 30: 166-179.

HelpAge International. 2010. Staying Behind: The Effects of Migration on Older People andChildreninMoldova.Availableathttp://www.unicef.org/moldova/The_impact_of_migration_on_older_people_and_children__in_Moldova.pdf: Accessed 2014-07-10.

Hu F. 2012. Migration, remittances, and children's high school attendance: The case of rural China. International Journal of Educational Development 32: 401-411.

Hu F. 2013. Does migration benefit the schooling of children left behind? Demographic Research 29: 33-70.

Hugo G. 2002. Effects of International Migration on the Family in Indonesia. Asian and Pacific Migration Journal 11: 13-46.

International Labour Organization (ILO). 2010. Working Children in the Republic of Moldova: The Results of the 2009 Children's Activities Survey. Chisinau: ILO. 100p.

International Monetary Fund. 2011. Republic of Moldova: Poverty Reduction StrategyPaper-ProgressReport.Availableathttp://www.imf.org/external/pubs/ft/scr/2011/cr1194.pdf: Accessed 2014-06-29.

International Organization for Migration. 2012. Extended migration profile of the Republic of Moldova. Available at<u>http://publications.iom.int/bookstore/free/110_emp_report.pdf</u>: Accessed 2014-07-03.

Jampaklay A. 2006. Parental Absence and Children's School Enrolment. Asian Population Studies 2: 93-110.

Jones H, Kittisuksathit S. 2003. International Labor Migration and Quality of Life: Findings from Rural Thailand. *International Journal of Population Geography* 9: 517-530.

Jones A, Sharpe J, Sogren M. 2004. Children's experiences of separation from parents as a consequence of migration. Caribbean Journal of Social Work 3: 89 -109.

Kantarevic J, Mechoulan S. 2006. Birth order, educational attainment and earnings. The Journal of Human Resources 41: 755-777.

Koska OA, Saygin PÖ, Çağatay S, Artal-Tur A. 2013. International migration, remittances, and the human capital formation of Egyptian children. International Review of Economics and Finance 28: 38–50.

Kristensen P, Bjerkedal T. 2010. Educational attainment of 25 year old Norwegians according to birth order and gender. Intelligence 38: 123-136.

Lahaie C, Hayes JA, Piper TM, Heymann J. 2009. Work and family divided across borders: The impact of parental migration on Mexican children in transnational families. Community, Work and Family 12: 299-312.

Lee L, Park A. 2010. Parental migration and child development in China. Available at http://repository.upenn.edu/cgi/viewcontent.cgi?article=1023&context=gansu_papers: Accessed 2014-06-15.

Lloyd CB, Blanc AK. 1996. Children's schooling in sub-Saharan Africa: The role of fathers, mothers, and others. Population and development review 22: 265-298.

Lopez-Cordova E. 2005. Globalization, migration, and development: The role of Mexican migrant remittances. Economia 6: 217-256.

Luecke M, Stoehr T. 2012. The Effects of Migration in Moldova and Georgia on Children and Elderly Left: Country Report: Moldova. Available at http://mgsog.merit.unu.edu/research/moldova_georgia.php: Accessed 2014-06-13.

Lücke M, Mahmoud TO, Pinger P. 2007. Patterns and trends of migration and remittances in Moldova. Chisinau: International Organization for Migration. 56p.

Mansour W, Chaaban J, Litchfield J. 2011. The impact of migrant remittances on school attendance and education attainment: evidence from Jordan. International Migration Review 45: 812–851.

Matano A, Ramos R. 2013. Available at Remittances and Educational Outcomes: Evidence for Moldova. http://www.ub.edu/searchproject/wp-content/uploads/2013/05/SEARCH-WP-3.10.pdf: Accessed 2014-11-18.

McKenzie D, Rapoport H. 2010. Can migration reduce educational attainment? Evidence from Mexico. Journal of Population Economics 24: 1331-1358.

