



## ORIGINAL ARTICLE


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## Intention to move and residential satisfaction: evidence from Poland

**JEL Classification:** O15; O18; R23

**Keywords:** migration intentions; residential mobility; residential satisfaction; housing satisfaction; urban development; Poland

### Abstract

**Research background:** Residential mobility affects the spatial structure of cities and urban development. Longer-distance migration has many additional implications: it affects the demographic situation of a sending area as well as its growth prospects. The literature on interregional and especially international migration regards residential satisfaction as being of at least secondary importance. More attention to this concept is given in research on intra-urban migration and suburbanisation. In a seminal paper of Speare (1974), residential satisfaction was found to be the best predictor of the willingness to move. However, determinants of mobility are country-specific. **Purpose of the article:** Answering the following research questions: 1) What is the scale and selectivity of the intention to move among city residents? 2) Does residential satisfaction explain variation in migration intentions?

**Methods:** The data are derived from the PAPI survey on life quality in Lublin, Poland (sample: 1101 residents). We build ordered logit models explaining residents' declarations regarding different types of migration (intra-urban migration, suburbanisation, interregional and international migration) with various proxies of residential satisfaction, as well as financial situation and demographic attributes.

**Findings & Value added:** The propensity to migrate was declared by approx. 15–30% of respondents, depending on the type of migration, which indicates relatively low mobility as against EU countries. We confirm that the intention to move is highly selective. The estimated ordered logit models explaining the intention to move prove that satisfaction with housing and neighbour-

hood characteristics along with life-stage characteristics are relevant predictors of intention to move both within and outside the region. We disregard the opinion that unemployment and adverse financial situation are key drivers of mobility in contemporary Poland. In a more international context, we provide evidence on how long- and short-distance migration are different in nature and discuss some policy implications regarding countering depopulation in peripheral areas.

## Introduction

Research on migration and residential mobility has both scientific and practical significance. Residential mobility, which we interpret as a short-distance migration, and more precisely as intra-urban migration and migration to suburbs (Coulter *et al.*, 2016), affects the spatial structure of cities and urban development with many implications for city planning and management (Short, 2016, pp. 429–436). As an example, residential migration changes the patterns of commuting and exerts pressure on urban infrastructure. From a theoretical perspective, the processes of intra-urban migration and suburbanisation are inherent to numerous concepts and approaches in urban geography, such as city life cycles, urban sprawl, locational analysis, theories on systems of cities or neighbourhood effects, just to mention a few (Henderson & Thisse, 2004; Duranton *et al.*, 2015). Longer-distance migration — interregional and international — has, in turn, many additional implications and affects the demographic situation of a region, as well as regional growth prospects. For example, since migration is a selective phenomenon, the outflow of the young and well-educated population (often referred to as brain drain) decreases the stock of human capital in the sending region and therefore hinders its economic growth (Faggian *et al.*, 2017, pp. 7–8). What is noteworthy, depopulation and brain drain pose a serious threat to the development of peripheral EU regions, including the Lubelskie Voivodship (Anacka & Okólski, 2010, pp. 141–163).

Residential mobility is intertwined with residential satisfaction, which is defined as the feeling of contentment when one possesses or achieves what one needs or desires in at home and its neighbourhood (Speare, 1974, pp. 175–177; Mohit *et al.*, 2014, p. 47). Mobility is also both a determinant and an outcome of the housing market situation, and as such it remains in the centre of housing economics (Wong, 2002). However, both the intensity and the drivers of mobility are highly country-specific. With these contexts in mind, we utilised data from the PAPI survey carried out on a quota sample of 1101 Lublin residents to conduct frequency and regression analysis, pursuing answers to the two research questions:

- What is the scale and selectivity of the intention to move among Lublin residents?
- Does residential satisfaction explain variation in migration intentions?

Our paper contributes to the existing literature in several ways. In a single study, it covers and compares both short- and long-distance migration plans and their selected drivers, which not only addresses the gap in Polish literature, but also contributes to the scarce international research presenting such an approach. While analysing the determinants of migration intentions, instead of focusing on wage expectations or job accessibility, we gave preference to much more specific, though inherent elements of life quality in a sending area such as housing satisfaction, neighbourhood safety along with residents' financial situation and demographic attributes. Furthermore, our paper sheds light on the intention to move among the residents of a very specific area on the EU map. Poland is experiencing both dynamic and violent processes of suburbanisation and massive international emigration. The survey has been conducted in Lublin — a medium-sized capital of a peripheral Polish region, characterised by a relatively low level of economic development, dynamic suburbanisation processes and large migration outflows. At the same time, the situation on the housing market in Poland seems exceptional, marked by one of the highest homeownership rates in the EU, and the dynamic growth of housing investments despite high housing prices in relation to wages. In the broader context, our results contribute to the ongoing discussion on the depopulation in the EU peripheral regions and cities, and might be valuable in designing targeted policy responses at local, national and EU levels.

