

HUNGARIAN DEMOGRAPHIC
RESEARCH INSTITUTE

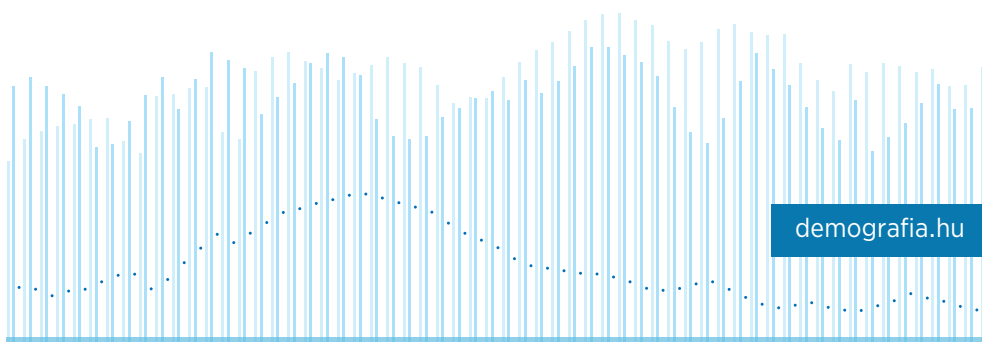
WORKING PAPERS

ON POPULATION, FAMILY AND WELFARE

N^o 29

SELECTION OF MIGRANTS AND REALIZATION
OF MIGRATION INTENTIONS - LESSONS FROM
A PANEL STUDY

by
Iréen Gödri - Gábor Attila Feleky



WORKING PAPERS

ON POPULATION, FAMILY AND WELFARE

N^o 29

SELECTION OF MIGRANTS AND REALIZATION OF MIGRATION INTENTIONS – LESSONS FROM A PANEL STUDY

by
Iré n Gö dri, Gá bor Attila Feleky

Hungarian Demographic Research Institute
2017

ISSN 1588-3396
ISBN 978-963-235-522-1

Director: Zsolt Spé der
Series editor: Ró bert Ivá n Gál
© Iré n Gö dri, Gá bor Attila Feleky

Suggested citation:
Gö dri, Iré n – Feleky, Gá bor Attila (2017): Selection of migrants and realization
of migration intentions – lessons from a panel study
Working Papers on Population, Family and Welfare, No. 29
Hungarian Demographic Research Institute, Budapest.

Address: Hungarian Demographic Research Institute
Budapest, Buday László utca 1–3. 1024 Hungary
e-mail: godri@demografia.hu

This paper was written as part of the research project *'The role of migration-related expectations and life-course events in the development and realization of migration intentions'* supported by the Hungarian Scientific Research Found (OTKA, 101458 PD).



HUNGARIAN DEMOGRAPHIC
RESEARCH INSTITUTE

ABSTRACT

We examined the selection of emigrants and the relationship between migration intention and actual migration based on the two-wave panel survey *Turning Points of Life Course – Transylvania* conducted in 2006 and 2009 among the Hungarian-speaking population of Transylvania aged 20–45. This type of follow-up surveys, which confront migration intentions and subsequent behaviour are scarce in the field of migration research. Based on the previous intentions and actual migration, four groups could be separated: *stayers*, who did not have migration plans and did not move; *expected migrants*, who previously reported intention to move and realized it; *dreamers*, who planned migration but did not realize it; and *unexpected migrants*, who initially had no migration plans but moved nevertheless. Our results indicate negative selection of migrants in the dimensions related to living conditions and work, and positive selection regarding subjective state of health and anomie. Although only 17% of the migration plans were followed by actual migration in the 3-year follow-up period, migration intention proved to be a statistically significant predictor of migration. Those who had a migration plan of any kind during the first wave were almost three and a half times more likely to move than non-planners. Based on Ajzen's theory of planned behaviour we have also analysed the role of migration-related expectations and subjective norms in migration behaviour. Migration-related expectations were measured by the assessment of advantages and disadvantages associated with migration, while subjective norms by the perceived pressure from significant others (friends, parents, relatives) towards migration. Our findings confirm that migration-related attitudes and subjective norms, in accordance with Ajzen's theory, influence migration behaviour only indirectly via migration intention.

Keywords: international migration, migration behaviour, migration intention, migration plans, migration-related attitudes, subjective norms, panel survey, selection of migrants

AUTHORS

Irén Gödri
Hungarian Demographic Research Institute, Budapest

Gábor Attila Feleky
Corvinus University of Budapest, Budapest

DOI: 10.21543/WP.2017.29

CONTENTS

List of Figures	4
List of Tables	4
INTRODUCTION	5
THEORETICAL BACKGROUND AND PREVIOUS EMPIRICAL RESEARCH	6
Selection of migrants – cross-sectional versus panel studies	6
The relationship between migration intention and behaviour	8
DATA	11
HANDLING SAMPLE ATTRITION, ESTIMATING THE PROPORTION OF MIGRANTS AND RETURNEES	11
REALIZATION AND CHANGE OF MIGRATION PLANS	14
COMPOSITION OF MIGRANT AND NON-MIGRANT GROUPS	17
SOCIO-DEMOGRAPHIC BACKGROUND AND SELECTION OF MIGRANTS	19
Descriptive results	20
Factors influencing migration behaviour – multivariable models	23
The role of migration intention, migration-related attitudes and subjective norms	27
EXPLAINING REALIZATION OF MIGRATION INTENTIONS	30
Factors influencing migration behaviour among planners – multivariable models	30
SUMMARY AND CONCLUSIONS	33
REFERENCES	36
ANNEX	39
List of Working Papers	42

LIST OF FIGURES

- Figure 1: Theory of planned behaviour as applied to migration decision (based on Ajzen 1991, 2005)
- Figure 2: The effective and estimated distribution of first-wave respondents by place of residence in the second wave (unweighted)

LIST OF TABLES

- Table 1: Sample attrition between the two waves
- Table 2: Occurrence of migration between the two waves by previous migration plans
- Table 3: Groups formed by previous migration plans and actual migration
- Table 4: Migration plans in 2009 by groups formed on the basis of previous migration intentions and actual migration
- Table 5: Socio-demographic characteristics of groups formed on the basis of previous migration intentions and actual migration (%)
- Table 6: Occurrence of migration between the two waves in the total sample and among those having planned migration by different socio-demographic groups
- Table 7: Occurrence of migration between the two waves in the total sample and among those having planned migration by different variables of psychosocial well-being
- Table 8: Odds ratios of migration behaviour between the two waves (logistic regression models – migrants versus stayers)
- Table 9: Occurrence of migration between the two waves in the total sample and among those having planned migration by migration-related attitudes and by perceived external norms
- Table 10: Role of previous migration willingness and migration intentions in migration behaviour (odds ratios of logistic regression models)
- Table 11: Role of migration-related attitudes in migration behaviour (odds ratios of logistic regression models)
- Table 12: Role of perceived external norms in migration behaviour (odds ratios of logistic regression models)
- Table 13: Odds ratios of migration behaviour between the two waves among planners (logistic regression models – expected migrants versus dreamers)
- Table A1: Comparison of the sample of the first wave and those with known whereabouts in the second wave by sex, age, level of education and employment status

INTRODUCTION

Measuring emigration is a serious challenge for sending countries. The poor coverage of administrative data on emigrants (i.e. people migrating out of a country) and the difficulties of collecting survey or census data on emigrant population (i.e. no longer resident in the country) result in a lack of accurate data about the number and characteristics of emigrants. Due to this fact the analyses of emigrants often rely on 'mirror' statistics, namely immigration statistics of the main receiving countries. However, these data reflect external selection effects in the composition of migrants (e.g. effects of migration regulations and of labour force demand in destination countries), thus blurring the distinction between selection due to external factors and self-selection of emigrants from a specific area (country, region) (Van Dalen and Henkens, 2007; Chort, 2012).

In order to identify the individual factors influencing migration decisions and behaviours, and thus mapping the drivers of migration, it is important to track the selection of migrants from the roots of the process. The surveys carried out in source countries in the population of origin before migration are suitable for this purpose. These surveys collect information about the individual life situations, living conditions, motivations, attitudes, preferences and expectations at the time when the migration intention is formed, therefore these data are more reliable than those collected retrospectively.

From the point of view of individual decision-making and behaviour, migration is a process with different stages (De Jong and Fawcett, 1981; Kley and Mulder, 2010; Kley, 2011). The process begins with the consideration of migration, followed in some cases – based on individual preferences, goals and perceived opportunities – by formation of a concrete plan to move, and then finally – depending on the facilitators and constraints – part of the plans are actually realized.¹ So there is a *decision-making phase* in the migration process, which is subdivided into *considering migration* and *planning migration*, and there is a *realization phase* (Kley and Mulder, 2010).

The data collected in the decision-making phase of migration allow us to capture the roots of selection: the individuals' socio-demographic characteristics, attitudes, expectations and perceived external norms influencing their migration decision. Migration plans, however, are not realized in every case and some planners will never put intention into action. Along with the lack of individual resources (financial, social, and psychological capital that can facilitate migration), various obstacles inhibiting realization – such as unforeseen costs, legal obstacles or unexpected events –, also play a role. Migration flows, particularly in the case of labour migration, are mainly determined by labour demand in the destination countries, which therefore often restrains the realization of plans.

Thus another selection takes place between planning and realizing migration, which can only be explored by a panel study, by tracking the potential migrants. By comparing the profiles of migration planners and movers (who actually migrated within a given period), and contrasting the factors underlying migration intentions and realized migration we can better understand why certain plans remain only dreams (Van Dalen and Henkens, 2008), and what explains the shift in selection between the two stages of migration process (Chort, 2012). In fact, analysing the relationship between planning and realizing migration will also reveal how well migration intentions predict action, i.e., the subsequent migration.²

¹ Fawcett (1985) refers to two works dated much earlier in which the authors separated, within the decision-making process of migration, the stages of inclinations to move, intentions to move and movement behaviour (Rossi, 1955), as well as desire for migration, consideration of migration and expectation for its realization (Goldsmith and Beegle, 1962).

² In this respect, of course, it is important to keep in mind that the different types of migration potential (from general to concrete plans), and the survey techniques that are used to measure it can result in different rates of realization.

In the light of the above, this paper has two goals. It aims to provide an insight into the selection mechanism of emigration from Transylvania (a historical region in today's Romania), as well as to reveal the relationship between migration intention and realization of migration. Our analysis is based on the two-wave panel survey *Turning Points of Life Course – Transylvania* conducted in 2006 and 2009, addressing the following questions:

- to what extent and among whom were migration intentions (measured in 2006 during the first wave) realized until the second wave in 2009, and which type of migration plans (short or long-term working abroad, or emigration) were mostly followed by actual migration?
- what individual factors determined the migration behaviour during the surveyed period, and what was the role of previous migration intentions, as well as migration-related attitudes and subjective norms in it?
- what individual factors explain the selection between planning and realizing migration, i.e., what factors facilitate or hinder the realization of migration intentions?

The paper is structured as follows. First, we briefly review the theoretical considerations and lessons from previous research that help us understand the factors underlying the selection of migrants, as well as the relationship between migration intentions and behaviour. Next, we present the source of data used in the analysis, the construction of panel database, sample attrition handling, and estimation of migrants and returnees. Then we attempt to answer our questions stated above using descriptive and multivariable data analysis. Finally, we conclude with summarizing the main results and drawing conclusions.

THEORETICAL BACKGROUND AND PREVIOUS EMPIRICAL RESEARCH

SELECTION OF MIGRANTS – CROSS-SECTIONAL VERSUS PANEL STUDIES

Migration is a selective process during which those leaving their country of origin are 'selected' by certain characteristics, so their composition is different from that of the population of origin (Borjas, 1987; Brücker and Defoort, 2009; Ambrosini and Peri, 2012). Selection results from the fact that the incentives and constraints as well as the costs and expected 'returns' of migration change according to age, education and other individual characteristics. The composition of migrants may have many economic and demographic consequences for both the countries of origin and destination.

Empirical data mostly underpin positive selection³ (Brücker and Defoort, 2009; Borjas, 1987; Hunt, 2004; Van Dalen and Henkens, 2008), but there are examples of negative selection too (Fernandez-Huertas Moraga, 2013), and sometimes migrants are not different by education or age from those who remained at home (De Jong et al., 1985). It is also possible within the same population to have positive selection in certain groups simultaneously with negative selection in other groups.⁴ Selection can also be shown by other dimensions with no direct economic relevance: compared to non-migrants a significantly greater share of migrants have prior migration experience (Fuller et al., 1985; Kley, 2011; De Jong et al., 1985), a family member or a friend living abroad (De Jong et al., 1985; Kanaiaupuni, 2000), and their community of origin is more supportive towards moving abroad (De Jong et al., 1985; Van Dalen and Henkens, 2008,

.....
³ Positive selection is when regarding some important criteria – mostly education, labour market position, income and/or financial status – migrants have a more favourable composition compared to the total population of origin, while negative selection is the opposite case.

⁴ E.g. negative selection was observed among the Mexican migrants on the whole, whereas positive selection predominated among those living in the countryside (Fernandez-Huertas Moraga, 2013). Another Mexican study identified negative selection among men and positive selection among women by educational attainment (Kanaiaupuni, 2000).

2013). In addition, the marital status is also an important selective factor (De Jong et al., 1985; Kley, 2011; Kanaiaupuni, 2000), as well as certain attitudes, personality traits, and psychological dispositions are more common among migrants (Van Dalen and Henkens, 2008, 2013).

