

Return Migration: The Experience of Eastern Europe*

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Abstract

Over the last decade, a significant share of the labour force in Central and East European (CEE) countries has been exposed to work spells abroad followed by return migration. Although there is a growing literature on CEE return migration, no comparative enquiry for the whole region has been undertaken so far.

This paper is a first attempt to fill this gap. We collate data from Labour Force Surveys and the European Social Survey (ESS) for a cross-country analysis of return migration in Central and Eastern Europe. Both the selectivity patterns and the income effects of return migration vary across countries. Consistent with previous results, we find that the average income premia for work abroad range between 10% and 20%. Within countries they are positively related to the relative position in the income distribution. Across countries they vary negatively with the average income level. Migrants are less likely to actively participate in the labour market upon return and more likely to switch into self-employment rather than dependent employment. The latter finding is not robust, however, once the endogeneity of migration decisions is controlled for.

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1 Background and Motivation

Return migrants from the ‘old’ EU countries (EU15) are an important and fast-growing group on the labour markets in Central and Eastern Europe (CEE). Although precise and comparable estimates of the stock of return migrants in the CEE countries are still missing, putting their number at half a million today and clearly above one million in a few years time certainly does not appear as an over-estimation. Analysing the labour market performance of these ex-migrants is thus of considerable importance.

Looking back at the period since the fall of the ‘iron curtain’, migration between Western and Eastern Europe was always a hotly debated economic and political issue. The focus of these debates was, however, almost exclusively of migration from the relatively poorer countries of CEE to the relatively richer countries in Western Europe¹. What was overlooked in some of the discussions on this topic – in particular the political ones - is that migration is often not a one-off event where people move permanently from one location to another. Instead, many individuals prefer temporary migration, which in turn can take different forms such as seasonal migration (often observed in the agricultural and service industries) or (non-seasonal) repeated migration, where workers stay in host countries more than once but always return to their home country at the end of these periods². In it’s latest SOPEMI report the OECD states that “between 20% and 50% of immigrants leave within five years of arriving in a country, some to return home and some to move to a third country” (OECD 2008). Various forms of such temporary migration became also common in CEE countries over the last decade³.

After EU enlargement in May 2004, the intensity of the debate on the economic impact of east-west migration increased again. Ireland, Sweden and the United Kingdom granted free access for workers from the CEE countries to their labour markets immediately after EU enlargement. In May 2006 Greece, Spain, Portugal and Finland also lifted the labour mobility restrictions, and Belgium, Denmark, France, Italy, the Netherlands and Luxemburg eased them. Only Austria and Germany retained their labour market restrictions.

A precise quantitative assessment of east-west migration flows within the EU remains difficult due to a lack of reliable and meaningful data on labour flows within Europe⁴. But notwithstanding the significant measurement problems involved there is no doubt that the actual flows of workers from the CEE countries to several ‘old’ EU countries increased significantly following EU enlargement and rather soon it was found that these increased migration flows had a major economic impact on the main host and home countries.

Countries receiving significant labour inflows, for example the UK, experienced

¹A recent model-based contribution to this debate is Brücker (2009). See also IMF (2008) and Heinz and Ward-Warmedinger (2006) for recent overviews.

²Dustman (1996) argued early on short-term migration would be the only politically possible option to open the doors of western European countries somewhat to immigrants from the CEE countries.

³The OECD (2008) states that a relatively small development gap between home and host country increases the likelihood of return migration, something that applies to East-West migration within Europe.

⁴The official population statistics may understate for example the flow of immigrant workers if they are based on definitions of migration that exclude temporary immigration or “commuting”.

	% of returnees overall	% of returnees among men	% of returnees among women
Czech Republic	6.48	7.57	5.55
Hungary	2.61	4.19	1.38
Latvia	7.43	11.41	4.82
Poland	7.97	11.79	4.30
Romania	7.65	11.09	4.51
Slovakia	6.80	10.19	3.17

Notes:

Returnees were identified as those persons born in the country who spent at least 6 month working abroad over the last 10 years and returned.

Own estimation, data from ESS 3rd round: 2006/07.

Table 1: Rate of return migration in the active population (aged 24-65)

an increase in their production capacities, lower wage and price pressures and a positive demand effect with immigrants adding to private consumption and investment. All in all, it was mostly found that the significant inflows of migrants from CEE countries had a positive impact on economic developments in the UK and most likely on other key host countries as well⁵. The main home countries of intra-EU migrants experienced, however, a negative supply shock with emigration adding to labour market bottlenecks and wage and inflation pressures⁶.

More recently, this pattern of post-enlargement intra-EU east-west migration has changed considerably for two reasons. First, many of the main host countries, in particular the UK, Ireland and Spain have experienced a significant cyclical downturn. This reduced their demand for new immigrants significantly and it made return migration more attractive. Second, the CEE countries experienced a period of rapid economic expansion, resulting in increased job opportunities in the host countries and fast convergence of wage and income levels between home and host countries, especially for skilled labour⁷.

