



RE M I N D E R

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS
IN NARRATIVES, DEBATES AND EU REFORMS

Impacts of Return Migration in Poland

WORKING PAPER

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REMINDER

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Impacts of return migration in Poland

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Abstract

As barriers to labour mobility have been lifted for migrants from Central and Eastern Europe, repeat and circular migration have become more common. However, not much is known about who is involved in this form of mobility. A significant number of the migrants who left Poland after the post-accession period have returned to Poland in the meanwhile, but studies on the effects of migration on their re-integration into the Polish labour market are thus far limited. This paper aims at contributing to a better understanding of the issue based on the analysis of available data. Using 2011 Polish census data, 2008 Labour Force Survey data, Central Statistical Office Estimates, as well as data from the 2002 census in Poland and by employing various relevant statistical techniques (binary and multinomial logistic regression model, probit model, Propensity Score Matching procedure, R-Pearson correlation), we have found that:

- Despite the financial and economic crisis in 2008 which affected the Polish economy in a rather delicate manner (contrary to the economies of important emigration countries for Poles such as Ireland, the Netherlands and the United Kingdom), there were no significant waves of return migration and according to the newest migration forecast for Poland, they will not occur in coming years (Anacka and Janicka 2018).
- Despite the greater economic activity on the part of returnees, the unemployment rate for this particular group is greater (even after controlling for the selection process by applying PSM procedure; the difference in 2008 was estimated at 1.5 pp.).
- Regional studies suggest that the over-qualification of return migrants experienced abroad results in skills waste upon return. As the over-qualification of ex-migrants is a widespread phenomenon (46% of the returnees in 2011 declared they were employed below their level of qualification when working abroad), skill waste has become a serious economic and social problem and calls for further investigation and policy that hinders this negative process.
- Only a small percentage of return migrants and, an even smaller share of the Polish population in general, declare an intention of changing their place of residence for abroad.



- Individuals who intend to re-emigrate are likely to be young, unattached, have high education levels and an unfavourable position in the Polish labour market such as working part-time, being inactive or unemployed. Repeat migration, thus, seems to be the result of disappointment with the situation in the Polish labour market. The characteristics of returnees who intend to re-emigrate resemble those of first-time migrants.
- Migration experience influences re-emigration plans. Longer periods of time spent in the host country are linked to future re-emigration plans.
- Migrants who worked abroad below their qualification level are less likely to plan a subsequent move abroad than those who have held jobs matching their qualifications. This indicates that negative experiences in the labour market of the host country may discourage returnees from re-emigrating.
- Post-enlargement migrants who returned from the UK and Ireland have a lower declared propensity to re-emigrate than those who returned from other EU countries.



Introduction

Labour mobility across intra-EU borders constitutes a key element of European integration. Freedom of movement is one of the 'four freedoms,' the cornerstones of European integration. The abolishment of barriers to freedom of movement and the support for mobile citizens thus stands at the core of many EU-funded programs and initiatives, to which this study subscribes.

Migration is defined as a change of a person's place of residence over an international border for at least 3 or 12 months. This definition gives no information on the duration or frequency of migration. In reality, a sizeable number of migrants do not move to another country for good, but return to their country of origin after some time, move to another country, or embark on repeated migration after having spent some time in their country of origin. Cross-border commuting or living in a transnational household are other forms of mobility not covered by the concept of migration.

In return (labour) migration, the reintegration of the return migrants into the labour market and the society of the country of origin are of paramount relevance. Does (return) migration lead to a successful positioning on the labour market of the country of origin and allow the application of knowledge and experiences obtained abroad or do returnees face de-qualification? Are (return) migrants 'agents of change' or do they find doors closed in the labour market or in society? Can migrants and the economy of the country of origin capitalize on their migration experience?

Poland is one of the EU countries with the highest numbers of labour migrants making use of freedom of movement in the European Union. A significant number of migrants who left Poland after the post-accession period have returned to Poland in the meanwhile, but studies on the effects of migration on their re-integration into the Polish labour market are thus far limited.

There were a few authors who have made an attempt to investigate the social, economic as well as demographic impact of return migration to Poland at regional and/or local level (Heffner and Sołdra-Gwiżdż 1997; Jaźwińska and Okólski 2001). However, their focus has



been mainly on the migratory experience per se and thus their work should be classified rather as studies on the emigration from Poland in the first post-transition decade (i.e. 1990s) rather than on return migration. The regional perspective is also present in the recent paper of Coniglio and Brzozowski (2016) and we refer to it several times, as it investigates the relationship between over-qualification while working abroad and economic performance on the domestic labour market upon return. Coniglio and Brzozowski proved that at least at the regional level, experiences of skills mismatching abroad foster a process of underutilization of skills after people return home.

This human capital perspective and potential brain-drain have been the interest of some authors (Fihel et al. 2006; Klagge and Klein-Hitpass 2010; Anacka and Fihel 2012) and this has probably been the most frequently adopted theoretical perspective. Anacka and Fihel (2012b) show that selectivity patterns of emigration and return migration induce a process of casting out whole categories of people (in terms of socio-demographic status) from the overall population, among them are e.g. people with tertiary education as well as those living in less attractive circumstances in terms of labour market conditions. Their conclusions confirm the results of previous studies on emigration from Poland which indicated that there is a persistent and deeply structural mismatch between labour market demand and the skills supply that creates the category of an 'economically redundant' population (Grabowska-Lusińska and Okólski 2009). A comprehensive study by Fihel et al. (2006) shows that before EU enlargement in 2004 when the return migration process was much less intensive than later on, there were some prospects for skill acquisition (such as language skills) in the case of well-educated Poles, who had developed unique knowledge and experience as managers and high-level professionals while working abroad. Those 'agents of change' boosted development and transformation processes in the post-transition period.

Taking an even narrower perspective, a few studies on return migration to Poland from particular countries of origin/destination (Koryś 2002; Slany and Małek 2002; Górny and Osipovic 2006) discuss the specificity of differently targeted migration streams. What seems to be common for all the studies referred to above is a focus on a human capital perspective and possible brain-drain process.



The prevalent approach in the literature on migration has been to treat return migration as a one-time definitive move from the host country to the home country. A sizeable number of both theoretical and empirical contributions examine the characteristics of return migrants and the consequences of temporary migration for the host and home countries and the returnees themselves. However, several studies show that once migrants return to the home country after a certain period of time abroad, they are likely to engage in international migration again. DaVanzo (1983) and Vadean and Piracha (2009) found that around half of the migrants who initially returned home make repeat movements between the home and host countries. Constant and Zimmerman (2012) demonstrated that 60% of guest workers in Germany are in fact repeat migrants. Migrants coming from countries that are geographically and culturally close to the host country are more likely to engage in repeat migration than those who come from more geographically and culturally distant regions (Bijwaard 2010). The same applies to migrants who move to countries where formal barriers to mobility have been lifted. According to Constant and Zimmerman (2012), 80% of migrants from EU countries who out-migrate from Germany later return to this country.

Several explanations have been provided in the literature for the reasons for migrants' return to the home country. Borjas and Bratsberg (1996) argued that return migration may be planned as part of a life-cycle in order to accumulate financial resources and return to the home country or it may be the result of erroneous information about opportunities in the host country. Other reasons include higher returns in the home country and human capital accumulated abroad, as well as a stronger preference for consumption at home, higher purchasing power in the home country compared to the host country (Dustmann and Weiss 2007) and higher returns to self-employment at home (Dustmann and Kirchkamp 2002). While return migration is considered a definitive move, repeat migration is viewed as a way of benefiting from available opportunities in both the host and home countries. In the language of economics, migrants maximize utility by repeatedly changing locations (Constant and Zimmermann, 2013). A specific feature of repeat migration is that it is a self-perpetuating phenomenon (DaVanzo 1983; Massey and Espinosa 1997). Having migrated once, an individual has acquired knowledge of the host country and built social networks which in turn significantly reduce the costs of subsequent trips.



The aim of this paper is to contribute to a better understanding of the above mentioned issues with regard to Poland, particularly:

(1) to contribute to the existing literature on the impact of migratory experience on labour market performance;

(2) to expand on existing literature on repeat migration by examining the relationship between socioeconomic characteristics and migration experience of return migrations, and their re-emigration intentions.

Here we use the terms 'repeat' and 'circular' migration interchangeably, although they may result in different consequences for the host and home countries. We define circular migration as repetitive back-and-forth movements by the same person between two or more countries to study or for work, whereas repeat migration may also involve a one-time return to the home country followed by permanent emigration to the previous or another country of destination. In turn, temporary migration is defined as a 'single back-and-forth movement, with a limited stay in the country of destination' (European Migration Network 2011).

This paper has two main sections. The first section looks at the impact of migratory experience on labour market performance. It aims to expand the current state of knowledge on the labour market effects of return migration by addressing two important research areas. First, it analyses how return migrants fare in the labour market compared to non-migrants in terms of their labour market participation and unemployment rates and their determinants. Second, it examines the impact of migration experience, i.e. being overqualified abroad, on migrants' labour market status in Poland. These two questions address the problem that has been under-researched in the literature on the recent migration flows in the EU which focuses on the impact of massive emigration after EU enlargement in 2004.

The second section addresses emigration intentions and past migration experience. The aim of this section is to examine how socioeconomic characteristics and migration experiences



of returnees relate to their re-emigration intentions. For this purpose we operationalise migration experience as the length of time spent abroad and position in the labour market in the host country.

Each of the two sections follows a similar structure. After a short introduction of the literature particularly relevant for the Polish case, data, methods and results are presented. The concluding section of the paper brings together main outcomes.

Impact of migratory experience on labour market performance

Return migration to Poland became the hot issue of public debate shortly after Poland joined the European Union (Fihel et al. 2008; Iglicka 2009; Grabowska-Lusińska 2010). During the first 2.5 years of Poland's EU membership, more than 1 million people left Poland and the return migration inflow was expected to appear in the years following this massive exodus. These expectations were deduced on the one hand from Ravenstein's law which states that '[e]ach main current of migration produces a compensating counter-current' (Ravenstein 1885:199), and on the other hand, from the fact that the economic crisis in 2008 did not hit the Polish economy as much as other European countries.¹ The expected massive return inflow has nevertheless not occurred so far, which poses a serious question about why, in spite of favourable general economic conditions, the second migration law formulated by the famous British geographer has not been fulfilled. In an attempt to clarify this issue, we propose deepening the economic understanding of the main drivers of recent population flows. We argue that generally favourable conditions in the economy in the country of origin simply do not translate into favourable conditions in the labour market for different groups of its participants, including return migrants in particular. To investigate potential discouraging factors that inhibit return migration to Poland, we compare the labour market status of return migrants and non-migrants. We hypothesise that if return migrants have the advantage in economic performance over non-migrants, then the labour market – which is perceived as the most important driver of both emigration and immigration – acts as a pull factor for potential return migrants. We improve our analysis by discussing potential long-term skill waste that may be a result of two interconnected

¹ Poland was the only EU-member country with a positive GDP growth rate in 2009 (2.8 per cent).



phenomena: the recent population outflow from Poland which contained a relatively high share of highly-skilled persons (Anacka and Okólski 2010; Grabowska-Lusińska and Okólski 2009) and a low rate of return inflow.

Literature overview

There are few quantitative studies examining the labour market effects of post-EU enlargement return migration for the countries of origin which are crucial in interpreting the impact of recent migratory processes. Reports by the Polish Central Statistical Office (CSO 2008, 2013, 2017) as well as papers investigating demographic aspects of return migration to Poland and the selectivity of this process (Anacka 2010; Anacka and Fihel 2012a, 2012b) form the basis and a starting point for our research. Another study by the University of Warsaw Centre of Migration Research team (Kaczmarczyk et al. 2016) has also been exploited here as it discusses the idea of migration in terms of economic assets and investigates the potential returns it creates once the migrant returns to his/her homeland. Kaczmarczyk and his colleagues (2016) directly address the question of the impact of having migratory experience on economic performance in the domestic labour market and conclude that, generally speaking, in the short term at least, economic returns from return migration are probably negative.

