# **Analysis of the Correlation between Residential Environment and Labour Mobility Potential**

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### Abstract

Exploring the diverse reasons and influencing factors of labour mobility on the macro-and micro-level involves the use of various economic, sociological and psychological factors. This paper focuses on the residential environment including residential area and apartment type as influencing factors of potential to move. Considering the residential environment is a justifiable approach because actual migration definitely affects its change. The paper summarizes the results of a pilot survey of the MOVE project, which performs systematic data collection in Borsod-Abaúj-Zemplén County (Hungary) about the mobility patterns of young people. The research sample consists of 184 business students of the University of Miskolc. The main goal of the analysis is to explore the relations between the variables of mobility intentions and the residential characteristics. Results show the future expectations about these factors and the personal need for changing the residential environment or house type show significant relations with the potential to move. Behind the need for a change dissatisfaction may stand. Consequently, measuring the satisfaction with the residential environment would be useful if the impact of other factors could be filtered out.

Keywords: labour mobility, mobility patterns, higher education students, environmental migration, mobility potential, residential environment.

JEL Classification: F22, O15, R23

### Introduction

Exploring and identifying the reasons for and motivations of migration and mobility can be regarded as the major tasks of both macro- and micro-level investigations. The literature identifies well-delineated reasons, or more precisely groups of reasons when defining the types of mobility. Furthermore, researchers agree that globalization has a major motivating influence on migration and mobility (Lipták, 2013; 2015). Geréb (2008) considers the flow of labour force as a typical case of population movement which has been going on almost unnoticeable for centuries.

Furthermore, mobility plays an increasing role in students' life (Dabasi et al., 2017). In order to handle the phenomena purposefully, and

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to achieve the relevant economic political objectives, exploring individual motivations is a prerequisite. Research in the fields of mobility and migration have by now gone beyond the level of legal and administrative issues, the role of individual abilities and competences is decisive (Rédei, 2007). Rudzitis (1991) points out that the factors that have a greater influence on mobility decisions are not economic considerations, but the dominant factors are the climate, access to services and the quality and quantity of the said services. Therefore, migration and mobility cannot be accounted for on the macro-level either by only economic, religious, political or even environmental reasons, but a complex system of causes and effects is at play, which is not independent of place or time.

Examining a panel dataset on Hungarian households, Sik and Simonovits (2002) concluded that the proportion of people who leave Hungary would come to 6% of the population, although they hypothesized that only a fraction of those wishing to leave the country would eventually do so. According to Kapitány and Rohr (2013), the estimated number of people aged 18-49 years are living permanently abroad is 335 thousand (7.4%), and 480 thousand people live within the country at an address different from or in proximity to their registered permanent place of residence.

Sik and Szeitl (2016) pointed out that the mobility potential of Hungarians regarding short-term and long-term employment was continuously increasing during the 1990s and 2000s, and following the peak value of 2012 (19%), it fell back to the level of the mid-2000s. On the basis of the 2009 data of the "Geographical and labour market mobility" report, they have shown that while mobility potential is high among Hungarians (29%), the number of those with real experience, i.e. those who did live abroad, is markedly lagging behind (6%). On the basis of the summary provided by Blaskó et al. (2014) concerning the trends in the social composition of Hungarians living abroad, we know that

- the majority of migrants are male,
- the proportion of those aged 26-50 years is high,
- the most important destination countries are Germany and the United Kingdom,
- the proportion of those with tertiary education qualifications is higher.

There is an overrepresentation of people with academic degrees leaving the country despite a remarkable decrease in the trend. Special

attention to the well-educated workforce is necessary. The paper focuses on young people and their potential to move. The research sample consists of students studying economics. The reasons for this choice are:

- modern industrial development and factory establishment projects require, in addition to engineers, a great number of organizational and administrative experts, project managers and other experts with academic degrees to carry out business and management tasks,
- although these specializations are highly sought after in the domestic labour market, too, the pay scale possibilities abroad are generally more advantageous,
- particularly with multinational companies, the possibility of working abroad often arises 'within the company', and in some cases, the experience of working at a foreign subsidiary plant may be a prerequisite for career advancement.

In this paper, a narrower area of the reasons for mobility, namely the relationship between potential mobility and the residential environment is explored. The research hypothesis posits that the residential environment may have a repulsive effect, i.e. the features of the residential environment are related to labour mobility potential. Conclusions are made based on the sample of the students of the University of Miskolc (n=184).