Meyerhoefer CD, Chen CJ. 2010. The effect of parental labor migration on children's educational progress in rural China. Review of Economics of the Household 9: 379-396.

Ministry of Economy of the Republic of Moldova. 2010. Poverty and Policy Report 2009. Available at <u>http://www.mec.gov.md/sector/241/1369</u>: Accessed 2014-05-06.

Ministry of Economy of the Republic of Moldova. 2012. Poverty Report Republic of Moldova. Available at http://www.mec.gov.md/sites/default/files/poverty-report-republic-of-moldova-2010-2011.pdf: Accessed 2014-05-09.

Ministry of Labour, Social Protection and Family Republic of Moldova. 2011. Annual Social Report 2010. Available at http://mpsfc.gov.md/file/rapoarte/RSA%202010%20en.pdf: Accessed 2014-05-06.

Monfardini Ch, See SG. 2012. Birth Order and Child Outcomes: Does Maternal Quality Time Matter? Available at <u>http://ssrn.com/abstract=2142449</u>: Accessed 2014-06-03.

Mosneaga V. 2009. Moldova–Transdniestria: Working Together for a Prosperous Future. Social Aspects. Chisinau: Cu drag Publishing House. 239p.

Munteanu A. 2005. Remittances and the governance deficit in Moldova: Remedies or sources of inequalities? South East Europe Review 2: 41-50.

Nakamuro M. 2010. School attendance and migrant remittances in transition economies: the cases of Albania and Tajikistan. International Development Planning Review 32: 333-361.

National Bureau of Statistics of Republic of Moldova. 2004. Migration of population. Available at <u>http://www.statistica.md/pageview.php?l=ro&idc=295&id=2359</u>: Accessed 2014-11-08.

National Bureau of Statistics of Republic of Moldova .2009. Labor Force Migration. Available at http://mirpal.org/files/files/Migratia_FM_en.pdf: Accessed 2014-08-06.

National Bureau of Statistics of Republic of Moldova.2014a. Young people in Moldova in 2013. <u>http://www.statistica.md/newsview.php?l=ro&id=4480&idc=168</u>: Accessed 2014-10-17.

National Bureau of Statistics of Republic of Moldova. 2014b. Education in the Republic ofMoldovastatisticalpublication.Availableathttp://www.statistica.md/public/files/publicatii_electronice/Educatia/Educatia_RM_2014.pdf:Accessed 2010-08-12.

National Bureau of Statistics of Republic of Moldova. 2014c. Teritorial statistic. Available at

http://www.statistica.md/public/files/publicatii_electronice/Statistica_teritoriala/Statistica_t eritoriala_2014.pdf: Accessed 2014-06-06.

National Bureau of Statistics of Republic of Moldova. 2014d. Animated population pyramid. Available at <u>http://www.statistica.md/public/files/Piramida/Moldova_Rsc.html</u>: Accessed 2014-03-05.

National Bureau of Statistics of Republic of Moldova. 2014e. Labour force. Available at <u>http://statbank.statistica.md</u>: Accessed 2014-08-07.

National Scientific and Applied Centre for Preventive Medicine and ORC Macro. 2006. Moldova: Demographic and Health Survey 2005. Available at http://www.unece.org/fileadmin/DAM/stats/gender/vaw/surveys/Moldova/DHS_Moldova. pdf: Accessed 2014-3-13.

 Northern Regional Development Agency. 2012. Regional Development Strategy: Northern

 Development
 Region.
 Available
 at

 http://www.serviciilocale.md/public/files/dezv_regionala/SDR_NORD_APROBAT_en.pdf
 : Accessed 2014-06-12.

Organisation for Economic Co-operation and Development. 2001. Glossary of statistical terms. Available at <u>http://stats.oecd.org/glossary/detail.asp?ID=1657</u>: Accessed 2014-3-13.

Orozco M. 2008. Looking forward and including migration in development: Remittance leveraging opportunities for Moldova. Chisinau: International Organization for Migration. 102p.