We organise the paper as follows. The first section summarizes the main literature findings regarding the factors influencing migration intentions. The consecutive section outlines data and methods. In the third, empirical part, we present descriptive statistics and subsequently build ordered logit models where dependent variables are built upon intention to move, while independent variables are various proxies of residential satisfaction, followed by financial situation as well as a set of demographic and life-stage characteristics. The following section discusses research results, while the conclusion sums up the main findings and limitations of the research.

## **Literature review**

In the literature, several approaches to the determinants of both residential mobility and longer-distance voluntary migration, deserve attention. Starting from the latter, labour market conditions, i.e. high unemployment and

low wages in the origin country or region as well as accessible jobs, and most importantly high wages in the migration destination, have been traditionally perceived as the most vital determinants of migration (Arrango, 2000, pp. 284–286). The development of research on migration resulted in extending the catalogue of this phenomenon's determinants to migration costs, self-selection, the impact of migration policy, skills transferability, social security, network effects, household composition or income inequalities (Chiswick & Miller, 2014). Since the paper of Liu (1975), there has been growing attention focused on the role of the various aspects of life quality, such as safety, environmental quality, quality of education and healthcare, consumer amenities, sense of community, as well as housing prices and conditions, in both short- and long-distance migration. Nonetheless, the literature on interregional and especially international migration usually regards housing conditions as being of at least secondary importance. The most commonly stylised facts stated that relatively low house prices in the receiving region or country may encourage residents to move (Berger & Blomquist, 1992, pp. 38–39; Rabe & Taylor, 2012, pp. 21–23) and that house owners are characterised by lower geographical mobility, especially in the conditions of decreasing house prices (Blanchflower & Oswald, 2013, pp. 13–20).

Much more attention to the factors shaping the quality of life, and particularly housing issues, is given in research on residential migration. Traditionally, residential mobility process has been divided into two stages. In the first one, people become dissatisfied with their present housing situation, which leads them to search for a better alternative on the housing market (Brown & Moore, 1970, pp. 1–12). Several empirical studies were devoted to the first stage of the mobility process. In a seminal paper of Speare (1974, p. 186), residential satisfaction was found to be the best predictor of the willingness to move. Ginsberg and Churchman (1984, pp. 427–430) also found that respondents dissatisfied with their house are more inclined to change their residence than the satisfied ones. However, a large group of respondents expressed their intention to move despite their satisfaction with the building, and vice versa. Landale and Guest (1985, pp. 216–218) found that although satisfaction is the strongest predictor of thoughts of moving, several structural factors (age, change in the household size, income, tenure and the proportion of friends in both areas) also have strong independent effects. More recent research focuses more on events in the life careers of household members that trigger residential mobility rather than on gradually increasing housing dissatisfaction (e.g. Coulter *et al.*, 2016, pp. 352–367). It is argued that residential mobility depends on a person's stage in the life course, career development determining propensity to

move and family-related issues (e.g. family development, family networks) (Dieleman, 2001, pp. 249–265; Coulter *et al.*, 2016, pp. 353–362). These events in the life cycle might certainly trigger housing dissatisfaction and a growing migration intention.

It is worth adding that approaches to analysing residential mobility might be grounded on both stated preference and actual behaviour. According to the empirical work of Lu (1998, pp. 1492–1493), residential satisfaction and mobility intentions are important predictors of actual migration decisions. Tjaden *et al.* (2019, pp. 39–48) confirm the strong association between international emigration intentions and recorded out-migration flows. However, structural variables such as tenure, income, age, race, household type and gender have significant direct effects on the migration over and above their indirect effects channelled through attitudinal variables. Therefore, the correspondence between mobility intention and behaviour might be significantly less than perfect (Van Dalen & Henkens, 2008, pp. 12–20).

Finally, research results on the determinants of the decision to move are strongly country- or even region-specific, as the decision-making process is determined by many local or country-specific attributes. Such factors include housing accessibility and turnover rates in local housing markets, accessibility of schools or other services, neighbourhood characteristics, regimes of intervention in housing markets, mortgage lending practices, city size, commuting costs, demographic structure or cultural factors (Dieleman, 2001, pp. 249–262; Haas & Osland, 2014, pp. 464–472).

