The Migration Intentions of Young Adults in Europe: A Comparative, Multi-Level Analysis¹

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ABSTRACT

Research on migration intentions is relatively fragmented, traditionally drawing conclusions from relatively small survey samples, focussing on individual countries, or relying on public opinion polls which provide very few explanatory variables. This paper addresses these limitations by developing a multi-level model of an extensive range of macro, meso and micro determinants of migration intentions across different time frames. The paper utilises an online panel survey of 20,473 non-student respondents aged 16-35 from 9 EU countries.

Ordinal multi-level modelling, with post-stratification weighting, is used to determine the key drivers of, and barriers to, migration intentions in both a pan-European model, and nine separate national-scale models. The findings confirm the significance of macro, meso and micro factors. While socio-economic factors emerge as powerful explanatory factors, non-pecuniary factors are also important, including sensation seeking. There are broad similarities in the findings across the separate national-level models, but also differences in the relative importance of socio-economic, gender, and personality factors. Migration intentions were highly dependent on the decision-making time frame: 17 per cent of respondents over one year, but 30 per cent over five years, are likely to migrate or to have made firm plans to migrate. The rank ordering of the countries challenges the notion of there being a simple differentiation between the newer and older member states of EU.

Keywords: youth migration; migration intentions; European migration; time frames; multi-level modelling

INTRODUCTION

There is a long-established research interest in migration intentions which tends to peak at times of either major economic crises or of significant shifts in migration regimes, such as the eastern enlargement of the European Union (Fassmann and Hintermann, 1998). This has been given renewed urgency by the high and increasing levels of youth migration in Europe, following the 2008+ economic crisis (Cairns, 2014; van Mol, 2016). Debates about the likely levels of future migration have also been fuelled more recently by the 2016 Brexit referendum in the UK (Pietka-Nykaza and McGhee 2016), which took place against a background of anti-migration political, media, and popular discourses, which emphasised perceived negative implications of the EU's freedom of movement provisions for national border controls. In general, there is more speculation than evidence on this contentious topic.

Even where empirical evidence does exist on future mobility intentions, it tends to be characterised by fragmentation due to methodological diversity, small samples and the difficulties of extrapolating from studies of particular countries. Using inconsistent terminology, past studies examine 'plans', 'desires', 'intentions' and 'wishes' to migrate under

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various time scales; in the next one, two, three, five or ten years. This makes previous empirical research on mobility intentions challenging to compare or to derive meaningful policy implications. Moreover, the renewed interest in recent years in the topic of future migration tends to focus on student mobility (e.g. Cairns and Smyth, 2011; Cairns, 2014), with relatively few studies of non-students. Examining intentions to migrate is important for understanding the actual migration decision-making process; empirical evidence suggests a strong link between the intended and actual decision (Van Dalen and Henkens, 2008). However, Fassmann and Hintermann (1998) emphasise that determining the potential for migration is a complicated issue and, especially due to political sensitivities, requires a rigorous research approach.

This paper aims to contribute to this research agenda by providing a detailed comparative analysis of migration intentions, across different time frames, for nine countries representing a range of migration contexts within the EU. These countries represent a range of contrasting socio-economic, migration, and EU membership contexts: Germany, Ireland, Italy, Latvia, Romania, Slovakia, Spain, Sweden and UK. Our analysis draws on a large-scale panel survey undertaken in these nine countries in late 2015 as part of the EU H2020 project YMOBILITY. The dataset analysed in this paper consists of 20,473 non-student Europeans aged 16-35 and is supplemented by secondary data on key socio-economic indicators to ensure the robustness of the analysis. Multi-level regression is used to analyse the key motives and barriers for migration among young individuals from the nine countries and their intention to migrate in the next one and five years. More specifically the paper addresses three main questions:

1. To what extent do different degrees of firmness in intentions to migrate vary across different time frames for a range of countries representing diverse migration contexts?
2. What is the relative importance of the potential macro, micro and meso-level determinants of intentions to migrate?
3. How do the determinants of the intention to migrate vary across different European countries representing markedly different migration contexts?

The paper first reviews the literature on migration intentions, including the measurement of the levels of intentions to migrate, and the determinants of these intentions, understood in terms of macro, meso and micro factors (Massey et al., 1993). It then outlines the methodology, before presenting and discussing findings revealing the intentions of young Europeans over both one-year and five-year time frames.

LITERATURE REVIEW

There is considerable debate in the migration literature about whether migration intentions/aspirations predict actual behaviour (Epstein and Gang, 2006: 653; Van Dalen and Henkens, 2007, 2008; Cairns and Smyth, 2011; Cairns *et al.* 2013). Ajzen (1991) and others have conceptualised this in terms of the locus of control, while more recently Van Dalen *et al.* (2005) have highlighted the potential importance of self-efficacy as the key determinant of who actually migrates. Notwithstanding these reservations, there has been renewed interest in recent years in attempts to measure individuals' migration intentions.

A review of the literature indicates that very recent publications tend to focus on student groups rather than on the general population. Both are discussed here although we note that there may be differences between those attending a university and other groups – such as graduates, those in employment and those either seeking or not seeking work. The group enrolled in education tends to express a higher willingness to be mobile. Van Mol (2016)

attributes this to the fact that students are freer from the constraints of everyday life and have fewer responsibilities. In their study of students' mobility intentions in Northern Ireland, Cairns and Smyth (2011) found that more than half of those surveyed are considering living outside Northern Ireland in future. A later study found that 72 per cent of students in the Republic of Ireland and 52 per cent in Northern Ireland have mobility intentions (Cairns 2014). Although 'the mobility question' and the precise terminology used in the various surveys widely differ, studies using student samples tend to identify higher mobility intentions. In contrast, potential migration rates are significantly lower among working-age adults (see e.g. Tabor *et al.*, 2015 on New Zealand).

In an attempt to explain such high variations in mobility intentions, Docquier *et al.*, (2014) reveal in their large cross-country study that college-educated individuals are more likely to become actual migrants because of better opportunities to realise their migration potentials. What prevents other groups from translating their plans into actual migration may be the lack of certain personal characteristics, or of familial constraints – important aspects which we return to later. In one of the rare studies examining whether intentions are in fact good predictors of future emigration, Van Dalen and Henken (2008) discovered that 24 per cent of those who had stated an intention to emigrate had actually emigrated from the Netherlands within two years. However, there are still relatively few studies which compare potential and actual mobility.

These different findings reflect not only the importance of the territorial and temporal contexts, but also the variable methods that have been used to estimate intentions. There are variations in the size of the samples, from a few hundred to several thousand, and in their representativeness, notably whether they include only students or seek to represent an entire age group. There are variations in measures of the firmness of intentions, which range from simple dichotomous responses to those which differentiate between unspecified intentions and having made firm plans to migrate. There are also differences in the time frames between those which do not specify a precise time frame, and those which specify one or more time periods within which the proposed migration will occur. Table 1 is a schematic synthesis of this literature and the methods used. Turning from the measurement of the levels of intentions to migrate to the determinants of these intentions, it is possible to draw on a more general literature pertaining more to actual migration than to intentions. The determinants can be understood in terms of macro, meso and micro factors (Massey *et al.*, 1993).

The research on the *macro* level mostly focuses on economic inequalities and macro-economic trends. The neoclassical approach (for example Todaro, 1969) emphasises disparities in *wages and employment* at the regional and international scales. Using data from the 2008 Eurobarometer survey, Otrachshenko and Popova (2014) demonstrate that the intention to migrate is indeed affected by macro-economic variables. Combining the impact of life satisfaction and macro-economic variables reveals a greater propensity to migrate among individuals from the Central and Eastern European (CEE) countries than from non-CEE countries. Hadler's (2006) study, however, using 2001 Eurobarometer survey data, points to the effects of regional disparities within and across European countries. The highest migration intentions can be observed in regions with a developmental gap compared to the overall level of a country; the higher the gap between the regional GDP and the countrywide GDP, the more willing people are to move. Surprisingly, the highest intentions to go abroad are found in highly developed countries. This raises the question of the extent to which not only the levels of migration intentions, but also their determinants, vary across different macro-regional contexts in Europe.