Researchers seem to agree that potential does not necessarily involve an actual move, and there are complex individual and institutional factors underlying the related decisions (see e.g. Massey et al., 1993; De Haas 2010). Popular attraction-repulsion and gravitation theories simply assume that people will migrate if the advantages of mobility outweigh the costs of mobility (De Haas, 2014). In practice, however, such simplification is misleading. Cultural background (Massey et al., 1993), the effect of expectations, the relationship between the source and the target area as centre and periphery (Kincses & Rédei, 2010), restricted individual information, available and desired financial possibilities, domestic and international legal restrictions (see e.g. Hautzinger, 2015) are only some examples of the influencing factors. Indirect factors should also be taken into account. Studying North Hungarian employment statistics, Lipták (2014) pointed out how external economic shock effects derail labour market processes, the forecast of which is made even more difficult by the delayed impact of such processes. The geopolitical situation of the countries affected by migration has an

interesting and important effect, which must be taken into consideration in local studies. Kincses and Rédei (2009) emphasized that Hungary can participate as a mediator in global transcontinental migration.

Studies by occupations confirm the assumption that prescription-like solutions have limited value.

Physicians and health service staff, in general, have been given special attention (Eke et al., 2009). On the one hand, the long-term effect of introduced measures is difficult to predict, and on the other hand, they cannot be generalized due to the specific features of the profession and the institutional system. Inductive conclusions must be based on research and analysis of several components to the issue. The objective of my study is to contribute to the research into the domestic and foreign intention to work of students in higher education. Applying an interdisciplinary and multi-level approach, the project investigates how young people's mobility can be 'good' for both social and economic development and in the individual development of the youths, and what the enhancing and inhibiting factors are (Dabasi-Halász, 2015). This research is related to exploring these factors for the MOVE project. With regard to the multifaceted and complex nature of factors at play in the mobility processes, especially the difficulties with creating a unified model (De Haas, 2014), I consider pioneering empirical studies important.

### Some results of Hungarian research related to labour mobility

A wide range of empirical research deals with labour mobility. In addition to the analysis of trends in the 2000s according to gender, demographic, labour market and household factors (Hárs & Simon, 2015).

The OTKA 109449 project ('Latest trends in Hungarian emigration') investigates the Hungarian migration situation and the potential of the population according to geographical distribution in depth. The large sample study found that 58.2% of those under 30 years of age are not planning their future in Hungary, but this intention declines by the increase in of age. Among those between 40 - 44 years of age, only 20.8% think in the same way. According to geographical differences, the highest proportion of those intending to emigrate is east of the Danube, in Nógrád and Heves Counties. Comparing this indicator with the proportion of those who have emigrated, the situation of Borsod-Abaúj

Zemplén County is interesting. In Heves County, those planning to leave make up 17.1%, while the proportion of those who have actually left Hungary falls below 1%. With regard to those planning to emigrate, Borsod-Abaúj-Zemplén County falls into the category of 14.1-17% while the proportion of those who have actually emigrated is 1.1-2%. (Kóródi & Siskáné, 2016).

The MOVE project that gives the frames of my investigations, aims to explore the mobility patterns of youth generations. My contribution to the project is to widen the considerable reasons and influencing factors of mobility focusing on living environment and residential issues as environmental factors. The Hungarian research group investigates the North Hungarian region, especially Borsod-Abaúj-Zemplén County and Miskolc in detail (Dabasi-Halász, 2015). The research seeks to find patterns of youth mobility in Europe by systematic data collection. Dabasi-Halász and Hegyi-Kéri (2014) emphasised that the patterns of youth mobility show great variations and the reasons cannot be simplified as study or labour intentions. They pointed out the weakening of labour market careers in relation to the fact that the need and requirement for becoming an adult are ever more prolonged. Therefore, the role of desires and ideas are also becoming more dominant in mobility.

There are relevant findings in the field published by Honvári (2012). Although he investigated the study-intentions of mobility among students in higher education, the results of this research contribute to the understanding of phenomena and tendencies. From among his higher education student sample, 68% were considering studying abroad for a period less than a year, while 3% were thinking of a period over a year. The research found a weak correlation between language skills and intention to study abroad. According to the questionnaire-based survey used in the study, students do not primarily choose their destination country regarding (professional) study opportunities: the possibility of learning the language, the advice and recommendation of people they know, and the available network of ties are more dominant motivational factors. Taking up a job during the studies for financial reasons is not typical of the respondents, but support from the family is primarily prevalent.