Pal S. 2004. Child schooling in Peru: Evidence from a sequential analysis of school progression. Journal of Population Economics 17: 657-680.

Pantiru MC, Black R, Sabates-Wheeler R. 2007. Migration and poverty reduction in Moldova. Available at <u>http://r4d.dfid.gov.uk/PDF/Outputs/MigrationGlobPov/WP-C10.pdf</u>: Accessed 2014-05-03.

Park H. 2008. Effects of single parenthood on educational aspiration and student disengagement in Korea. Demographic Research 18: 377-408.

Paxton P, Hipp JR, Marquart-Pyatt S, Marquart-Pyatt ST. 2011. Nonrecursive models: Endogeneity, reciprocal relationships, and feedback loops. United States of America SAGE Publications.128p.

Pottinger AM. 2005. Children's experience of loss by parental migration in inner-city Jamaica. American Journal of Orthopsychiatry 75: 485-469.

Pinger P. 2010. Come Back or Stay? Spend Here or There? Return and Remittances: The Case of Moldova. International Migration 48: 142-173.

Rahman MM, Fee LK. 2009. Gender and the Remittance Process: Indonesian Domestic Workers in Hong Kong, Singapore and Malaysia. Asian Population Studies 5: 103-125.

Rankin BH, Aytaç IA. 2006. Gender inequality in schooling: The case of Turkey. Sociology of Education 79: 25-43.

Raosoft.2004.Samplesizecalculator.Availableathttp://www.raosoft.com/samplesize.html:Accessed 2014-8-7.

Ratha, D., Mohapatra, S. and Silwal, A.2011. Migration and Remittances Factbook 2011, 2nd edition. Washinghton: World Bank. 290p.

Reiersøl O. 1945. Confluence Analysis by Means of Instrumental Sets of Variables. Arkiv for Mathematik Astronomi och Fysik 32a: 1-119.

Ruggiero E. 2005. Migration and remittances. Problems of Economic Transition 48: 54-83.

Salah MA. 2008. The Impacts of Migration on Children in Moldova. Available at http://www.unicef.org/The_Impacts_of_Migration_on_Children_in_Moldova%281%29.pd f: Accessed 2014-07-04.

Semyonov M, Gorodzeisky A. 2005. Labor Migration, Remittances and Household Income: A Comparison between Filipino and Filipina Overseas Workers. International Migration Review 39: 45-68.

Sargan JD. 1958. The Estimation of Economic Relationships Using Instrumental Variables. Econometrica 26: 393-415.

Shu X. 2004. Education and Gender Egalitarianism: The Case of China. Sociology of Education 77: 311–336.

Schwartz R. 2007. Exploring the Link between Migrant Communities Abroad (MCA) and Moldova. Available at <u>http://www.iom.md/materials/9_diaspora_and_ocv_final_report_eng.pdf</u>: Accessed 2014-06-25.

Sintov R, Cojocaru N. 2013. Assessment of links between education, training and labour migration in Moldova. Budapest: International Labour Organization. 176p.

Smits J, Hoşgör AG. 2006. Effects of family background characteristics on educational participation in Turkey. International Journal of Educational Development 26: 545-560.

South Regional Development Agency. 2012. Regional Development Strategy: SouthDevelopmentRegion.Availableathttp://www.serviciilocale.md/public/files/dezv_regionala/SDR_Sud_2010-2016_actualizata.Var_Engleza.pdf: Accessed 2014-06-12.

Staiger D, Stock JH. 1997. Instrumental variables regression with weak instruments. Econometrica 65: 557-586.

StataCorp. 2015. Stata base reference manual release 14. Texas: Stata Press. 2825p.

Stock JH. 2001. Instrumental Variables in Statistics and Economics. International Encyclopedia of the Social and Behavioral Sciences. Smelser NJ, Baltes PB, editors. International encyclopedia of the social and behavioral sciences. Amsterdam: Elsevier, 7577-7582.