Table 1. Previous studies measuring mobility intentions

Authors	Aim	Country	N	Sample/population	The migration intention question	Analytical Method
Fassmann & Hintermann (1998)	To identify the migration potential among CEE countries	Czech Republic, Hungary, Poland and Slovakia	4,392	Gallup Survey. A quota sample out of the total population over the age of 14. Questionnaire administered face to face in the respondents' homes in 1996.	'Potential' migration is differentiated into three categories: very general, potential and 'real' potential. ('Yes'/'No') Three questions: I have thought of going abroad/ I have at least gathered information about the target country in question/ I have already applied for a residence permit or a work permit.	Descriptive statistics
Van Dalen & Henkens (2005)	To examine who intends to leave Africa	Ghana, Senegal, Morocco and Egypt	1,569 583 2,267 2,940	Special purpose migration surveys in 1997/1998	The key question probed the intentions of respondents who had never emigrated before: 'Do you intend to migrate abroad?' ('yes' /'no'/'don't know') Timescale: Intention to emigrate within 2 years / Has taken actual steps to emigrate.	Ordered probit analysis
Epstein & Gang (2006)	To examine the roles "other people" play in influencing an individual's potential migration decision	Hungary	2491	Those aged 20-40 in the Hungarian Household Panel Survey 1992-97	Respondents asked to specify the strength of their desire to go abroad: 'not willing', 'somewhat willing', and 'willing'. Explanatory variables capture past (friends worked abroad), present (friends/kin abroad), and future (friends/kin planning on going abroad) networks and herd effects.	Probit analyses
Hadler (2006)	To examine people's intentions to migrate aged younger than 45 years	15 European countries, 196 nuts-2-regions	7000	Using the Eurobarometer Survey for 2001	'Do you think you will move in the next five years?' 'Yes'/'No' Intend to move to another country within the European Union: 'Yes'/'No'	Three-level regression
Agadjanian, et al. (2008)	To examine young people's intentions to migrate abroad in Kyrgyzstan, in particular on differences between Asian and European-origin ethnic groups	Kyrgyzstan	1,535	Survey conducted in 2005. Sample: 1,535 aged 18-29	The term 'intentions' is used to encompass both firm plans to migrate abroad and wishes to migrate abroad: "plan" and "wish" as two types of migration intentions that are similar in essence but different in strength and maturity. Considering intentions to migrate permanently or temporarily.	Logistic regression for ordered outcomes to analyze the maturity of migration intentions - multinomial logit model
Cairns & Smyth (2011)	To examine orientations towards future geographical mobility amongst		250	A questionnaire spread across four different academic disciplines in Northern	'I see myself always living in Northern Ireland in the future'. ('Yes'/'No')	Chi square

	students in Northern Ireland	Northern Ireland		Ireland's two universities, 2006/2007.		
Cairns (2014)	To examine orientations towards future geographical mobility amongst students	Northern Ireland and Ireland	400	Undergraduates aged between 18 and 24, who were studying at universities in Dublin, Belfast and Cork during 2010	'In the future, I see myself always living in Northern Ireland/Republic of Ireland.' (Yes/'No')	Chi square
Van Dalen & Henkens (2012)	To analyse the international labour migration intentions amongst the Dutch potential labour force	The Netherlands	971	A nation-wide survey of those aged 16–60 years	'Do you expect to work abroad for a couple of years in the next 10 years?' Five categories of rankings of expectations from 'highly unlikely' to 'highly likely'.	Regression analysis
Otrachshenko & Popova (2014)	The impacts of individual characteristics and of country macroeconomic variables on the intention to migrate	27 Central and Eastern European (CEE) and Western European (non-CEE) countries	24,232	Using the Eurobarometer Survey for 2008	'Do you intend to move in the next five years?' 'Do you intend to move within country or to another country?' -distinguishing three types of migration intentions; permanent international, temporary international, and domestic. and migration intention duration: 'How long do you expect to stay abroad?' – temp and permanent	A two-level regression analysis
Docquier et al. (2014)	To analyse the determinants of potential and actual migration	138 origin countries + 30 major destinations	all population	Using information on potential migrants from World Gallup surveys and on actual migrants from national censuses for 138 origin countries + 30 major destinations between 2000 and 2010,	'Ideally, if you had the opportunity, would you like to move permanently or temporarily to another country, or would you prefer to continue living in this country?'	The bilateral gravity-like regressions
Van Mol & Timmerman (2014)	To examine the determinants of intra-European student mobility in six countries	Austria, Belgium, Italy, Norway, Poland, UK	5654	An online survey and in-depth interviews and focus groups with non-mobile as well as ex-mobile students	'Do you intend to spend some time abroad during the remainder of your degree?' (Yes/'No')	Binary logistic regression

Van Mol (2016)	To analyse mobility intentions amongst young people aged 16–30 in all member states of the EU	All EU member states	13,078	Representative sample of young people aged 16–30 in all member states of the EU, using secondary data from Flash Eurobarometer 395. A multi-stage random (probabilistic) sample was drawn in each member state of some 500 individuals who were surveyed through Computer Assisted Telephone Interviews (CATI) in 2014	‘You want to study, undergo training or work in another EU country than [country]’ = ‘Yes’/ ‘No’	Multi-level binary logistic regression
Tabor et al. (2015)	To examine New Zealand-born working-age adult participants’ mobility intentions	New Zealand	205	Participants recruited through online forums in 2012/2013	‘Are you currently planning or considering moving to another country?’ ‘Yes’/‘No’ Timescale: Within the next year, between 1-3 years from now, 3 or more years from now. Considering migration for the past 1-3 years / for more than 3 years, and a less than a year.	Logistical regression techniques
Balaz et al. (2015)	To examine the decision weights for eight attributes of potential destination countries	Slovakia	157	Experimental research with university students and recent graduates.	Participants presented with a hypothetical intra-company transfer to a foreign country for three years.	Mann Whitney U test

Economic factors can also act as a major barrier to mobility (Van Mol and Timmerman, 2014). Financial reasons deter European students in Austria, Belgium, Italy, Norway, Poland, and the UK from studying abroad. Much recent research (Halfacree, 2004) emphasises that a range of non-economic macro-scale factors may also influence migration. These are explored by Baláž *et al.* (2016) in a study of complex migration decision-making among young people in Slovakia (see also Table 1). While the economic characteristics of countries are nearly always the most important in decision-making, Baláž *et al.* also find evidence of substantial weight being given to non-economic factors such as health, crime, and personal freedom and security. Another important macro-scale factor is the level of dissatisfaction with the public domain in the home country or regions (van Dalen and Henkens, 2008), so that issues such as corruption can have a considerable but variable influence on migration intentions across Europe.

Meso-level factors focus particularly on access to knowledge about living abroad. This can be related to various personal, community and diaspora ties, work-based networks as well as recruitment channels for both those in employment and for students. Networks, including those established online, play a key role in migration decisions (Boyd, 1989; Epstein and Gang, 2006), by facilitating access to accommodation and employment, easing the initial stress after the arrival. Young people with mobility intentions are significantly more likely to have siblings or friends who live abroad (Cairns and Smyth, 2011). The strength, size and type of networks vary between students, skilled and unskilled workers, with the last group relying mostly on informal networks. Networks are not only facilitators but also act as barriers to potential mobility (van Dalen and Hankens, 2012), especially in the form of strong attachments to local communities and the role of family relationships in both encouraging and discouraging international mobility (Cairns, 2014).