### Extending the interpretation of environmental migration

Among the promoting and hindering factors of migration and mobility, the environmental issues are usually mentioned related to environmental catastrophes or hunger, especially as a hindrance factor. The environment generally features as a reason for the forced move (Dun & Gemenne, 2008) in the literature, in the form of catastrophes or climate change. There are several local investigations (see for instance Reuveny, 2007; Marino, 2012) where it is applicable; attention to Hungary is less relevant. The study of Vág (2010) stands out which gives a systematic overview of the academic and practical issues. His study identified environmental vulnerability related to climate change as the reason for environmental migration, involving both rapid (catastrophes) and slow (climate change) underlying processes. At the same time, the realization of the move is highly influenced by the level of operation of the institutional system, as well.

Black (1998) pointed out that environmental migrants (refugees) as such do not exist since political and economic factors also influence the mobility of this kind. Accepting that an independent interpretation of environmental factors as a reason for the move may yield limited results, I believe that it important to include them in the investigation. In my opinion, this requires a wider interpretation of the concept of the environment than the above. Láng (2002) collects the general interpretations of the environment:

- the totality of the physical, chemical and biological circumstances surrounding the living organism(s),
- the totality of the individuals surrounding some individual, or to be found in the proximity of the individual, with whom the individual is in constant contact or with whom the individual lives.
- space (area) in which the life of the individual and his/her narrow community takes place, in which the majority of phenomena are directly comprehensible and can be controlled by the members of the community to the necessary extent,
- the totality of external constraints influencing the individuals and the population.

This study is concerned with a limited area of the environment, namely, the living circumstances, including the type of the settlement and of the house or apartment and the characteristics of the residential environment. Since certain elements of the living conditions of the

individual will change as a result of the move, it is worth studying how mobility processes are influenced by the present and future (imagined or expected) living conditions. Focusing on social mobility but also revealing regional influences, Földi (2000) carried out an analysis of the connection between residential environment and mobility regarding Budapest. The idea of my research was inspired by the assumption that the quality of the residential environment appearing on the macro-level, i.e. its measurable components, are worth studying on the micro-level, in the individual's subjective decision-making concerning mobility. However, I use a different approach; (living) environment is used as a group generating feature and not as a direct object of the study, and I seek to find a correlation between this and the mobility potential.

### Research method

Due to the complexity of the reasons and patterns of mobility presented in the relevant literature, it is difficult to generalize the phenomena. I believe that local, pathfinding research activities are reasonable. In a longer term, these results may allow exploring the best practices for managing the problems. The role of my research is to contribute to understanding the possible reasons for mobility by highlighting a less central aspect in the field.

For the survey, a self-completion electronic survey was prepared. Data collection was carried out by the Evasys survey system of the University of Miskolc, and the processing was supported by IBM SPSS Statistics Version 22. Data processing was anonymous. The survey investigated the labour mobility intentions within Hungary or abroad as well as the target areas and the causes. For the analysis of the relationship between the residential environment and intention to move, the questionnaire contained separate blocks about the present and desired future residential environment; the type of house or apartment (single ownership or community-owned, i.e. condominium) and the type of the residential area (inner city, suburban, housing estate, rural residential area with detached houses, agricultural farm area, other). The respondents were asked to use a scaling evaluation (ordinal scale) or to select the most specific answer of a listing. To analyse the relationships, cross-tabulation was used, and the existence of relationships was determined by the examination of the significance of Pearson  $\chi^2$  indicator (with a 95% reliability level). Cross-tabulation is a general technique for

examining the relationship between categorical or ordinal variables. Since higher (metric) measurement level results are not available, conclusions made on the basis of methods for metric measurement may be misleading. Test statistics of the cross-tabulation is widely accepted in social sciences (Malhotra, 2010).

The research must be considered as a pilot study of the MOVE project. The aim is to identify the possible relationships and to prepare further research activities. Accordingly, the analysis was carried out using several grouping factors, a comprehensive description of which would surpass the extent of this paper.

### Composition of the study sample

The period of data collection was in February and March 2017. The analysis comprised a sample of the responses of students of economics at the University of Miskolc (n=184). The representativeness of the sample was not checked, the statements are valid for the sample and their aim is to prepare for further research tasks.