In this section, we focus on the economic performance of return migrants which has been the subject of many studies focusing on other cases than the Polish one. Kaczmarczyk et al. (2016) provide an in-depth literature overview of the possible interplay between return migration and labour market conditions. Here we refer only to a few papers of interest to us when describing the contextual background. The Irish case studied by Barrett and Trace (1998) as well as by Barret and O'Connell (2000), for example, come to the conclusion that the advantage of return migrants in domestic labour market is limited with the wage premium of only ca. 10-15% (comparing to non-migrants), which is relatively low if we take into account the cost of the re-integration upon return (De Jong et al. 2002; Barrett and Mosca 2013). There are several studies devoted to the economic performance of returnees (e.g. Vadean and Piracha 2009) in less developed contexts (Albania, China, Senegal) but their result cannot be easily translated into the European environment. We mention them, however, to signalize the wide recognition of the problem.



Data

Data on recent return migration to Poland is scarce but also, apparently, underexplored. Basically, if one wants to investigate the scale and the structure of the population inflow of immigrants to Poland with Polish citizenship (basic, general and frequently used definition of return migrant) and/or those who had previously lived in Poland, one can make use of the following data sources:

- 1) data on individuals from the national population census conducted in Poland 2011,²
- 2) data on individuals from the Labour Force Survey, ad hoc module conducted in 2008 which has been designed to investigate the economic situation of immigrants (return migrants in particular),
- 3) Central Statistical Office estimates of the long-term migration streams to/from Poland in years 2009-2016,
- 4) data from the national population census conducted in Poland in 2002.³

The data sources enumerated above are available either at the individual level or as tabulations and cross-tabulations presented in publicly available reports. All of the databases we referred to are based on the Central Statistical Office (CSO) surveys. Despite the drawbacks of the methodology applied (discussed extensively in yearly SOPEMI Reports, see e.g. Kaczmarczyk 2015), CSO is the most reliable and convenient data producer in the field of migration statistics. Various categories of migrants usually constitute very low shares of the general population (Billsborrow 1997), thus one needs surveys with large samples (or even overall population) in order to investigate issues connected with the migratory experience. In the case of Poland, there are no registers other than the population register that could add another perspective or an input on the analysis based on the CSO data on return migration/migrants.⁴ What's more, there are only a few surveys apart from the Labour Force Survey that can serve as a valuable source of information in the migratory experience of Poles.⁵ The analysis we provide has been fed with information taken from all

²Limited and/or restricted access.

³Data on individual level unavailable.

⁴ Quality of the data from population registers is very low (Okólski 1997).

⁵ The most valuable one of the migratory experience among Silesian population has been mentioned in the report.



of the datasets mentioned, however, the novelty we propose is the extensive use of the LFS data on individuals which – to the best of our knowledge – has not been applied so far.

Methods

The aim of this section is to assess the impact of previous migratory experience on the labour market performance with a special focus on the problem of skills attained. Thus, we deal with two specific research questions: do return migrants have higher unemployment and inactivity rates than non-migrants, and what is the impact of the level of skill acquisition on the economic activity of return migrants? To address these research questions, we compare unemployment rates for non-migrants and returnees using LFS data. However, having in mind that the migratory experience is a result of the selective process, we improve our analysis by applying the Propensity Score Matching model (PSM) that gives the formula for recalculating weights for individuals. Applying PSM weights, moreover, allows for the proper assessment of the impact of specific factors on individual output.

PSM has been designed for dealing with a sample selection problem (Rosenbaum and Rubin, 1983). It imitates an experimental design in which, when controlling for other confounding variables, one may measure the treatment effect directly. Once introduced, PSM has been widely used in the studies for which an experiment design was not possible to apply but for which survey data were available (Pan and Bai 2015).

We support our analysis with the macro-perspective which focuses on regional patterns of the relationship between unemployment and intensity of return migration. We employ CSO data on the number of returnees in the region based on the National Census and LFS data on the unemployment rate (in the region) and provide a R-Pearson correlation for the two series.

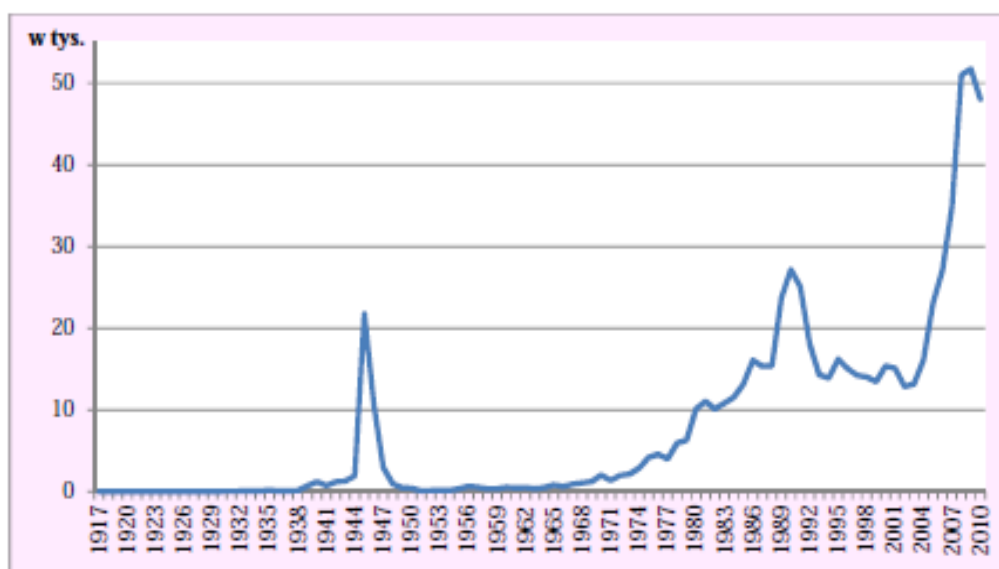


Results

Scale and dynamics of the recent migration flow to Poland

According to the national census (2011), 730,000 Polish residents experienced at least one one-year period of staying abroad.⁶ More than half of them (59%) had returned before the previous population census was conducted (in 2002) and only 172,000 arrived in the post-crisis period (2008-2011). However, the number of returnees after 2008 seems to be relatively low compared to the number of Poles registered as permanent residents in Poland living abroad, which was as high as 2.27 million persons as of December 31st, 2007 (see Fig. 1).

Figure 1. Stock of return migrants surveyed in 2011 by year of return (in thousands)



Source: CSO (2011: 72)

Poles were perceived as highly mobile after EU Enlargement in 2004. Hence, the relatively low number of returnees seems to be surprising. It may be explained on the one hand by the fact that in the case of Poland, people relatively frequently move back and forth and migration is not a one-step process. According to the CSO estimates at the end of 2010, around 2 million so-called permanent residents were living outside the country, while 25% of them (500,000) were staying abroad for less than one year. This means that the strategy

⁶ The number doesn't cover those who were staying abroad at the moment when the census was conducted as well as those who had never lived in Poland before going abroad.

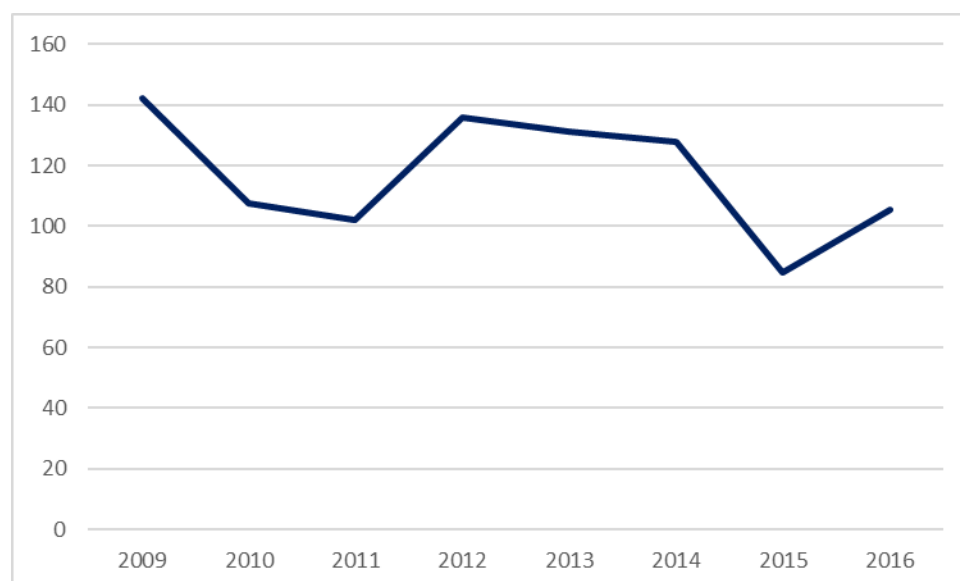
of incomplete migration⁷ popular among Polish migrants since the late 1980s (see Jaźwińska and Okólski 2001) was still widespread and adapted in Poland in the late 2000s. Those migrants who have adapted to this strategy spend some amount of time abroad (usually a few months up to a year) followed by a period of living at home in Poland. They are not typical seasonal migrants as the periods of their stays are longer than 3 months and the job they perform cannot always be treated as seasonal (i.e. from the agriculture or construction sector, connected with tourism etc.). Another fact that may be important in this case is that the German labour market may have attracted some return migrants once the transitional period ended in 2011, which should be taken into account when interpreting the results of the last population census.⁸ On May 1st, 2011, the labour market in Germany opened up to citizens from EU8 countries. It may be assumed that those who planned to take up employment under the new policy regulations left Poland before the 1st May, 2011 (as was the case in 2004 when the UK opened its labour market for EU8 citizens, see Kaczmarczyk, Mioduszevska, Żylicz 2009).

The relatively high popularity of the 'back and forth migration stream' can be partially confirmed by CSO estimates of return migration flows to Poland since 2009. According to this data source, the number of returnees was relatively stable over the period 2009-2016 and at least twice as large as the number of returnees estimated on the basis of the population census data (Fig. 2).

⁷ Incomplete migration is a concept similar to that of circular migration, but the former does not have the regularity inherent in the latter strategy and assumes that the migrant locates his/her interest in two places simultaneously (see Jaźwińska, Okólski 2001). This concept has a long tradition in Polish studies on emigration. It has been introduced and exploited by demographers and has much in common with the notion of transnationalism (see e.g. Bauboeck, Faist 2010), understood narrowly as 'migrants' durable ties across countries' (Faist 2010).



Figure 2. Number of return migrants according to CSO/Eurostat estimates (inflows, yearly).



Source: own elaboration based on Eurostat.

The relatively good situation in the Polish labour market did not play an important role in facilitating the return migration inflow in the period 2002-2011. The most frequently indicated reasons for coming back to Poland were 'missing family' (26%), 'accompanying family' (11%) or 'expiration of a work contract' (10%; CSO 2013:74). Similar results were obtained in 2008 when the same issue was investigated in the LFS *ad hoc* module.

Returnees who had stayed abroad for at least three months declared that they had moved back to Poland due to the fact that they 'didn't plan to stay longer abroad,' 'their work contract had expired' or they 'performed seasonal work' (29%). The second most important reason was that they 'missed their family' or were 'accompanying persons to other return migrants' (9.5%) (CSO 2008:15).