Empirical research in Polish literature generally indicates that the main factors influencing emigration were differences between Poland and a receiving country in terms of the unemployment rate and wages (Strzelecki & Wyszynski 2011, pp. 10–15). However, only scarce research based on microdata considers the influence of other aspects of life quality on migration intentions (Czapiński & Panek, 2015; Baranowski *et al.*, 2016). Databases of large-scale surveys as Labour Force Survey (LFS) or European Union Statistics on Income and Living Conditions (EU-SILC) do not entail sufficiently detailed questions on migration intentions and its possible determinants, whereas Social Diagnosis in Poland does include a few questions on living conditions and safety, though questions on the intention to migrate only concerns international economic migration (Czapiński & Panek, 2015). The literature on intra-urban migration and suburbanisation in Poland indicates the importance of housing issues (e.g. Śleszyński, 2013, pp. 49–50; Kaczmarek, 2017, pp. 85–96), though we have not found any research on the influence of residential satisfaction on migration based on individual data.

## **Data and methods**

The data is derived from the 2018 edition of the cyclical PAPI survey on life quality in Lublin (Poland). 1101 adults were interviewed in five resident service offices in March and April. In order to reduce bias stemming from non-random selection, quota selection has been applied, allowing to adjust the sample composition to that of the population in terms of sex, district of residence and status on the labour market. As the latter is strongly correlated with age, the sample age structure eventually reflects that of the general population as well. Sample characteristics are presented in Table 1.

We operationalise the concept of intention to move by asking a question ‘Do you consider moving to: (a) another district in Lublin, (b) other municipalities close to Lublin, (c) a city outside the voivodship, (d) another country?’ The first research question regarding the scale and selectivity of the intention to move is addressed by analysing the distribution of answers, followed by discussing descriptive statistics regarding migration propensity across such respondents’ characteristics as sex, age, education, marital status, labour market status, place of birth and financial situation.

The second research question considering whether residential satisfaction explains variation in migration intentions is addressed by applying ordered logistic regression. We apply answers to the question regarding intentions to move to four subsequent destinations as subsequent dependent variables in four ordered logit models. We test various questions regarding residential satisfaction as explanatory variables, adding to the models also other regressors, such as financial situation (table 2) and a set of demographic and life-stage characteristics (table 1).

## **Results**

### *Descriptive statistics*

Our first goal was to capture the scale and selectivity of migration intentions among Lublin residents. In general, the survey results confirmed many stylised facts on migration selectivity appearing in the literature, though shed some new light on the propensity for migration as well. The propensity to migrate (sum of answers ‘definitely yes’ and ‘rather yes’) have been declared by approx. 15–30% of respondents, with intra-urban migration being selected more often than moving to suburbs and cities in

other regions, whereas international migration was the least frequent choice (Figure 1).

Migration intention is also a highly selective phenomenon (see Figure 2). First and foremost, the intention to move clearly decreases with age, especially when international mobility is considered. Unsurprisingly, this is the youth aged 18–24 who are most likely to migrate, with the exception of moving to suburbs, which is declared most frequently by people aged 25–44.

Furthermore, the intention to migrate is declared more often by men (regardless of the distance of migration) and singles (except for moving to suburbs). The relation between migration intentions and education is less clear: those with the lowest education most often declare willingness to move outside the city (although their share in the sample is small, approx. 4%), respondents with vocational education are the least prone to move, while the results for those with secondary or tertiary education are akin.

Respondents' situation in the labour market also determines their intention to move. Students are confirmed to be the most mobile part of the society, which might be linked to a frequent change of rented flats (intra-urban migration) and to the willingness to migrate after the completion of education (interregional and international migration) which is presumably motivated by economic reasons. The self-employed are most likely to move to the city suburbs. Inactive pensioners are characterized by the lowest mobility. As far as the unemployed are concerned, we observe a relatively high propensity for international migration and, what is more surprising, for intra-urban migration. Finally, the financial situation apparently does not determine the intention to move abroad. In terms of mobility within Poland, the distribution of the migration intention among respondents who differently assess their financial situation is U-shaped: the lowest propensity to migrate has been declared by those who assess their situation as 'average', whereas those who gave both positive and negative answers were quite more willing to migrate.

### *Ordered logit model*

Ordered logit models enable an analysis of phenomena that are expressed with ordinal variables, notably Likert-scale data. In the case of stimulant variables, higher values mean their higher position. For the purposes of the present paper, we marked answers 'definitely yes' or 'very good' with the value of 5, while 'definitely no' or 'very bad' — with 1. Answer 'hard to say' was put in the middle of the scale, with the value of 3.

Our models also include binary variables, applied for instance for sex or marital status. In each model, we incorporated all the variables regarding residential satisfaction and financial status (see Table 2) as well as socio-economic ones (see Table 1). Results are presented in Table 3.