Larger costs and more significant barriers of migration also result in positive selection (Brücker and Defoort, 2009). It is also crucial how widespread emigration is in the given community of origin: communities with large migrant networks emit new migrants in negative selection, while there is positive or neutral selection by education in the absence of such networks (McKenzie and Rapoport, 2010). This is explained by the fact that the existence of migrant networks can reduce the cost of migration, so there is a higher hope for 'returns' even with lower educational attainment.

Findings concerning the selection of migrants are primarily based on cross-sectional surveys conducted among those who actually moved to the destination countries or migration planners in the countries of origin. The former ones examine composition on the basis of so-called 'revealed preferences' while the latter ones do it on the basis of 'stated preferences' (Van Dalen and Henkens, 2013). However, while the post-migration surveys reflect the already mentioned selection effects by destination countries and, additionally, it is problematic to collect retrospective data, in the case of the migration planners it is uncertain to what extent and among whom intentions will be realized later. In order to track the whole selection process – from the formation of intentions and plans to their realization – longitudinal panel surveys are needed.

The need for longitudinal studies in migration research has been highlighted for several decades (Gardner et al., 1985; Coleman and Salt, 1992), pointing out that only such surveys make it possible to explore the relationship between migration intentions and actual migration, as well as to put migration in the context of other life course events. So far, however, few research has been carried out in which exploration of migration intentions was followed by examination of their future realization, thereby confronting intentions and subsequent behaviour. One of the reasons for this is that by conducting panel surveys, sample attrition often results from migration itself, so migrants are more likely to 'be missing' at the next wave, and tracking them is much more difficult (Buck, 2000).

The first follow-up survey that examined the explanatory factors of migration intentions and behaviour in the case of international migration, took place at the beginning of the 1980s in a Philippine province (Gardner et al., 1985; De Jong et al., 1985). According to the study between 1980 and 1982, among those who intended to move within two years, 44% realized their plan. The results indicate that regarding intention and action, there were more similarities than differences between key factors of selection (prior migration experience was the only factor that explained the migration behaviour but not intention itself). The variables involved in the analysis, however, explained migration intentions to a much greater degree (53%) than migration behaviour (38%).

More than two decades later, in the context of migration from Mexico to the United States, there was another study (based on a nationally representative longitudinal survey) of migration intentions and subsequent actions as well as selection process of migrants (Chort, 2012). The comparison of intentions to migrate and actual moves showed that realization of migration is mostly determined by sex: controlled for their migration intention measured in 2002, women migrated much less likely by 2005 than men. As explained in the study, migration opportunities for women were much more limited by financial and social constraints – misestimated at the planning stage – than for men. At the same time, the role of external factors – 'unexpected shocks' (e.g. illness, unemployment, natural disaster) and 'misevaluated costs' – explaining this discrepancy between migration intentions and actions was also studied but their effect was much smaller than that of sex. The survey confirmed a negative selection at the intention stage, and a positive selection of actual migrants.

Also in the 2000s a Dutch panel survey made an attempt to understand selection during migration process by comparing emigration intentions and subsequent behaviour in the Netherlands (Van Dalen – Henkens, 2008, 2013). About 24% of those having an emigration plan in 2005 realized it by 2007, and 34% by 2010. In this case, the existence of a previous emigration intention proved to be the main explanatory factor of actual emigration. When previous intention was also included, only the age of respondent had significant effect in the model of emigration behaviour, which suggests that the age explained the discrepancy between intention and behaviour (Van Dalen – Henkens, 2013). Within the group of migration planners, the only difference was found about health status: healthy people (who considered their own state of health better) were more likely to realize their migration intentions.

In Hungary studies on migration potential have been made on a regular basis since 1993, designed to explore the number, destination countries and socio-demographic composition of potential migrants (Berencsi, 1995; Sik and Simonovits, 2002; Hárs, Simonovits and Sik, 2004; Sik, 2006, 2012; Gödri and Feleky, 2013). Based on them it was possible to explore the changes over time in the intensity of migration intentions and the choice of destination countries (Nyírő, 2013), but realization of plans was not tracked. The only exception is the study in which the sample of the 2003 Labour Force Survey run by the Hungarian Central Statistical Office (HCSO) was used in 2007 to interview again those who had the intention in 2003 to work abroad (Hárs, 2008). The findings showed a relatively weak connection between migration intentions and subsequent migration: although the survey covered a four-year period, 10% of those who had planned actually worked abroad at the time of the second interview, and a further 7% worked abroad in the meantime and then returned home. The rate of realized migration was almost 20% for men, and only 12% for women.⁵

As seen in the above examples, longitudinal surveys – if they are based on tracking the total first-wave sample – offer insight into both stages of the selection process. In some cases, the composition of migration planners indicates the composition of migrants; in other cases, however, there is a significant shift in selection. This is due to the fact that while migration intentions are based on various push, pull and retaining factors – and their subjective perception – as well as calculation of costs and expected returns of migration, the realization of intentions are primarily facilitated by the various human, financial, social and psychological resources (Massey and Espinosa, 1997; Palloni et al., 2001), and hindered by external barriers (e.g. social norms, expectations, legal obstacles, unforeseen costs, etc.), respectively. It can be assumed, therefore, that groups better equipped with certain individual resources that can be converted during migration have better chances to realize their migration plans.

THE RELATIONSHIP BETWEEN MIGRATION INTENTION AND BEHAVIOUR

Based on the few longitudinal surveys available, it appears that in some societies and communities, migration intentions can be considered as reliable predictors of future migration but they prove to be less reliable elsewhere. There are many examples (although mostly concerning internal migration) to justify that migration intentions are important indicators of future migration, because migration planning is one of the main explanatory factors of subsequent migration on individual level (De Jong et al., 1985; Lu, 1998; De Jong, 2000; Kley and Mulder, 2010; Kley, 2011; Van Dalen and Henkens, 2008, 2013). However, the longitudinal studies reviewed fail to clearly answer the question of

⁵ The shortcoming of this survey is that not the total first-wave sample was interviewed again in 2007 but only those having previously migration plans. The analysis of selection was therefore limited to migration realized within the group of planners.

how well the trend and composition of future migration can be estimated based on migration intentions or plans. In the case of international migration, the barriers and obstacles are obviously larger, so depending on by whom, from where, to where and why migration is planned, the answer given may be that intentions predict future emigration well (Van Dalen and Henkens, 2008, 2013); but also that even though they are reasonable, informative indicators, they cannot be considered as the direct indicator of actual migration (Chort, 2012).

To study the relationship between intention and action, most of the empirical research start from the assumptions of the *theory of reasoned action* developed by Ajzen and Fishbein (1980) and the later *theory of planned behaviour* (Ajzen 1991).⁶ The theory of reasoned action attempts to understand action through intentions, claiming that action is directly influenced by intention, and the appropriate assessment of intention allows the precise prediction of action. It is based on the assumption that intentions are determined by *attitudes* toward action, as well as *subjective norms* (beliefs about the expectations of other people) related to action. An attitude is the individual's positive or negative evaluation of action's likely outcomes, i.e., the assessment of advantages and disadvantages of migration. Subjective norms are the external opinions and expectations as perceived by the individual in relation to the specific action (i.e., how 'significant others' would judge their migration).

In addition to attitudes and subjective norms the theory of planned behaviour includes a third factor (*Figure 1*), claiming that *perceived behavioural control* also influences the formation of intentions (Ajzen, 1991). This determinant of intentions expresses how easy or difficult the individual feels it to perform the specific action and how capable one feels to realize it, respectively.⁷ It is related to the sense of self-efficacy or ability (thus indirectly to self-confidence).

Based on the above, migration intention is formed by *assessment of advantages and disadvantages* of migration, by perception of *external expectations* related to migration (pressure from the significant others), as well as by *beliefs about the feasibility* of migration. By exploring these factors that influence intentions, we can understand behaviour/action itself, i.e., migration. (In the following we are testing the influence of first two components; the third is not included in the current analysis.)

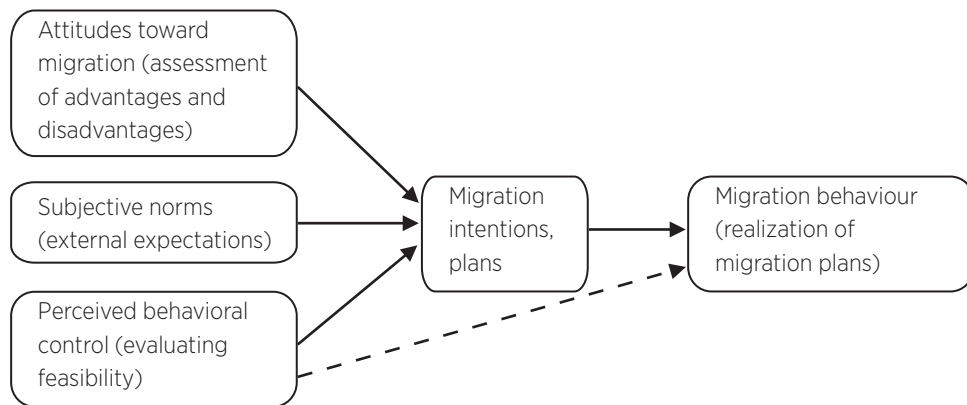


Figure 1

Theory of planned behaviour as applied to migration decision (based on Ajzen 1991, 2005b)

⁶ Although the role of subjective factors – attitudes, preferences, intentions – in migration decisions has been recognized since the 1950s, the systematic application of conceptual frameworks of contemporary psychological and socio-psychological theories in migration research only began in the eighties (Fawcett, 1985).

⁷ If the individual's perceived and actual control over action is more or less the same, there can be direct connection between perceived behavioural control and behaviour/action – marked by a dotted arrow in the figure (Ajzen, 2005b, p.119).

At the decision-making phase of migration, however, one cannot anticipate all the factors which influence action by facilitating or restraining realization of intention, and unexpected barriers may also emerge. The higher the costs and risks implied by the action (as with international migration), the more likely that factors arise which were disregarded by planners. However, the theory of planned behaviour fails to take all of this into account, and therefore in certain cases the model based on this theory is unsuitable to predict the future trend and composition of migration.

The empirical findings demonstrate well that although the chances of future migration are greater among those having previous migration plans, a significant proportion of migration planners do not realize their plans despite the strong connection between intention and action, while many people do migrate without prior plans (Gardner et al., 1985; Simmons, 1985; Lu, 1999; Kan, 1999; Van Dalen and Henkens, 2008).⁸ There can be various reasons for this discrepancy.

On the one hand migration *intentions and plans may change over time*. The potential migrant can encounter obstacles, costs, risks after developing the intention that will result in abandoning migration intentions, or postponing their realization. Both internal factors such as lack of information or adequate skills and abilities, and external factors such as lack of opportunities or dependence on others can hinder the realization of planned action (Ajzen, 2005a), and can lead to abandoning or postponing plans. An unexpected event before realization of intention or a change in the circumstances determining motivations can also result in modifying intention.

On the other hand, an *insufficiently 'serious' intention* can also underlie the failure to realize plans. The different measurement techniques applied to assess intentions capture people at different stages of the decision-making process (those disposed to migrate, considering migration, having a migration plan, or those who have already taken steps toward migration), so 'intentions' involve both general desires and specific, concrete plans (Fassmann and Hintermann, 1998). In the case of the former, however, the chances of realization are slight. The more we can capture real, actual migration intention, and not only desires and dreams, the more reliable the prediction based on migration potential will be.

Another form of inconsistency between intention and action is when migration occurs in the absence of previous plans. This so-called 'surprise move' (Gardner et al., 1985) or 'unexpected move' (Lu, 1999) can occur due to changing circumstances, emergence of new information or unexpected events after the measurement of intentions, but may also result from the fact that migration was not planned by the person previously interviewed about their own intentions. According to the new economics of migration, migration-related decisions are usually made by families or households in order to increase their income and reduce their risks, respectively (Taylor, 1986; Stark, 1991). It is possible therefore that there was a family decision or another family member's intention underlying migration which occurred despite the lack of individual migration intention.

Both the change of intentions over time and the inaccuracy of their measurement reduce the predictive power of intention. The appropriate operationalization of migration intention, the clarification of concepts is an important step to estimate migration by way of previous intentions. Intentions are more accurate indicators when applied to a specific action including its timing and destination, in contrast with only general desires. However, we cannot ignore the role of different individual and structural background factors as well as external constraints and barriers that influence the realization of migration along with or, sometimes, against intentions.

⁸ Besides the failure of realizing migration, we can observe discrepancy between intentions and action in terms of timing and destination country of migration (Gardner et al., 1985).

DATA

The database of the panel survey *Turning Points of Life Course – Transylvania* provides a unique opportunity to examine selection during migration, as well as the factors influencing migration behaviour.⁹ The first wave of the survey was conducted in 2006 on a representative sample of 2,492 persons of the Hungarian-speaking population of Transylvania aged 20–45. In the first wave, migration intentions were measured by a standard set of questions (used in TÁRKI surveys since 1993), which, taking into account the duration of migration, addressed the respondent's plans for *short-term (a few weeks or month)* or *long-term (several years) employment abroad, or emigration (permanently settling down abroad)*.

The second wave took place at the turn of 2008–2009, when respondents interviewed in 2006 were contacted again. For those who could not be re-interviewed, the reason of failure was registered on the address card, and in case they had moved, the data of their new place of residence were also recorded – if it was possible to find out. In the questionnaire for the second wave there were also questions related to those having returned after a given period of time spent abroad (at least 3 months) between the two surveys (so we also have information about their experience of working abroad as well as the reasons for their return). By linking the data from the two waves and the address cards, it was possible not only to analyse the selection process of migrants, but to test realization of migration plans explored in the first wave, and it has been revealed how well prior migration intentions predicted future migration.