Economic performance of the return migrants in the domestic labour market

Analysis of the structure and economic activity of Polish return migrants based on the previous population census (2002) showed that those who stayed abroad for at least 12 months had much higher activity rates⁹ than those who had never been outside the

⁹ We employ definitions here based on an ILO statistical recommendation, i.e. *unemployed* persons are those who, during the reference week: (a) had no employment, and (b) were available to start work within the next two weeks, and (c) had actively sought employment at some time during the previous four weeks; the



country: 65% of returnees were economically active, whereas the economic activity rate for the overall population was 55% (Fihel et al. 2006). However, the probability of being unemployed was almost the same for returnees and non-migrants (20-21%). The positive side of experiencing unemployment by returnees was that the period of job-seeking was in their case 20% shorter than the average (1.2 years instead of 1.5 years), and even much shorter (1 year) if they had a university degree. It has been shown that those who moved to Poland before the year 2002 had a strong and positive impact on the Polish economy as their skills filled gaps in a still-transforming Polish labour market. Census data revealed that 80% of return migrants with tertiary education were professionals, managers, and high-level officials (Fihel et al. 2006).

Differences between the economic activity of return migrants and those who remained in 2011 became much smaller than they had been almost a decade earlier. The activity rate among those who had stayed abroad for at least 12 months was 58.4%, whereas the activity rate for non-migrants was 54.8%. However, both of these groups appeared to be much more visible in the labour market than short-term return migrants (40.5% of the latter were economically active). Despite differences in economic activity, unemployment rates for these three population categories were almost the same – 12.3% for short-term returnees, 12.8% for long-term returnees, 12.1% for non-migrants. This may be surprising in light of the fact that return migrants were much better educated than non-migrants: almost 30% of the former held university degrees (8.4% of them were PhDs), whereas the same was true only for 17.5% of non-migrants. There were also more people with secondary vocational and vocational education level among returnees (see Table A3, Annex), which means that they appeared to be much better qualified workers than the average.

employed comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories: (a) paid employment: (a.i) at work: persons who during the reference period performed some work for a wage or salary, in cash or in kind; (a.ii) had a job but not at work: persons who, having already worked in their present job, were temporarily not at work during the reference period and had a formal attachment to their job. This formal attachment should be determined in the light of national circumstances, according to one or more of the following criteria: the continued receipt of wage or salary; an assurance of return to work following the end of the contingency, or an agreement as to the date of return; the elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs; (b) self-employment: (b.i) at work; persons who performed some work for profit or family gain, in cash or in kind during the reference period; (b.ii) with an enterprise but not at work: persons with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason (ILO Guidelines, OECD Statistical Glossary, online).



The unemployment level of return migrants seems to be relatively high when we take into account that more than a quarter of them were living in medium sized towns and cities (over 300,000 inhabitants), where job opportunities are much better than in small towns and villages (even when controlling for the region; see Table A2, Annex). Nevertheless, return migrants are less likely to rely on other household members' income than the average (10.6% for long-term migrants and 19.8% for short-term migrants vs. 31.9% for non-migrants). Employment is the most popular source of income for long-term return migrants (37.9% rely on it). They are also more likely to be self-employed than those who remain put (9.0% versus 4.0%; see Table A4, Annex).

The results gathered through the analysis of the census data need further investigation, as both employment and unemployment rates depend on the socio-demographic composition of the given sample. As we have already mentioned, during the whole post-transition period in Poland (i.e. since 1989), we observed strong selectivity not only in emigration (Anacka and Okólski 2010) but also in return migration. Fihel and Anacka (2012) demonstrated that as of 2009, there was a strong overrepresentation of people with basic vocational education, those living in rural areas, and those with experience in migration to Germany, which was at that time the country offering jobs for relatively low-skills persons, mostly in the agriculture sector. These features made returnees more likely to perform worse than average in the labour market. Nonetheless, at the same time, almost two thirds of return migrants were males who were heading to their homes in Wielkopolskie or Dolnośląskie which are the regions situated in the western part of the country that offer better opportunities in the labour market than one can experience in other regions of Poland. The overall effect of these contradictory forces on the economic performance of the potentially employed seemed to be unfavourable for returnees, however. In spite of the fact that the rate of economic activity was much higher for those having migratory experience (by almost 20 pct.), the probability of being unemployed was also significantly higher for them (by 3 pp.; see Anacka and Fihel 2012).

Having in mind that in this particular case double selectivity¹⁰ may have occurred, Kaczmarczyk et al. (2013) made an attempt to analyse the relationship between economic

¹⁰ First, there is a selectivity towards emigration, then migrants already settled abroad make decisions on their



activity and migratory experience by applying a simple multinomial logit model with labour market status as a left-hand side variable with three categorical levels (i.e. unemployed, employed, and inactive; for detailed results of the estimation procedure see Table A5, Table A6, Annex). They found that a significant joint effect is observable on migratory experience and other socio-demographic features (see Table 1 below).

Table 1. Likelihood ratio test of migratory experience effects

Variable	DF	Wald Chi-Square	p-value
Migratory experience	4	16.048	0.0030
Migratory experience and age (joint effect)	12	29.606	0.0032
Migratory experience and living in an agricultural household (joint effect)	4	9.804	0.0439
Migratory experience and education (joint effect)	16	54.657	< 0.0001

Source: Kaczmarczyk et al. (2016).

When controlling for socio-demographic characteristics in terms of the unemployment equation (Table A5, Annex; note that employment is the reference status), the probability of being unemployed is 2.5-fold higher for short-term return migrants, and 3 to 5-fold higher for long-term return migrants aged 18-44, compared to non-migrants. The interaction of short-term migration and living in an agricultural household also turns out to be significant. That is, such migrants face a more than 2-fold higher probability of being unemployed than non-migrants (living in an agricultural household). Finally, both short- and long-term migration reduce the employment opportunities in the case of persons with a vocational and post-secondary level of education.

Before providing an in-depth discussion of the model outcomes, we extend the abovementioned analysis with the results of the Propensity Score Matching (PSM) procedure which provides the augmented unemployment rates for both return migrants and non-migrants. In our study, we employ the PSM procedure to measure the difference

return, which is also conditional on their socio-economic and demographic features.

between the unemployment rate (outcome) of the returnees (treatment) and people without migratory experience (control) with the use of the 2008 LFS data.¹¹ First, we estimate the parameters of the logistic regression with the binary variable indicating whether a person belongs to the treatment or control group (i.e. has returned from abroad after at least three months of absence in the country or has never been abroad). As a result, we obtain a formula for calculating propensity scores (see Table A7, Annex)¹² which are simply taken from the logistic regression output and are equal to the predicted probabilities of being viewed as a treatment case (see Fig. A1, Annex).

The core of the PSM method is an algorithm that allows us to find pairs of cases with the most similar values of explanatory variables from the logistic regression¹³ ('statistical twins'), among which, one case belongs to the treatment group and the other one to the controls. As a result, we obtain well-balanced samples with a similar distribution of variables taken into account when estimating the logistic regression equation (see Table 2 below).

¹¹ The same dataset has been used by Kaczmarczyk et al. (2016).

¹² From a theoretical point of view, there is no need to be concerned with the selection of the variables used at this stage as the predictive power – being a subject of maximization procedure in typical application of the model – is neglected here. The logistic regression equation should be fed with any variable that is or might be correlated with the outcome as '[t]he more liberal we are in including variables in our propensity score creation, the less chance that we have unaccounted hidden bias' (Gant and Crowland 2017).

¹³ This means they have the closest possible propensity score values.



Table 2. Composition of the treatment and control samples after PSM

Category	Return migrants	Non-migrants
Percentage of		
males	63.4	63.2
persons aged 15-17	0.3	0.3
persons aged 18-19	7.9	7.8
persons aged 20-24	11.4	11.7
persons aged 25-29	9.7	9.4
persons aged 30-34	8.3	8.6
persons aged 35-39	8.6	8.6
persons aged 40-44	11	10.8
persons aged 45-49	11.9	11.8
persons aged 50-54	7.9	7.8
persons aged 60-64	6.5	6.5
persons aged over 64	16.2	16.4
non-married	21.4	21.4
married	64.7	64.8
widowed	8.6	8.3
divorced	5.3	5.5
living in urban area	65.0	64.9
persons with tertiary education	21.7	21.9
persons with post-secondary education	25.0	24.8

Category	Return migrants	Non-migrants
persons with secondary education	8.2	8.1
persons with vocational education	30.3	30.3
persons with background education or without formal education	14.8	14.9
persons being hhh ^a	55.7	55.8
persons being wife or husband of hhh	21.1	21.3
persons being partner of hhh	1.1	0.9
persons being child of hhh	16.4	16.4
persons being child in law of hhh	1.7	2.0
persons being parent in law of hhh	2.3	2.2
persons being grandchild of hhh	0.9	0.9
persons being sibling of hhhh	0.3	0.3
other relatives	0.0	0.0
other hh members	0.3	0.2
N	1,741	1,741

a 'hhh' abbreviation stands for 'head of the household'

Source: own elaboration based on LFS data.

The matching algorithm performed very well in creating treatment and control groups which then allow us to calculate the unemployment rate for both. Although the matching procedure was adopted, the difference between the unemployment rate for returnees remained significant – there were 8.3% job-seekers among economically active returnees and only 6.6% among economically active non-migrants. This result validates preliminary

results on the negative impact of migratory experience about the economic performance in the Polish labour market upon return. There are several explanations for this fact:

- (1) migration may result in human capital depreciation and, at the same time, creates limited options for using skills acquired abroad,
- (2) migration results in a weakening of social ties which would otherwise foster the process of job-seeking,¹⁴
- (3) migration discourages potential employers who perceive return migrants as more mobile and thus as unstable employees,
- (4) migratory experience is a signal to the potential employee that there might be a possible skills mismatch between the potential employee and the position (s)he is applying for (Kaczmarczyk et al. 2016).

The first possible explanation has been confirmed within the framework of the study of return migration to the Silesia region in Poland (Coniglio and Brzozowski 2016). Coniglio and Brzozowski (2016) show that regardless of the method applied, the skills mismatch experienced during the stay abroad was significantly correlated (when controlling for other covariates) with the probability of skill waste upon return (Coniglio and Brzozowski 2016:95). This led, as has been shown in the study we refer to, to a higher propensity for being economically inactive and likewise resulted in lower chances of finding a job in Poland. The fact that almost half of the return migrants in 2011 (46% according to National Census data) declared that their employment abroad was below the level of their qualifications implies that this may be the most important potential source of difficulty in the economic reintegration of return migrants in the domestic labour market.

These findings are in line with previous analyses of emigration from Poland which indicated that opening the European labour market to Poles in 2004 for the first time in post-transition history gave a chance to the so-called 'economically redundant population' of finding better economic opportunities abroad (see Kaczmarczyk and Okólski 2008). Those

¹⁴ The insider advantage is one of the most important reasons for immobility according to Fischer et al. (2000).



who came back upon 'bitter return' (Coniglio and Brzozowski 2016) faced similar problems in the domestic labour market to those experienced before migration.

On the basis of the explanation provided above we may assume that returnees anticipate to some extent difficulties in finding a job in Poland, which results in the observed pattern in the relative number of returnees and the unemployment level. Both the number of return migrants and their share in the total population in the region are negatively correlated with the regional unemployment level (see Table 3).

Table 3. Number of returnees in regions and the unemployment level (2011).

Region	Unemployment rate	Number of returnees	Share of return migrants in the total population of the region
Dolnośląskie	10.2	39,274	0.039
Kujawsko-Pomorskie	10.6	9,325	0.019
Lubelskie	10.9	9,673	0.019
Lubuskie	8.2	12,534	0.031
Łódzkie	9.4	11,765	0.017
Małopolskie	8.7	19,091	0.029
Mazowieckie	8.2	43,226	0.033
Opolskie	9.1	9,470	0.032
Podkarpackie	12.2	12,686	0.030
Podlaskie	8.4	8,012	0.036
Pomorskie	8.0	24,905	0.034
Śląskie	9.1	24,838	0.023
Świętokrzyskie	11.9	4,883	0.020

Region	Unemployment rate	Number of returnees	Share of return migrants in the total population of the region
Warmińsko-Mazurskie	8.9	11,185	0.027
Wielkopolskie	8.8	16,915	0.019
Zachodniopomorskie	11.4	15,305	0.029
R-Pearson correlation with the unemployment level		-0.330	-0.317

Source: own elaboration based on CSO data.