In all the cases, the p-value for the likelihood ratio test enables to reject the null hypothesis, i.e. used predictors are correctly chosen. Furthermore, all the four estimated models show the McFadden  $R^2$  of very low value — not exceeding 9%. Nevertheless, a low value of McFadden  $R^2$  is a distinct feature of logit models and measures referring to the number of cases correctly predicted are more appreciated in a model's goodness of fit (Hosmer *et. al*, 2013, p. 182). The number of cases correctly predicted (when empirical and theoretical values are coherent) ranges from 46.3% for the model explaining intra-urban migration intentions to 62.8% for the model used for the propensity for international migration.

We assess the strength of association between independent variables and intention to move by calculating odds ratios. Odds ratios of less than 1 indicate that the analysed independent variable has an influence on the dependent variable, reducing its probability to take higher values. For the thorough analysis of the migration drivers, we decided not to exclude the insignificant factors to provide a thorough insight into research results. Nevertheless, the significant regressors in Table 3 were marked with stars, while factors influencing the migration intentions positively are written in bold.

Analysing the relationship between willingness to move and demographic as well as socio-economic characteristics of respondents, we clearly confirm that the life-stage is related to the intention to move, being robust to the changes of the analysed destination. Younger people are definitely more prone to migrate. This is reflected both by the significance of 'students' and 'retired' variables in the model predicting intra-urban mobility intentions and the significance of 'age' variable in the remaining three models. Odds ratios for all considered variables strongly deviates from 1, which confirms the effect of life-stage variables on the mobility. Furthermore, being a city newcomer does not influence mobility declaration except for a model explaining moving to suburbs, where those who live in Lublin since birth declare willingness to move more frequently. The more surprising finding is the insignificance of variables related to the employment and the unemployment in our models, notably in models for migration to other regions or countries. Finally, financial self-assessment seems to be rather unrelated to the willingness to move: it proves to be significant only when internal migration outside the region is considered



and those who assess their financial situation more positively tend to be somewhat more eager to move.

Our models confirm that variables relating to residential satisfaction have significant effects on migration intentions. Nevertheless, as the migration distance increases, different dimensions of residential satisfaction turn out to be significant. Regarding intra-urban mobility, individuals who appreciate both the area of their flat and their neighbourhood in terms of green areas are less willing to change their place of residence. When moves to municipalities near the city are considered, dissatisfaction with technical conditions of a flat is significant. The effect of the flat area on migration intentions is also relevant in the case of moving to other regions in Poland. Finally, variables regarding flat neighbourhood and safety turn out to be significant in explaining the international migration intentions: those who experience troublesome neighbours or apartment burglaries are more likely to move abroad.

## **Discussion**

The declaration to migrate has been expressed by approx. 15–30% of residents, while readiness for migration was decreasing with the growing migratory distance. Our results confirm that migration intentions, alike actual migration, show negative distance elasticity (Schwartz, 1973, pp. 1162–1167; White & Lindstorm, 2005, pp. 328–336). Accurate comparisons between the ratios revealed in our research and other results in the literature are hampered by the variability in methods applied to estimate intentions to move (sample size and its representativeness, question phrasing, scale of answers etc.). While remaining cautious, we assume that the ratio of residents declaring willingness to move to another country does not deviate substantially from the international average for 138 countries estimated at 14.2% for unskilled and 21.4% for college-educated people (Docquier *et al.*, 2014, p. 49). Regarding internal mobility, residents are distinctly less mobile than those living in most EU countries (Hadler, 2006, p. 122; Williams *et al.*, 2017, p. 8). These results suggest that concerns regarding massive out-migration from less prosperous, peripheral regions (e.g. Flaga & Wesołowska, 2018, pp. 22–23; Faggian *et al.*, 2017, pp. 134–135) should not be referred straightaway to regional cities lying in the EU peripheral regions, but rather to rural peripheral areas first. However, we also acknowledge that explanations which are less favourable to such cities are plausible. One of the explanations might be that negative net-migration rates in peripheral cities do not result from large out-migration driven by

dissatisfaction of current residents, but rather from lower in-migration against cities with a more favourable location. Another explanation could be that although the migration intentions in peripheral cities in Poland are not commonly declared, the mobility declarations more often turn into performed actions. However, these presumptions require further research.