There are three main groups of *micro-level* or individual factors which shape migration: socio-economic, demographic, and psycho-social or personality. While neoclassical perspectives based on wages and unemployment can be applied to the analysis of individual decision-making, *human capital* theories are more commonly applied at this scale (Sjaastad, 1962). In this perspective, migration is understood as an investment decision to realise differential returns on human capital in different economic spaces, or as a means to acquire human capital with a view to enhanced lifetime income. Given that education is often used as a surrogate measure of human capital, it is not surprising that there is evidence, for example in Central and Eastern Europe, of higher mobility intentions amongst the more educated (Fassmann and Hintermann, 1998; Epstein and Gang, 2006). More recent research provides a more nuanced perspective, demonstrating that social class background is also an important factor, with higher rates of potential mobility amongst those from the topmost socio occupational groups, at least in the case of student mobility (King *et al.*, 2010). A different economic perspective is provided by the role of finance as a major barrier to students participating in European student mobility (Van Mol and Timmerman, 2014).

Turning to *socio-demographic* factors, there is mixed evidence about the role of gender. There is a general agreement among scholars using whole population samples that males are significantly more likely to express mobility intentions (Fassmann and Hintermann, 1998; Epstein and Gang, 2006). But studies of specific groups' migration behaviour (e.g. UK outward Erasmus students, King *et al.*, 2010) indicate that women are disproportionately important in student mobility flows. And yet, other more recent studies of intended future migration amongst students suggest that men are relatively more numerous (Cairns and Smyth, 2011), possibly because of family and other social constraints (Van Mol, 2016). There is agreement,

however, that the likelihood of migration decreases with age (Epstein and Gang 2006; Otrachshenko and Popova, 2014; Van Mol, 2016), marriage (Gubhaju and De Jong, 2009; Otrachshenko and Popova, 2014), and childbearing (Hadler, 2006; Agadjanin *et al.*, 2008), although how these categorisations vary within the young-adult group is less well documented. Previous experience of living abroad is another important factor which is associated with higher rates of mobility (Fassmann and Hintermann, 1998: 66; Epstein and Gang, 2006; Tabor *et al.*, 2015). For example, Van Mol (2016) demonstrates that individuals with such experiences are more than twice more likely to intend to migrate than those lacking this experience, while Handler (2006) shows that the farther individuals have previously moved, the farther they are likely to intend to move. Experimental research also suggests that individuals with histories of international mobility cope better with potential overload of, and imperfect, information about different contexts (Balaz *et al.*, 2016). They are also more likely to engage in multiple or repeat migrations, according to Ciobanu's (2014) research on Romanians and Main's (2013) work on Polish women.

Recent research focuses less on socio-economic and socio-demographic characteristics, and more on *personality* factors. Boneva and Frieze (2001) introduce the notion of 'migrant personality': compared to non-migrants, migrants tend to be more work-orientated and to have higher achievement motivations, whilst 'stayers' are more tied to their families and home-based social networks and community attachments (Cairns, 2009; 2014; Cairns and Smyth, 2011). These initial formulations have been extended in several directions. Van Dalen and Henkens (2007) indicate that personality traits such as self-efficacy and sensation-seeking tend to be critical predictors of the migration intentions of Dutch citizens. Other studies indicate the importance of being more open to experience (Jokela, 2009) or being persistent or contentious (Tabor and Milfont, 2011; Tabor *et al.*, 2015). Identities have also been recognised as important determinants of migration and/or migration intentions. Those who have strong, or are proud of their, national identities, are less likely to migrate (Bjarnason and Thorlindsson, 2006; Van Dalen and Henkens, 2012). The same applies to students in Northern Ireland who have strong local identities (Cairns and Smyth, 2011; Cairns, 2014). Finally, a relatively new strand of research indicates that risk tolerance/aversion and perceived competence to manage risk are important determinants of the willingness to migrate (Williams and Baláž, 2012).

To sum up, while there is a growing body of research on migration intentions, a review of the literature suggests that much of it is fragmented and that there are three major gaps which need to be addressed. These generate the three main research questions addressed by this paper, relating to time frames, the determinants of intentions to migrate, and how these vary across European countries and/or macro-regions.

METHODOLOGY

Dataset – sample and weighting

This study takes a quantitative approach, based predominantly on primary data, supplemented by some secondary data on key socio-economic indicators. The primary data were collected in a large-scale online panel survey, specially commissioned from a major market research organisation, GfK Significance (Belgium). Data collection took place between November 2015 and January 2016, in nine European countries representing a range of migration and socio-economic conditions, and histories of EU membership: Germany, Ireland, Italy, Latvia, Romania, Slovakia, Spain, Sweden and UK. The dataset analysed consists of 20,473 non-student respondents aged 16-35, this being the age-band which we nominate to cover 'youth' and

‘young adult’ respondents. The survey, designed by the authors, includes respondents’ demographic characteristics, past travel and migration experiences, current quality of life and personality evaluation, perceived importance of key motives and barriers for migration, and intention to migrate. The perception/evaluation and intention questions are measured on 5-point scales. Specifically, the ‘mobility question’ asked about medium-term (within one year) and longer-term (within five years) intentions to migrate for a period of at least six months: this can include return migration intentions, in the case of migrants currently living outside their countries of birth. The answers, provided in the form of Likert-scale type questions, distinguish different levels of firmness in migration intentions.

Since an online panel survey approach was adopted for primary data collection, the sample may not be fully representative of the population. Therefore, post-stratification survey weights were constructed based on the latest micro-region population data (NUTS 3) from the Eurostat census records. The stratification uses various strata (including age-group, gender, educational level and urban-rural division) which are known to influence migration.

To supplement the primary survey data, a number of socio-economic indicators have also been collected for 2015 at the macro-scale, the national, and the NUTS1 and NUTS3 regional levels. These include, for example, ‘Life expectancy’, ‘Unemployment’, and ‘Gross Domestic Product Purchasing Power Standards (GDP-PPS) in € (Eurostat Database, 2017).

Method of analysis

Multi-level regression modelling with ‘Post-Stratification’ (MRP) is used in this study to analyse the key drivers and barriers (i.e., independent variables) of pan-European youth migration intentions for the next 1 and 5 years, respectively (i.e., the dependent variables). A pan-European model with the full dataset and nine country-specific models with respective national datasets are estimated to identify key common factors as well as country-specific factors that affect European young people’s migration intentions.

Multi-level regression models are a class of statistical models developed for the analysis of data structures with nested (or hierarchical) sources of variability, and can therefore correctly handle both individual and aggregated information. Multi-level data structures exist through hierarchical spatial (e.g., national or NUTS0 and regional/NUTS1 in this study) and non-spatial (e.g., age, gender, education in this study) group influences on an outcome (i.e., migration intention in this study). MRP begins by using multi-level regression to model individual survey responses as a function of demographic and geographic predictors, using the dataset to partially pool respondents by spatial and sub-population ecological groups. Post-stratification weights are then used to correct estimates, ensuring that the surveyed data reflects actual population structures. This is a well-established approach in the social and political sciences (Lax and Phillips, 2009a; 2009b; Ghitza and Gelman, 2013). Table 2 presents the hierarchical structures of the estimated models in this study. The Level-2 spatial structures above are constructed to abide with Hox’s (1998) 50/20 rule for multi-level models with cross-level interaction designs: 50 hierarchical groups each constructed from 20 or more observations.

Given the nature of the dependent variables, this study employed ordinal multi-level regression models, in particular the most widely employed ‘Proportional-Odds Cumulative Logit’ model (Agresti, 2002; Finch *et al.*, 2014;), using the ‘ordinal 06-28’ [R] package (Christensen, 2015). Beneficially, this approach allows for the interpretation of the regression

variables on a binary scale, from 0 (Low) to 1 (High), while taking into account the complete set of responses in the structured dataset.