Emigration intentions and past migration experience

As repeat migration becomes increasingly common in regions where there are no formal restrictions on cross-border mobility such as in the EU, a subject of interest for study is what distinguishes migrants who return to their home country for good and from those who make a subsequent move or moves abroad. How do their characteristics and migration experiences differ? The aim of this study is to examine how socioeconomic characteristics and migration experience of returnees relate to their re-emigration intentions. We operationalize migration experience as the length of time spent abroad, position in the labour market of the host country, i.e. if they held jobs commensurate with their qualifications, and the destination country.

Our empirical analysis focuses on Polish return migrants as Poland has a rich history of temporary migration and plays a central role in movements within the EU. We also compare the experiences of returnees with the history of migration before and after the 2004 EU enlargement. As the issue of the determinants of repeat migration within the context of East-West migration in the EU is under-researched, we hope to contribute to filling this gap in the literature.

The remainder of this paper is organised as follows. First, a review of literature on the determinants of repeat migration is presented. Second, the background of the history of emigration from Poland and data used in this section is described. Third, the empirical and methodological approaches are discussed. Finally, after descriptive statistics, the section presents empirical findings regarding the relationship between the characteristics of returnees including their migration experience and their re-emigration intentions.

Literature review

In this section, for the sake of completeness, we will briefly review selected theoretical approaches that have been used to explain return migration and repeat migration. Next, we will refer to available empirical studies on repeat migration.

Theoretical approaches

According to neoclassical economics, migrants are rational actors who make their decisions to move abroad based on a cost-benefit calculation, with wage differentials between the host and home countries being the main driving force (Todaro 1969). Return occurs as the result of a failed migration experience. Return migrants are those who miscalculated the costs of migration and overestimated the expected benefits from migrating (Borjas and Bratsberg 1996).

In turn, New Economics of Labour Migration (NELM) rests on the assumption that migration is a household's strategy of spreading income risks and of overcoming market constraints (Stark 1991). Migrants return after they have managed to collect and remit enough financial and human capital to realize their investment plans. Return is, thus, the success resulting from achievement of one's goals in the host country (Dustmann 2003). Constant and Massey (2002) tested empirically neoclassical economic theory and NELM and found that the probability of return is determined by the initial motives of migrants, i.e. whether they want to maximize lifetime earnings or overcome market deficiencies in the home country.

While neoclassical economics and NELM focus only on the migrant's host country experience, the structural approach takes into account also social and institutional factors in the home country. Whether return is a success or a failure is to a large extent determined by conditions in the local context of the home country and how well migrants adjust to



them. Cassarino (2008) found, for example, that economic and institutional circumstances in the home country affect post-return experiences. The structural approach postulates that if the migrant fails to readjust, he or she may plan to emigrate again (Cassarino 2004).

Transnational theory (e.g. Portes et al. 1999; Vertovec 2004) posits that migrants routinely implement activities and maintain commitments linking them with their families and social organisations in the home country. More specifically, through transnational ties, migrants conduct family affairs, economic activities and cultural practices, and maintain political interests. This is all the more so the case now that modern technology has greatly reduced transportation, communication and banking costs, and has enabled migrants to simultaneously engage in activities in different countries (e.g. Guarnizo 1994).

Empirical studies

The empirical literature in economics on repeat migration is scarce largely due to the fact that reliable data is hard to obtain. There are a few studies on developing countries.¹⁵ As regards the US, Massey (1987) measured how various variables affect the probability of Mexicans emigrating from their home country, undertaking repeat migration, settling in the US and/or returning to Mexico. He found that different factors account for the likelihood of first-time migration as opposed to later trips. While migrant networks and the migration tradition play a major role in initiating migration, the migration experience itself determines the decision about whether to make subsequent moves to the US. Thus, the likelihood of repeat migration increases with the length of time spent in the US, the number of previous trips to the US and the presence of the migrant's wife. Interestingly, apart from the migration experience, only owning a house in Mexico serves to affect the probability of subsequent migration while marital status, age, education, the presence of children and ownership of a business or land are insignificant for the decision on repeat migration.

Massey and Espinosa (1997) studied the determinants of migration – both documented and undocumented – between Mexico and the US. They analysed which factors initiate migration, sustain it and make migrants return to their home country. They argue that migration is propelled by the formation of social networks and migration-specific human

¹⁵ For an overview see Constant and Zimmermann (2013).



capital which mutually reinforce one another and promote more mobility between the host and the home countries. They established that accumulation of migration experience – operationalised as the length of stay in the US, prior trips to the US and occupational achievement – constitutes a major factor that increases the odds of repeat migration. Additionally, repeat migration is more common among documented migrants than among the undocumented ones.

In the European context, most studies have examined repeat migration from the perspective of the host country. Focusing on guest workers in Germany, Constant and Zimmermann (2011) study the characteristics of circular migrants and their influence on the frequency of exits and the overall time spent outside the host country. Based on data from the German Socioeconomic Panel and on count data models, they found that migrants who have high levels of education, maintain a residence in Germany and are attached to the German labour market, spend longer periods of time in Germany, whereas migrants whose families stay in the home country are more likely to remain out of Germany longer. In turn, male migrants and migrants who have German passports make more frequent trips outside Germany.

In another study, using the same dataset, Constant and Zimmermann (2012) examine the behaviour of repeat migrants from a life-cycle perspective and compare the characteristics of immigrants who settled in Germany to those who make repeat moves between Germany and the home country. Employing the Markovian framework,¹⁶ they found that migrants most likely to leave Germany and later return are male, have spent just a few years in the host country, remit money, have vocational training from Germany and a spouse and children in the home country. By contrast, speaking German, having a job in Germany and being married decrease the probability of leaving Germany.

Meanwhile, Bijwaard (2010) analyses factors that influence the departure of immigrants and the repeat moves back to the Netherlands. Using data from Statistics Netherlands and a mover-stayer duration model, Bijwaard found significant differences between labour migrants and students and family migrants in terms of their propensity to leave the

¹⁶ The Markov chain is a stochastic model which describes a sequence of events in which the current state only influences the probabilities of the future state.



Netherlands and return from abroad. Labour migrants are by far the most mobile group. Students are the most prone to leave the Netherlands and hardly ever return in contrast to immigrants coming for family reasons who have the lowest propensity to leave and often return from abroad. Migrants originating mostly from Turkey and Morocco, i.e. countries with which the Netherlands signed guest worker agreements in the 1960s and 1970s, are more likely to stay permanently in the Netherlands than those coming from Western countries.

There are hardly any studies on repeat migration using source country data. One notable exception includes the paper by Vadean and Piracha (2009) on Albanian migration. Their focus is on socioeconomic characteristics and previous migration experience of repeat migrants as opposed to migrants who return to Albania for a permanent stay. First, using the multinomial logit model, they examine the characteristics of non-migrants, migrants who emigrated permanently from Albania, return migrants and repeat migrants. They then analyse the likelihood of return migrants emigrating again. In order to control for double selection into emigration and then return migration, they use the probit model with two sequential selection equations. Using the Albanian Living Standard Measurement Survey, they found that being male, having a low level of education, finding a job in the host country and coming from a rural area increase the likelihood of repeat migration. In contrast, older age, having secondary education, achieving a financial target or being unsuccessful in the labour market of the host country make migrants more prone to stay in the home country following their return from abroad.

Background and data

Poland has a long history of emigration. Starting in the 1880s, it experienced several massive waves of emigration. Up until the mid-1940s, movements from Poland took the form of settlement migration with the majority of emigrants taking up residence in the US and, to a lesser extent, countries in Europe. After the imposition of Communist rule, emigration from Poland largely stopped. As foreign travel became possible again in the 1980s due to the lessening of restrictions on emigration, two million people left Poland for the West. While over a million were short-time migrants, a great number emigrated indefinitely (Stola 2010). After the fall of the Iron Curtain, a shift in migration policy i.e. the



introduction of visa-free regimes resulted in fewer migrants emigrating with a view to settle in the host country. The majority undertook temporary or circular mobility (Fihel, Kaczmarczyk, Okólski 2006).

Poland's accession to the European Union on 1 May 2004 marked a turning point in Polish emigration history. Only in the decade after 2002 did the stock of Polish permanent residents abroad increase one-and-a-half-fold from 786,000 to 2,017,000. It reached a peak in 2007, when 2,270,000 migrants stayed abroad (CSO). Furthermore, not only has the scale changed, but likewise the composition of Polish emigrants and the destinations they are headed for. This massive post-accession outflow has been characterized by an overrepresentation of young people and university graduates. Germany and non-European countries such as the US have lost their dominant position as destinations for Polish migrants in favour of mostly English-speaking EU member states, i.e. the UK and Ireland, followed by the Netherlands and other 'old' EU countries.

Poland's accession into the EU has given rise to more diversified patterns of mobility of Polish nationals. The available data indicates that migration from Poland is, to a large extent, temporary, and influenced by economic conditions in the host and home countries. At the time of the latest census in 2011, over one million residents of Poland had a history of migration for longer than a year. The rate of return migration was particularly high in 2008 and 2009, i.e. the period of economic downturn in Western Europe.

As shown by Fihel and Grabowska (2014), some migrants still undertake repetitive trips abroad for employment, in many cases reconciling work in Poland with the job in the host country. These are mainly migrants working in low-ranked occupations and those who are paid low wages in Poland including nurses and teachers.

The data used in this study stem from the 2011 Polish Census of Population and Housing, and more specifically from its representative survey, which covered approx. 20% of residences (i.e. 2.74 million) in Poland. The survey was mainly carried out by means of direct interviews with the residents of homes sampled. It included persons who were registered as permanent residents of Poland. Besides collecting a wealth of information on standard demographic characteristics, including education and labour market activity of Polish



residents as well as their migration intentions, the survey allows for the identification of return migrants and, to a lesser extent, emigrants. Return migrants are defined as individuals who left Poland and resided abroad for at least a year prior to returning. The census contained questions related to their experience abroad including the year of emigration and return, destination, whether they worked abroad and if the job was commensurate with their qualifications. We can therefore distinguish between pre-EU accession migrants and those who emigrated after 1 May 2004. The census data shows that return migrants made up roughly 2% of permanent residents of Poland living in the country at that time. Moreover, a quarter of returnees have a history of emigration in the period following Poland's accession to the European Union in 2004.

As regards the emigrants, the information concerning such things as their former place of residence in Poland, destination, length of stay abroad and education, all derives from household members who stayed in Poland. Unfortunately, a lot of this data is missing. Information on education, for example, was collected for fewer than 20% of emigrants. It is nevertheless worth noting that the census contains the largest sample of returnees of all data sources available in Poland and has been largely unexplored as regards migration data.

The sample used in this study is composed of return migrants aged 16-65 years. Excluding those return migrants for whom some variables are missing, our final unweighted sample contains 88,924 observations.

Empirical and methodological approach

As noted earlier, our aim is to study the effect of return migrants' characteristics and their migration experience on the probability of making a subsequent move abroad. The choice of variables has been guided by previous research and the availability of data. Massey (1987) and Massey and Espinoza (1997) argued that repeat migration is largely the result of previous migration experience. We have thus included in our analysis the length of stay in the host country, and labour market experience, i.e. whether the migrant worked according to his or her qualifications abroad and the previous destination country. The issue of over-qualification is of great relevance for intra EU-mobility. Many of those who migrated from Central and Eastern Europe following the 2004 and 2007 EU enlargement processes –



despite having high or medium levels of education – have undertaken employment in low-skilled sectors of the ‘old’ EU member states (Clark and Drinkwater 2008; Johnston 2015). We hypothesize that return migrants who were overqualified for the jobs held abroad will have a lower propensity to move abroad again than those who had jobs that matched their skills. This hypothesis is based on our assumption that overqualified migrants may fear that their qualifications will further depreciate if they re-emigrate.