Our results indicate that migration intentions are highly selective. More specifically, the research indicates that the intention to move is strongly related to life-stage characteristics, particularly to age, which is consistent with a large body of literature on declared as well as actual migration (e.g. Bailey, 2009; Coulter *et al.*, 2016). However, some results seem more surprising against stylised facts about migration. First, the distribution of the willingness to move among respondents who differently assess their financial situation deserves attention. As expected, those assessing their situation as ‘very good’ were more willing to migrate within the city and to the city suburbs marked with more expensive, single-family housing. Nonetheless, high propensity to interregional migration seems more unusual for this group. What is more remarkable, experiencing an adverse financial situation or unemployment does not increase the willingness to migrate abroad, which is at odds with earlier studies on post-accession Polish migration after 2004 (e.g. Kaczmarczyk & Okólski, 2008, pp. 604–611; White *et al.*, 2018). Our results suggest that, at least among urban residents, interregional and international mobility is no longer driven primarily by adverse household financial situation and job-finding concerns. We link this result to an improving labour market situation in Poland (Maleszyk, 2020) and argue that growing labour market tightness after 2016 has reduced the importance of financial difficulties or unemployment as ‘push’ drivers of migration.

Our models confirm that variables related to residential satisfaction are relevant predictors of migration intentions which is in line with the literature cited in ‘literature review’ section. We, therefore, provide evidence for the approach emphasizing the role of the quality of life in various mobility patterns, regardless of the migration distance. The more innovative finding is that although all our models entail at least one significant variable concerning residential satisfaction, each type of migration is predicted with a different set of specific variables. Hence, our results additionally confirm that long- and short-distance migration are quite different in nature, which is consistent with the findings for other large EU countries (Biagi *et al.*, 2011, pp. 123–128). As a consequence, various migration movements may respond differently to local policy measures targeted at attracting and retaining urban residents.

Finally, the numbers of cases correctly predicted in our models are not very high, particularly when intra-urban and suburban mobility are considered. We might comment on this fact by referring to an established pull-push approach in migration theory (Lee, 1966). Our models entail a rather comprehensive list of proxies for push factors referring to the origin area as well as socio-economic individual traits, yet do not incorporate variables reflecting pull factors concerning desired destinations. Given the lower number of cases correctly predicted for short-distance mobility, we suggest that against longer-distance moves pull drivers might be relatively more important in explaining the intention to move within the city and to its suburbs. If this is true, an important policy implication arises: local policy measures aimed to improve residents' housing conditions and the quality of neighbourhood areas might be only partially successful in mitigating both the depopulation of certain districts and suburbanisation in Poland. Nonetheless, this suggestion requires further empirical evidence.

## **Conclusions**

Our analysis reveals that the propensity to migrate was declared by approx. 15-30% of respondents with intra-urban migration being selected more often than moving to suburbs and cities in other regions, whereas international migration was the least frequent choice. Consequently, the declared mobility of Poles is somewhat lower than similar figures for other countries, especially for moves within the country. The intention to migrate is also highly selective: it is strongly related to life-stage characteristics, particularly to age. In an effort for a better understanding of migration intentions we built ordered logistic regression models, including socio-economic and residential satisfaction variables. Our results have proved that satisfaction with housing and neighbourhood characteristics along with life-stage characteristics are relevant predictors of intention to move within as well as outside the region. More specifically, being young or a student increases the probability of all kinds of mobility, satisfaction with green areas significantly reduces intention to move within the city, housing dissatisfaction regarding the flat area or its technical conditions increases the likelihood of all the moves within the country, while variables regarding safety are significant in explaining intention to move to other countries. Remarkably, variables related to employment (unemployment) status and financial self-assessment proved to be insignificant in almost all models which might be considered as an outcome of recent improvements in labour market situation and increased households' incomes in Poland. These results additional-

ly increase the understanding of how long- and short-distance migration are different in nature.

Finally, our research provides two conclusions for local development policy. Firstly, given the rather low intention to move within the country and at most average international mobility by Lublin residents, we argue that the threat of huge out-migration from cities lying in the EU peripheral regions does not have to be always pervasive. Secondly, local measures aiming at diminishing depopulation processes that focus solely on improving the housing conditions and the quality of neighbourhood might be only partially effective in retaining residents within the city, as pull drivers presumably operate as well, especially when an intention to move within the region is considered.

We acknowledge that our research has several limitations. The geographical scope of our survey covers only one city in Poland. Our list of migration drivers does not incorporate variables regarding desired destinations or objective measures of financial situation which might also be in operation given the moderate number of cases correctly predicted. Finally, comparisons to other research are hampered by variability in research methods. Some of them might be addressed in the follow-up research.