Given the fact that there are scarce empirical data from panel surveys on the selection of international migrants and the relationship between migration intention and actual migration, the panel database of the research *Turning Points of Life Course – Transylvania* is particularly valuable. As far as we know, in the Central and Eastern European region – despite the relative abundance of studies on migration potential – this has been the first study that, by contacting again the total first-wave sample (not only the planners), allows a detailed exploration of explanatory factors of realized migration, with particular attention to the role of previous migration intentions.

Another novelty of the survey is that it has become possible to apply Ajzen's theory of planned behaviour to migration decisions. First-wave data include migration-related attitudes (assessment of advantages and disadvantages of emigration), as well as subjective norms (beliefs about the external expectations of friends, parents or relatives). These data enable us to analyse the how these factors influence the migration behaviour.

Although the second wave of the survey was completed in 2009, the recording of address card data as well as linking data from the two waves and with data from address cards, and then cleaning the total database took place only in 2012 (under the auspices of mentioned OTKA-research) due to prior lack of financial and human resources, and only then it became possible to analyse these data.

HANDLING SAMPLE ATTRITION, ESTIMATING THE PROPORTION OF MIGRANTS AND RETURNEES

In panel studies attrition is usually relevant because of sample distortion, i.e., the representativeness of the sample in subsequent waves. However, when we examine realization of migration plans, or the occurrence of migration between the two waves,

⁹ The survey was conducted by the Hungarian Demographic Research Institute, in cooperation with the Max Weber Social Research Foundation (Kolozsvár) and the Romanian Institute for Research on National Minorities (former Research Institute of Interethnic Relationships). For details on the first-wave sample and survey see Kiss and Kapitány, 2009.

sample drop-out will be seen in a different light, since one of the reasons for attrition can be migration itself. In this case if the residence of non-respondents from the second wave can be identified (at least whether they are in the home country or abroad), they are not 'missed' for the purposes of migration analysis (despite their failure to fill in the questionnaire).

Of the 2,492 persons¹⁰ which comprised the first-wave sample of the survey *Turning Points of Life Course – Transylvania*, 1,690 were interviewed during the second wave, an additional 410 people were linked with their whereabouts by the interviewers, and 7 people no longer lived at the time of the second wave. Accordingly, we have sufficient information of the whereabouts of 2,107 persons in total, while there are no data available about 385 people. *Table 1* contains the detailed attrition data from the second wave.

So it is clear that about two-thirds of the total first-wave sample were interviewed in the second wave (attrition was 32.2%); however, on the whole (completed with data from address cards) 84.6% of first-wave respondents were successfully located. According to data from address cards, 5.0% (106 persons) of those with 'known whereabouts' (2,107 persons) were staying abroad at the time of the second wave, and 14.4% (304) were staying in the home country (in their original address or elsewhere) but were not interviewed. Using the weight of first wave, which ensured the representativeness of the sample by sex, age group, level of education and 'ethnic microregion,' these proportions change slightly: during the second-wave interview 5.5% of those with 'known whereabouts' lived abroad,¹¹ 15.5% lived in the home country but did not respond to the questionnaire (response rate was 78.6%), while 0.4% no longer lived.

Table 1

Sample attrition between the two waves

	1 st wave (in 2006)	2 nd wave (in 2009)	% of first-wave sample	% of first-wave sample (weighted)	% of those with known place of residence	% of those with known place of residence (weighted)
Respondent	2492	1690	67.8	64.7	80.2	78.6
Non-respondent but place of residence is known		410	16.5	17.3	19.5	21.0
Lived abroad		106	4.3	4.5	5.0	5.5
Moved elsewhere in the country		78	3.1	3.2	3.7	3.9
Refused to respond		130	5.2	5.4	6.2	6.6
Other failure (failed to contact the person, unable to respond)		96	3.9	4.2	4.6	5.0
Deceased		7	0.3	0.3	0.3	0.4
<i>Sum</i>		<i>2107</i>	<i>84.6</i>	<i>82.3</i>	<i>100.0</i>	<i>100.0</i>
Nothing known		385	15.4	17.7	-	-
<i>Total</i>		<i>2492</i>	<i>100.0</i>	<i>100.0</i>	-	-

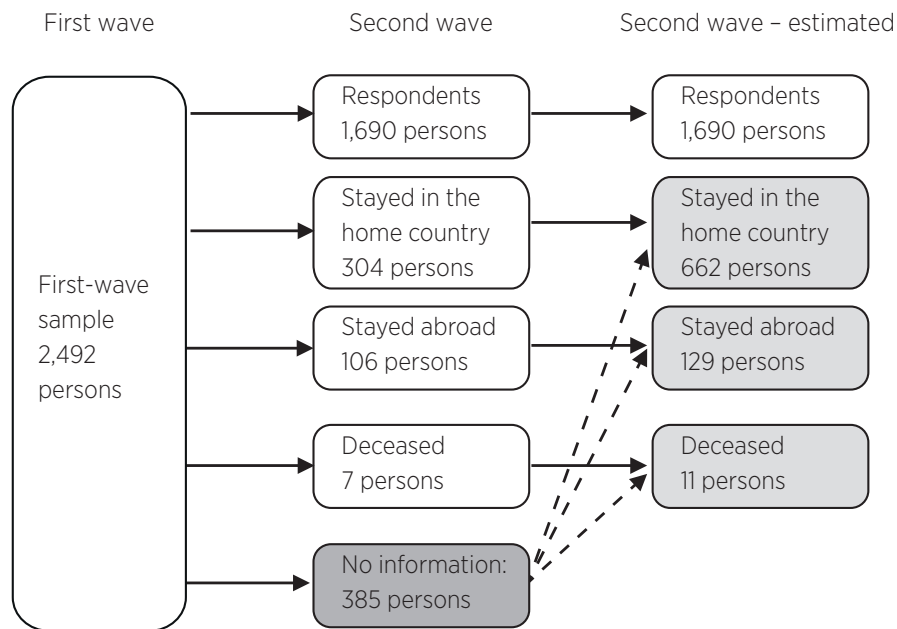
Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

¹⁰ It is important to note that among those included in the first-wave sample, less mobile persons (reachable at their home address) were likely to be already overrepresented, and those 'on the move' (Horváth, 2003) – who were already involved in some form of migration either as temporarily absent or as commuters – were underrepresented.

¹¹ The rate of those living abroad (for the group with known whereabouts) was much more significant among persons having previous migration plans: 9.6% among planners of short-term migration, 11.6% among planners of long-term migration, and 14.8% among emigration planners.

Those about whom no information was obtained during the second wave (385 persons) could have included persons located both in the home country and abroad, and it can be assumed that the rate of migrants among them is slightly higher than in the total sample. This is also suggested by the fact that among those having migration plans at the time of the first wave, the rate of those with 'unknown whereabouts' in the second wave was much higher: while it was 16% among non-migration planners, 21% among planners of short-term migration, 24% among planners of long-term migration and 26% among emigration planners.

Based on models taking account of the rate and composition of groups known to be located abroad or in the home country, we made an estimation of the place of residence for the 385 persons with unknown whereabouts (see annex for a detailed description). Accordingly, people with unknown whereabouts were distributed between the groups of those with foreign residence, non-respondents with domestic residence and the deceased. Using these estimated data to complement the group of people staying abroad based on their address cards (106 persons), it can be assumed that *129 persons of the first-wave sample were staying abroad at the time of the second wave interview* (see Figure 2), which means 5.2% of the unweighted sample, and 5.8% of the weighted sample.



Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Figure 2

The effective and estimated distribution of first-wave respondents by place of residence in the second wave (unweighted)

In addition to those staying abroad at the time of the second-wave survey, there were persons (as mentioned above) among respondents involved in migration who stayed abroad for some time (at least 3 months) between the two waves of the survey, and then returned: 48 of the 1,690 persons, accounting for 3.2% of the weighted subsample of respondents. Assuming that there were a similar proportion of persons among those not responding to the questionnaire but staying in the home country during the second wave who stayed abroad for at least 3 months between the two waves, the number of returnees among them can be estimated at 21. In summary, the number of returnees from staying abroad was *probably 69 persons of the total first-wave sample*, making up 2.8% of the unweighted sample and 3.0% of the weighted sample. Our analyses took

into account the estimated rates of those staying abroad and those having returned, but using only the weighted subsample of persons with known whereabouts (2,107).

In order to examine realization of migration plans, it would be important to take into account the length of staying abroad (if any) that followed plans in the case of those planning for different durations of migration (a few weeks/months, a few years, or permanent stay). In most cases, however, there is no sufficient information available about it. A part of those staying abroad at the time of the second wave 'emigrated', another part 'worked abroad' according to address card data. The time of departure is not known for any of the groups, and in the case of the latter, the expected duration of foreign employment is also unknown. (Additionally, people from the 'emigrated' group may also return later). Similarly, in the case of returnees, the length of time spent abroad is not always known (only that it was at least 3 months).

All in all, our analysis regarded everybody to be migrant who stayed abroad at the time of the second-wave interview, or spent at least 3 months abroad between the two waves and then returned from there. (A similar definition was used to define migrant persons in previous panel studies, see Chort, 2012; Van Dalen and Henkens, 2008, 2013). For those planning migration at the time of the first wave, realization of plans was also evaluated on this basis, although we are aware that this may imply some inaccuracy.¹²

REALIZATION AND CHANGE OF MIGRATION PLANS

According to data from the first wave in 2006, almost one-third of respondents (30.3%) representing the Hungarian-speaking Transylvanian population aged 20-45 planned some type of migration: 24.7% planned short-term, 15.2% planned long-term employment abroad, and 7% planned emigration (Gödri and Kiss, 2009).¹³ 40% of the planners had plans for different lengths of time. About three years later, at the time of the second wave, 10% of earlier planners lived abroad and 7% were return migrants (who permanently stayed abroad for at least 3 months after the previous interview was made, and then returned home). In summary, about 17% of migration plans were realized more or less in some form (*Table 2*). It corresponds with the result of an earlier – already mentioned – Hungarian survey on the realization of employment intentions (Hárs, 2008), which, however, measured the same realization rate after four years.

Plans for long-term work abroad and (also) emigration were followed by migration to a slightly higher degree than plans made for only short term. At the same time, much more of those planning (also) emigration in 2006 lived abroad at the time of the second wave (15.8%) than of those planning longer or shorter foreign employment. The rate of returnees, however, was higher among the latter: 48-53% of those aiming to migrate for work returned, while it was a little over one-tenth (12.5%) among those who (also) planned to emigrate. The latter group comprised persons who made plans for work in addition to emigration. Migration was realized to the largest degree among those who in 2006 had all three types of migration plans: 23.4% of them migrated and most of them (22.1%) also lived abroad at the time of the second wave.

Taking into account the destination countries of migration plans, it seems that a somewhat larger proportion of migration plans were realized that primarily aimed at Hungary (18%) compared to those aiming at other (mostly Western European or

.....
¹² Realization of migration plans can actually be examined only with certain limitations, since what can be stated in many cases is only the start to realize the plan.

¹³ Since then the rate of persons within the Transylvanian population planning employment abroad has further increased, in particular in the younger generations (in 2013, 43% of those aged 18-35, and 51% of those aged 18-29 planned to work abroad), and the move toward Western Europe has further strengthened in migration intentions (Kiss and Barna, 2013).

overseas) destination countries (15%). Realization of plans was lowest among those mentioning several migration plans and associated destination countries (9%); however, it was remarkably high among those who did not name a destination country (27%). Although the low sample sizes in both cases demand caution in our conclusions, it indicates that the more 'desperate' the planners (i.e., having various migration plans), the more likely they will realize their intentions even without a specific destination country, whereas in the case of plans tied to a variety of destination countries (which suggests a kind of uncertainty), migration will be less likely to occur.

Table 2

Occurrence of migration between the two waves by previous migration plans^a

Existence, type and destination country of migration plans during the first wave	Occurrence of migration between the two waves				Total	N
	Did not live abroad	Lived abroad				
		(for at least 3 months), and then returned home	during the 2 nd wave	total		
<i>Total population</i>						
<i>Migration plan in 2006^{***}</i>						
not had	94.7	1.3	4.1	5.3	100.0	1477
had	82.9	7.1	10.0	17.1	100.0	608
<i>Together</i>	<i>97.2</i>	<i>3.0</i>	<i>5.8</i>	<i>8.8</i>	<i>100.0</i>	<i>2095</i>
<i>Migration planners</i>						
<i>Type of migration plan in 2006 (longest planned duration)^{***}</i>						
short-term only (a few weeks or months)	84.3	7.5	8.2	15.7	100.0	266
long-term at most (a few years)	81.0	10.0	9.0	19.0	100.0	210
even emigration	82.0	2.3	15.8	18.0	100.0	132
<i>First mentioned destination country[*]</i>						
Hungary	81.7	8.2	10.1	18.3	100.0	279
other country	84.8	7.0	8.2	15.2	100.0	270
mixed ^b	90.9	4.5	4.5	9.1	100.0	22
no destination country	73.0	0.0	27.0	27.0	100.0	37
<i>Together</i>	<i>82.9</i>	<i>7.1</i>	<i>10.0</i>	<i>17.1</i>	<i>100.0</i>	<i>608</i>

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Remarks: ^a Denotation of variables showing significant correlation by chi square test: ^{***}: $p < 0.001$; ^{**}: $p < 0.01$; ^{*}: $p < 0.05$.