It should be noted that as our data is cross-sectional and does not contain information on the number of previous trips abroad, we are unable to distinguish between migrants who repeatedly move for work across the border and those who, following their return to Poland, decide to re-emigrate for good. This distinction is, however, important as the characteristics of migrants who engage in these two forms of mobility may differ. The same applies to the consequences for the home and host countries.

The 2011 census asked respondents 'do you intend to change your place of residence?' Possible answers included: yes, within the country; yes, move abroad; no; I do not know. The way the question was worded might suggest to the respondents that they were being asked about a permanent move. Table 1 below depicts the breakdown of intentions of changing the place of residence by migration experience. It shows a low propensity for both return migrants and non-migrants to move both within the country and abroad.

Table 1: Intentions to change the place of residence (%)

	Yes, within the country	Yes, go abroad	No intention	Do not know	Not established
Return migrants	6.11	2.02	80.55	11.06	0.26
Non-migrants	4.49	0.59	80.97	13.94	0.01

Source: CSO

Those who answered this question affirmatively were further asked when they intended to change their place of residence. Respondents had three alternatives to choose from: within a year; within the next few years; or I do not know.

As we use data on emigration intention instead of on the actual move, a few points need to be made. The use of migration intentions as a substitute for actual emigration has been subject to criticism. Some researchers have resorted to other methods than stated intentions in the absence of data on actual behaviour. Nonetheless, as Manski (1990) points

out, intentions just represent best-point predictions of future behaviour. These intentions are based, however, on the information available to the respondent at the time of the survey. The actual behaviour may not follow the stated intention if at the time of the realisation of behaviour, the respondent has received more information than was available to him when he stated his intention. Emigration intentions may thus be helpful in understanding migrant selection as they highlight the populations interested in emigration (Dustmann and Okatenko 2014). They also help avoid sample selection problems which occur when the host country data is used. Furthermore, a number of empirical studies show that migration intentions can quite accurately predict future emigration (van Dalen and Henkens 2013; Creighton 2013). Additionally, the characteristics of those who only stated an intention of emigrating versus those who did actually emigrate do not, in fact, differ. The mechanisms at play that bring people to emigrate and only declare an intention of emigrating without realising it are the same (van Dalen and Henkens 2008). We also tentatively hypothesise that in the case of return migrants, emigration intentions may be better predictors of future behaviour than in the case of first-time migrants. For the potential first-time migrants, declaring an intention to emigrate may simply represent a reflection of their dreams and aspirations, whereas individuals with migration experience hold more realistic expectations. The uncertainty that goes hand in hand with the first-time move is largely absent when the individual decides to emigrate a subsequent time to the same destination country.

A simple positive or negative answer to the question about emigration intentions does not provide any information on what to determine as to how concrete the respondent's intentions actually are. The person who states that he or she will emigrate one day or sometime in the future is probably less likely to effectuate his or her intention than the person who states that he or she will emigrate within a year. The first statement reflects aspirations, which are less likely to necessarily materialize, while the second implies some sort of readiness on the part of the respondent to move. Hence, in this study we take into account the firmness of the respondent's intentions. We assume that respondents who declare that they will emigrate within a definite time are more set on emigrating and more likely to actually move abroad than those who state that they will realize their emigration plans in the infinite future or do not know when. Following the approach used by van Dalen



et al. (2005), we thus focus on the intensity of respondents' emigration intentions. We distinguish among four outcomes:

- 1) No intention to emigrate
- 2) Intention to emigrate, but uncertain when
- 3) Intention to emigrate within the next few years
- 4) Intention to emigrate within a year.

We exclude respondents who were uncertain about whether they want to move abroad or not as they cannot be unambiguously included into any of the categories above. As we have ordered outcomes, we will estimate the ordered probit models. We will use the QLIM procedure in SAS for this purpose.

As migrants select both initial emigration and return migration, not accounting for self-selection of migrants can result in inconsistent and biased estimates. Our dataset is quite large for the studies on return migration and includes both return migrants and emigrants. However, information on the majority of emigrants is missing for some key variables such as education. We have therefore decided, as of now, not to use the data on emigrants in our estimations. The study is, thus, of a descriptive character.¹⁷

Descriptive statistics

Table 2 (Annex) depicts descriptive statistics on demographic characteristics, education, regional distribution, labour market activity and migration experience of return migrants by period of emigration. Overall, only 2.3% of the respondents in our sample express an intention to move abroad and out of these, 43% declare that they intend to emigrate within a year. That percentage is higher for return migrants who left Poland after May 2004. 4.6% of post-enlargement migrants state that they plan to emigrate. Of these, more than half intend to do so within a year. In turn, 1.5% of pre-enlargement migrants expressed an intention of moving abroad and barely 40% of these within one year's time. Taking into account that migration intentions are not always followed by the actual behaviour, this low propensity among Polish return migrants to re-emigrate is surprising. For instance,

¹⁷ We are working on devising an alternative way to deal with missing information on education in our dataset in order to account for selection into migration.



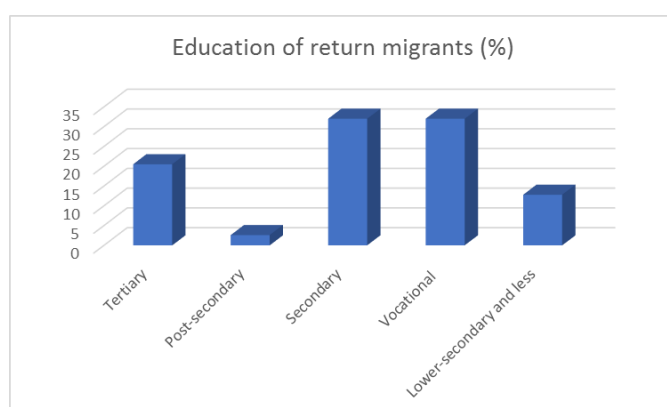
Barcevius and Zvalionyte (2012) showed that a quarter of Lithuanian return migrants expressed a firm intention of re-emigrating. One contributing factor behind the low level of declared intention to emigrate may be the wording of the question in the census which asks if the respondent plans to change a place of residence, which may be understood as a permanent move. We assume that at least part of the short-term circular mobility may not be captured by this question. We will delve into this finding in the later part of this study.

Men make up the majority of returnees. There are significant differences in age between pre-enlargement migrants and those who emigrated later. Nearly 65% of those with a history of mobility after Poland's accession to the EU are aged 26-45 years. Pre-enlargement migrants are naturally overrepresented in older cohorts with 75% being 45 years of age and older. The proportion of married individuals is also larger among pre-enlargement migrants. Three-quarters of them have a spouse or relative compared to 68% among those with post-enlargement migration experience. Only 6% of pre-enlargement migrants in our sample are single compared with a quarter of those who emigrated later. Returnees with post-enlargement migration experience – typically being younger – have more children aged 0-6 and less often live in households with persons aged 65 and over.

As regards geographical distribution, post-enlargement migrants are less likely to live in large towns and more likely to reside in rural areas. The biggest percentage of return migrants live in eastern and southern parts of Poland.

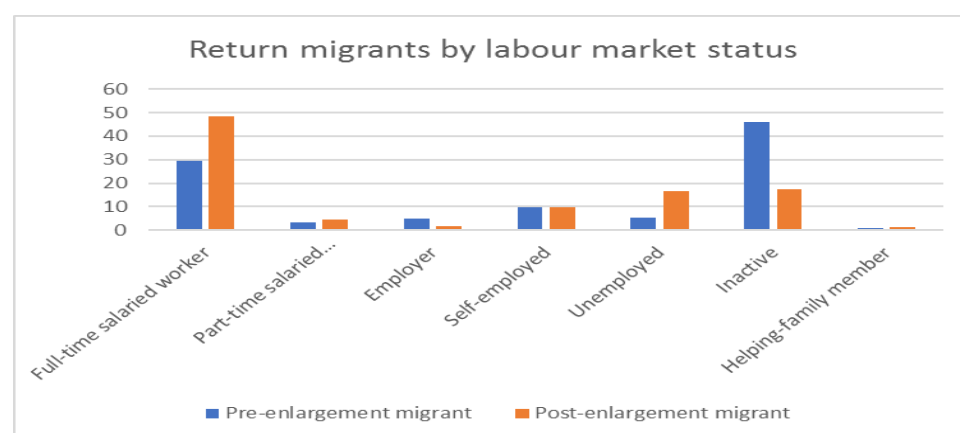
More than 1 in 5 return migrants have a university degree and around a third have vocational education (see Chart 1).

Chart 1: Return migrants by education



Returnees with pre-accession migration experience are a lot more likely to have lower-secondary education or less than later migrants. This is the result of the fact that the Polish population overall had a lower level of education prior to EU accession. As regards labour market activity, the proportion of full-time salaried workers amounts to nearly 30% and 48% among returnees with pre- and post-enlargement migration experience, respectively (see Chart 2). The share of the self-employed does not differ much between the two groups of returnees and stands at nearly 10%. However, returnees with post-enlargement experience are less likely to be employers. 46% of pre-enlargement migrants are inactive, which is hardly surprising given that they belong to older age groups. The unemployment rate is pretty high for post-enlargement migrants with nearly 17% of the respondents declaring that they are out of work compared to 5.5% for earlier migrants.

Chart 2: Return migrants by labour market status



Concerning migration-related variables, Table 2 shows that the most common reasons for the return of both pre- and post-accession migrants were the expiration of their contract abroad and the longing for family, which were chosen by around 60% of respondents in our sample. It should be noted, though, that family-related reasons played a much more important role for returnees with post-enlargement migration experience. Post-enlargement migrants are also more likely to have been overqualified for the jobs they held in the host country. 27.1% stated that they had worked below their qualifications relative to 19.1% of pre-enlargement migrants.

Returnees with the history of migration after May 2004 spent an average of 2.4 years abroad before returning compared to a little over 4 years for those who emigrated earlier. Post-enlargement migrants had returned on average 2.5 years before the 2011 census was conducted, compared to 21.7 years for pre-enlargement migrants. Charts 3 and 4 below show large differences in destination countries according to the period of emigration.

Chart 3: Destination countries of pre-enlargement migrants

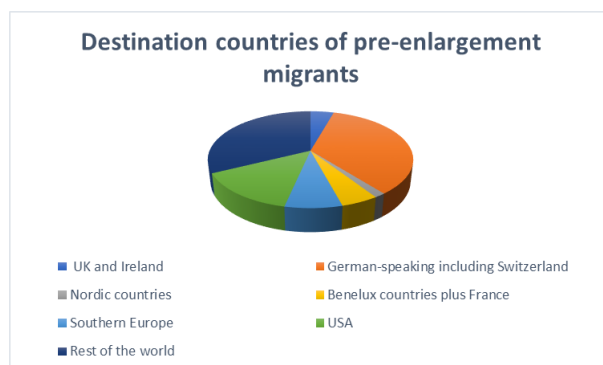
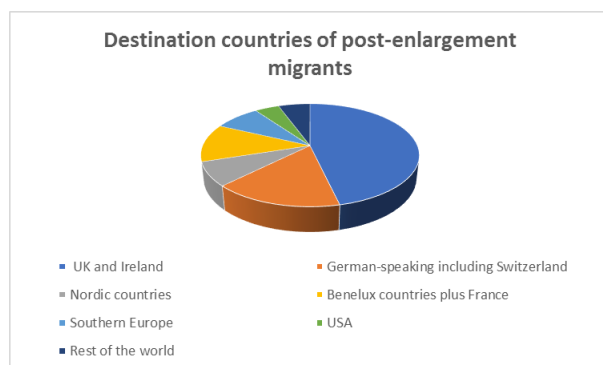


Chart 4: Destination countries of post-enlargement migrants



46.4% of returnees with a history of migration after Poland joined the EU indicate that they had stayed in the UK or Ireland, whereas that percentage amounts to 4.4 for earlier migrants. The US and other non-European countries lost their importance as destinations for post-enlargement migrants. The share of migrants in our sample who stayed in Germany and other German-speaking countries differs significantly among the two groups of returnees. It amounts to 35% in the case of pre-enlargement migrants and a little over 16% in the case of later migrants.