Stock JH, Wright JH, Yogo M. 2002. A survey of weak instruments and weak identification in generalized method of moments. Journal of Business and Economic Statistics 20: 518-529.

United Nations. 1998. Recommendations on statistics of international migration. New York: United Nations. 58p.

United Nations Children's Fund. 2014. Republic of Moldova: Multiple Indicator Cluster Survey 2012, Final Report. Chisinau: Elan Poligraf. 316 p.

United Nations Development Programme (UNDP). 2014. International Human Development Indicators. Available at http://hdr.undp.org/en/data: Accessed 2014-06-06.

Vladicescu N, Cantarji V, Jigau I. 2008. The impact of migration and remittances on communities, families and children in Moldova. Available at http://www.unicef.org/socialpolicy/files/The_Impact_of_Migration_and_Remittances_on_Communities_Families_and_Children_in_Moldova.pdf: Accessed 2014-07-22.

Vremis M, Craievschi-Toartã V, Rojco A, Cheianu-Andrei D. 2010. Approaches to Social Exclusion in the Republic of Moldova: Methodological and Analytical Aspects. Chisinau: Nova Imprim. 290p.

Walewski M et al. 2008. The impact of migration and remittances on the rural areas of Moldova. Warsaw: Centre for Social and Economic Investigations. 54p.

World Bank. 2010. Strengthening the Link between Migration and Development in Moldova. Available at http://siteresources.worldbank.org/INTECA/Resources/WBMoldovaReport.pdf: Accessed 2014-3-10.

World Bank. 2014. Data: Moldova. Available at <u>http://data.worldbank.org</u>: Accessed 2014-05-15.

Wu DM. 1974. Alternative tests of independence between stochastic regressors and disturbances: Finite sample results. Econometrica 42: 529–546.

Xiang B. 2007. How far are the left-behind left behind? A preliminary study in rural China. Population, Space and Place 13: 179-191.

Yang D. 2008. International migration, remittances and household investment: Evidence from Philippine migrants' exchange rate shocks. The Economic Journal 118: 591-630.

Zhao M, Glewwe P. 2010. What determines basic school attainment in developing countries? Evidence from rural China. Economics of Education Review 29: 451-460.

IX. Annex

List of annexes

Annex 1.	Descriptive statistic results divided by regions
Annex 2.	Questionnaire for youth in the English language
Annex 3.	Questionnaire for local experts in the English language
Annex 4.	Photo documentation-questionnaire survey – Straseni district
Annex 5.	Photo documentation-observation – Straseni district

	District					
	Total	Causeni	Straseni	Floresti	Balti	Chisinau
Child and household characteristics						
Share of respondents (%)	100	20	21	17	19	23
Age in years (mean)	18.0	18.1	17.9	18.0	17.9	17.9
Male (%)	47	47	48	50	47	43
Rural area (%)	57	86	87	83	13	14
Sibling (yes) (%)	88	89	90	90	85	84
Number of siblings (mean)	1.5	1.6	1.5	1.5	1.4	1.4
First born (%)	43	38	46	35	51	43
Double citizenship (%)	16	18	13	19	15	13
	E	ducation				
Youth attendance (%)	53	53	51	54	51	56
Repetition of class (%)	3	3	3	2	4	5
	Migration	and remitte	inces			
Experience with migration (%)	40	38	40	39	41	40
Preference of migration (%)	74	76	74	79	71	72
HH member migration (%)	64	63	66	62	65	62
Mother's migration (%)	37	35	37	36	39	40
Father's migration (%)	47	49	55	52	40	38
Remittance (%)	68	66	70	73	62	67
Youth work and labour						
Youth working in agriculture (%)	32	45	43	54	10	8
Youth working in HH	84	88	86	87	80	79
Youth care siblings	24	27	26	26	23	20
Youth care grandparents	12	14	13	13	10	12
Paid activity (%)	35	34	35	33	37	35

Annex 1. Descriptive statistic results divided by regions

Annex 2. Questionnaire for youth in English language



Dear respondent,

I would like to thank you in advance for participating in this questionnaire. This survey aims to address the current situation of migration and its impact on the educational achievements of children in the Republic of Moldova.