^b It was possible to name two destination countries (if various migration plans existed, then two in each case); 'mixed' category stands as first mentioned destination country if other destination country was mentioned besides Hungary in the case of various plans.

The above table also shows that while migration occurs over three times more frequently among those with previous plans than among non-planners, a relatively large proportion of migration plans was not realized between the two waves of survey. However, there were cases of migration in the absence of previous intention – even if it was less prevalent: 5.3% of non-planners still migrated later. Taking into account previous migration intention and realized migration together, four groups can be separated: *stayers*, who did not have migration plans and did not move; *expected migrants*, who previously reported intention to move and realized it within the 3-year follow-up period; *dreamers*, who planned migration but did not realize it within 3 years; and *unexpected*

migrants, who initially had not migration plans but moved nevertheless (*Table 3*). The highest proportion (two-thirds of the total sample) is made up by stayers, the rate of dreamers is also significant (one-quarter of the sample), while the rate of expected and unexpected migrants is relatively small (5% and 3.8%, respectively).¹⁴

Table 3

Groups formed by previous migration plans and actual migration

		Migration between the two waves	
		yes	no
Migration intentions in 2006	yes	Expected migrants 5.0% (N=104)	Dreamers 24.2% (N=504)
	no	Unexpected migrants 3.8% (N=79)	Stayers 67.0% (N=1,398)

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Of the four groups, stayers and expected migrants behaved in accordance with their plans (72%), while there is inconsistency between intention and action in the other two groups (28%). For *dreamers* this may be the result that plans were not realized *yet* – either because they were postponed, or because they were planned by a later time. There is, however, no information about the latter as the question about the planned timing of migration was missing in the first wave. Also, the failure of planned migration can result from the fact that the structure of supply side (potential migrants) did not meet the demand of destination countries. In this case, a part of the dreamers can actually be regarded *to have failed*.

In the case of *unexpected migrants* (who make up 43% of all migrants), migration intention may have been formed after the first wave of the survey (because the circumstances changed in the meantime), but it cannot be excluded, as Hárs, Örkény and Sik (2006) point out, that there were cases during the previous interviews when migration intentions were hid. Whatever led to unexpected migration, it indicates that migration may occur in spite of the lack of previous intentions.

In the second wave of the survey, migration intentions were reassessed. In that round it was possible to interview those not moving – according to or despite their earlier plans – and those having returned following migration. This can be used to examine the change in migration intentions for the various groups; e.g. we can learn if *dreamers* abandoned their previous migration plans, or it is merely about planning realization at a later time or postponement, respectively. The results show that barely one-third (32.8%) of those not realizing their previous migration plans (measured in 2006) planned some type of migration in 2009, while 67.2% of them gave up their earlier plans (*Table 4*).

A reverse change can be observed in the case of *stayers*: although they had no previous intention to migrate, in 2009 one-tenth of them mentioned migration-related plans (mainly for short-term employment). The largest proportion of migrants having migration intentions in 2009 was that of *return migrants* (one-third of all migrants): two-thirds of them planned new migration (84.8% of returnees after expected migration). It also confirms the well-known relationship that prior migration experience increases the occurrence of new migration plans. Based on migration intentions measured in 2009, it can be assumed that the rate of migrants within the surveyed population, estimated at 8.8% during the second wave, continues to grow over time.

¹⁴ In the Dutch survey shown earlier, the rate of stayers was even more significant (86.5%), while that of dreamers was only 8.3%, expected migrants made up 4.2%, and unexpected migrants (termed unintended movers) were only 1% (Van Dalen and Henkens, 2013).

Table 4

Migration plans in 2009 by groups formed on the basis of previous migration intentions and actual migration

Types	Migration plan in 2009		Total	N
	yes	no		
Stayers	10.1	89.9	100.0	1154
Dreamers	32.8	67.2	100.0	408
Returned migrants	66.2	33.8	100.0	71
<i>Total</i>	<i>18.2</i>	<i>81.8</i>	<i>100.0</i>	<i>1633</i>

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Remark: The group of returned migrants includes returnees following both expected and unexpected migration; these have been combined due to low sample size. Based on chi square test, significance: $p < 0.001$.

COMPOSITION OF MIGRANT AND NON-MIGRANT GROUPS

An important question – which perhaps may bring us closer to understanding the nature of migration intention and action – is what socio-demographic characteristics can describe the four groups separated by previous migration plans and realized migration. Is there a clear difference between the two groups of migrants and non-migrants, i.e., in the composition of expected and unexpected migrants, as well as in that of dreamers and stayers?¹⁵

Table 5 contains, along with the basic socio-demographic characteristics of these four groups, some additional criteria mainly related to financial status, employment and housing conditions. It is clear that in both groups of migrants men are represented by a slightly higher rate, while women predominate among stayers (who did not plan migration). Within the group of dreamers, however, the rate of men is extremely high, suggesting that there were even more among men – although they moved to a larger degree than women – who planned migration but failed to realize it. In terms of average age, expected migrants and dreamers are the two youngest groups, while that of stayers is the eldest. Among the formers (particularly among expected migrants), the rate of those with at most lower secondary education is higher than in the total sample, and the rate of unemployed and other inactive was larger among them. While approximately only half of expected migrants and dreamers were employed (employees or self-employed) in 2006, this ratio reached two-thirds among unexpected migrants and stayers. The differences are also shown in terms of marital status and number of children: the rate of unmarried and, in part, cohabiting people and childless was extremely high among expected migrants, but it was also above the average in the groups of unexpected migrants and dreamers. In contrast, the married and those with children were overrepresented among stayers.

The proportion of household members living abroad for at least one year – as a factor contributing to the formation of migration intention and to migration itself – was almost two times higher in the groups of actual migrants or dreamers than among stayers. The adverse financial, labour market status and housing conditions, and correspondingly relative deprivation, were more characteristic of expected migrants than of the total population and even more than of stayers.¹⁶ Some of these disadvantages, such as

¹⁵ The results for the unexpected migrants are to be interpreted with caution due to the small group size.

¹⁶ The indicator for poor housing conditions (or housing poverty) takes into account the crowdedness and lack of comfort of the residence (see: Kapitány and Spéder, 2004); absolute (material) deprivation considers the material components of life circumstances, while relative deprivation sees them as shortage ('would need it but cannot afford').

Table 5

Socio-demographic characteristics of groups formed on the basis of previous migration intentions and actual migration (%)

Socio-demographic characteristics in 2006	Expected migrants	Dreamers	Unexpected migrants	Stayers	Total sample
<i>Sex**</i>					
male	53.8	58.1	55.0	47.6	50.7
female	46.2	41.9	45.0	52.4	49.3
<i>Age (average)***</i>	29.6	30.2	31.5	33.5	32.5
<i>Educational attainment**</i>					
at most lower secondary (8 classes or less)	31.1	23.4	21.5	17.4	19.7
vocational training school (10 classes)	22.3	17.5	19.0	23.7	21.9
upper secondary	35.9	47.2	50.6	47.7	47.1
higher education	10.7	11.9	8.9	11.3	11.3
<i>Employment status***</i>					
employee	50.0	44.5	60.3	58.0	54.4
self-employed	2.1	5.8	6.4	7.8	7.0
unemployed	12.5	15.2	1.3	5.8	8.2
student	4.2	7.8	3.8	6.1	6.3
other inactive	31.3	26.7	28.2	22.3	24.0
<i>Marital status (partnership) ***</i>					
unmarried (single)	50.0	37.8	33.7	25.0	29.7
married (lives with married partner)	33.7	49.3	56.2	63.8	58.5
cohabiting	14.4	8.7	6.3	6.5	7.4
divorced, widowed (single)	1.9	4.2	3.8	4.7	4.4
<i>Number of children***</i>					
no child	54.8	50.8	49.4	36.6	41.4
one child	15.4	20.7	25.3	26.5	24.5
two or more children	29.8	28.5	25.3	36.9	34.1
<i>Have a household member living abroad**</i>	7.8	8.2	10.3	4.1	5.5
<i>Have financial problems month by month ***</i>	34.7	26.3	26.0	18.8	21.7
<i>Unemployment experience ***</i>					
never	37.5	41.9	63.3	56.0	52.0
once	33.7	32.9	16.5	27.4	28.6
several times	28.8	25.1	20.3	16.6	19.4
<i>Dissatisfied with job***</i>	30.4	14.3	23.0	9.8	12.4
<i>Poor housing condition*</i>	24.5	16.2	19.5	14.9	15.8
<i>Absolute (material) deprivation**</i>	34.3	28.2	29.1	22.7	24.8
<i>Relative deprivation***</i>	28.4	25.0	25.6	17.4	20.1
<i>Anomie**</i>	33.3	47.1	28.2	40.7	41.5
N	104	504	79	1398	2085

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

previous unemployment, occurred at a higher rate among dreamers, and others, such as job dissatisfaction and poor housing conditions, also among unexpected migrants. Financial problems and absolute (material) or relative deprivation were also more common in both groups than among stayers. Anomie,¹⁷ however, characterized movers (both expected and unexpected migrants) to a lesser extent, and dreamers not realizing their plans to a greater degree than stayers.

In summary it can be stated that the two groups acting in accordance with their original plans – expected migrants and stayers – are sharply separated from each other by all examined characteristics. The composition of dreamers (the majority of whom abandoned their migration plans in the meantime), however, is closer to that of expected migrants in most respects than to that of stayers, indicating that selection is in part completed already while forming the intention. In the case of dreamers, however, a number of characteristics (e.g. high rate of low educational attainment, singles and childless, as well as those having financial problems and the deprived) are less marked, and job dissatisfaction and poor housing conditions are also not typical of them any more than the average. The absence of these push factors probably contributed to the fact that their migration has not been realized despite their earlier intentions.

SOCIO-DEMOGRAPHIC BACKGROUND AND SELECTION OF MIGRANTS

Following the first wave of survey, the analysis of the social profile of migration planners and the explanatory factors of migration intention indicated that in 2006 in the examined age-group of ethnic Hungarians in Transylvania, the social status of potential migrants – contrary to the previous trend – was generally more negative (Gödri and Kiss, 2009). Based on data from the second wave, it appears that negative selection continued: *expected migrants* – compared to *dreamers* not realizing their plans – were characterized in 2006 by lower educational attainment, more unfavourable financial and labour market status and deprivation. Among *unexpected migrants*, job dissatisfaction, financial problems and deprivation also occurred to a greater degree than among stayers, although by no means as much as among expected migrants. The question arises as to what factors explain migration between the two waves of the survey, and what role previous migration intentions play in them. Is it possible to estimate the composition of actual migrants based on the composition of potential migrants?

The previous findings have also shown that, in accordance with Ajzen's theory of planned behaviour, the assessment of advantages and disadvantages of emigration as well as perceived external norms influence emigration intentions (Gödri and Kiss, 2009). But what role do migration-related attitudes and subjective norms play in migration behaviour? Do these factors affect actual migration directly or only indirectly through intentions?

To answer the questions above, we first examine the selection of migrants with a bivariate analysis – both in the total sample and in the group of planners – and then we explore, using multivariable logistic regression models, the explanatory factors of actual migration (in the total sample) with particular attention to the role of previous migration intentions, migration-related attitudes and subjective norms, respectively.

¹⁷ In our analysis the variable for anomie comprises the variables: *lack of trust in the future*, *lack of control over everyday things* ('I have no influence over my everyday affairs') as well as the so-called *orientational disorder* ('Life is so complicated nowadays that most of the time I don't know what to do'), i.e. feeling 'lost'.

DESCRIPTIVE RESULTS

While the rate of participants in migration between the two waves was 8.8% in the total first-wave sample and 17.1% among those previously planning migration, certain socio-demographic groups moved or realized their migration plans to a higher degree (Table 6.)¹⁸

There shows no significant difference by sex in the occurrence of migration in the total sample or among migration planners.¹⁹ Migration occurred above average among those aged under 25 as well as among those with maximum lower secondary education. The educational attainment shows significant correlation within the group of planners too: both those with lower secondary or vocational education realized their migration plans to a much greater degree than upper secondary or higher education graduates. Migration was twice as frequent among unmarried singles and cohabiting partners as among married, and not only because a greater proportion of them had initial plans, since we can see that this selection continued during realization of plans. The childless also moved at a higher rate, but in terms of realizing migration plans, there was no significant difference in this respect.

Table 6

Occurrence of migration between the two waves in the total sample and among those having planned migration by different socio-demographic groups

Socio-demographic characteristics in 2006	Total sample		Migration planners during the first wave	
	Occurrence of migration (%)	N	Occurrence of migration (%)	N
<i>Sex</i>				
male	9.4	1063	16.1	348
female	8.2	1032	18.5	259
<i>Age group</i>	***			
-25	14.1	375	19.4	170
25-29	8.4	395	17.8	129
30-34	8.6	421	14.0	121
35-39	6.9	475	17.0	100
40-45	6.8	429	16.3	86
<i>Educational attainment</i>	*		*	
at most lower secondary (8 classes or less)	12.2	411	21.3	150
vocational training school (10 classes)	8.3	457	20.7	111
upper secondary	7.9	989	13.5	275
higher education	7.6	238	15.5	71
<i>Employment status</i> ***				
employee	8.5	1128	17.8	270
self-employed	4.9	144	6.5	31
unemployed	7.6	170	13.6	88
student	6.1	132	9.3	43
other inactive	10.5	495	18.4	163

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

¹⁸ In the bivariate analysis, significance was cross-checked by chi square test; for ordinal variables we used Spearman's rank correlation (denotations are indicated below the tables).