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### **Acknowledgments**

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## Annex

**Table 1.** Sample characteristics

		Sample size	%
<i>1) Sex</i>			
a)	Men	511	46,4
b)	Women	590	53,6
<i>2) Age</i>			
a)	18-24	179	16,3
b)	25-34	257	23,3
c)	35-44	203	18,4
d)	45-54	129	11,7
e)	55-64	140	12,7
f)	65 and more	189	17,2
	no answer	4	0,4
<i>3) Education</i>			
a)	Primary and lower secondary	47	4,3
b)	Basic vocational	138	12,5
c)	Secondary and post-secondary	381	34,6
d)	Tertiary	535	48,6
<i>4) Labour market status*</i>			
a)	Employed	587	53,3
b)	Self-employed	126	11,4
c)	Unemployed	65	5,9
d)	Pensioner	252	22,9
e)	In education	175	15,9
f)	Family and household responsibilities	76	6,9
<i>5) Marital status</i>			
a)	Single	333	30,2
b)	Married/cohabitating couple	587	53,3
c)	Divorced/separated	81	7,4
d)	Widowed	97	8,8
e)	No answer	3	0,3
<i>6) Living in Lublin since birth?</i>			
a)	Yes	672	61,0
b)	No	429	39,0

Note: \* The sum exceeds 100% as some respondents declared more than one status.

**Table 2.** Summary statistics for the explanatory variables regarding residential satisfaction and financial situation

Question/variable		Response distribution				
		<i>very good</i>	<i>rather good</i>	<i>hard to say*</i>	<i>rather bad</i>	<i>very bad</i>
<i>7) How do you evaluate your own flat or house in terms of:</i>						
a)	area	35.6	53.6	0.9	8.6	1.3
b)	technical conditions	33.2	53.4	1	10.5	1.8
c)	location	51.6	39.9	0.8	6.8	0.9
d)	housing costs	15.6	44.8	3.3	29.1	7.2
e)	neighbourhood	33.7	49.3	3.6	9.5	3.8



**Table 2.** Continued

Question/variable	Response distribution				
	<i>definitely yes</i>	<i>rather yes</i>	<i>hard to say*</i>	<i>rather no</i>	<i>definitely no</i>
8) <i>Do you feel safe in your:</i>					
a) flat/house	72.4	25.7	0.2	1.4	0.4
b) neighbourhood during the daytime	66.1	31.4	0.09	1.8	0.5
c) neighbourhood at night	45.3	38.1	2.2	12.3	2.1
9) <i>How often do the following problems appear in your neighbourhood:</i>	<i>very often</i>	<i>often</i>	<i>hard to say*</i>	<i>seldom</i>	<i>very seldom</i>
a) apartment burglaries	1.4	4.8	10.2	33.4	50.2
b) street thefts or robberies	0.9	5.7	10.6	27.8	54.9
c) acts of vandalism	3.6	19.3	4.6	36.6	35.8
d) drunkenness	9.2	30	3.1	33.8	23.9
e) nuisance behaviours by neighbours	3.4	11.5	2.9	34.6	47.5
10) <i>How do you evaluate your neighbourhood in terms of:</i>	<i>very good</i>	<i>rather good</i>	<i>hard to say*</i>	<i>rather bad</i>	<i>very bad</i>
a) air quality	15.3	52.5	2.6	21.0	8.5
b) noise level	21.6	54.9	0.3	18.9	4.3
c) cleanliness	14.9	56.1	0.8	23.8	4.4
d) green areas	27.4	52.3	1.0	14.9	4.4
11) <i>How do you assess your:</i>	<i>very good</i>	<i>good</i>	<i>average</i>	<i>Bad</i>	<i>very bad</i>
a) financial situation	7.6	39.8	42.2	8.0	1.6

Note: \* *This option has not been read during the interview.*

**Table 3.** Coefficients and measures of fit of ordered logit models regarding willingness to move

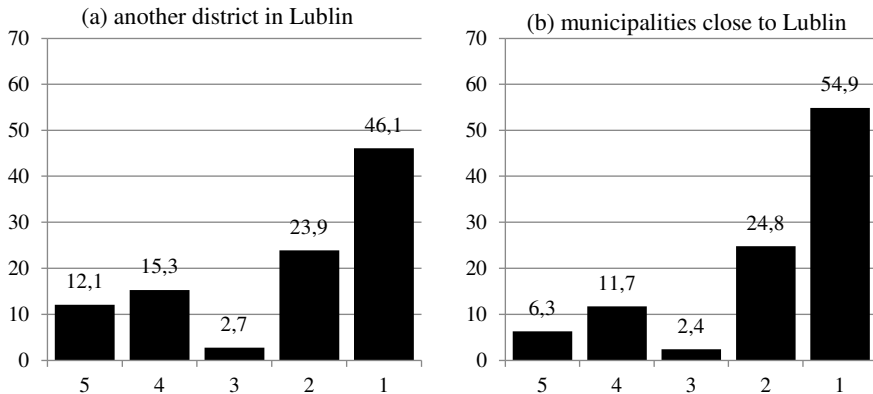
	<b>Another district in Lublin</b>	<b>Other municipalities near Lublin</b>	<b>A city outside the voivodship</b>	<b>Another country</b>
1b) Women	0.82	1.214	1.048	0.871
2) Age	1.007	0.762***	0.609***	0.617***
3) Education	0.987	1.085	1.101	0.879
4a) Employed	1.194	1.052	1.016	1.124
4b) Self-employed	1.072	0.821	0.995	0.805
4c) Unemployed	1.111	0.888	1.315	0.715
4d) Pensioner	0.286***	0.969	1.03	0.903
4e) In education	1.608*	0.918	0.716	0.849
4f) Family and household responsibilities	0.813	1.096	0.891	1.356
5a) Single	1.414	1.002	1.071	1.4
5b) Married/cohabiting couple	1.266	1.066	0.762	1.362
5c) Divorced/separated	1.142	1.201	0.709	0.92
6a) Living in Lublin since birth	1	1.388*	1.12	1.154