Table 2: Pan-European and national multilevel model hierarchical structures

	PAN- EUROPEAN	ES/RO/SE	DE/IT/UK	IE/LV/SK
Level-1 (Demographic)	Sub-populations	Sub-populations	Sub-populations	Sub-populations
Level-2 (Spatial)	NUTS 1: Macro-region	NUTS 3: Micro-region	NUTS 2: Region	NUTS 3: Micro-region
Level-3 (Spatial)	NUTS 0: National	NUTS 1: Macro-region	NUTS 1: Macro-region	

Note: ES: Spain, RO: Romania, SE: Sweden, DE: Germany, IT: Italy, IE: Ireland, LV: Latvia, and SK: Slovakia.

Before running the regression analysis, the necessary data processing is performed. Firstly, iterative regression imputation is conducted to replace missing values (Gelman and Hill, 2006: 539). Secondly, all numeric independent (X) variables undergo a process known as Grand Mean Centring (GMC) so the slope between predictor and response remains unchanged, but the interpretation of the intercept (response when $X_N = 0$) now defines the outcome magnitude for the expected (mean) value of a predictor value. Thirdly, to address the scaling issue, the centred predictors are divided by 2 standard deviations to allow for all coefficients (including the untransformed binary and categorical coefficients) to be roughly interpreted on a common scale, except for the intercept, which now corresponds to the average predicted outcome with all inputs at their mean (Gelman and Hill, 2006). Lastly, to handle the potential multi-collinearity problem between candidate explanatory variables, the Variance Inflation Factor (VIF) diagnostic is conducted and all variables with VIF scores above 5 were removed (Schuenemeyer and Drew, 2011).

FINDINGS AND DISCUSSION

One-year versus five-year migration intentions

The paper first evaluates the extent to which different degrees of firmness in migration intentions vary across two time frames, for our nominated range of countries representing differentiated migration contexts. Figures 1 and 2 present the distribution of one- and five-year migration intentions in the national and pan-European samples. Overall, 17 per cent of respondents in the pan-European sample consider they are likely to migrate, or have even made concrete plan to migrant, within a year. The results vary among the nine survey countries. The respondents in Ireland, Slovakia and Latvia show the lowest intention (13%), while the respondents in Romania show the highest intention (21%), followed by Italy (20%) and Spain (19%). As would be expected, there are higher levels of migration intentions over five years. Overall, 30 per cent of the respondents are either likely to migrate or have already made concrete plans. Understandably, individuals have more time to prepare and plan (especially financially) over the longer time frame. Again, broadly similar national differences can be observed: Romanian respondents still demonstrate the highest migration intention in five years (41%), followed by Italy (39%) and Spain (35%). Slovakian respondents display the lowest intention to migrate in five years (22%), followed by the respondents from the UK (25%), Ireland and Latvia (both 26%). Further insights into the underlying reasons for these national differences are provided by the following analyses.

Figure 1: Intentions of persons aged 16-35 years, to move abroad for a period of at least 6 months within the next year (1-Year Intentions)

Figure 2: Intentions of persons aged 16-35 years, to move abroad for a period of at least 6 months within the next five years (5-Year Intentions)

Figure 3: Hierarchical cluster analysis, providing a cross-country comparison of responses for migration intent and candidate determinants of identity, lifestyle and migratory influences. Cluster Method: “Ward D2”, Distance = “Correlation”, P-Values (%) = “Approximately unbiased (AU)”

Figure 3 provides a cross-country comparison of responses to the wider survey in the form of a hierarchical cluster analysis dendrogram, using the ‘Pvclust 2.0’ [R] package (Suzuki & Shimodaira, 2006). The analysis considered the two intention measures in a numeric form (1-5), and 36 candidate x-variables numerically exploring themes of identity, lifestyle and migratory influences. Probability values for cluster structures were defined by 10,000 iterations of multiscale bootstrap resampling, presented as bootstrap probability (BP) and approximately unbiased (AU) p-values. Detailed clusters structures are significant at the 90% unbiased significance level.

The cross-country comparison of the raw survey data indicates that shared differences in response exist between (1) Northern and (2) Southern-Eastern European countries, which can be separated into the following four sub-groups: (1a) Ireland and United Kingdom; (1b) Germany and Sweden; (2a) Latvia and Romania, (2b) Italy, Spain and Slovakia. While indicating broad macro regional differences relating to socio-economic and migration conditions, as well as histories of access to the EU freedom of movement space, there are also important differences between the Eastern member states.

Pan-European analysis of determinants

The Nagelkerke pseudo- R^2 measures for the pan-European ordinal weighted multilevel models of (a) 1-year and (b) 5-year migration intentions, indicate that the person-specific (behavioural and demographic) measures, secondary sub-population variables, and hierarchical structures explain 25-27 per cent of the models’ variation (Table 3). The first Chi-Square Likelihood Ratio compares the full model to the Null (Intercept only) model, to ensure that any gains in predictive power of the final model are worth the added complexity. The test confirms the

overall statistical significance of the model ($P < 0.001$). It is possible to conclude that a moderate, but reliable, relationship has been modelled. The second Chi-Square Likelihood Ratio ($P < 0.001$) confirms that the inclusion of hierarchical structures is appropriate for both data sets (Galwey, 2006: 213-214).

Table 3: Statistical summary of the Pan-European ordinal weighted multilevel models for (a) 1-year, and (b) 5-year migration intentions

		1-Year Intentions	5-Year Intentions
Model Description	<i>Observations (N)</i>	20,473	20,473
	<i>Log Likelihood</i>	-27096.988	-29633.94
Pseudo R-Squared Measures	<i>Nagelkerke's R² (1991)</i>	0.25	0.27
Chi-Square Likelihood Ratio (P-Value)	<i>1. Full Model vs. Null (Intercept) Model</i>	< 0.001 ***	< 0.001 ***
	<i>2. Hierarchical Effects</i>	< 0.001 ***	< 0.001 ***

Fixed effects

Table 4 provides a comprehensive description of the fixed parameters from the pan-European models. The final check ensures that the proportional odds assumption is tenable, with a consistent relationship existing between all sequentially paired groups of the models' ordinal outcome. For both models, the threshold intercept coefficients between all groups is significant at the 0.01% level ($P < 0.001$).

Firstly, we summarise the common factors that affect both the 1-year and 5-year time frames for European youth adult migration intentions (see Table 4). The results of this study are in line with the literature, in terms of confirming the importance of all three categories (macro, meso and micro) of influencing factors.

At the macro level, the economic outlook (i.e., the perception of a worsening EU economy) has a significant negative impact on migration intentions. The more negative the perceived economic outlook, the higher the intention to migrate, confirming the neoclassical economic view of migration (e.g., Otrachshenko and Popova, 2014). In addition, there is a linear relationship between the transition from rural to urban areas. European young people living in urban areas (especially big cities) are more likely to migrate than those living in rural areas. This is in line with past studies on mobility intentions (Epstein and Gang, 2006). The resources (e.g., finance and information) accessible to individuals living in urban areas or larger cities may enable them to migrate more easily, or these act as platforms for internal migrants before becoming international movers (significant for the relevant micro-scale variable, although relatively low-ranked).

At the meso level, migration intentions appear to decrease where importance is placed on being with family. In addition, a higher level of satisfaction with the local community (i.e., strong community attachment) is associated with a lower migration intent. Both findings confirm Cairns' (2014) arguments that social relationships may become barriers of migration.