¹⁹ Although we found significant variations by sex in the composition of migrant types, high male surplus of dreamers and female surplus of stayers not planning migration led to the result that the rate of occurrence of migration was not significantly higher in either sex.

Table 6 (cont.)

Occurrence of migration between the two waves in the total sample and among those having planned migration by different socio-demographic groups

Socio-demographic characteristics in 2006	Total sample		Migration planners during the first wave	
	Occurrence of migration (%)	N	Occurrence of migration (%)	N
<i>Marital status (partnership) ***</i>	***		**	
unmarried (single)	12.5	625	21.5	242
married (lives with married partner)	6.6	1223	12.4	283
cohabiting	12.9	155	25.4	59
divorced, widowed (single)	5.4	92	8.7	23
<i>Number of children **</i>	**			
no child	11.1	867	18.4	310
one child	7.1	507	13.4	119
two or more children	7.3	710	17.9	173
<i>Region in country of origin</i>				
Székely Land	9.6	698	21.1	161
Partium	9.0	624	15.3	190
North Transylvania	7.1	622	14.4	201
South Transylvania and Banat	11.3	150	21.8	55
<i>Settlement size *</i>	*			
below 1000	9.4	331	19.8	111
1000–10 000	7.8	842	15.4	260
10 000–100 000	12.0	474	22.5	120
above 100 000	6.7	447	12.9	116
<i>Ethnicity **</i>	**			
non-Roma	8.1	1855	17.1	505
Roma	13.9	194	15.4	91
<i>Living conditions **</i>	**			
live without problems or acceptably well	7.3	771	15.7	172
barely make ends meet	8.0	846	15.1	259
have financial problems month by month	12.3	447	21.2	165
<i>Unemployment experience</i>				
never	8.2	1085	15.7	249
once	8.1	596	17.5	200
more than once	11.5	408	19.2	156
<i>Job satisfaction ***</i>	***		***	
satisfied	6.6	1046	14.5	234
dissatisfied	19.3	254	30.7	101
not working	8.4	712	14.4	257
<i>Housing poverty *</i>	*		*	
housing not poor	8.0	1740	15.6	495
poor housing	12.0	325	23.6	106
<i>Home ownership **</i>	**			
owner	6.5	713	13.6	177
owner's partner	7.8	308	16.9	65
owner's other family member	11.2	932	20.2	322
other	6.9	131	9.3	43
<i>Household member living abroad *</i>	*			
not have	8.5	1954	17.2	551
have	13.9	115	16.3	49
<i>Total</i>	8.8	2095	17.1	608

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

Although it seems that the highest percentage of migrants originated from South Transylvania and Banat (where the occurrence of migration plans measured in the first wave was also the most common, and the rate of Hungarians within the population was the lowest), variations by regions did not prove to be significant either in the total sample or within the group of planners. In terms of settlement size, migration mostly occurred in settlements with a population between ten and hundred thousand people, while it was the least common in big cities with over hundred thousand people. Presumably, the latter was also due to lesser economic constraints for residents living in larger cities as the result of booming local economy in the early 2000s. Roma population was also characterized by higher rates of migration, but Roma origin does not show significant connection with realization of migration plans.

In the dimensions related to livelihood, work and housing, the already mentioned negative selection predominated: the rate of migrants was significantly higher in groups which were characterized by deprivation, job dissatisfaction, and poor housing conditions. Those dissatisfied with their job particularly moved by a high rate – and the same was observed within the group of planners – suggesting that migration in many cases is a strategy to improve labour market prospects. In terms of home ownership, the higher migration frequency of non-owners (or their relatives) often mentioned in the literature cannot be observed. The larger degree of movement shown by other family members of the owner is presumably connected with the more intense migration of young people (such as the owner's children).

Table 7

Occurrence of migration between the two waves in the total sample and among those having planned migration by different variables of psychosocial well-being

Psychosocial well-being (in 2006)	Total sample		Migration planners during the first wave	
	Occurrence of migration (%)	N	Occurrence of migration (%)	N
<i>Can always rely on someone if needed</i>	**		*	
completely true	7.4	1376	14.4	388
not true or only partly true	11.4	711	22.1	217
<i>Health satisfaction</i>	*			
dissatisfied	4.5	154	11.1	45
moderately satisfied	7.8	566	18.1	144
very satisfied	9.4	1353	17.2	413
<i>Anomie</i>	**		*	
(rather) not characteristic	9.9	1159	20.0	320
(rather) characteristic	6.3	823	12.3	260
<i>Concerned for the future of child</i>	***			
not at all or little	4.6	409	14.5	62
very much	8.9	903	17.2	261
not relevant	11.6	723	18.6	263
<i>Concerned for the country's economic situation</i>	***			
not at all or little	8.0	1492	16.1	410
very much	10.9	551	18.9	185
<i>Current and expected life conditions</i>	*		*	
deserve current	6.7	343	11.6	95
deserve somewhat better	8.5	918	15.3	236
deserve much better	10.6	734	21.0	252
<i>Total</i>	8.8	2095	17.1	608

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

Among those with a household member living abroad for at least a year – i.e., having social capital to reduce the costs and risk of migration – the overall rate of migration was higher, but this selection was generated already at the formation of migration intention, because the group of planners showed no significant difference in realizing their plans in this respect.

Besides the above characteristics, the individual's *psychosocial well-being* as well as *state of health* can also influence migration or realization of migration plans. Although a long period of time can pass between collecting these data and the occurrence of migration during which these indicators of subjective well-being may have changed, it is worth looking at which earlier characteristics imply a major degree of movement.

It can be seen (*Table 7*) that among those who did not feel that there was always someone to rely on (which can be interpreted as the absence of safe social background), and were concerned about the economic situation of the country, and believed they deserved much better living conditions than they were living in, migration (and also the realization of migration intentions among planners) occurred to a greater degree.

Those being concerned about the future of their children moved to a higher degree than the unconcerned, but above-average rate of migration – as we have seen before – occurred only among the childless. While dissatisfaction with living conditions or job resulted in higher rates of migration, dissatisfaction with own health had the opposite effect: those very satisfied with their health moved the most, and – partly related to this – those who were not (or were less) characterized by anomie. The lack of anomie implied a higher rate of migration, i.e., more successful realization of plans, within the group of planners too.

FACTORS INFLUENCING MIGRATION BEHAVIOUR – MULTIVARIABLE MODELS

In order to examine the net effects of the previously presented socio-demographic characteristics on the migration behaviour and thus to explore the explanatory factors of selection, we built logistic regression models. The dependent variable was migration behaviour between the two waves of the survey (i.e., the variable had a value of 1 for all who stayed abroad during the second wave, or spent at least 3 months abroad between the two waves).

The first base model involved four variables (sex, age group, educational attainment and employment status), and controlling for them we checked the effect of previously surveyed variables one by one.²⁰ Only those variables were built into later models whose univariate effect, controlled for the variables of the base model, proved to be significant. The second base model contained two additional control variables compared to the first one (settlement size and marital status), and then two groups of variables were added separately: one of them included variables for living conditions, unemployment experience, job satisfaction, housing condition, and household member living abroad (Model 1); the other comprised indicators of subjective well-being (Model 2). Finally, we included both previous groups of variables into the final model.

The odds ratios of the models show that while age and in part (in the case of work-related migration) sex were key determining factors of migration intentions (i.e., younger age groups and men were more likely to plan migration), sex had no significant influence on migration behaviour, and we can observe a significantly greater chance of movement only among the youngest (aged under 25) (*Table 8*).

²⁰ Although the variables of the base model are important also in terms of selection (and in this sense, they are non-neutral control variables), we still treated them as control variables for the exploration of additional factors explaining selection, as we were keen to find out whether financial and subjective well-being show further selection effect along with them.

Table 8

Odds ratios of migration behaviour between the two waves (logistic regression models – migrants versus stayers)

Explanatory variables (characteristics in 2006)	Base model 1 (B1)		Base model 2 (B2)		Model 1 (B2+living conditions, work, housing)		Model 2 (B2+subjective well-being)		Final model	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Sex (ref.: male)</i>										
female		0.840		0.921		1.016		1.046		1.217
<i>Age group</i>	**				+					
over 40 (ref.)		1		1		1		1		1
under 25	***	2.587	*	1.796	*	2.080		1.650		1.715
25–29		1.340		1.115		1.295		1.246		1.393
30–34		1.360		1.233		1.282		1.324		1.344
35–39		1.072		1.018		0.887		1.021		0.805
<i>Educational attainment</i>			*							
at most lower secondary (ref.)		1		1		1		1		1
vocational training school		0.664	+	0.619		0.879		0.673		0.953
upper secondary	*	0.638	*	0.560		0.859	+	0.625		0.899
higher education	+	0.588	*	0.439		0.719	*	0.439		0.684
<i>Employment status</i>										
employee (ref.)		1		1		1		1		1
self-employed		0.671		0.731		0.995		0.610		0.703
unemployed		0.710		0.778		1.008		0.787		1.079
student		0.536		0.543		0.796	*	0.335		0.529
other inactive		1.152		1.189		1.431		1.114		1.441
<i>Settlement size</i>			**		*		**		**	
1000–10 000 (ref.)				1		1		1		1
under 1000				1.294		1.353		1.497		1.516
10 000–100 000			**	2.051	**	2.080	***	2.389	**	2.357
over 100 000				1.169		1.224		1.138		1.211
<i>Marital status (partnership)</i>			*				*			
married (live with married partner) (ref.)				1		1		1		1
unmarried (single)			*	1.747	*	1.584	**	2.438	*	1.986
divorced, widowed (single)				0.826		0.700		0.674		0.720
cohabiting			*	1.808		1.316	**	2.305		1.357
<i>Living conditions</i>						+				
live without problems or acceptably well (ref.)						1				1
can barely make ends meet						1.049				0.995
have financial problems month by month					*	1.686			+	1.646
<i>Unemployment experience</i>										
never (ref.)						1				1
once						1.010				1.139
more than once						1.344			+	1.600
<i>Job satisfaction</i>					***				***	
satisfied (ref.)						1				1
dissatisfied					***	2.834			***	3.031
not working						0.758				0.746

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; +: $p < 0.1$.

Table 8 (cont.)

Odds ratios of migration behaviour between the two waves (logistic regression models – migrants versus stayers)

Explanatory variables (characteristics in 2006)	Base model 1 (B1)		Base model 2 (B2)		Model 1 (B2+living conditions, work, housing)		Model 2 (B2+subjective well-being)		Final model	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Housing poverty</i>										
not poor housing (ref.)						1				1
poor housing					+	1.590				1.553
<i>Household member living abroad (ref.: no such person)</i>										
have						1.550				1.123
<i>Can always rely on someone if needed (ref.: completely true)</i>										
not true or only partly true								*	1.524	* 1.491
<i>Health satisfaction</i>										
satisfied (ref.)									1	1
moderately satisfied									2.060	2.187
very satisfied								+	2.541	+ 2.571
<i>Anomie</i>										
(rather) not characteristic (ref.)									1	1
(rather) characteristic							**	0.506	***	0.421
<i>Concern for the future of child</i>										
not at all or little (ref.)								+	1	1
very much								+	1.756	+ 1.755
not relevant									1.050	1.192
<i>Concern for the country's economic situation</i>										
not at all or little (ref.)									1	1
very much								+	1.451	1.417
<i>Current and expected living conditions</i>										
deserve current (ref.)									1	
deserve somewhat better									1.236	
deserve much better								+	1.644	
Nagelkerke R ²		0.031		0.054		0.095		0.106		0.141

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; +: $p < 0.1$.

In terms of *educational attainment* migration behaviour was more likely among those with lower secondary education (at most 8 classes): compared to them, all three of the other educational groups – but mostly higher education graduates – were significantly less likely to move. It suggests that in the second half of the 2000s – contrary to the trend of previous decade and particularly the years immediately before and after the change of regime – emigration from Transylvania was no longer typical for the intellectuals but was rather the ‘coping strategy’ of the lower educated people. This is also suggested by the fact that, although there was no significant influence by *employment status*, the degree of move was greatest among ‘other inactive’, and this group (which almost meant one-quarter of the total sample!) was likely to include hidden unemployed. At least one-third

of the movements were temporary,²¹ which presumably served to increase the income of the household in the home country.

The interesting selection by *settlement size* was also confirmed by multivariable analysis: the chance of movement from settlements with a population between 10 and 100 thousand was about two times greater than from those with a population between thousand and ten thousand, and it remained significant in all models. It can be assumed that small town residents had a higher chance to obtain information needed for migration than those living in smaller settlements (villages), while their labour market opportunities were behind those living in larger cities.²²

In terms of *marital status*, the greater chances of migration for unmarried singles, as well as cohabitants proved to be significant both in the base model and in the model of subjective well-being; but in the model comprising variables for living conditions, employment status and housing condition, the significance of the latter category (cohabitants) disappeared. It suggests that the higher chance of movement of cohabitants can be partly attributed to their less favourable situation, while the unmarried group was more mobile controlled also for these variables (possibly rather due to less restraints).

Roma origin, based on the bivariate analysis, implied a higher rate of migration intensity, which was not significant, controlled for the first base model, but it brought an interesting change for the influence of employment status. Controlled also for Roma origin (besides sex, age group and educational attainment) the unemployed and students were significantly less likely to move than employees. It may suggest that the rate of these two groups was higher among those with Roma origin;²³ and because Roma were involved in migration more intensively, it obscured the fact that both the unemployed and students were less likely to move.