**Table 3.** Continued

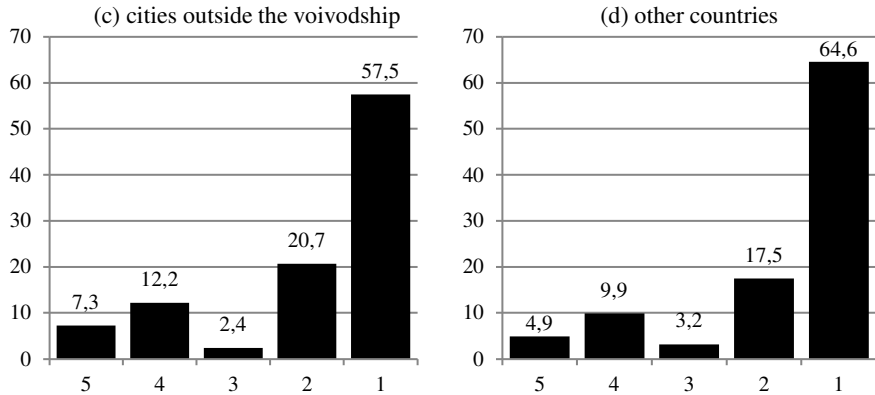
	Another district in Lublin	Other municipalities near Lublin	A city outside the voivodship	Another country
7a) Area of an own flat	0.854*	0.887	0.851*	0.865
7b) Technical condition of an own flat	1.06	0.819**	1.032	1.01
7c) Localization of an own flat	0.94	0.909	0.941	0.956
7d) Housing costs of an own flat	1.065	0.929	0.951	0.966
7e) Neighbourhood	0.938	1.021	0.93	0.818*
8a) Safety in an own apartment	1.048	1.104	0.848	0.882
8b) Safety in the neighbourhood during the day	0.97	0.83	1.08	1.145
8c) Safety in the neighbourhood at night	1.118	1.115	0.967	1.063
9a) Burglaries	1.087	1.01	1.089	1.191*
9b) Robberies or street thefts	0.956	1.085	1.007	1.016
9c) Acts of vandalism	0.961	1.019	1.003	1.031
9d) Drunkenness	1.1	0.935	0.968	1.028
9e) Troublesome neighbours	1.063	1.016	1.109	0.987
10a) Air quality	1.042	0.925	0.936	0.984
10b) Noise level	0.997	0.913	1.001	0.951
10c) Cleanliness	1.03	0.961	0.971	0.944
10d) Green areas	0.839**	1.094	0.997	1.063
11) Financial situation	1.084	1.116	1.158*	1.062
N	976	976	976	976
Likelihood ratio test: Chi <sup>2</sup>	0.000	0.000	0.000	0.000
Pseudo R <sup>2</sup>	0.055	0.044	0.086	0.087
Number of cases correctly predicted (%)	46.3	54.4	57.3	62.8