Table 4: Pan-European ordinal weighted multilevel model descriptive outputs for (a) 1-year, and (b) 5-year migration intentions

Parameter		1-Year Migration Intentions				5-Year Migration Intentions			
Name	Type	Estimate	Std. Error	Significance		Estimate	Std. Error	Significance	
				(1) P-Value	(2)			(1) P-Value	(2)
Intercept: No Intentions Unlikely	Threshold Coefficient (1 2)	0.416	0.126	0.001 ***	X	-0.341	0.142	0.017 *	X
Intercept: Unlikely Not Sure	Threshold Coefficient (2 3)	1.539	0.127	< 0.001 ***	X	0.581	0.142	< 0.001 ***	X
Intercept: Not Sure Likely	Threshold Coefficient (3 4)	2.553	0.128	< 0.001 ***	X	1.673	0.143	< 0.001 ***	X
Intercept: Likely Concrete Arrangements	Threshold Coefficient (4 5)	3.566	0.129	< 0.001 ***	X	3.229	0.144	< 0.001 ***	X
Age (Years)	Level 1: Continuous	-0.386	0.042	< 0.001 ***	6	-0.429	0.044	< 0.001 ***	4
Gender: Male	Level 1: Binary	0.223	0.065	0.001 ***	18	0.289	0.082	< 0.001 ***	11
Migration Experience: Internal	Level 1: Binary	0.133	0.029	< 0.001 ***	27	0.138	0.028	< 0.001 ***	24
Migration Experience: Born Outside Home	Level 1: Binary	0.066	0.08	0.415		-0.077	0.083	0.351	
Migration Experience: Years Lived Abroad	Level 1: Continuous	0.08	0.033	0.016 *	33	-0.004	0.033	0.903	
Lifestyle: Living On Your own	Level 1: Binary	0.061	0.042	0.145		-0.003	0.041	0.95	
Lifestyle: Travel Frequency (Abroad)	Level 1: Interval	0.781	0.029	< 0.001 ***	2	0.51	0.028	< 0.001 ***	3
Lifestyle: Household Financial Situation	Level 1: Interval	-0.213	0.03	< 0.001 ***	21	-0.123	0.029	< 0.001 ***	29
Identify: Birth Region	Level 1: Interval	-0.143	0.029	< 0.001 ***	25	-0.124	0.028	< 0.001 ***	28
Identify: World Citizen	Level 1: Interval	0.259	0.029	< 0.001 ***	10	0.245	0.028	< 0.001 ***	14
Personality: Acceptable New Job Risk	Level 1: Interval	0.249	0.027	< 0.001 ***	13	0.294	0.027	< 0.001 ***	10
Personality: Sensation-seeking	Level 1: Continuous	0.306	0.03	< 0.001 ***	9	0.327	0.029	< 0.001 ***	8
Personality: Perseverance	Level 1: Interval	-0.012	0.029	0.681		-0.066	0.028	0.017 *	38
Satisfaction: Health	Level 1: Interval	0.032	0.032	0.309		0.076	0.031	0.013 *	37
Satisfaction: Housing	Level 1: Interval	-0.096	0.033	0.003 **	32	-0.048	0.032	0.128	
Satisfaction: Family	Level 1: Interval	-0.109	0.032	0.001 ***	29	0.039	0.031	0.211	
Satisfaction: Community	Level 1: Interval	-0.111	0.031	< 0.001 ***	28	-0.146	0.03	< 0.001 ***	23
Satisfaction: Overall Current Life	Level 1: Interval	-0.013	0.037	0.735		-0.258	0.036	< 0.001 ***	13
Migration Factor: Employment Prospects	Level 1: Interval	-0.242	0.03	< 0.001 ***	14	0.126	0.029	< 0.001 ***	26
Migration Factor: Education	Level 1: Interval	0.238	0.032	< 0.001 ***	15	0.123	0.031	< 0.001 ***	29
Migration Factor: Language Barrier	Level 1: Interval	-0.015	0.031	0.624		-0.129	0.03	< 0.001 ***	25
Migration Factor: Improve Language Skills	Level 1: Interval	0.067	0.033	0.044 *	35	0.126	0.032	< 0.001 ***	26
Migration Factor: Being with Family	Level 1: Interval	-0.258	0.032	< 0.001 ***	11	-0.208	0.031	< 0.001 ***	18
Migration Factor: Being with Friends	Level 1: Interval	0.002	0.033	0.96		-0.165	0.031	< 0.001 ***	22
Migration Factor: Lifestyle/Culture	Level 1: Interval	-0.006	0.033	0.843		0.078	0.032	0.014 *	36
Migration Factor: Healthcare	Level 1: Interval	-0.1	0.034	0.003 **	31	-0.103	0.033	0.002 **	34
Migration Factor: Company Policy	Level 1: Interval	0.152	0.032	< 0.001 ***	23	0.086	0.031	0.005 **	35
Migration Factor: Corruption	Level 1: Interval	0.007	0.033	0.82		0.04	0.032	0.214	
Migration Factor: Climate	Level 1: Interval	0.142	0.031	< 0.001 ***	26	0.047	0.03	0.116	

Table 4 [CONTINUED] ...

Parameter		1-Year Migration Intentions				5-Year Migration Intentions			
Name	Type	Estimate	Std. Error	Significance		Estimate	Std. Error	Significance	
				(1) P-Value	(2)			(1) P-Value	(2)
Return Migrant (vs. No Prior Intent)	Level 1: Categorical (Experience)	0.433	0.05	< 0.001 ***	5	0.532	0.049	< 0.001 ***	2
Researched Migration (vs. No Prior Intent)	Level 1: Categorical (Experience)	0.667	0.032	< 0.001 ***	3	0.873	0.031	< 0.001 ***	1
Primary (vs. Higher Degree)	Level 1: Categorical (Education)	0.015	0.143	0.914		-0.375	0.156	0.016 *	6
Secondary (vs. Higher Degree)	Level 1: Categorical (Education)	-0.07	0.082	0.395		-0.229	0.1	0.023 *	17
Post-Secondary (vs. Higher Degree)	Level 1: Categorical (Education)	-0.218	0.081	0.007 **	20	-0.295	0.1	0.003 **	9
Degree (vs. Higher Degree)	Level 1: Categorical (Education)	-0.09	0.05	0.073		-0.11	0.048	0.023 *	33
Married w/children (vs. Single)	Level 1: Categorical (Civil Status)	0.077	0.039	0.049 *	34	-0.121	0.038	0.001 **	31
Married (vs. Single)	Level 1: Categorical (Civil Status)	-0.059	0.041	0.145		-0.232	0.039	< 0.001 ***	16
Separated w/children (vs. Single)	Level 1: Categorical (Civil Status)	0.436	0.122	< 0.001 ***	4	0.166	0.12	0.169	
Separated (vs. Single)	Level 1: Categorical (Civil Status)	0.349	0.175	0.046 *	7	-0.127	0.179	0.479	
Single w/children (vs. Single)	Level 1: Categorical (Civil Status)	0.252	0.069	< 0.001 ***	12	0.061	0.068	0.371	
Full-time (vs. Unemployed)	Level 1: Categorical (Employment)	-0.034	0.079	0.668		0.176	0.077	0.022 *	21
Part-time (vs. Unemployed)	Level 1: Categorical (Employment)	0.054	0.081	0.509		0.24	0.079	0.002 **	15
Casual & Seasonal (vs. Unemployed)	Level 1: Categorical (Employment)	0.031	0.089	0.729		0.192	0.087	0.027 *	20
Self-employed (vs. Unemployed)	Level 1: Categorical (Employment)	-0.063	0.089	0.477		0.155	0.087	0.075	
Job seeking (vs. Professional)	Level 1: Categorical (Occupation)	0.225	0.087	0.01 *	17	0.356	0.085	< 0.001 ***	7
Clerical & Administrative (vs. Professional)	Level 1: Categorical (Occupation)	0.005	0.049	0.925		-0.038	0.047	0.416	
House-person & Caring (vs. Professional)	Level 1: Categorical (Occupation)	-0.126	0.103	0.222		0.147	0.099	0.137	
Other (vs. Professional)	Level 1: Categorical (Occupation)	-0.046	0.063	0.467		-0.091	0.06	0.13	
Other Manual (vs. Professional)	Level 1: Categorical (Occupation)	0.227	0.06	< 0.001 ***	16	0.068	0.058	0.24	
Skilled Manual (vs. Professional)	Level 1: Categorical (Occupation)	0.183	0.052	< 0.001 ***	22	0.096	0.05	0.055	
City (vs. Rural)	Level 1: Categorical (Living Area)	0.148	0.039	< 0.001 ***	24	0.208	0.038	< 0.001 ***	18
Town (vs. Rural)	Level 1: Categorical (Living Area)	-0.008	0.038	0.826		0.117	0.037	0.001 **	32
Origin-Destination EU25 (vs. Destination)	Level 1: Categorical (EU Migration)	0.345	0.085	< 0.001 ***	8	0.286	0.101	0.005 **	12
Origin EU25 (vs. Destination EU15)	Level 1: Categorical (EU Migration)	0.401	0.209	0.055		-0.075	0.244	0.759	
Origin EU27 (vs. Destination EU15)	Level 1: Categorical (EU Migration)	1.094	0.274	< 0.001 ***	1	0.375	0.318	0.238	
Eurobarometer: Understand EU Workings	Level 2: Continuous	-0.165	0.091	0.068		-0.124	0.093	0.183	
Eurobarometer (P): Worse Personal Job	Level 2: Continuous	-0.019	0.053	0.717		0.061	0.056	0.274	
Eurobarometer (P): Worse EU Economy (%)	Level 2: Continuous	0.22	0.1	0.027 *	19	0.388	0.105	< 0.001 ***	5
Eurobarometer: Favour National Austerity	Level 2: Continuous	-0.106	0.048	0.026 *	30	0.004	0.047	0.934	
Eurobarometer: Strong National Identity (%)	Level 2: Continuous	0.062	0.08	0.437		0.046	0.083	0.585	
Eurostat: NUTS 1 Gross Domestic Product	Level 2: Continuous	-0.105	0.069	0.127		-0.041	0.083	0.625	
Eurostat: NUTS 0 Gross Domestic Product	Level 3: Continuous	0.095	0.208	0.646		-0.37	0.239	0.122	