Regarding the dimensions of *living conditions, work, and housing condition*, negative selection observed in the bivariate analysis was also confirmed by the logistic regression (Model 1). People struggling with financial problems, dissatisfied with their job, living in poor housing conditions – even after controlled for the variables of the second base model – were more likely to get involved in migration than those living ‘without problems’ or ‘acceptably well,’ satisfied with their work, and with no poor housing. These effects, except for housing poverty, can be observed in the final model too, with the additional effect of unemployment experience, i.e., migration was more likely to occur to those who had repeatedly experienced unemployment earlier in their life. However, the most significant effect was observed in job satisfaction: those dissatisfied with their work were three times more likely to move.

Household members living abroad significantly increased chances for migration controlled for variables of both base models (80% and 70%, respectively), but this effect was lost in the extended model (Model 1). It has to be noted, however, that this means only a part of possible social capital, since other close family members (e.g. a sibling who is not a household member), or a relative, a friend, etc. may be part of the social network living abroad that can contribute to increasing the chances of migration. Nevertheless, we do not have information about it.

Variables reflecting *subjective well-being*, and *psychosocial condition* (involved in the analysis) also showed significant effects controlled for the variables of the second base model (Model 2). The incapability to mobilize network capital in the community

.....
 21 In the case of those staying abroad during the second wave, the rate of returnees is still unknown, and we have no data about the circular character of temporary moves.

22 Based on this, we would expect that migration was less likely in the smallest settlements with fewer than 1000 people, but our data did not confirm it.

23 Indeed: of those with Roma origin, 21% were unemployed and 12% were students, while among non-Roma these groups represented 7% and 5.5%, respectively.

of origin increased the chances of migration: who felt that they had no family members or friends they can rely on if needed moved more easily, while having such a network could be an important restraint.²⁴ Migration behaviour was also more likely among those concerned for the future of their children or the country's economic situation, and also among those for whom there was a major dissonance between actual and expected (believed to be deserved) living conditions. Of these factors, *satisfaction with state of health* contributed most to the migration behaviour: those very satisfied with their health were two and a half times more likely to move than the dissatisfied. In contrast, some level of *anomie* reduced the chance of movement by half. In the final model the majority of these variables – with the exception of concern for the country's economic situation – retained their impact, although with slightly weaker significance.

Regarding the final model, it can be claimed that although the effects of variables with respect to the living conditions and work as well as subjective well-being were also visible, the role of job satisfaction and anomie was the most significant overall, while the effect of settlement size and marital status as control variables also remained significant. Therefore, small town residence, unmarried marital status and job dissatisfaction clearly increased the probability of migration; anomie, however, reduced it.

THE ROLE OF MIGRATION INTENTION, MIGRATION-RELATED ATTITUDES AND SUBJECTIVE NORMS

The present study endeavoured to explore what role do previous migration intentions play in actual migration and how migration behaviour is determined by *previous migration-related attitudes* as well as *perceived external norms*. Migration-related attitudes were measured as the respondents' perceptions about the likely outcomes (i.e. advantages and disadvantages) of migration, in other words, the assumed effects of a possible migration on various areas of their lives. The question about the assumed effects of migration measured expectations in ten dimensions, focusing on whether deterioration or improvement is expected in the given area in case of migration; we only took into account eight of them in generating combined variables.²⁵ Subjective norms appear as emigration-related expectations by friends, parents, and relatives, i.e., external pressure – perceived by the individual – towards emigration.

The results clearly show (*Table 9*) that those persons of the first-wave sample moved at a higher rate who exclusively (or mostly) expected improvement in various areas of their life and mainly those who assumed positive changes in most listed areas. Among migration planners, however, the realization of plans did not show a significant connection with these previous attitudes. Similarly, expectations by significant others, and in particular by parents, implied a significantly higher (almost double) rate of migration, but this kind of external pressure among the planners did not contribute to realization of plans. It suggests that both migration-related attitudes and subjective norms had played a role in selection already at the formation of migration intention – i.e., the persons assuming the benefits of migration and perceiving the expectation of important others initially planned migration by a higher rate – later, however, these factors no longer played a role in realizing plans.

²⁴ Concern for personal relationships (with partner and parents) proved to be the strongest retaining factor also at the forming of migration intentions (Gödri and Kiss, 2009).

²⁵ How would emigration affect 1) your employment prospects, 2) your financial status, 3) the opinion your relatives and friends hold about you, 4) your happiness and satisfaction with life, 5) you to have a quiet and balanced life in your old age, 6) the relationship between you and your parents, 7) you to preserve your Hungarian identity (your mother tongue and culture), 8) you to be free to do what you want? (The items concerning the relationship with the partner and the partner's work prospects have been omitted to retain sample size.)

Table 9

Occurrence of migration between the two waves in the total sample and among those having planned migration by migration-related attitudes and by perceived external norms

Migration-related attitudes and perceived external norms (in 2006)	Total sample		Migration planners during the first wave	
	Occurrence of migration (%)	N	Occurrence of migration (%)	N
<i>Expectations about the outcomes of migration</i>				
How would emigration affect ...	**			
expects rather deterioration or both equally	6.5	857	15.0	140
expects only (or rather) improvement	10.3	1238	17.9	469
Positive expectation (assumed improvement)	***			
in 0–2 areas	6.9	1137	15.4	201
in 3–4 areas	9.8	583	18.5	211
in 5–8 areas	13.3	376	17.8	197
<i>Perceived external norms</i>				
Friends suggest emigration	**			
no	7.6	1639	16.6	374
yes or partly	13.0	347	17.1	199
Parents suggest emigration	***			
no	8.0	1743	16.4	450
yes or partly	16.0	187	19.3	114
Relatives suggest emigration	**			
no	7.8	1762	16.7	430
yes or partly	13.7	242	15.5	148
Expectation by friend, parent, or relative	***			
perceived	7.4	1601	16.6	355
not perceived	13.0	437	16.3	241
<i>Total</i>	8.8	2095	17.1	608

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

In order to find out what role previous migration intentions and plans (or migration willingness at all) played in actual migration, we added the related variables separately to the final model presented above. Our findings show that migration willingness itself – which can be considered a 'weaker' indicator than migration intention – significantly increased the chances of migration: those who previously showed a willingness to move abroad to improve their living and working conditions were twice as likely to migrate in the surveyed period (*Table 10*). Those who had any kind of migration plan during the first wave were even more – almost three and a half times more – likely to move, and taking into account the type of plan it is clear that migration most likely occurred in the case of longer term plans for a few years of working abroad or even emigration.²⁶ Considering the increased explanatory power of the model, as well as the level of significance of odds ratios, it can be concluded that *migration intention is a statistically significant predictor of migration*. However, two variables of the final model – job satisfaction and anomie – also retained their influence on a very high level of significance ($p < 0.001$) even with the involvement of migration plans, and another five variables (marital status, settlement size, housing poverty, lack of social support and health satisfaction) had their influence too, although with lower significance. It indicates that *previous migration intentions and plans are important but they are not the only explanatory factors of migration behaviour*.

²⁶ The joint inclusion of migration willingness and migration plans in the model also indicates that plans explain the migration behaviour with higher significance and greater odds ratio (2.904 versus 1.737) than willingness does.

The factors which continue to have an effect on migration behaviour even with the involvement of previous intentions are those which actually affect the migration directly, not only through intentions.

Table 10

Role of previous migration willingness and migration intentions in migration behaviour (odds ratios of logistic regression models)

Explanatory variables (migration willingness, and intention in 2006)	Final model + migration willingness		Final model + migration plan		Final model + type of migration plan	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Migration willingness (ref.: not had)</i>	***	2.299				
<i>Migration plan (ref.: not had)</i>			***	3.474		
<i>Type of migration plan</i> (longest planned duration)	6.5	857	6.5	857	6.5	857
had no plan (ref.)					1	1
short-term at most (a few weeks/months)					***	3.126
long-term at most (a few years)					***	3.752
even emigration					***	3.849
Nagelkerke R ²		0.158		0.189		0.190

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

And finally: do migration-related attitudes and perceived external norms have a role in the migration behaviour, or – in accordance with Ajzen's theory – they influence migration behaviour only indirectly via intentions? To answer this question, the variables of 'attitudes' and 'perceived external norms' were added to our existing models, and then, in case of significant effect, the model was further expanded with the variable 'previous migration plan', thereby testing whether the direct effect remains.

Table 11

Role of migration-related attitudes in migration behaviour (odds ratios of logistic regression models)

Explanatory variables (attitudes and migration plans in 2006)	Model 1 + expectation		Model 1 + expectation + migration plan		Model 2 + expectation		Model 2 + expectation + migration plan		Final model + expectation		Final model + expectation + migration plan	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Positive expectation</i> (assumed improvement)						*						
in 0–2 areas (ref.)		1		1		1		1		1		1
in 3–4 areas		1.235		1.037		1.052		0.828		1.032		0.831
in 5–8 areas	*	1.635		1.142	**	1.912		1.358	*	1.607		1.101
<i>Migration plan</i> (ref.: had no plan)			***	2.896			***	3.415			***	3.474
Nagelkerke R ²		0.101		0.135		0.116		0.163		0.146		0.191

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.
Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; +: $p < 0.1$.

Out of migration-related attitudes, only the positive expectations (i.e., the assumed advantages of migration) proved to have significant effect. Those who expected a positive change (i.e., assumed improvement) due to migration in more than half of the areas listed were more likely to move, controlled for a number of other background variables presented earlier (*Table 11*). After including 'previous migration plan' in the model, however, this effect disappeared in all three models.

Perceived external norms (pressure from friends, parents, relatives) had only influence on the model containing variables for subjective well-being (Model 2), increasing the chances of movement by one and a half times (*Table 12*). (Expectations of both parents and relatives was slightly stronger, while of friends it was not significant.) After involving 'previous migration plan', however, the effect disappeared in this case too.

Table 12

Role of perceived external norms in migration behaviour (odds ratios of logistic regression models)

Explanatory variables (perceived external norms and migration plans in 2006)	Model 2 + external norm		Model 2 + external norm + migration plan	
	Sig.	Exp(B)	Sig.	Exp(B)
<i>Expectation by friend, parent or relative (ref.: not perceived)</i>		1		1
perceived	*	1.486		1.037
<i>Migration plan (ref.: not had)</i>			***	3.322
Nagelkerke R ²		0.111		0.156

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Remark: External norms influenced only Model 2.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$.

All of the above confirms that the subjective factors examined – both migration-related attitudes and perceived external norms – influence migration behaviour only indirectly via migration intentions. Those who assume positive change (improvement) due to migration in most areas, and experience social pressure toward migration, are more likely to develop migration intentions, and thus have a higher chance to move. Our data therefore underpin Ajzen's theory of planned behaviour, although we managed to test only two of its components: attitudes and subjective norms.

EXPLAINING REALIZATION OF MIGRATION INTENTIONS

FACTORS INFLUENCING MIGRATION BEHAVIOUR AMONG PLANNERS – MULTIVARIABLE MODELS

Although intentions are statistically significant predictors of migration behaviour, they are not perfect, since in many cases there is a clear discrepancy between migration intention and subsequent behaviour. As suggested by the bivariate analysis, selection of migrants cannot only be observed compared to the population of origin but also within the group of migration planners – comparing those realizing their plans (expected migrants) and those not realizing their plans (dreamers).

In order to examine explanatory factors of selection that takes place in the realization phase of migration – and thus to reveal the factors which facilitate or hamper realization of intentions –, we also used logistic regression analysis. The models have been built in the way described in the previous chapter, but in this case in the population of migration planners. The dependent variable was migration behaviour between the two waves of the survey, and it had a value of 1 for those who have realized their plans (expected migrants) and 0 for those who have not realized (dreamers).

Although the role of *sex* did not appear in the base models, including job satisfaction and housing condition (Model 1) women were about 65% more likely to realize their migration plans (*Table 13*). This suggests that job dissatisfaction and poor housing conditions being more typical of men increased the chances of realizing their migration plans, and thus obscured the fact that they were otherwise – controlled for these factors – behind women in realizing their migration plans. The influence of *age group* did not appear at all, and *educational attainment* was only partly manifest: those with upper secondary education were less likely to realize their plans than those with lower secondary education (however, this relationship disappears after including job satisfaction and housing condition). Even *employment status* failed to influence the realization of plans; only after involving variables for subjective well-being (Model 2) we can observe lower odds of students. This is due to the fact that anomie was least typical of them, and the lack of anomie in turn increased the likelihood of migration significantly (so the two effects wiped out each other).

Settlement size, which was an important selection factor in migration behaviour in the whole sample, also underlay realization of plans: small town residents were more likely to set out – not only overall but also among planners – than those living in smaller settlements. *Marital status* was decisive too: not only migration plans were more common among unmarried and cohabitants but their plans were also more likely to be realized than in the case of married. In particular, unmarried status increased the chances of realizing plans significantly (by more than five times in the final model too).

The negative selection observed regarding employment status and housing condition was also confirmed by multivariable analysis: those *dissatisfied with their job* and *with poor housing conditions* were at least twice as likely to move even within the group of planners (Model 1). Living conditions (as proxy indicator of income status), as well as unemployment experience, however, did not influence the realization of plans (not even when controlled for the variables of the first base model, so they were omitted from Model 1), although migration intentions were significantly determined by both factors. Similarly, household members living abroad only increased the likelihood of developing intentions, and had no effect on their realization.