Empirical results

This section presents the results from the estimation of ordered probit equations on the probability of re-emigration intentions. Columns 1-2 in Table 3 contain specification which include the variables of interest, i.e. those related to migration experience. In Columns 3-4, we added demographic and regional covariates. In Columns 5-6 and 7-8, we added education and labour market activity, respectively. Columns 9-10 additionally contain reasons for return and whether a spouse or a partner is staying abroad.

As regards demographic variables, the effect of gender on the propensity of re-emigrating is not unambiguous or robust. As can be seen in Table 3, the coefficient is negative and statistically insignificant across most specifications meaning that gender does not influence future migration plans. However, the coefficient changes the sign and becomes significant at a level of 10% when we control for the reasons for return in the model. This indicates that being male increases the likelihood of re-emigration, at least in declarations.

Age clearly has an impact on the intentions of return migrants to emigrate again. Unsurprisingly, and in line with a life-cycle hypothesis and migration literature, younger cohorts are more likely to express an intention of going abroad. Respondents aged 16-25 years have the highest likelihood of re-emigration of all age groups in our sample.

As far as marital status is concerned, the propensity to re-emigrate is the highest among unattached returnees, i.e. either single or divorced. Married respondents were less set on emigrating, whereas widowhood has no apparent effect on future re-migration plans.

Having small children at home and living with persons aged 65 and over are two variables negatively related to future re-emigration plans. First, having young children can make relocation abroad more difficult. Furthermore, having parents nearby who can help respondents take care of children can provide another explanation for the lower propensity of returnees with young children to make migration plans. In turn, elderly persons in the household may be in need of care and thus lower the propensity of respondents to re-emigrate.



The size of the town where the respondent resides likewise influences future re-emigration plans. Returnees residing in small towns and rural areas are less likely to declare an intention of re-emigrating than individuals coming from medium-size towns. As regards the region in Poland, the coefficient is only statistically significant for eastern Poland. It indicates that respondents living in that region are less set on re-emigrating than those residing in the central region, i.e. our reference category.

Education is strongly associated with future re-emigration plans. Respondents with higher levels of education have the increased likelihood of declaring an intention to re-emigrate compared to return migrants with secondary education. In turn, returnees with vocational and lower secondary and less education are less set on re-emigrating. The reason for the low declared propensity of respondents with vocational education to re-emigrate may be that there is demand for their skills in Poland which acts as a disincentive to change one's place of residence. Another explanation may be that, as shown by Fihel and Grabowska (2014), less educated migrants may engage in circular mobility for short stays in host countries, oftentimes undertaking low-skilled and low-status jobs seasonally or only on demand. We assume that in this case, they will be less likely to declare that they intend to change their place of residence if they travel to host countries only for short periods of time.

Another important variable influencing emigration intentions of return migrants in our sample is labour market status in Poland. The estimations clearly indicate that respondents with an unfavourable situation in the Polish labour market such as part-time workers, the unemployed and/or inactive, are more likely to declare an intention to re-emigrate than the reference group, i.e. full-time salaried workers. The self-employed are also more set on re-emigrating than salaried workers working full time. The coefficients for employers and helping family members are not statistically significant. These findings imply that returnees who face hard times in re-establishing themselves in the Polish labour market are most likely to declare an intention to move abroad again.

Another variable that is associated with emigration intentions by returnees are reasons for the return to Poland after previous migration episodes. Respondents who returned because of an improved situation in the Polish labour market are less likely to declare an intention to move abroad than return migrants in the reference group, i.e. persons who found it hard to



find a job or lost a job in the host country. In turn, respondents who intended to become self-employed upon return to Poland are more set on re-emigrating than the reference category. The coefficient for this variable is only significant at a level of 10%, however. This finding indicates that the respondents who wanted to start their own business upon return might have been unsuccessful or disappointed with the opportunities that awaited them in Poland. Unsurprisingly, achieving a savings target is associated with a lower motivation for subsequent emigration. Similarly, respondents who returned due to the expiration of a contract abroad were less likely to state an intention to re-emigrate. In contrast, individuals who came back to Poland as a result of the completion of studies abroad or due to family-related reasons were more eager to emigrate than the reference group. The explanation for the higher declared propensity of students or other educational migrants to re-emigrate is that besides having education from the host country, they are often proficient in the host country language and have developed social networks. All these factors make it easier for migrants to find jobs abroad commensurate with their qualifications. Respondents who came back to Poland because they missed or accompanied their family members may have been disappointed with the opportunities they encountered in the Polish labour market upon return. Hence, they were more likely to plan subsequent emigration. The intention to re-emigrate may be stronger if they had stable well-paid jobs abroad.

Being overqualified for the job abroad is another variable of interest that has an impact on future re-emigration plans. As depicted in Columns 1-6, the coefficient for over-qualification becomes statistically significant and negative when the variable 'education' is added to the specification meaning that there is an association between the two variables. The estimations show that if the respondent held a job abroad below his or her qualifications, he or she is less likely to declare an intention to re-emigrate than those in the reference category, i.e. those who worked above or according to their qualifications or those who were uncertain if the job they held matched their skills. This finding implies that migrants who undertake jobs for which they are overqualified in the host country may treat migration as a temporary episode because they may not want to allow their qualifications to depreciate. This result is in line with the study by Pungas et al. (2012) who found that Estonian migrants who worked below their qualifications in Finland have a higher tendency to return.



The estimations also show that there is a positive relationship between the length of time spent in the host country and an intention to re-emigrate. The longer the migrant stays in the host country, the more integrated he or she becomes in the receiving society and the labour market and the more he or she develops overall connections to the host country. In contrast, the more time that has passed since the migrant returned to the home country, the lower the likelihood of re-emigration. Staying out of the country for a long period, moreover, leads to the depreciation of location-specific capital (DaVanzo 1983) and weakening of social ties.

Destination is another variable that is associated with future emigration plans. Respondents who returned from certain groups of countries are more likely to state an intention of re-emigrating than those who returned from other countries. Returnees with a history of migration to German-speaking countries in the EU, Nordic countries, Benelux countries, plus France, are more set on re-emigrating than the respondents who stayed in Ireland or the UK. Coefficients for other destinations are statistically insignificant.

Last but not least, unsurprisingly, having a spouse or a partner abroad significantly increases the likelihood of declaring an intention to re-emigrate.

We have also run separate models for returnees who migrated prior to 2004 and for those who emigrated later to see if the characteristics that influence re-emigration intentions differ between the two groups. The estimation results in Table 4 show that gender is only statistically significant for pre-enlargement migrants. Being male in this group is associated with re-emigration intentions. Pre-enlargement migrants who live in the northwestern region have a higher declared propensity to move abroad than respondents who live in the central region. This coefficient is insignificant in the case of post-enlargement migrants. The two groups also differ as regards the effect of self-employment on future re-emigration plans. Pre-enlargement self-employed migrants were more likely to declare an intention to re-emigrate than full-time salaried workers. No such effect was found for later migrants. Concerning the reasons for return, an intention of becoming self-employed was statistically significant only for pre-enlargement migrants. In turn, we have observed a negative association between achieving a savings target and re-emigration plans only in the case of respondents with a history of migration after May 2004. Furthermore, there is a major



difference between pre- and post-enlargement migrants regarding the significance of the previous host country on their intention to re-emigrate. In the case of pre-enlargement migrants, only those who returned from Nordic countries were more set on re-emigrating than the respondents who returned from Ireland and the UK. The signs for other coefficients are insignificant. Regarding post-enlargement migrants, returnees who had stayed in German-speaking EU countries, Nordic countries, Benelux countries plus France and the rest of the world, were all more likely to declare an intention to re-emigrate than the reference group.

Conclusions

This paper aimed to contribute to the existing literature on the impact of migratory experience on labour market performance and to the literature on repeat migration, by bringing forth the Polish case study.

The first section focused on the economic performance of return migrants. Until 2016, neither data from Polish national censuses nor the data from CSO estimates and surveys support the hypothesis that there were years with intensive inflows of returnees. Return migration remained relatively stable and proportional to the outflow of Poles. Despite the financial and economic crisis in 2008 which affected the Polish economy in a rather delicate manner (contrary to the economies of such important emigration countries for Poles as in Ireland, the Netherlands and the United Kingdom), no significant waves of return migration are observable, and according to the newest migration forecast for Poland, they will not occur in coming years either (Anacka and Janicka 2018).

One of the explanations for the relatively low share of return migrants among the population of Poles (those who returned between 2004 and 2008 comprised only around 1.3% of the total population) is the fact that the vast majority of migrants still adapt to the strategy of incomplete and circular migration. However, this explanation called for a more pronounced study of the factors that feed this particular strategy with economic motivations. This is why we referred to some studies on return migration to Poland which support the hypothesis that returnees perform worse in the labour market than non-migrants. The most important result of our analysis is firm proof of this relationship to be



existent. Despite greater economic activity on the part of returnees, the unemployment rate for this particular group is greater (even after controlling for the selection process by applying the PSM procedure; the difference in 2008 was estimated at 1.5 pp.).

In addition, some regional studies suggest that the over-qualification of return migrants experienced abroad resulted in skills waste upon return. As the over-qualification of ex-migrants is a widespread phenomenon (46% of the returnees in 2011 declared they were employed below their level of qualification when working abroad), the skill waste becomes a serious economic and social problem and calls for further investigation and results in a policy that hinders this negative process.

The second section of this paper focused on the relationship between socioeconomic characteristics and migration experience of return migrations, and their re-emigration intentions. Using 2011 Polish census data and the ordered probit model, we have found that individuals who intend to re-emigrate are likely to be young, unattached, have high education levels and an unfavourable position in the Polish labour market such as working part-time, being inactive or unemployed. Repeat migration, thus, seems to be the result of disappointment with the situation in the Polish labour market. The characteristics of returnees who intend to re-emigrate resemble those of first-time migrants. Our results may thus confirm Borjas and Bratsberg's (1996) theory that repeat migration may intensify the initial selection in favour of emigration.

Returning to Poland due to improved conditions in the Polish labour market, expiration of a contract abroad or upon achieving a savings target, are all associated with a lower declared propensity to re-emigrate.

We have also found that, in line with the literature, migration experience influences re-emigration plans. A longer period of time spent in the host country is linked to future re-emigration plans. Migrants who worked abroad below qualifications, moreover, are less likely to plan a subsequent move abroad than those who held jobs matching their qualifications. This indicates that negative experiences in the labour market of the host country may discourage returnees from re-emigrating. Another finding is that post-



enlargement migrants who returned from the UK and Ireland have a lower declared propensity to re-emigrate than those who returned from other EU countries.

Given a large outflow from Poland, a puzzling finding is that only a small percentage of return migrants – and even a much lower share of Polish population in general – declare an intention of changing their place of residence for a stay abroad. This may be the result of how the question was formulated in the census or may indicate that the bulk of emigration from Poland is temporary and for a relatively short period of time and may thus not be captured by this question.

As we were not able to control for selection into initial and return migration, our results should be interpreted with caution. The study is of a descriptive character.



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Annex

Table A0. Economic activity among groups with various migratory experiences (aged 15 and over)

Status in the labour market	Short-term return migrants	Long-term return migrants	Non-migrants
Employed	35.5	51.0	48.2
Unemployed	5.0	7.5	6.7
Inactive	59.5	41.6	45.2
Total	100.0	100.0	100.0

Source: own elaboration based on NPC 2011 data, CSO.