The survey will take approximately 15 minutes to complete. The questionnaire is voluntary and completely anonymous.

Thank you for your time and your help.

Tereza Pilařová <u>pilarovat@gmail.com</u>

The Czech University of Life Sciences Prague, the capital city Prague

- 1. Please select your gender
 - $\Box Male \\ \Box Female$

2. Please select your age

16	21
17	22
18	23
19	24
20	

3. What citizenship do you hold?

	🗆 Russian
□ Moldovan	🗆 Ukrainian
□ Romanian	\Box Bulgarian

4. Do you live in rural area?

Yes
No

5.	Please write down	region	of your	residence
----	-------------------	--------	---------	-----------

Do you have siblings? (if not, please skip up to question number 9)
 □ Yes
 □ No

7. If you crossed in previous question yes, please select number of siblings

1
2
3

7. If you crossed in previous question yes, please select number of siblings

4
5
5
6

7. More than 5

8. If you crossed yes in question 6, please select if you are

- \Box The oldest (first born) child
- \Box The youngest child
- \Box Other possibility

9. How many members older than 60 years do live in the household?

- 10. Did you attend the school in academic year 2013/2014? (if not ,please skip up to question number 13)
 - \Box Yes \Box No
- 11. If you crossed in previous question yes, please select level of education which you study
 - \Box Primary education

 \Box Secondary education

 \Box Tertiary education

12. Did you repeat grade during your studies?

- \Box Yes
- □ No

13. If you crossed in question number 9 no, please select the highest level of completed education

- \Box Never attend school
- \Box Completed primary education
- \Box Completed secondary education
- \Box Completed tertiary education

- 14. If you crossed in question number 9 no, please select the reason for not attending school (multi-choices question)
 - □ Work
 - \Box Child care
 - □ Household activities
 - □ Siblings care
 - □ Disease

- □ Cannot afford expenses for school
- \Box School is too far
- \Box Do not want study
- □ Other_____
- 15. What is the mother's highest level of completed education?
 - \Box Completed primary education
 - $\hfill\square$ Completed secondary education
 - \Box Completed tertiary education
- 16. What is the father's highest level of completed education?
 - \Box Completed primary education
 - $\hfill\square$ Completed secondary education
 - \Box Completed tertiary education
- 17. Do you have personal experience with migration?
 - □ Yes
 - □ No
- 18. Do you want to migrate in the future?
 - \Box Yes
 - 🗆 No
- 19. Does anybody from your household have migrated?
 - □ Yes
 - □ No
- 20. If you crossed in previous question yes, please select which member of household have migrated
 - □ Mother
 - □ Father
 - \Box Sibling

Grandmother
Grandfather
Other_____
21. If you crossed in question number 19 yes please write down name(s) of country(ies) and length of migration for each member who have migrated and please specify type of migration

Family member	Country	Length of migration	Type of migration. (Seasonal/ Permanent)

22. Do you (or somebody in your household) receive some goods sent/brought back by person working abroad?

Yes
No

23. If you crossed in previous question yes, please select goods which you have received

	Medicine and medical
□ Food	equipment
□ Clothing	Electronic
□ Toys	□ Other

24. Do you (or member of household) have bank account in the Republic of Moldova?

🗆 No

25. Do you (or somebody in your household) receive the money (monetary remittances) sent by person working abroad?

 $\Box Yes \\ \Box No$

26. If you crossed in question number 24 yes, please specify how your household mostly use the money

- \Box Food
- \Box Payment of utility bills
- \Box Clothes
- \Box Housing (buying, building, etc.)
- \Box Medical expenses
- \Box Education

- \Box Investment in business
- \Box Agricultural activities
- \Box Savings
- \Box Investment to travelling
- \Box Donations to church or other
- charitable purpose
- □ Other _____