From among the 184 respondents, 32.1% are studying on bachelor level and 67.9% are studying at master's level while 51.4% are full-time students and 48.6% are correspondence (part-time) students. 130 students (70.7%) are female and 54 students (29.4%) are male.

65.8% of the respondents still live with their parents. It must be mentioned that the proportion of those who flew the nest is 10.6% of the full-time students and 58.8% of the part-time students. The leading reason for leaving the parental home is establishing their own families (47.6%) while 17.5% wished to live on their own. 54.9% of the respondents grew up in a detached house, 10.4% in a small block of flats or in a terraced house whereas 31% grew up in a block of flats in a housing estate.

According to the answers, 39.7% of the respondents grew up in a city, 33.7% in a small town and 26.6% in a village. In a 10-15 years' time 62% of the respondents see themselves living in a city, 28.8% in a small town and 9.2% in a village. From among those who grew up in a small town, 45.5% would move to a city, and 40.8% of those who grew up in a village would do the same whereas 8.2% of those who grew up in a city would move to a small town and 1.4% would move to a village. The proportion of those wishing to stay in a city is 90.4% of those living in one.

With regard to the residential area, the green area is the most attractive (63.6%) followed by the inner city (15.2%) and by the rural area with detached houses (14.1%). Residential estates were seen by 4.3% as a desirable area to live in. The respondents clearly wish to live an independent life, with 70.1% saying they would like to live in a detached house while only 10.9% answered positively about living in a multistorey block of flats made of bricks or concrete. From among the 133 respondents who did not grow up in a green area, 73 (54.8%) would like to move to such an area. Regarding the inner city, this rate is 9.2%, it is 4.8% for a block of flats and 4.7% for the rural area with detached houses.

### Intention to find employment in a different part of Hungary and abroad

Among the respondents, 58.7% would move to a distant part of Hungary while 10.3% would not and 31% are uncertain. The reasons for movement are clearly salary and income opportunities, career prospects and better living standards. The former experiences of friends and acquaintances are of positive influence and in 67.8% of the answers, they appear as arguments supporting the decision on movement. The factors listed against mobility include limited possibilities for keeping contact with family and friends.

Working abroad permanently is planned by 15.2% of the respondents while 38% consider it possible to work abroad for a short period of time. Those who are certain about not moving abroad for work make up 8.2% while 20.7% are uncertain. 17.9% consider working in Hungary in a job that offers the possibility of travelling abroad. The arguments for and against working abroad show the same pattern as those found regarding mobility within Hungary.

The analysis shows a significant relationship between the willingness for labour mobility within Hungary and abroad. 25.9% of the respondents who would migrate within Hungary would also move permanently abroad for work. Those who do not plan to migrate within Hungary, 31.6% would work abroad for a short time while 42.1% of those uncertain about labour mobility said yes to the same question. Regarding the potential duration of working abroad ( $\chi^2$ =54.897, d<sub>f</sub>=8, sig=0.000) and eliminating ( $\chi^2$ =30.065, d<sub>f</sub>=4, sig=0.000) (Table 1.) also show a significant relationship between the two factors. Among those

who are uncertain about mobility within Hungary, the proportion of those with an intention to work abroad is 42.1% although they would undertake this for a short period of time only.

			(B) Wo			
			Yes	No	Maybe	Total
(A)	Yes	person	68	22	18	108
Would you move		% (A)	63.0%	20.4%	16.7%	100.0%
to work to a distant		% (B)	69.4%	45.8%	47.4%	58.7%
part of Hungary	No	person	6	13	0	19
(permanently)?		% (A)	31.6%	68.4%	0.0%	100.0%
		% (B)	6.1%	27.1%	0.0%	10.3%
	Maybe	person	24	13	20	57
		% (A)	42.1%	22.8%	35.1%	100.0%
		% (B)	24.5%	27.1%	52.6%	31.0%
	Total	person	98	48	38	184
		% (A)	53.3%	26.1%	20.7%	100.0%
		% (B)	100.0%	100.0%	100.0%	100.0%

Table 1. Cross tabulation analysis of domestic and foreign labour mobility potential