Table A1. Sex distribution among groups with various migratory experiences

Population category	Male	Female
Short-term return migrants	47.4	52.6
Long-term return migrants	62.8	37.2
Non-migrants	48.0	52.0

Source: own elaboration based on NPC 2011 data, CSO.

Table A2. Type of settlement among groups with various migratory experiences

Type of settlement	Short-term return migrants	Long-term return migrants	Non-migrants
Rural area	27.0	25.5	40.0
Towns (up to 20 K inhabitants)	11.9	11.8	12.9
Towns (20-300 K inhabitants)	33.8	35.9	31.0
Towns (over 300 K inhabitants)	27.3	26.8	16.1
Total	100.0	100.0	100.0

Source: own elaboration based on NPC 2011 data, CSO.

Table A3. Educational attainment among groups with various migratory experiences

Highest level of education attained	Short-term return migrants	Long-term return migrants	Non-migrants
PhD or higher	1.7	2.5	0.4
tertiary (Msc, MA)	18.6	20.4	12.3
tertiary (BA, Bsc)	6.3	6.4	4.8
tertiary (for teachers)	0.3	0.2	0.1
postsecondary	2.0	2.6	2.3
postsecondary (no sec. school leaving certificate)	0.2	0.3	0.3
secondary vocational	12.1	15.4	12.8
secondary vocational (no sec. school leaving certificate)	4.6	5.9	5.2
secondary	11.5	8.0	9.7
secondary (no sec. school leaving certificate)	3.0	2.1	2.7
vocational	13.4	24.0	22.8
grammar school	2.4	0.6	5.4
primary school	20.8	10.6	19.7
no formal education	2.9	1.0	1.5

Source: own elaboration based on NPC 2011 data, CSO.

Table A4. Main source of income among groups with various migratory experiences

Main source of income	Short-term return migrants	Long-term return migrants	Non-migrants
employment (public sector)	6.7	11.0	11.7
employment (private sector)	17.0	26.9	20.3
Self-employment (non-agricultural sector)	6.3	9.0	4.0
Self-employment (agricultural sector)	1.1	1.7	3.2
real estate	0.2	0.3	0.1
property	0.2	0.2	0.1
pension	38.6	29.0	18.6
structural benefit	0.2	0.1	0.2
disability benefit	2.4	3.7	3.6
family benefit	2.9	1.3	1.6
social benefit	0.2	0.2	0.5
unemployment benefit	0.5	1.1	0.8
Pre-pension benefit	0.1	0.3	0.3
benefit for low-income households	0.6	0.8	1.0
other sources	3.2	3.8	2.1
other family members	19.8	10.6	31.9

Source: own elaboration based on NPC 2011 data, CSO.

Table A5. Multinomial logit for labour market status (unemployment equation)

Variable (level)	Beta	Std. error	Wald Chi-Square	<i>p-value</i>
Intercept	-1.9906	0.8611	5.3436	0.0208
Migratory experience				
Short-term returnees	0.9183	0.4400	4.3557	0.0369
Long-term returnees	-0.5283	0.8505	0.3858	0.5345
Migratory experience and age (joint effect)				
Without migratory experience, aged 15-17	1.3198	457.5	0.0000	0.9977
Without migratory experience, aged 18-29	-1.2334	0.6026	4.1894	0.0407
Without migratory experience, aged 30-44	-1.5406	0.5518	7.7943	0.0052
Short-term returnees, aged 15-17	-0.7293	614.3	0.0000	0.9991
Short-term returnees, aged 18-29	-1.1943	0.6572	3.3026	0.0692
Short-term returnees, aged 30-44	-1.8409	0.6243	8.6944	0.0032
Migratory experience and living in an agricultural household (joint effect)				
Without migratory experience, living in non-agricultural household	-0.0509	0.6189	0.0068	0.9345
Short-term returnees living in non-agricultural household	-0.7915	0.6697	1.3968	0.2373
Migratory experience and education (joint effect)				
Without migratory experience, background education	0.4670	0.7550	0.3825	0.5362
Without migratory experience, basic vocational	0.4870	0.6753	0.5200	0.4709

education				
Without migratory experience, secondary education	0.1265	0.8232	0.0236	0.8779
Without migratory experience, post-secondary and vocational education	0.1365	0.6320	0.0466	0.8290
Short-term returnees, background education	0.7925	0.8801	0.8180	0.3679
Short-term returnees, basic vocational education	1.3558	0.7921	2.9297	0.0870
Short-term returnees, secondary education	-0.4476	1.0287	0.1893	0.6635
Short-term returnees, post-secondary and vocational education	0.1830	0.7537	0.0589	0.8082

Source: Kaczmarczyk et al. (2016).

Table A6. Multinomial logit for labour market status (inactivity equation).

Variable (level)	Beta	Std. error	Wald Chi-Square	<i>p-value</i>
Intercept	-1.9906	0.8611	5.3436	0.0208
Migratory experience				
Short-term returnees	0.6770	0.2659	6.4826	0.0109
Long-term returnees	-0.5652	0.4104	1.8964	0.1685
Migratory experience and age (joint effect)				
Without migratory experience, aged 15-17	-7.0315	121.9	0.0033	0.6540
Without migratory experience, aged 18-29	-0.0315	0.2653	0.0140	0.9056
Without migratory experience, aged 30-44	-0.3685	0.2637	1.9527	0.1623
Short-term returnees, aged 15-17	-0.5362	164.1	0.0000	0.9974
Short-term returnees, aged 18-29	-0.2866	0.3178	0.8133	0.3671
Short-term returnees, aged 30-44	0.1951	0.3195	0.3729	0.5415
Migratory experience and living in an agricultural household (joint effect)				
Without migratory experience, living in non-agricultural household	0.4776	0.3203	2.2231	0.1360
Short-term returnees living in non-agricultural household	0.3290	0.3819	0.7422	0.3889
Migratory experience & education (joint effect)				
Without migratory experience, background education	-1.5223	0.4086	13.8841	0.0002
Without migratory experience, basic vocational education	0.8046	0.4028	3.9894	0.0458
Without migratory experience, secondary education	-0.4663	0.4909	0.9024	0.3421

Without migratory experience, post-secondary and vocational education	-0.5595	0.3960	1.9956	0.1578
Short-term returnees, background education	-0.9901	0.4917	4.0557	0.0440
Short-term returnees, basic vocational education	0.1153	0.4759	0.0587	0.8086
Short-term returnees, secondary education	0.5082	0.5725	0.7879	0.3747
Short-term returnees, post-secondary and vocational education	-0.1829	0.4671	0.1534	0.6954

Source: Kaczmarczyk et al. (2016).

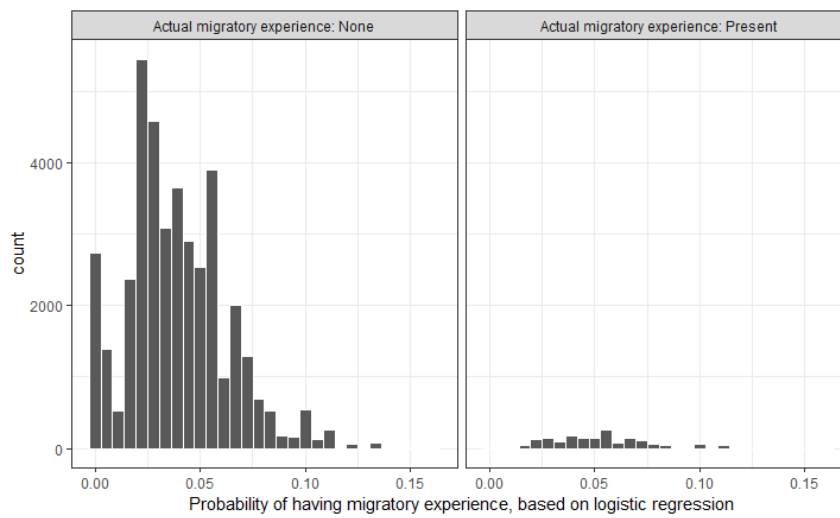
Table A7. Logit equation for propensity score matching procedure

	Estimate	Std. Error	z value	p-value	sign. level
Intercept	-5.089	0.491	-10.367	0.000	***
Sex (females)	-0.620	0.048	-12.828	0.000	***
persons aged 15-17	0.946	0.587	1.611	0.107	
persons aged 18-19	2.890	0.489	5.913	0.000	***
persons aged 20-24	3.199	0.488	6.561	0.000	***
persons aged 25-29	3.008	0.490	6.137	0.000	***
persons aged 30-34	3.019	0.492	6.136	0.000	***
persons aged 35-39	3.012	0.493	6.111	0.000	***
persons aged 40-44	3.082	0.492	6.265	0.000	***
persons aged 45-49	3.077	0.492	6.260	0.000	***
persons aged 50-54	2.798	0.493	5.671	0.000	***
persons aged 60-64	2.936	0.495	5.930	0.000	***
persons aged over 64	2.992	0.490	6.101	0.000	***
married	-0.089	0.076	-1.174	0.241	
widowed	0.025	0.113	0.221	0.825	
divorced	0.219	0.112	1.960	0.050	*
living in urban area	-0.276	0.048	-5.780	0.000	***
persons with post-secondary education	-0.434	0.059	-7.341	0.000	***
persons with secondary education	-0.501	0.084	-5.962	0.000	***

persons with vocational education	-0.427	0.059	-7.217	0.000	***
persons with background education or without formal education	-0.779	0.079	-9.882	0.000	***
persons being wife or husband of hhh	-0.249	0.060	-4.127	0.000	***
persons being partner of hhh	0.140	0.186	0.755	0.450	
persons being child of hhh	-0.289	0.081	-3.568	0.000	***
persons being child in law of hhh	-0.383	0.165	-2.319	0.020	*
persons being parent in law of hhh	-0.436	0.154	-2.838	0.005	**
persons being grandchild of hhh	-0.241	0.235	-1.027	0.304	
persons being sibling of hhhh	-0.793	0.334	-2.374	0.018	*
other relatives	-12.543	128.568	-0.098	0.922	
other hh members	-0.558	0.337	-1.654	0.098	

Source: own elaboration based on LFS 2008 data, CSO.

Figure A1. Histograms of propensity scores form the model explaining migratory experience for non-migrants (left panel) and returnees (right panel)



Source: own elaboration based on LFS 2008 data, CSO.