Among variables with respect to *subjective well-being*, lack of social support and concern for the future of children increased, while anomie reduced the chances of realizing migration plans (Model 2). The impact of all three factors – most significantly that of anomie – can be observed in the final model too. It is worth noting that anomie has different effects in the two stages of the selection process: it increased the likelihood of forming migration intentions; however, it reduced the probability of realizing intention. Health satisfaction did not imply greater chances of realizing plans (though in the whole sample it increased the probability of migration behaviour); concerns for own health state, however, kept some of the planners at home (but this effect was only significant controlled for the first base model).

Although the realization of migration intentions is explained by fewer factors (compared in particular to the explanatory factors of migration intention itself), the explanatory power of these factors together is greater than that of factors explaining migration behaviour in the whole sample (the Nagelkerke R^2 in the final model is 0.226 here, in contrast with the value of 0.141 in case of latter).

Table 13

Odds ratios of migration behaviour between the two waves among planners (logistic regression models – expected migrants versus dreamers)

Explanatory variables (characteristics in 2006)	Base model 1 (B1)		Base model 2 (B2)		Model 1 (B2+work, housing)		Model 2 (B2+subjective well-being)		Final model	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Sex (ref.: male)</i>										
female		1.253		1.451	+	1.649		1.495	+	1.687
<i>Age group</i>										
above 40 (ref.)		1		1		1		1		1
below 25		1.805		0.901		0.743		1.181		0.823
25–29		1.381		0.927		0.799		1.447		1.188
30–34		0.973		0.789		0.671		1.229		0.987
35–39		1.322		1.223		1.025		1.444		1.161
<i>Educational attainment</i>										
at most lower secondary (ref.)		1		1		1		1		1
vocational training school		0.929		0.857		1.043		0.748		0.948
upper secondary	+	0.564	*	0.493		0.631	*	0.427		0.577
higher education		0.648		0.511		0.654		0.463		0.593
<i>Employment status</i>										
employee (ref.)		1		1		1		1		1
self-employed		0.457		0.550		0.691		0.156		0.155
unemployed		0.656		0.756		1.120		0.728		1.008
student		0.489		0.493		0.726	*	0.210		0.304
other inactive		0.955		0.974		1.109		0.785		0.970
<i>Settlement size</i>					+				*	
1000–10 000 (ref.)				1		1		1		1
below 1000				1.268		1.557		1.259		1.452
10 000–100 000			*	1.852	*	2.359	+	1.961	*	2.626
above 100 000				0.913		1.191		0.769		0.911
<i>Marital status (partnership)</i>			**		*		**		**	
married (live with married partner) (ref.)				1		1		1		1
unmarried (single)			**	2.751	**	2.847	***	5.835	**	5.453
divorced, widowed (single)				0.697		0.781		0.670		0.962
cohabiting			*	2.736	*	2.573	*	3.073	*	2.686
<i>Job satisfaction</i>										
satisfied (ref.)						1				1
dissatisfied					**	2.425			*	2.462
not working						0.841				0.883
<i>Housing poverty</i>										
not poor housing (ref.)						1				1
poor housing					*	2.056			*	2.084
<i>Household member living abroad (ref.: no such person)</i>										
have						0.908				0.719
<i>Can always rely on someone if needed (ref.: completely true)</i>										
not true or only partly true							+	1.641	*	1.760

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; +: $p < 0.1$.

Table 13 (cont.)

Odds ratios of migration behaviour between the two waves among planners (logistic regression models – expected migrants versus dreamers)

Explanatory variables (characteristics in 2006)	Base model 1 (B1)		Base model 2 (B2)		Model 1 (B2+work, housing)		Model 2 (B2+subjective well-being)		Final model	
	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)
<i>Health satisfaction</i>										
dissatisfied (ref.)										1
moderately satisfied										2.816
very satisfied										3.122
<i>Anomie</i>										
(rather) not characteristic (ref.)										1
(rather) characteristic							**	0.452	**	0.448
<i>Concern for the future of child</i>										
not relevant (ref.)							+			1
not at all or little										2.547
very much							*	3.049	+	2.395
<i>Concern for the country's economic situation</i>										
not at all or little (ref.)										1
very much										1.413
Nagelkerke R ²		0.035		0.085		0.124		0.181		0.226

Source of data: Turning Points of Life Course – Transylvania, authors' calculation.

Significance: ***: $p < 0.001$; **: $p < 0.01$; *: $p < 0.05$; +: $p < 0.1$.

However, migration-related attitudes (such as expectations about the outcomes of migration) and perceived external norms have no influence at all on realization of plans (not even when controlled for the variables in the first base model). Although a number of studies point out that expectations related to advantages and disadvantages of migration²⁷ play an important part in the decision-making process (Fawcett, 1985; Simmons, 1985; De Jong et al., 1985; De Jong, 2000), and in the case of internal migration the influence of perceived family norms have also been shown (De Jong, 2000), our analysis confirms that these factors affect only development of migration intentions and not the subsequent behaviour (i.e. the realization of intentions).

SUMMARY AND CONCLUSIONS

In our study, we examined the selection of migrants and the relationship between migration intentions and realization of these intentions based on the two-wave panel survey *Turning Points of Life Course – Transylvania* conducted in 2006 and 2009, among the Hungarian-speaking population of Transylvania aged 20–45. To our knowledge, this is the first follow-up survey on migration potential in the Central and Eastern European region in which the exploration of migration intentions was followed by tracking each of the first-wave sample's respondents (not only planners) and recording the place of

²⁷ These expectations appear at several authors as the utility of different (current and alternative) places of residence ranked in terms of reaching individual goals (place-utility) and as a result of considering advantages and disadvantages of moving.

residence of migrated persons. Thus, the detailed analysis of explanatory factors of migration on the supply side became possible, as well as the clarification of the role of migration intentions in predicting migration behaviour. Data collected during the first wave also allowed us – by applying Ajzen's theory of planned behaviour to decisions on migration – to study the influence of migration-related attitudes (beliefs about advantages and disadvantages of emigration), as well as subjective norms (perceived expectations of significant others) on migration.

The findings show that 17% of migration plans were followed by actual migration during the three-year period between the two waves of the survey; however, migration also occurred among those who didn't plan migration – though at a relatively low rate (5%). Overall nearly three-quarters of respondents acted in accordance with their previous intentions. Expected migrants (who previously reported an intention to move) are not only younger, less likely to be married and have lower educational attainment but are also more likely to be characterized by poor financial, housing conditions and labour market positions compared to stayers who didn't plan migration at all. The composition of so-called dreamers (who failed to realize their migration plans) is in many respects similar to the composition of expected migrants, suggesting that selection partially took place in the phase of forming intentions.

Negative selection of migrants was also confirmed by the multivariable analysis: in the second half of the 2000s, those who struggled with financial difficulties, experienced unemployment repeatedly, were dissatisfied with their job, as well as lived in poor housing conditions, were more likely to be involved in some (even temporary) form of migration. Psychosocial well-being was also of key importance: the lack of social support, as well as concern for the future of children increased the chances of migration behaviour, similarly to satisfaction with one's own health; anomie (lack of trust in the future, feeling 'lost'), in turn, significantly reduced it. In summary, there was rather negative selection in the dimensions related to living conditions and work; and positive selection regarding subjective state of health and anomie.

Taking into account the previous migration intention, it proved to be the most important factor to increase the chances of migration behaviour: those who had any kind of migration plan during the first wave were almost three and a half times more likely to move between the two waves than non-planners (while the explanatory power of the regression model also increased considerably). Therefore, it can be stated that *migration intentions are statistically significant predictors of actual migration*. Nevertheless, besides previous intention, the influence of job dissatisfaction and anomie has remained strongly significant: the former fosters, the latter hinders migration. Although migration-related positive attitudes and in part – controlled only for variables of subjective well-being – perceived external norms related to migration also increased the chances of migration behaviour, these effects disappeared after involving previous migration intention (plan) as an explanatory variable. These findings confirm that migration-related attitudes and subjective norms, in accordance with Ajzen's theory, influence migration behaviour only indirectly via migration intention.

The results indicate negative selection of migrants not only compared to the population of origin but also in the realization phase: between expected migrants and dreamers. Job dissatisfaction and poor housing conditions at least doubled the chances of migration within the group of planners too, just like concern for the future of their children, and lack of supportive social network. Anomie, however, reduced the likelihood of realizing migration intentions, although it contributed to their development.

In summary, it can be concluded that negative selection identified earlier in the planning phase of migration during the emigration process of ethnic Hungarians from Transylvanian (Gödri and Kiss, 2009) was followed by negative selection in the realization stage too in several dimensions. Our assumption, that groups better equipped

with certain individual resources which can be converted during migration have better chances to realize their migration plans, has failed in terms of age, level of education and financial capital. Only the lack of anomie (i.e., trust in the future, control over everyday things and the subjective sense of orientation in life) formed the 'capital' that fostered realization of migration plans.

Although previous migration intention is the primary determinant of migration behaviour on individual level (increases the likelihood of moving to the highest degree), it is also clear that based on intentions alone, one may significantly overestimate the volume of actual migration, and estimations regarding the composition of migrants are likely to be biased as well. In order to use migration intentions as more appropriate indicators for predicting future migration, it is important to 'refine' the measurement of intentions. The influence of *migration plan* on migration behaviour proved to be stronger than the influence of *migration willingness*. This also indicates that the more accurate the assessment of individual 'determination' to migrate, the better the predictive power of the indicator, so it is important to identify 'serious' plans (with additional questions, e.g. about timing and steps already taken), within migration plans. Presumably this approach could produce an indicator of migration potential that predicts the volume and composition of future migration more accurately.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I. (2005a). From intentions to actions. In *Attitudes, Personality and Behavior (Second Edition)*. Milton-Keynes, England: Open University Press, 99–116.
- Ajzen, I. (2005b). Explaining intentions and behaviour. In *Attitudes, Personality and Behavior (Second Edition)*. Milton-Keynes, England: Open University Press, 117–141.
- Ajzen, I. and Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behaviour*. New York: Prentice Hall.
- Ambrosini, J. W. and Peri, G. (2012). The Determinants and the Selection of Mexico-US Migrants. *The World Economy*, 35(2), 111–151.
- Berencsi, Zs. (1995). Az elvándorlási szándékok Magyarországon 1994-ben. *Szociológiai Szemle*, 1995/2. 99–106.
- Borjas, G. J. (1987). Self-Selection and the Earnings of Immigrants. *American Economic Review*, 77(4), 531–553.
- Brücker, H. and Defoort, C. (2009). Inequality and the self-selection of international migrants: theory and new evidence. *International Journal of Manpower*, 30(7), 742–764.
- Buck, N. (2000). Using panel surveys to study migration and residential mobility. In: D. Rose, ed., *Researching Social and Economic Change. The uses of household panel studies*. Routledge: London and New York, 250–272.
- Chort, I. (2012). *New insights into the selection process of Mexican migrants. What can we learn from discrepancies between intentions to migrate and actual moves to the U.S.?* Paris: School of Economics, Working paper, 2012 – 18.
- Coleman, D. and Salt, J. (1992). *The British Population: Patterns, Trends and Processes*. Oxford: Oxford University Press.
- De Jong, G. F. (2000). Expectations, gender and norms in migration decision-making. *Population Studies*, 54(3), 307–319.
- De Jong, G. F. and Fawcett, J. T. (1981). Motivations for migration: an assessment and a value expectancy research model. In: De Jong, G.F. and Gardner, R.W. eds., *Migration Decision Making: Multidisciplinary Approaches to Microlevel Studies in Developed and Developing Countries*. New York: Pergamon, 13–58.
- De Jong, G. F., Root, B. D., Gardner, R. W., Fawcett, J. T. and Abad, R. G. (1985). Migration Intentions and Behavior: Decision Making in a Rural Philippine Province. *Population and Environment*, 8(1/2), 41–62.
- Fassmann, H. and Hintermann, Ch. (1998). Potential East-West Migration. Demographic Structure, Motives and Intentions. *Czech Sociological Review*, 6(1), 59–72.
- Fawcett, J. T. (1985). Migration psychology: new behavioral models. *Population and Environment*, 8(1/2), 5–14.
- Fernandez-Huertas Moraga, J. (2013). Understanding Different Migrant Selection Patterns in Rural and Urban Mexico. *Journal of Development Economics*, 103, 182–201.
- Fuller, T. D., Lightfoot, P. and Kamnuansilpa, P. (1985). Mobility Plans and Mobility Behavior: Convergences and Divergences in Thailand. *Population and Environment*, 8(1/2), 15–40.
- Gardner, R. W., De Jong, G. F., Arnold, F. and Cariño, B. V. (1985). The best-laid schemes: an analysis of discrepancies between migration intentions and behaviour. *Population and Environment*, 8(1/2), 63–77.
- Goldsmith, H. C. and Beegle, J. A. (1962). *The initial phase of voluntary migration*. East Lansing: Michigan State University, Rural Sociology Studies, No. 1.