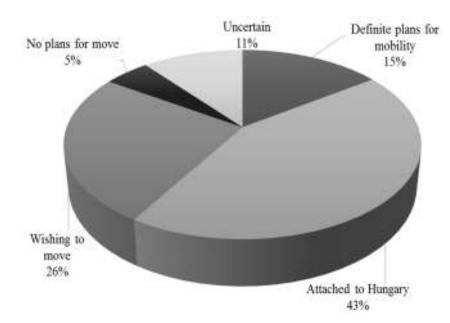
### Motivations behind the potential to labour mobility

Based on the combinations of intentions to work in Hungary and abroad, the following groups of the respondents have been created:

- those with a definite potential for mobility: those who would move to a distant part of Hungary or abroad permanently with the aim of finding employment,
- those attached to Hungary: they would work in distant parts of Hungary, but not abroad, or only for a short period of time, or are uncertain,
- those wishing to move abroad: they do not wish to move to distant parts of Hungary or may consider it, but would work abroad (note: the respondents of the sample would not work abroad permanently),
- those who are not planning to move: they do not wish to move to distant parts of Hungary or may consider it, and are uncertain about working abroad,
- uncertain: with respect to labour mobility both within Hungary or abroad.

The composition of the number of elements in the subsample is shown in Table 1 while the general characteristics are presented in Table 2.

Fig. 1. Sample distribution by categories of mobility potential (%)



Characteristics		Definite plans for mobility	Attached to Hungary	Wishing to move	No plans for move	Uncertain
	N (persons)	28	80	47	9	20
Sex	Female	64.3%	66.3%	74.5%	88.9%	80.0%
	Male	35.7%	33.8%	25.5%	11.1%	20.0%
Level	Bachelor	35.7%	31.3%	21.3%	33.3%	55.0%
	Master	64.3%	68.8%	78.7%	66.7%	45.0%
Program	Full-time	67.9%	46.3%	51.1%	33.3%	55.0%
	Part-time	32.1%	53.8%	48.9%	66.7%	45.0%

Table 2. Characteristics of groups formed by migration potential (data in% of the sub-sample)

Those with a definite potential for mobility:

The subsample is clearly characterised by a demand for finding higher income possibilities and better living conditions. According to 78.6% of the respondents, career opportunities are definitely arguments for moving within Hungary. Keeping contact with family and friends is more of an argument for moving according to 53.6% of the respondents, which means that it would not be a problem. In relation to moving

abroad, 39.3% identified family as an argument for mobility. 64.3% of the sample are looking for adventure, too, when working abroad. The culture of the destination country has a positive influence on working abroad in the opinion of 75% of the respondents.

Those attached to Hungary:

In this subsample finding higher income possibilities and better living conditions and career prospects are the factors that characteristically support the argument for moving for work to a different part of the country. Maintaining family ties and keeping contact with friends is rather an argument against moving: in relation to moving within Hungary, 67.5% indicated the family and 68.8% indicated friends and acquaintances as an argument against moving while in relation to moving abroad, 73.8% indicated both as arguments against moving. With regard to seeking adventure and challenges within Hungary, 60% of the subsample sees this as a supportive factor for moving while in relation to working abroad 72.3% identified this as an argument for. The culture of the target country is seen as an argument for working abroad by 70% of the respondents.

Those wishing to move:

Obtaining a better income is seen as a very strong argument by this subsample. 85% also consider career opportunities as a factor supporting mobility. Maintaining family ties (75% both in relation to domestic and foreign move) and relationships with friends (in relation to domestic move 75% and abroad 83%), however, are seen as arguments against mobility. Adventure is considered by approximately half of the respondents as an argument for mobility while the other half sees it as an argument against.

Those with no plans to move:

They clearly consider moving as a favourable possibility regarding income, living conditions and career prospects but 88.8% identify maintaining family ties as an argument against mobility. In relation to emigrating, 44.5% indicated the culture of the target country as an argument against moving.

Those uncertain:

They consider mobility as a clearly favourable possibility regarding income, living conditions and career prospects. As for the factors, the proportion of respondents divided in their opinion is approximately half-and-half.

Some significant correlations could be identified using the above groupings based on the cross-tabulation analysis (presented in Table 3). The respondents could choose from Yes, No, or Maybe when answering the question regarding mobility within Hungary (For the purpose of finding work, would you move (permanently) to a distant part of Hungary?). When giving an opinion about the factors, they had to select from a four-point scale, namely, if the factor is an argument against, rather against, rather for, or is an argument for mobility.