Table 2: Characteristics of returnees (pre-enlargement and post-enlargement migrants)

	Pre-enlargement migrants	Post-enlargement migrants	Total
Emigration intentions (%)			
No intention to emigrate	98.5	95.4	97.7
Intends to emigrate, but uncertain when	0.3	0.6	0.4
Intends to emigrate in the next few years	0.6	1.4	0.8
Intends to emigrate within a year	0.6	2.6	1.1
Male (%)	72	69.3	71.3
Age			
16-25	0.2	9.8	2.6
26-35	8.21	44.8	17.5
36-45	13.6	20	15.1
46-55	21.5	17.5	20.5
56-65	56.5	7.9	44.6
Marital status (%)			
Single	6	24.7	10.6
Married	76.2	67.9	74.1
Widowed	10.9	1.7	8.6
Divorced	7	5.7	6.7
Children aged 0-6	0.12	0.3	0.18
Persons aged 65 and over in a household	0.52	0.17	0.4
Size of the town (%)			
Small town	15.9	16.3	16
Medium-size town	38.2	34.4	37.3
Large town	12.1	8	11.2
Rural area	33.8	41.3	35.6
Region (%)			
Northern	13.9	17.9	15
North-Western	13.1	16.8	14
South-Western	12.1	12.3	12.1
Southern	19.5	19	19.4
Eastern	23.1	20.7	22.5
Central	18.3	13.4	17.1
Education (%)			
Tertiary	20.2	21.6	20.5
Post-secondary	2.5	2.9	2.6
Secondary	31	35.2	32
Vocational	31.6	33.4	32
Lower-secondary and less	14.7	6.9	12.8
Labour market status (%)			
Full-time salaried worker	29.6	48.3	34.2
Part-time salaried worker	3.5	4.5	3.8
Employer	4.8	1.9	4.1
Self-employed	9.7	9.9	9.8
Unemployed	5.5	16.8	8.3
Inactive	46	17.4	39
Helping family member	1	1.2	1
Reasons for return (%)			
Improvement in opportunities on the Polish labour market	3.2	4.3	3.5
Intention to become self-employed	3.5	3.8	3.6
Achieving a savings target	3.6	6.1	4.2
Difficulty with finding a job/losing a job abroad	2.3	8.1	3.7
Expiration of a contract abroad	38	15.3	32.5
Missing family/accompanying family	29.8	43.5	33.1
Completion of studies abroad	1.7	1.6	1.7
Other	18	17.3	17.8
Overqualified abroad (%)	19.1	27.1	21
Duration of stay abroad (in years)	4.1	2.4	3.7
Length of time since return (in years)	21.7	2.5	17
Destination (%)			
United Kingdom and Ireland	4.4	46.4	14.7
German-speaking including Switzerland	35	16.2	30.4
Nordic countries	1.5	7.5	2.9
Benelux countries and France	5	12	6.7
Southern Europe	7.6	8.1	7.7
USA	14.3	4.3	11.9
Rest of the world	32.4	5.6	25.9
Spouse/partner abroad (%)	0.9	1.4	1
N	67217	21707	88924



Table 3: Results of the ordered probit estimates on the probability of re-emigration intention

	MODEL 1		MODEL 2		MODEL 3		MODEL 4		MODEL 5	
	1	2	3	4	5	6	7	8	9	10
	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error	Estimate	Standard error
Intercept	-1,642***	(0,023)	-1,615***	(0,045)	-1,642***	(0,048)	-1,775***	(0,050)	-1,854***	(0,068)
Male			-0,081***	(0,022)	-0,03	(0,023)	-0,006	(0,023)	0,041*	(0,024)
Age (ref. 25-34)										
16-25			0,165***	(0,043)	0,193***	(0,044)	0,173***	(0,044)	0,169***	(0,044)
36-45			-0,023	(0,031)	0,001	(0,031)	0	(0,031)	0,01	(0,031)
46-55			-0,202***	(0,035)	-0,165***	(0,036)	-0,193***	(0,036)	-0,169***	(0,037)
56-65			-0,471***	(0,043)	-0,437***	(0,043)	-0,526***	(0,045)	-0,482***	(0,045)
Marital status (ref. Married)										
Single			0,353***	(0,028)	0,345***	(0,028)	0,318***	(0,029)	0,325***	(0,029)
Widowed			0,016	(0,061)	0,056	(0,062)	0,031	(0,062)	0,028	(0,063)
Divorced			0,341***	(0,033)	0,342***	(0,034)	0,32***	(0,034)	0,313***	(0,034)
Children aged 0-6			-0,105***	(0,022)	-0,109***	(0,023)	-0,115***	(0,023)	-0,117***	(0,023)
Persons aged 65 and over in a household			-0,122***	(0,022)	-0,118***	(0,022)	-0,142***	(0,022)	-0,141***	(0,023)
Area (ref. Medium-size town)										
Small town			-0,106***	(0,03)	-0,092***	(0,03)	-0,1***	(0,03)	-0,107***	(0,03)
Large town			0,05	(0,033)	0,01	(0,034)	0,018	(0,034)	0,013	(0,034)
Rural area			-0,233***	(0,025)	-0,207***	(0,025)	-0,207***	(0,025)	-0,214***	(0,025)
Region (ref. Central)										
Northern			0,007	(0,036)	0,032	(0,036)	0,027	(0,036)	0,015	(0,037)
North-Western			0,035	(0,036)	0,06*	(0,036)	0,059	(0,036)	0,054	(0,037)
South-Western			0,053	(0,037)	0,079**	(0,037)	0,078**	(0,038)	0,066*	(0,038)
Southern			-0,053	(0,035)	-0,026	(0,035)	-0,03	(0,036)	-0,032	(0,036)
Eastern			-0,118***	(0,036)	-0,096***	(0,036)	-0,11***	(0,036)	-0,118***	(0,037)
Education (ref. Secondary)										
Tertiary					0,063**	(0,026)	0,102***	(0,027)	0,092***	(0,028)
Post-secondary					0,187***	(0,051)	0,189***	(0,051)	0,186***	(0,052)
Vocational					-0,213***	(0,027)	-0,225***	(0,027)	-0,222***	(0,028)
Lower-secondary and less					-0,245***	(0,047)	-0,283***	(0,048)	-0,289***	(0,048)
Labour market status (ref. Full-time-salaried worker)										
Part-time salaried worker							0,207***	(0,049)	0,189***	(0,049)
Employer							0,089	(0,054)	0,052	(0,056)
Self-employed							0,133***	(0,035)	0,104***	(0,037)
Unemployed							0,347***	(0,031)	0,341***	(0,031)
Inactive							0,265***	(0,029)	0,239***	(0,029)
Helping family member							0,097	(0,112)	0,083	(0,113)
Reasons for return (ref. Difficulty with finding a job/losing a job abroad)										
Improvement in opportunities on the Polish labour market									-0,272***	(0,079)
Intention to become self-employed									0,11*	(0,065)
Achieving a savings target									-0,169**	(0,071)
Expiration of a contract abroad									-0,171***	(0,054)
Missing family/accompanying family									0,086*	(0,048)
Completion of studies abroad									0,245***	(0,073)
Other									0,223***	(0,05)
Overeducated abroad	0,041*	(0,023)	-0,021	(0,024)	-0,066***	(0,024)	-0,072***	(0,024)	-0,088***	(0,025)
Duration of stay abroad (in years)	0,009***	(0,002)	0,018***	(0,002)	0,017***	(0,002)	0,016***	(0,002)	0,011***	(0,002)
Length of time since return (in years)	-0,032***	(0,001)	-0,02***	(0,002)	-0,021***	(0,002)	-0,02***	(0,002)	-0,019***	(0,002)
Destination (ref. The UK and Ireland)										
German-speaking including Switzerland	-0,01	(0,029)	0,101***	(0,031)	0,135***	(0,031)	0,15***	(0,032)	0,176***	(0,032)
Nordic countries	0,059	(0,048)	0,168***	(0,05)	0,204***	(0,05)	0,209***	(0,051)	0,226***	(0,051)
Benelux countries and France	0,028	(0,037)	0,096**	(0,038)	0,132***	(0,038)	0,139***	(0,038)	0,152***	(0,039)
Southern Europe	-0,06	(0,037)	0,018	(0,039)	0,063	(0,04)	0,067*	(0,04)	0,07*	(0,04)
USA	-0,179***	(0,04)	0,05	(0,042)	0,043	(0,043)	0,052	(0,043)	0,035	(0,043)
Rest of the world	-0,134***	(0,038)	0,027	(0,039)	0,039	(0,04)	0,046	(0,04)	0,125***	(0,041)
Spouse/partner abroad									0,45***	(0,07)
Limit2	0,081***	(0,005)	0,085***	(0,005)	0,086***	(0,005)	0,087***	(0,005)	0,088***	(0,005)
Limit3	0,316***	(0,010)	0,331***	(0,010)	0,333***	(0,010)	0,335***	(0,010)	0,339***	(0,010)
N	86916		86916		86916		86916		86916	
McFadden's R2	0.062		0.102		0.107		0.114		0.124	

*significant at 10%; ** significant at 5%; *** significant at 1%.



Table 4: Ordered probit estimates on the probability of re-emigration intention

	Pre-enlargement migrants		Post-enlargement migrants	
	Estimate	Standard error	Estimate	Standard error
Intercept	-1.685***	(0.110)	-1.691***	(0.107)
Male	0.084***	(0.032)	-0.012	(0.036)
Age (ref. 25-34)				
16-25	0.554***	(0.127)	0.079	(0.05)
36-45	-0.003	(0.046)	0.035	(0.046)
46-55	-0.161***	(0.052)	-0.224***	(0.057)
56-65	-0.445***	(0.06)	-0.557***	(0.088)
Marital status (ref. Married)				
Single	0.262***	(0.044)	0.37***	(0.041)
Widowed	-0.015	(0.072)	0.221*	(0.134)
Divorced	0.3***	(0.041)	0.334***	(0.062)
Number of children aged 0-6	-0.125***	(0.032)	-0.091***	(0.033)
Number of persons aged 65 and over in a household	-0.146***	(0.028)	-0.093**	(0.04)
Area (ref. Medium-size town)				
Small town	-0.118***	(0.041)	-0.091**	(0.046)
Large town	-0.019	(0.045)	0.068	(0.054)
Rural area	-0.181***	(0.034)	-0.265***	(0.038)
Region (ref. Central)				
Northern	0.067	(0.049)	-0.037	(0.056)
North-Western	0.171***	(0.048)	-0.086	(0.057)
South-Western	0.075	(0.051)	0.063	(0.058)
Southern	-0.017	(0.048)	-0.052	(0.055)
Eastern	-0.11**	(0.049)	-0.124**	(0.057)
Education (ref. Secondary)				
Tertiary	0.066*	(0.036)	0.116***	(0.043)
Post-secondary	0.179***	(0.067)	0.188**	(0.082)
Vocational	-0.28***	(0.037)	-0.151***	(0.042)
Lower-secondary and less	-0.395***	(0.069)	-0.18***	(0.07)
Labour market status (ref. Full-time-salaried worker)				
Part-time salaried worker	0.223***	(0.067)	0.134*	(0.074)
Self-employed	0.103**	(0.046)	0.099	(0.061)
Unemployed	0.41***	(0.046)	0.272***	(0.043)
Inactive	0.139***	(0.04)	0.358***	(0.044)
Helping family member	0.065	(0.151)	0.097	(0.171)
Reasons for return				
Improvement in opportunities on the Polish labour market	-0.297**	(0.118)	-0.198*	(0.112)
Intention to become self-employed	0.176*	(0.095)	-0.021	(0.103)
Achieving a savings target	-0.132	(0.109)	-0.191**	(0.096)
Expiration of a contract abroad	-0.165*	(0.086)	-0.142*	(0.074)
Missing family/accompanying family	0.093	(0.081)	0.085	(0.062)
Completion of studies abroad	0.195*	(0.108)	0.345***	(0.109)
Other	0.239***	(0.083)	0.214***	(0.065)
Overeducated abroad	-0.073**	(0.034)	-0.1***	(0.037)
Duration of stay abroad (in years)	0.015***	(0.002)	0.005	(0.013)
Length of time since return (in years)	-0.013***	(0.002)	-0.078***	(0.012)
Destination (ref. The UK and Ireland)				
German-speaking including Switzerland	0.048	(0.053)	0.22***	(0.048)
Nordic countries	0.154*	(0.093)	0.212***	(0.063)
Benelux countries and France	0.024	(0.067)	0.182***	(0.05)
Southern Europe	-0.007	(0.062)	0.061	(0.064)
USA	-0.047	(0.061)	0.003	(0.088)
Rest of the world	-0.047	(0.062)	0.326***	(0.066)
Spouse/partner abroad	0.333***	(0.1)	0.581***	(0.101)
_Limit2	0.097***	(0.007)	0.079***	(0.006)
_Limit3	0.394***	(0.016)	0.291***	(0.013)
N	67217		21707	
McFadden's R2	0.128		0.08	

*significant at 10%; ** significant at 5%; *** significant at 1%.



REMINDER

ROLE OF EUROPEAN MOBILITY AND ITS IMPACTS
IN NARRATIVES, DEBATES AND EU REFORMS

The REMINDER project is exploring the economic, social, institutional and policy factors that have shaped the impacts of free movement in the EU and public debates about it.

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