(P) = Perceptions within the next 12-months; *** Significant at the 0.1% level ($P < 0.001$); ** Significant at the 1% level ($P < 0.01$); * Significant at the 5% level ($P < 0.05$)

At the micro level, a larger number of significant motives of and barriers to migration are identified. Firstly, when thinking about a household's financial situation, individuals who struggle to make ends meet every month, and persons who were seeking jobs (in comparison to having professional jobs) are more likely to migrate. These findings echo the neoclassical economic view of migration with respect to unemployment, and is consistent with the finding of this study at the macro level. Secondly, this study confirms Boneva and Frieze's (2001) notion of the importance of migrant personality. In particular, those who consider they have a greater propensity for sensation-seeking are more likely to migrate, in line with Williams and Baláž's (2012) findings about the related concept of willingness to take risk. Respondents who identify themselves as world citizens have stronger migration intentions, while those with a strong identity with their birth region were more likely to remain, confirming the findings of Bjarnason and Thorlindsson (2006) and Van Dalen and Henkens (2012). Thirdly, migration intentions were likely to be greater for individuals seeking to enhance their language skills and general education. This is in line with the notion that migration represents investment in human capital (Sjaastad, 1962). The human capital theory also supports the finding that persons with a higher degree are more likely to migrate, as observed by other researchers (Fassmann and Hintermann, 1998; Epstein and Gang, 2006). Fourthly, individuals with lower quality of life are more likely to migrate, suggesting migration is related to a lifestyle choice, as also evidenced by Baláž *et al.* (2016). Fifthly, those who place a high importance on healthcare are less likely to migrate. Both findings suggest the existence of important barriers to migration intentions. Lastly, socio-demographic variables have some effects on European young people's migration intentions. In particular, younger male persons with past internal mobility experience are more likely to migrate, which once again confirms previous research findings (e.g., Epstein and Gang, 2006; Van Mol, 2016).

Next, we identify the top five significant factors for migration intentions over the next 1 and 5 years, respectively, based on the estimates in Table 4. Taking first the *1-year intentions*, and the pan-European analysis, the top five factors influencing a young person's intention to move abroad within the next year are:

- 1) Origin EU27 vs. Destination EU15 (+)
- 2) Lifestyle: Travel Frequency Abroad (+)
- 3) Researched Migration vs. No Prior Intent (+)
- 4) Separated w/children vs. Single (+)
- 5) Returned Migrant vs. No Prior Intent (+)

The signs in the parentheses suggest either positive (+) or negative (-) effects of these variables on the intention. The estimates in the output table are provided in units of ordered logits, which are exponentially transformed into odds ratios for the purpose of further interpretation. The odds ratio represents the impact of a unit change in an independent variable (when all other independent variables in the model are held constant) on the ratio of the probability of an event occurring, represented by the binary scale of 1 = Migrate and 0 = Remain. An odds ratio greater than 1 indicates that the odds of migrating increase with the independent (X) variable, and vice versa:

- Origin EU27 vs. Destination EU15: **EXP (1.094) = 2.986**; in other words, the odds for people from Romania expressing an intention to migrate within one year are 198.6% higher than those from Germany, Sweden or the UK;

- Travel Frequency Abroad (+1 Likert scale): **EXP (0.781 / (2 * 1.146)) = 1.406**; in other words, the odds increases by 40.6% as travel frequency increases by 1 unit on a 6-point Likert scale;
- Researched Migration vs. No Prior Intent: **EXP (0.667) = 1.948**; in other words, the odds for people who have researched migration options are 94.8% higher than those who have never thought about migration before;
- Separated with children: **EXP (0.436) = 1.546**; in other words, the odds for those who are separated with children are 54.7% higher than people who are single and without children;
- Returned Migrant vs. No Prior Intent: **EXP (0.433) = 1.542**; in other words, the odds for people who are returned migrants are 54.2% higher than those who have never previously considered migration, indicating the importance of either pre-disposition or acquired migration knowledge (Williams & Baláž, 2012).

Moving now to *5-year intentions*, in the pan-European analysis, the top five most influential factors are:

- 1) Researched Migration vs. No Prior Intent (+)
- 2) Returned Migrant vs. No Prior Intent (+)
- 3) Lifestyle: Travel Frequency Abroad (+)
- 4) Age in Years
- 5) Eurobarometer (Next 12-Months): Worsening EU Economy (+)

As with the one-year model, they are interpreted as follows:

- Researched Migration vs. No Prior Intent: **EXP (0.873) = 2.394**; in other words, the odds for people who have researched migration options are 139.4% higher than those who have never thought about migration before;
- Returned Migrant vs. No Prior Intent: **EXP (0.532) = 1.702**; in other words, the odds for people who are returned migrants are 70.2% higher than those who have never thought about migration before;
- Travel Frequency Abroad (+1 Likert scale): **EXP (0.51/ (2 * 1.146)) = 1.249**; in other words, the odds increases by 24.9% as travel frequency increases by 1 unit on a 6-point Likert scale;
- Age (+1 year): **EXP (-0.429 / (2 * 4.753)) = 0.956**; in order words, the odds decreases by 4.4% as age increase by 1 year;
- Declining EU Economy: **EXP (0.388/ (2 * 38.334)) = 1.005**; in order words, the odds increases by 0.5% for a 1-unit increase in the percentage of people who perceive the EU economy will worsen in the next 12-months.