	$\chi^2$	$d_{\mathrm{f}}$	sig.
Mobility within Hungary for reasons of pay and income	29.473	12	0.003*
Mobility within Hungary, reputation of the destination region	26.337	16	0.049*
Mobility within Hungary, career prospects	46.462	16	0.000*
Mobility within Hungary, adventure	28.571	16	0.027*
Move abroad, culture of the target country	49.813	16	0.000*
Move abroad, maintaining family ties and keeping in contact with friends and acquaintances	30.322	16	0.016*
Mobility within Hungary, adventure	36.734	16	0.002*

Table 3. Significant relations between mobility potential and influencing factors of mobility (cross-tabulation results)

## Relationship between residential environment and labour mobility potential

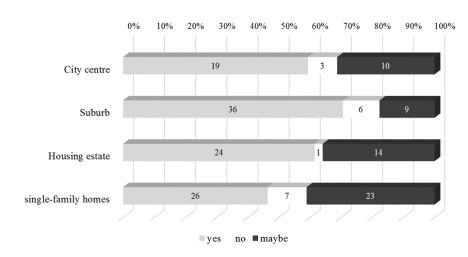
The focal question of my research is whether a relationship can be found between the labour mobility potential of students with a background of different type of settlement and residential environment. Using crosstabulation analysis, the question of domestic or foreign labour mobility has also been examined. Within the sample, there is no significant regional influence according to the type of settlement where the parental home was (Table 4). The distribution of answers showing a significant relationship is presented in Table 2. Those living in green areas and suburbs have the highest potential for mobility (70.6%), while those living in a detached house (single family home) in a rural area show the least potential (46.4%) although in this group the proportion of those being uncertain is also the highest (41.1%).

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	$\chi^2$	$d_{\mathrm{f}}$	sig.
Type of settlement where the parental home is & mobility potential within Hungary	3.959	4	0.412
Type of settlement where the parental home is & mobility potential abroad	4.147	8	0.844
Type of residential area where the parental home is & mobility potential within Hungary	18.498	10	0.047*
Type of residential area where the parental home is & mobility potential abroad	17.466	20	0.623

Table 4. Significance test of the current residential environment and the labour mobility potential (cross-tabulation results)

Fig. 2. Mobility potential within Hungary by the residential environment (persons)

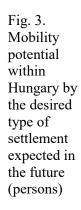


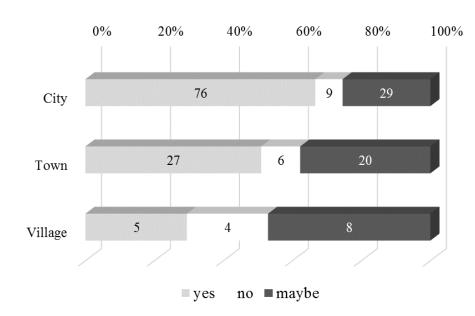
A similar analysis was carried out regarding the future desired type of settlement and residential area type and mobility potential. The relationship between where the respondent wishes to live in 10-15 years' time, whether it is a city or town or village and whether the respondent would move to a distant part of Hungary for the purpose of labour is significant. With regard to the potential for labour mobility abroad, such a relationship cannot be found. Similarly, a significant relationship between the type of residential area and labour mobility potential can only be found in relation to move within Hungary (Table 5). The distribution of answers showing a significant relationship is presented in Table 3. Those wishing to live in a city are most open to mobility (66.7%) and those wishing to live in a village are the least (29.4%)

although, among the latter, the proportion of those who are uncertain is the highest (47.1%).

	$\chi^2$	$d_{\mathrm{f}}$	Sig.
Desired future type of settlement & mobility potential within Hungary	11.163	4	0.025*
Desired future type of settlement & mobility potential abroad	6.209	8	0.624
Desired future residential area & mobility potential within Hungary	10.182	10	0.433
Desired future residential area & mobility potential within Hungary	16.674	20	0.674

Table 5. Significance test of the expected future residential environment and the labour mobility potential Source: Own table based on cross-tabulation analysis