Note: \*  $p < 0.05$ . \*\*  $p < 0.01$ . \*\*\*  $p < 0.001$

**Figure 1.** Distribution of the intention to move among the respondents (in %)

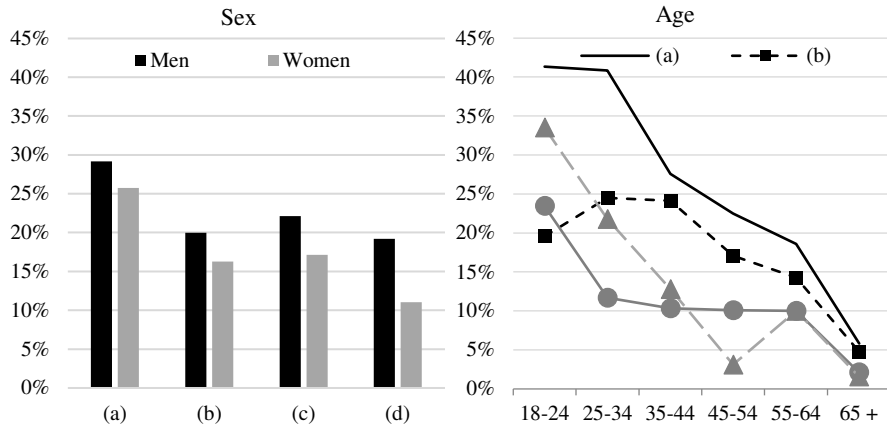


**Figure 1. Continued**

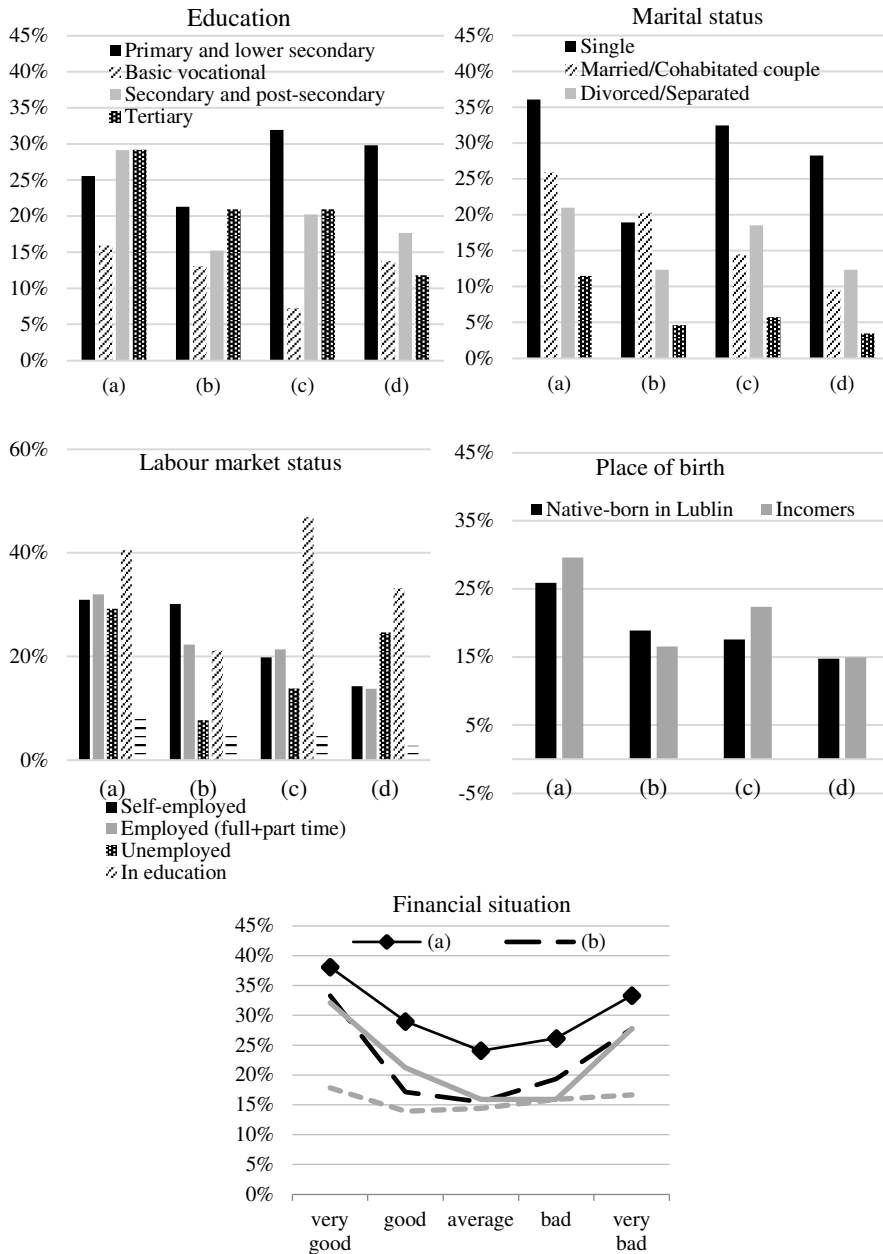


Explanations: 5–definitely yes, 4–rather yes, 3–hard to say, 2–rather no, 1–definitely no.

**Figure 2. Migration intentions and sex, age, education, marital status, status on the labour market, place of birth and the financial situation**



**Figure 2. Continued**



Explanations: Intention to move to: (a) – another district in Lublin, (b) – other municipalities close to Lublin, (c) – a city outside the voivodship, (d) – another country.