Three of the five main factors are the same over the two time frames, but concerns over the EU economy are more important over the longer term, which may reflect greater uncertainty over this time scale. The absence of 'Origin EU27 and Destination EU15' from the top five factors over five years, may reflect a potential peaking of this particular migration flow, related to the relatively recent ending of transitional freedom of movement arrangements for Romania (and Bulgaria). Additionally, Table 4 discloses more differences in the influencing factors between the two time frames. For example, life satisfaction with housing and family domains only affects migration intention over the next year, while satisfaction with health,

overall life satisfaction and having a perseverance personality only have significant effects on migration intention over the next five years. Employed persons are more likely to intend to migrate than unemployed persons only over five years, which resonates with the findings about perceived macro-economic conditions, while occupational differences seem to affect the intention to migrate over one year. Finally, language barriers and staying with friends become barriers for intentions to migrate for the five-year time frame.

Hierarchical effects

The fixed effects models (Table 4) show that, at an individual response level, migration intentions for males within the next one and five years are higher than for females, by 25.0% (Odds Ratio: EXP (0.223) = 1.249) and 33.5% (Odds Ratio: EXP (0.289) = 1.335) respectively. In terms of education, an individual with a basic level of education is most likely to migrate within the next year, while those with a higher degree are most likely to migrate within the next five years.

Hierarchical structures within the multi-level model also consider the collective response of members from demographic sub-populations, based on education, age and gender group interactions (Table 5). The results show that the individual effects of gender and education are modified somewhat at an ecological level. The highest 1-year and 5-year migration intentions appear in the ‘female 26-35-year medium education’ subpopulation (+10.2% and 21.4%), even if males overall have higher mobility plans.

Table 5: Level-2 hierarchical structure coefficients and likelihoods (%) values for the Pan-European demographic sub-populations

Sub-Population Unit	1-Year Migration Intention		5-Year Migration Intention	
	Coefficient	Likelihood (%)	Coefficient	Likelihood (%)
16-25 Female ED0-2	0.015	1.48 %	-0.036	-3.51 %
16-25 Male ED0-2	-0.018	-1.79 %	-0.054	-5.25 %
26-35 Female ED0-2	-0.012	-1.15 %	-0.045	-4.36 %
26-35 Male ED0-2	0.015	1.52 %	0.137	14.63 %
16-25 Female ED3-4	0.096	10.02 %	0.194	21.4 %
16-25 Male ED3-4	-0.023	-2.25 %	-0.039	-3.86 %
26-35 Female ED3-4	-0.041	-4 %	-0.079	-7.58 %
26-35 Male ED3-4	-0.031	-3.07 %	-0.074	-7.13 %
16-25 Female ED5-8	-0.03	-2.97 %	0.025	2.55 %
16-25 Male ED5-8	0.049	4.99 %	0.065	6.69 %
26-35 Female ED5-8	-0.027	-2.64 %	-0.054	-5.27 %
26-35 Male ED5-8	0.009	0.9 %	-0.031	-3.1 %

Figure 4 presents the exponentially transformed spatial ecological unit coefficients from the pan-European multi-level models, as a percent of increased/decreased intent to migrate within (a) 1-year or (b) 5-years. Mapped outputs represent the combined influence of Level-2 (NUTS 1: macro-region) and Level 3 (NUTS0: national) spatial differences in migration intentions. NUTS 1 (macro-region) level populations in Southern Spain and Italy generally exhibit strong youth migration intentions, and are >5% more likely to migrate within the next year, perhaps a consequence of prevailing high unemployment levels. In Italy, the reverse is observed for 5-year intentions, which are < -5% lower than the expected level of

intent recorded in a European macro-region, perhaps indicating greater optimism for longer-term economic and social trajectories. Comparison of the 1-year and 5-year periods, reveals a change in the direction of migration intent, from negative to positive, for residents of Ireland, Wales and the South East of England, perhaps indicating the importance of uncertainties concerning the longer (five year) period in these regions.

National comparisons

For each national subset of the survey, two multi-level models are constructed which explore the (a) 1-year and (b) 5-year migration intentions. National models for 1-year migration intentions return Nagelkerke pseudo-R- measures of 0.27-0.37, with the 5-year intention models recorded at 0.27-0.51. The top 5 most influential modelled parameters that are significant ($P < 0.05$) in each of the national models are summarised in Table 6.

Various differences between the two time horizons and among the nine countries can be seen among the top 5 influencing factors presented in Table 6. These key influences tend to be similar for countries within three European geographic zones (Northern, Southern, and Eastern). The preceding hierarchical cluster identified the Southern and Eastern European countries as having common attributes, the effects of which are shown to differ in magnitude and direction by geographic region in the regression analysis. Given the more significant potential implications of the five-year migration intention, the following national comparisons focus on this set of results. Firstly, opposite signs of effects are found in a couple of cases, particularly between Romania and other countries. Unemployed persons are more likely to migrate in Romania than persons taking casual or seasonal jobs, while the opposite is true in Spain; women are more likely to migrate than men in Romania, while men are more likely to migrate than women in Ireland. Recent studies conducted in Ireland confirm high mobility intentions among men (Cairns and Smyth, 2011; Van Mol, 2016). Persons born out of the home country are more likely to migrate in Sweden, but less likely in Romania. Romanian young persons with primary education are more likely than those with higher degrees to migrate, while Irish young people with higher degrees are more likely to migrate than those with primary degrees. Perception of a worsening national economy is the top driver of migration in Latvia; the job-seeking occupational status in comparison to being employed in a professional position is the top predictor of migration in Romania; ‘understanding of how the EU works’ is the second most important driver to migrate for Romanian young persons. These findings suggest that, for the key migration-origin countries, economic reasons still play an important role in shaping migration intentions, as suggested by the neoclassical view (consistent also with the findings of Baláž *et al.*, 2016). In addition, more consistent findings can be seen within the geographical zones, for example, between Spain and Italy in Southern Europe, and between Germany and the UK in Northern Europe. In particular, the sensation-seeking personality plays a more important role in Germany and the UK than in other countries.

A series of “Two-Way ANOVA” models were used to determine whether statistically significant differences exist between the national migration intention models, grouped by (1) Geographic Zone and (2) intention timeframes. The analysis evaluated the 42 coefficients present in each national model. The overall null hypothesis (H_0) states that the population means for countries located in different geographic zones are equal across both periods of time, while the alternative hypothesis (H_1) states that at least one group’s response is significantly different. Table 7 presents the ANOVA Tukey Honest Significant Difference (HSD) post-hoc results.

Figure 4: Exponentially transformed spatial ecological unit coefficients from the Pan-European multilevel models, as a percent of increased/decreased intent to migrate within (a) 1-year or (b) 5-years.

Table 6: Top-5 significant modelled influences on 1-year and 5-year migration intentions (with influence direction), obtained from the national ordinal weighted multilevel models