27.	Who is the head of househ	old?	
	☐ Mother☐ Father☐ Sibling		Grandmother Grandfather Other
28.	Who care about you at hor	ne?	
	☐ Mother☐ Father☐ Sibling		Grandmother Grandfather Other
29.	Are you engaged in housel □ Yes □ No	old activities?	
30. you are	If you crossed in previous e engaged	question yes, please s	select type of activity (ies)in which
	Housework Work in agriculture		Care about siblings Care about grandparents Other
31. with h	If you crossed in previous elping with these things	question yes please so	elect time which you spent per day
	Less than 30 min-1 ho 1 hour -2 ho) min our our	 4 hour -5 hour 5 hour -6 hour 6 hour -7 hour More than 7 hours

Were you working in year 2013 (paid activity)? 32.

 \Box 2 hour -3 hour \Box 3 hour -4 hour

- □ No

33. Please select assets which your household own

Farm land	Refrigerator deep freezer
	Refingerator, deep neezer
Tractor	Radio
Plough, other large farm	Television (color)
machinery	Computer and electronical
Car	entertainment devices (DVD-player,
Motorcycles	cameras etc.)
Bicycles	Mobile phone
Washing machines	Internet

34. Do you think that the migration have impact on educational achievements of children left-behind?

Yes
No

35. If you crossed in previous question yes, please specify why

Thank you for your time and answers.

Annex 3. Questionnaire for local experts in English language

Dear respondent,

I would like to thank you in advance for participating in this questionnaire. This survey aims to address the current situation of migration and its impact on the educational achievements of youth in the Republic of Moldova. The survey will take approximately 15 minutes to complete.

 Thank you for your time and your help.

 Tereza Pilařová

 moldova.survey.2015@gmail.com

 The Czech University of Life Sciences Prague, the capital city Prague

Do you think that parental migration has impact on the school attendance and enrollment of youth left- behind? (Please specify your opinion)

Which factors do you think influence the access to education for youth in the Republic of Moldova? (1: do not influence the access to education; 5: really influence the access to education)

	1	2	3	4	5
Poverty	0	0	0	0	0
Living in rural area	0	0	0	0	0
Region of residence (north/south/central)	0	0	0	0	0
Number of siblings in household	0	0	0	0	0
Gender of child/youth	0	0	0	0	0
Work in household	0	0	0	0	0
Labour of children/youth	0	0	0	0	0
Work of children/youth in agriculture	0	0	0	0	0
Migration	0	0	0	0	0

Destination (CIS/EU) of migration of parents	0	0	0	0	0
Duration of migration of parent	0	0	0	0	0
Money sent by member working abroad (remittances)	0	0	0	0	0
Migrant's networks	0	0	0	0	0
Distance to school	0	0	0	0	0
Quality of school	0	0	0	0	0
Ownerhip of PC	0	0	0	0	0
Education of mother	0	0	0	0	0
Education of father	0	0	0	0	0
Parental support during the preparation to school	0	0	0	0	0
If children/youth want to migrate in future	0	0	0	0	0
Personal experience of children/youth with migration	0	0	0	0	0

Do you think that there are differences in following items between youth with parent abroad and youth without migrant?

	Yes	No	I do not know
School attendance	0	0	0
School retention	0	0	0
School drop-outs	0	0	0
Results (grades)	0	0	0
School enrollment	0	0	0
Motivation to study	0	0	0
Material ensuring	0	0	0

According to you what is the main reason for not enrollment of youth to the university?

According to you what is the main reason for youth to migrate?

Which factors do you think are important for youth considering to work abroad?

Please write down any comments, suggestions, opinions on the topics (education of youth leftbehind, youth migration etc.)

Please write down your name or name of institution

Thank you for your time and answers.

Annex 4. Photodocumentation-questionnaire survey – Straseni district



Annex 5. Photodocumentation-observation – Straseni district