- Gödri, I. and Kiss, T. (2009). Migrációs hajlandóság, tervek és attitűdök az erdélyi magyarok körében. In: Zs. Spéder ed., *Párhuzamok. Anyaországi és erdélyi magyarok a századfordulón*. KSH NKI Kutatási Jelentések 86. 183–218.
- Gödri, I. and Feleky, G. A. (2013). Elvándorló fiatalok? Migrációs tervek a magyarországi 18–40 évesek körében. *KorFa Népesedési Hírlevél*, 2013/5.
- Hárs, Á. (2008). *Migrációs tervek és megvalósulásuk. Okok, ösztönzők és visszatartó erők*. Kopint Konjunktúra Kutatási Alapítvány. Kézirat.
- Hárs, Á., Simonovits, B. and Sik, E. (2004). Munkaerőpiac és migráció: fenyegetés vagy lehetőség? In: T. Kolosi, I.Gy. Tóth and Vukovich G. eds., *Társadalmi Riport*. TÁRKI, Budapest, 272–290.
- Hárs, Á., Örkény, A. and Sik, E. (2006). *A román-bolgár EU-csatlakozás magyar munkaerőpiacra gyakorolt várható hatásai*. TÁRKI, Budapest.
- Horváth, I. (2003). Migrációs hajlandóság az erdélyi magyarság körében – 2003. október. *Erdélyi Társadalom*, 1(2), 39–53.
- Hunt, J. (2004). Innis Lecture: Are Migrants More Skilled than Non-Migrants? Repeat, Return, and Same-Employer Migrants. *The Canadian Journal of Economics / Revue canadienne d'Economie*, 37(4), 830–849.
- Kan, K. (1999). Expected and unexpected residential mobility. *Journal of Urban Economics*, 45(1), 72–96.
- Kanaiaupuni, S. M. (2000). Reframing the Migration Question: An Analysis of Men, Women, and Gender in Mexico. *Social Forces*, 78(4), 1311–1347.
- Kapitány, B. and Spéder, Zs. (2004). *Szegénység és depriváció. Társadalomszerkezeti összefüggések nyomában*. KSH NKI Műhelytanulmányok 4. KSH NKI, Budapest.
- Kiss, T. and Barna, G. (2013). *Erdélyi magyarok a magyarországi és a romániai politikai térben*. Műhelytanulmányok a romániai kisebbségekről, Nr. 50., Nemzeti Kisebbségkutató Intézet, Kolozsvár.
- Kiss, T. and Kapitány, B. (2009). Magyarok Erdélyben: a minta kialakítása és az adatfelvétel. In: Zs. Spéder ed., *Párhuzamok. Anyaországi és erdélyi magyarok a századfordulón*. KSH NKI Kutatási Jelentések 86. 33–54.
- Kley, S. (2011). Explaining the stages of migration within a life-course framework. *European Sociological Review*, 27(4), 469–486.
- Kley, S. and Mulder, C. H. (2010). Considering, planning, and realizing migration in early adulthood. The influence of life-course events and perceived opportunities on leaving the city in Germany. *Journal of Housing and the Built Environment*, 25. 73–94.
- Lu, M. (1998). Analyzing migration decisionmaking: relationships between residential satisfaction, mobility intentions, and moving behaviour. *Environment and Planning A*, 30(8), 1473–1495.
- Lu, M. (1999). Do people move when they say they will? Inconsistencies in individual migration behaviour. *Population and Environment*, 20(35), 467–488.
- Massey, D. S. and Espinosa, K. E. (1997). What's Driving Mexico-U.S. Migration? A Theoretical, Empirical, and Political Analysis. *American Journal of Sociology*, 102(4), 939–999.
- McKenzie, D. and Rapoport, H. (2010). Self-selection patterns in Mexico-U.S. migration: the role of migration networks. *The Review of Economics and Statistics*, 92(4), 811–821.
- Nyíró, Zs. (2013). A migrációs potenciál alakulása Magyarországon. *Magyar Tudomány*, 2013(3), 281–285.
- Palloni, A., Massey, D.S., Ceballos, M., Espinosa, K. and Spittel, M. (2001). Social Capital and International Migration: A Test Using Information on Family Networks. *American Journal of Sociology*, 106(59), 1262–1298.
- Rossi, P. H. (1955). *Why families move*. New York: The Free Press.

-
- Sik, E. (2006). *A vándorlási hajlandóság változatlan, sőt...* TÁRKI, Budapest.
- Sik, E. (2012). *Csúcson a migrációt tervezők aránya*. TÁRKI, Budapest.
- Sik, E. and Simonovits, B. (2002). Migrációs potenciál Magyarországon, 1993–2001. In: T. Kolosi, I.Gy. Tóth and Gy. Vukovich eds., *Társadalmi riport 2002*. TÁRKI, Budapest, 207–219.
- Simmons, A. B. (1985). Recent Studies on Place-Utility and Intention to Migrate: An International Comparison. *Population and Environment*, 8(1/2), 120–140.
- Stark, O. (1991). *The Migration of Labour*. Cambridge: Basil Blackwell.
- Taylor, J. E. (1986). Differential migration, networks, information and risk. In Stark, O. (ed.): *Research in Human Capital and Development 4. Migration, Human Capital, and Development*. Greenwich, Conn.: JAI Press, 147–171.
- Van Dalen, H. P. and Henkens, K. (2007). Longing for the good life: understanding emigration from a high-income country. *Population and Development Review*, 33(1), 37–65.
- Van Dalen, H. P. and Henkens, K. (2008). *Emigration Intentions: Mere Words or True Plans? Explaining International Migration Intentions and Behavior*. Tilburg University, Center for Economic Research.
- Van Dalen, H. P. and Henkens, K. (2013). Explaining emigration intentions and behaviour in the Netherlands, 2005–10. *Population Studies*, 67(2), 225–241.

ANNEX

ESTIMATION AND WEIGHTING PROCEDURES IN THE MERGED DATABASE OF THE TWO-WAVE PANEL SURVEY *TURNING POINTS OF LIFE COURSE - TRANSYLVANIA*²⁸

Due to panel attrition, merging data from the first and second waves of the survey *Turning Points of Life Course - Transylvania* made it necessary to carry out estimation procedures and, based on the outcome, create new weights different from those used in the database of the first wave. The estimation procedures had essentially two goals: to determine, on the one hand, the rate of those staying in the home country and abroad (*Estimation procedure I*), and, on the other hand, that of returnees (*Estimation procedure II*).

ESTIMATION PROCEDURE I

Our first-wave sample comprises 2,492 respondents. In the second wave 1,690 of them were able to fill in the questionnaire again, and the place of residence for 410 persons was clearly identified (7 persons deceased). However, we failed to obtain any information about 385 persons. Therefore, we made an estimate about the possible location of 385 persons with unknown whereabouts. The basis for this was a model that took account of the characteristics by certain variables – including age, sex, educational attainment, ethnicity, partnership characteristics, experience of working abroad and previous migration plans – for those with ‘known’ whereabouts in the home country or abroad (as well as those who died between the two waves). According to the result of estimate, of the 385 persons in question 358 persons were *likely* to have lived in the home country, 23 persons abroad, and 4 persons were dead at the time of the second wave. Applying the weights of the first wave which used variables of age group, educational attainment and ethnic microregion, and taking into consideration the estimate too, of the 2,492 persons interviewed in the first wave about 93.7% lived in the home country, 3.6% lived abroad, and 0.6% were dead at the time of second wave.

NEW WEIGHT I

In the analysis we only consider the responses by 2,107 research subjects whose whereabouts (or death) are definitely known to us. The weights of the first wave were therefore changed in a way that the above rates apply to the subsample of 2,107 persons with known whereabouts (ensuring that the weighted sample size remains 2,107), resulting in *new weight I*. Looking at the effect of attrition and indicated transformations on sample composition, it was found that the composition of subsample we surveyed in the second wave does not differ significantly from the sample of the first wave (see *Table A1*).

²⁸ The authors hereby express their gratitude to Gergely Fraller, special advisor at HCSO, for his assistance in the weighting process.

Table A1

Comparison of the sample of the first wave and those with known whereabouts in the second wave by sex, age, level of education and employment status

Socio-demographic characteristics in 2006	1 st wave sample ^a (N=2,492)	2 nd wave subsample of persons with known whereabouts* (N=2,107)
<i>Sex</i>		
male	51.5	50.8
female	48.5	49.2
<i>Age</i>		
under 25	17.8	17.9
25–29	19.1	18.8
30–34	20.2	20.0
35–39	22.9	22.8
over 40	20.0	20.6
<i>Educational attainment</i>		
at most lower secondary (8 classes or less)	18.7	19.6
vocational training school (10 classes)	21.5	21.8
upper secondary	48.0	47.2
higher education	11.8	11.4
<i>Employment status</i>		
employee	55.2	54.5
self-employed, entrepreneur	7.2	7.0
unemployed	7.8	8.3
student	6.1	6.4
other (retired, on maternity leave, homemaker)	23.7	23.9

^a The initial sample was weighted using the weight of the first wave, while the sample of those with known whereabouts was weighted using *new weight 1*.

ESTIMATION PROCEDURE II

To estimate the rate of persons staying in the home country during the second wave but having lived (also) abroad between the two waves, we used responses from the questionnaire of the second wave: of the 1,690 persons interviewed, 48 persons reported that they went abroad after the first wave interview but then returned, so applying the *new weight 1* described above, the rate of returnees among respondents can be around 3.2%. In the case of 304 persons who stayed in the home country but failed to fill in a questionnaire, it was certainly not possible to discover migration experience between the two waves. Taking into account the distribution by sex, age and employment status of domestic residents who filled or failed to fill in the questionnaire, the rate of those trying to make a living abroad (too) between the two waves can most likely be estimated at 3.2% among non-responding domestic residents. Based on this, in the subsample of 2,107 persons with known whereabouts 3.2% of those known to have been in the homeland in the second wave, and 3.0% of the total sub-sample can be regarded to have returned.

NEW WEIGHT II

In order to apply the above rates to the sample, i.e., to make the rate of returnees 3.0% in the sample, *new weight I* has been modified in the following way: the weight of those known to have lived abroad (too) between the two waves was increased, while the weight for the rest of known domestic residents was decreased by the same degree, respectively. The resulting weight (*new weight II*) was applied solely in those parts of the analysis where determining the rate of returnees was relevant. In these cases, without using *new weight II*, we should have assumed that none of the non-responding domestic residents had spent longer time (at least 3 months) abroad.

LIST OF WORKING PAPERS

1. László Hablicsek, Pál Péter Tóth: The Role of International Migration in Maintaining the Population Size of Hungary between 2000–2050
2. Maritetta Pongrácz: Birth out of Wedlock
3. Attila Melegh: East/West Exclusions and Discourses on Population in the 20th Century
4. Zsolt Spéder: Fertility and Structural Change in Hungary
5. Sándor Illés: Foreigners in Hungary: Migration from the European Union
6. Magdalena Muszyńska: Family Models in Europe in the Context of Women's Status
7. Attila Melegh, Elena Kondratieva, Perttu Salmenhaare, Annika Forsander, László Hablicsek, Adrienn Hegyesi: Globalisation, Ethnicity and Migration. The Comparison of Finland, Hungary and Russia
8. Zsolt Spéder, Balázs Kapitány: Poverty and Deprivation: Assessing Demographic and Social Structural Factors
9. Etelka Daróczi: Ageing and Health in the Transition Countries of Europe – the Case of Hungary
10. Péter Őri: Demographic Patterns and Transitions in 18–20th Century Hungary. County Pest-Pilis-Solt-Kiskun in the Late 18th and Early 20th Centuries
11. Zsolt Spéder, Balázs Kapitány: Ideational Factors and Parenthood. A Gender- and Parity Specific Analysis in a Post-Communist Society
12. Irén Gödri: The Role of Ethnicity and Social Capital in Immigration to Hungary
13. Attila Melegh, Arland Thornton, Dimitar Philipov, Linda Young-DeMarco: Mapping Societal Developmental Hierarchies in Europe: a Bulgarian Perspective
14. Balázs Kapitány, Zsolt Spéder: Factors Affecting the Realisation of Child-Bearing Intentions in Four European Countries
15. Zsolt Spéder, Balázs Kapitány: Realising Birth Intention in European Comparison – Understanding the Post-Communist Fertility Transition
16. Tamás Faragó: Historical Demography in Hungary: a History of Research
17. Attila Melegh: Net Migration and Historical Development in Southeastern Europe since 1950
18. Róbert I. Gál, Endre Szabó, Lili Vargha: The age profile of invisible transfers: the true size of asymmetry in inter-age reallocations
19. Irén Gödri, Béla Soltész, Boróka Bodacz-Nagy: Immigration or emigration country? Migration trends and their socio-economic background in Hungary: A longer-term historical perspective
20. Péter Őri, Levente Pakot: Residence patterns in nineteenth century Hungary: Evidence from the Hungarian MOSAIC sample.
21. Zsuzsa Blaskó: Studying emigration by extending a large-scale household survey. Methodology, evaluation and descriptive findings
22. Lili Vargha, Róbert Iván Gál, Michelle O. Crosby-Nagy: Household production and consumption over the lifecycle: the National Time Transfer Accounts in 14 European countries
23. Kálmán Joubert, Gyula Gyenis: The Hungarian Longitudinal Growth Study: From birth to the age of 18 years
24. Róbert Iván Gál, Árpád Törzsök: The Savings Gap in Hungary
25. Lajos Bálint: Suicide in the Hungarian Kingdom
26. Róbert Iván Gál, Pieter Vanhuyse, Lili Vargha: Pro-elderly welfare states within pro-child societies: Incorporating family cash and time into intergenerational transfers analysis
27. Zsolt Spéder, Lívia Murinkó, Lívia Sz. Oláh: Sailing close to the wind? The effects of third birth policies in post-communist Hungary
28. Róbert Iván Gál, Márton Medgyesi: Financing the lifecycle or mitigating poverty: Redistribution in the Hungarian welfare system by age and income

The above Working Papers can be ordered at the following e-mail addresses:

workingpapers@demografia.hu

The Working Papers are also available online at:

<http://www.demografia.hu/workingpapers>