PARAMETER	1-YEAR INTENTIONS									5-YEAR INTENTIONS								
	DE	IE	SE	UK	ES	IT	LV	RO	SK	DE	IE	SE	UK	ES	IT	LV	RO	SK
Age (Years)										4 (-)			5 (-)					
Casual & Seasonal (vs. Unemployed)														1 (+)			5 (-)	
Current Life Satisfaction										5 (-)								
Full-time (vs. Unemployed)							2 (-)											
Gender: Male		2 (+)	4 (+)					5 (+)			2 (+)						3 (-)	
House-person & Caring (vs. Professional)	3 (-)																	
Identify: World Citizen				5 (+)														
Job seeking (vs. Professional)																		1 (+)
Lifestyle: Travel Frequency (Abroad)	2 (+)			1 (+)	2 (+)	3 (+)				3 (+)			2 (+)	4 (+)	5 (+)			
Married w/children (vs. Single)								3 (-)										2 (-)
Migration Experience: Born Outside Home Country												2 (+)					4 (-)	
Migration Factor: Being with Family																5 (-)		
Other Manual (vs. Professional)								4 (+)								3 (+)		
Part-time (vs. Unemployed)							5 (-)							5 (+)				
Personality: Acceptable New Job Risk (Financial)					5 (+)													
Personality: Risk Response Ability					4 (+)													
Personality: Sensation-seeking				4 (+)						2 (+)			4 (+)					
Post-Secondary (vs. Higher Degree)		5 (+)	2 (+)					2 (+)										
Primary (vs. Higher Degree)		1 (-)									1 (-)						1 (+)	
Researched Migration (vs. No Prior Intent)	4 (+)			2 (+)	3 (+)	2 (+)				1 (+)		4 (+)	1 (+)	2 (+)	3 (+)	2 (+)		5 (+)
Return Migrant (vs. No Prior Intent)						4 (+)							3 (+)		4 (+)	4 (+)		4 (+)
Satisfaction: Community	5 (-)																	
Secondary (vs. Higher Degree)			1 (+)					1 (+)			5 (+)							
Self-employed (vs. Unemployed)							4 (-)					3 (-)						
Separated (vs. Single)							1 (+)		1 (+)									
Separated w/children (vs. Single)	1 (+)		3 (+)			1 (-)	3 (+)		2 (-)						2 (-)			3 (-)
Single w/children (vs. Single)					1 (+)	5 (+)			5 (-)			5 (+)		3 (+)				
Skilled Manual (vs. Professional)				3 (+)														
Eurobarometer (Next 12-Months): Worse National Economy (%)																1 (+)		
Eurobarometer: Good National Economy (%)		3 (-)						4 (-)			4 (-)							
Eurobarometer: Good National Employment Level (%)		4 (-)									3 (-)				1 (-)			
Eurobarometer: Good Personal Job Situation (%)												1 (-)						
Eurobarometer: Non-EU Immigration is Positive (%)			5 (+)															
Eurobarometer: Trust The National Legal System (%)								3 (+)										
Eurobarometer: Understand EU Workings (%)																	2 (+)	

With regard to geographical differences, the results suggest that, persons employed in “Clerical”, “Other Manual”, and “Other: Undefined” occupations in Eastern European countries, are more likely to migrate than those from similar occupations in Northern Europe; persons who perceive themselves as risk-takers in Northern and Southern European countries, are more likely to migrate than risk-takers from Eastern European countries; those that identify themselves as world citizens in Northern European countries are more likely to migrate than world citizens from Eastern European countries; persons from Eastern European countries with a good household financial situation are less likely to migrate than their counterparts from Northern or Southern European countries.

Table 7: Two-Way ANOVA post-hoc analysis, identifying significant differences in migration intentions between the national models by (1) Geographic Zone (“Northern”, “Southern” and “Eastern”) and (2) Intention Timeframe (“1-Year” and “5-Years”)

Two-Way ANOVA (3x Geographic Zones, 2x Timeframes)	Tukey HSD Comparison	Mean Coefficient Difference
Travel Frequency (Abroad)	(1) Northern vs. (2) Eastern	Higher (**)
	(1) Southern vs. (2) Eastern	Higher (*)
	(1) 5-Years vs. (2) 1-Year	Lower (*)
Household Financial Situation	(1) Northern vs. (2) Eastern	Higher (***)
	(1) Southern vs. (2) Eastern	Higher (**)
Identify: World Citizen	(1) Northern vs. (2) Eastern	Higher (*)
Personality: Risk-seeking	(1) Northern vs. (2) Eastern	Higher (**)
	(1) Southern vs. (2) Eastern	Higher (*)
Migration Factor: Education	(1) 5-Years vs. (2) 1-Year	Lower (*)
Researched Migration vs. No Prior Intent	(1) 5-Years vs. (2) 1-Year	Higher (*)
Clerical & Administrative vs. Professional	(1) Northern vs. (2) Eastern	Lower (**)
Other vs. Professional	(1) Northern vs. (2) Eastern	Lower (***)
Other Manual vs. Professional	(1) Northern vs. (2) Eastern	Lower (***)
	(1) Southern vs. (2) Eastern	Lower (***)

*** Significant at the 0.1% level ($P < 0.001$); ** Significant at the 1% level ($P < 0.01$); * Significant at the 5% level ($P < 0.05$).

Some differences are also found between the 1-year and 5-year intention timeframes. For example, travel frequency has a significantly lower influence on long term migration intentions; education has a greater influence on long term migration decisions; persons that have extensively researched migration are more likely to migrate in the next 5-years, than take immediate action.

CONCLUSIONS

Based on a large-scale online survey, supplemented by selected aggregate socio-economic indicators, and using ordinal multi-level regression analysis, this study examines various motivation factors and barriers of European young people’s migration intentions over the next year and five years. In this paper we focus specifically on non-student respondents aged 16-35 years.

The study findings reveal that, within a year, 17 per cent of respondents in the pan-European sample of non-student respondents aged 16-35 are likely to migrate, with a

substantial minority having made concrete plan to do so. The results vary among the nine countries, with the respondents in Romania showing the highest intention (21%) and those in Ireland, Slovakia and Latvia the lowest (13%). Mobility intentions among the nine European countries significantly increase when changing the time-scale to five years. As many as 30 per cent of the respondents across all countries are either likely to migrate or have made concrete plans already. Again, Romanian respondents show the highest migration intention in five years (41%), followed by Italy (39%) and Spain (35%). Slovakian respondents display the lowest intention to migrate (22%), followed by the respondents from the UK (25%), and Ireland and Latvia (both 26%). These findings are particularly surprising in the case of Ireland given its history of emigration, and also indicate differences between the A8 and A2 member states included in this survey.

Our findings confirm that Romania seems to be emerging as an important emigration nation, and that is rooted in the economic factors emphasised in neoclassical approaches to migration (Todaro, 1969). Individuals struggling to secure their livelihood in their home country, those with no income and no qualifications are most likely to have plans to migrate. Considering that Romania has only recently gained full access to the EU labour market, emigration to the more developed countries may continue at relatively high levels for some years. On the other hand, the two A8 countries, Latvia and Slovakia, which became EU members in 2004, display much lower mobility intentions. This raises the question of whether their peak emigration flows have passed – at least for the foreseeable future – due to changes in opportunities and living standards in their home countries.

There are significant barriers to mobility; in particular, strong family attachment is an important meso-level determinant. Confirming recent studies (Cairns, 2014; Van Mol, 2016), migration intentions decrease where importance is placed on being with family. Turning to micro-level determinants of intentions, our study reveals that a number of non-economic motives are also important. In terms of demographic factors, potential European migrants are more likely to be men, younger, urban and highly educated and with past internal mobility experience. Nevertheless, national differences can be observed. For example, Romania again seems to display different characteristics, with women, and those with lower education, more likely to express intentions to leave. Supporting more recent research on the existence of a ‘migrant personality’ (Boneva and Frieze, 2001; Van Dalen and Henkens, 2012), this study also indicates that the sensation-seeking personality plays an important role in willingness to migrate, especially in Germany and the UK. Indeed, a cross-country comparison among the nine survey countries identified that there were both country-specific influencing factors of youth migration, and also some statistically significant differences at the macro-regional level (Northern, Southern and Eastern) between these.

The analysis of future migration trajectories has long been a central issue for national and regional policy analysts, concerned with the implications of both emigration and immigration. This paper has above all identified the high level of commitment to future international migration within the EU, as well as differences across macro-regions, and between individual countries. This signifies that any future realignment of international migration controls either at the level of individual countries (such as in post-Brexit UK) or at the EU level, is likely to have major implications for potential migrants, and for the relative size and composition of the flows to particular destination countries. But it also suggests that the effects of any regulatory changes will be mediated by the complex set of established, inter-related drivers of migration.

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