Analysis has been carried out whether any difference can be identified in the potential for mobility if the current and desired future type of settlement is considered together. The proportion of those who would move within Hungary is 63.6% among those wishing to stay in the city while this proportion among those wishing to move into the city is 70.8% and it is 71.9% among those wishing to leave the city. Horváth identifies this process as an acceleration of suburbanisation processes: capital cities

and other centres offer favourable work opportunities, services and higher living standards thus becoming more and more desirable mobility destinations (Rechnitzer, 2016). From among those wishing to stay in the country, 42.9% would move, but the proportion of those being uncertain is the highest here (41.3%). At a 95% reliability level, the result is not significant ( $\chi^2=11.497$ , d<sub>f</sub>=6, sig=0.074). With regard to labour mobility abroad, the subsamples of the study show similar results, with those wishing to leave the city requiring attention with 14.3% being certain about not wishing to move abroad for work and 28.6% being uncertain. The results are not significant, keeping or changing the residential environment is not a factor for group categorisation.

The relationship between wishing to change the residential area in case of a detached house and community residential area (condominium) and mobility potential has been examined in a similar way. Regarding the mobility within Hungary, a significant relationship can be found ( $\chi^2=14.103$ , d<sub>f</sub>=6 sig=0.029). The distribution of answers is presented in Table 6.

		Potential for labour mobility within Hungary			Potential for labour mobility abroad		
	n (persons)	Yes	No	Uncertain	Yes	No	Uncertain
Staying in detached house	83	48.2	16.9	34.9	55.4	25.3	19.3
Wishing to move to detached house	43	62.8	4.7	32.6	62.8	16.3	20.9
Staying in apartment block	33	72.7	3.0	24.2	45.5	39.4	15.2
Wishing to move to apartment block	18	77.8	0.0	22.2	44.4	22.2	33.3

Table 6: Relationship between labour mobility and the type of the house or flat (data in % of the subsample)

Including in the analysis the combinations of labour mobility potential within Hungary and abroad (yes, no, uncertain), too, a significant relationship was found between the present residential area ( $\chi^2$ =50.345, d<sub>f</sub>=35, sig=0.045), the envisaged future type of home ( $\chi^2$ =64.263, d<sub>f</sub>=42,

sig=0.015) and changing the type of homes ( $\chi^2$ =34.923, d<sub>f</sub>=21, sig=0.029).

### Discussion of the results

Based on the experiences of the study, it can be stated that Black's (1998) opinion that migration and mobility cannot be understood only along environmental aspects seems to be true for the residential factors as well. The results show a significant relationship only in the case of certain factors, however, any generalisation based on these, even beyond the sample, is difficult. The main outcomes of the research can be summarised as follows:

- The respondents do not exclude labour mobility within Hungary (at least not on the level of potential) but the proportion of those uncertain is high. They would primarily move abroad for labour for a short period of time only while the possibility of working in Hungary with the potential for trips abroad is popular.
- The argument of higher income and career possibilities are in support of the decision while maintaining family and social relationships appear to be arguments against.
- In general, there is no significant relationship between mobility potential and residential environment. With regard to domestic analysis, a significant relationship has been found in view of the respondents' desire to live in a city or town or village in the future. Those wishing to live in a city show the most potential to migrate within Hungary while those wishing to live a village have the least although the proportion of those uncertain is twice as high among the latter than among those wishing to live in a city. Significant differences have also been found with regard to the place where the respondents grew up, namely in a city centre, suburb or a housing estate with blocks of flats etc. Those who grew up in the city, especially in a suburb show more potential for mobility although, in the latter group, the proportion of those who do not wish to move abroad is the highest.
- Combining the categories of domestic and foreign labour mobility potential, a significant difference can be found between those who wish to change their type of residence.

### **Conclusions**

The results of the pilot survey are limited from a certain point of view. However, there are no clear patterns of potential mobility among the higher education students investigated, the indirect experiences are useful.

Moreover, considering the results, the potential for labour mobility appears to be related to future expectations as well as the demand for change regarding the residential environment. Assuming dissatisfaction behind the demand for change, a possibility of extending this research is offered by including relative aspects and examining individual satisfaction level with the residential environment. Further research is needed to examine the motivation of those open to finding short-term employment abroad, with special attention to cross-border commuting as a special case of mobility (Hardi & Lampl, 2008). Since this phenomenon, directed out of Hungary, is characteristic of the western and north-western parts of the country, expanding the sample is a prerequisite. Similarly, interesting observations can be obtained by foreign labour force arriving Hungary, surveying in characteristically appear to be seasonal workers coming from the east primarily to Central Hungary (Hamar, 2015).

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