Although these rather recent changes in the international economic environment can for the bigger part not be reflected in the data yet, by 2006/07 already between 6-8% of the active population in a number of CEE countries had spend at least six months working abroad over the previous decade and subsequently returned to their country. For the male active population the corresponding figure is significantly higher (in Poland almost 12% of the working population).

Against this background the paper analyses the experience of CEE return migrants from a cross-country perspective. By pooling repeated cross-sections from the EU Labour Force Survey (EU-LFS) we are able to identify an unweighted

⁵See e.g. Blanchflower, Saleheen and Shadforth (2007).

⁶The demand effects of migration in the home countries depended crucially on the size of emigrant's remittances, which can compensate the decline in household consumption due to emigration. In fact, these remittances may have stimulated not only general private spending but more specifically housing construction, stoking an already buoyant part of the economy in many CEE countries.

⁷For how long and to what extent these pull factors for return migration remain in place depends on the repercussions of the current global financial crisis on the real economy and in particular the labour markets in the CEE countries.

sample of more than 2,500 returnees across ten CEE countries over the period 2002-2007. Despite the fact that the above-mentioned recent increase in the incentives for CEE migrants to return to their host countries can not be found yet in the available statistics this sample is considerably larger than those available in previous, mostly country-specific studies on return migration to the CEE countries.

The paper is organised as follows. Section 2 provides a short overview of the available evidence on return migration in Eastern Europe. Section 3 describes the available data set and provides some descriptive analysis on return migration. Section 4 outlines the estimation strategy used in the paper. Section 5 discusses the empirical results. Section 6 summarises the key findings of the paper and provides some policy implications.

2 Return migration in Eastern Europe: available empirical evidence

Many empirical studies in the field of migration suffer from a lack of comparable and reliable data and this is a particularly acute problem for empirical studies looking at the labour market performance of return migrants in the CEE countries. The available papers in this field are therefore generally based on (country-specific) survey data and more often than not the sample of return migrants covered in the papers is very small⁸.

De Coulon and Piracha (2005) study the wage effects of return migration in Albania, comparing the performance of returnees to those who stayed in the home country. Using a sample of just under 600 individuals (around 200 return migrants and around 400 'stayers') they find a negative selection of return migrants compared to 'stayers' in the home country⁹. Their argument for this is that on average the more skilled 'stayers' would have faced relatively higher costs of migration than the migrants. Nevertheless they find that the hourly wage of return migrants increases due to their period abroad. In addition, they find that a large proportion of the return migrants become self-employed after their return to Albania.

Co, Gang and Yun (2000) examine the labour market performance of Hungarian return migrants using data from the Hungarian Household Panel Survey¹⁰. Using a number of different estimation techniques they consistently find that there is no wage premium for men who previously worked abroad whereas female return migrants who have previously worked in OECD countries earn a considerable premium over the wage of 'stayers'. The authors argue that this gender-specific result may be due to the fact that experience abroad is more valued in industries where a relatively larger number of female return migrants entered (e.g. financial services).

⁸Interestingly some of the studies emphasise that besides analysing the available data they also make a methodological contribution by using advanced estimation methods and / or by analysing the (limited) available data in many different ways in order to try and increase the robustness of the results.

⁹They find that 80% of the migrants migrated for a period of maximum three years. 30% migrated for a period of less than one year (De Coulon and Piracha 2005, p. 786)

¹⁰Out of 3145 individuals covered in this survey 167 were identified as having worked abroad (Co, Gang and Yun, 2000, p. 59)

Hazans (2008) uses a relatively large sample of over 10000 economically active residents in Latvia of which around 500 have worked abroad during the last three years prior to the survey. After controlling for factors such as inter alia demographic and educational differences between ‘stayers’ and movers he finds that return migrants earn on average around 15% more than ‘stayers’. While this is broadly in line with the findings of the other studies on return migration to CEE countries his gender-specific results (20% wage premium for male return migrants versus 6% for females) appear to contradict the findings of Co, Gang and Yun (2000). In addition to the traditional argument that the wage premium for return migrants is mostly a result of the additional skills obtained in the host country and transferred to the home country he proposes a number of alternative or rather additional explanations. First, he argues that due to their savings from working abroad return migrants can search longer. Second, he suggests that they are more confident and “aim higher” and third he argues that they value wages relatively higher than ‘stayers’ (Hazans 2008, p. 25).

The focus of the study by Mintchev and Boshnakov (2006) is on the impact of return migration on remittances rather than possible income premia following their return to the home country¹¹. They use a sample survey of 1000 households for their analysis of which around 14% are households with at least one return migrant. The authors find that return migrants send / bring back a significant share of their income earned in the host country which in turn has a significant positive impact on the income position of Bulgarian households with return migrants. In addition the study concludes that 20% of receiving households run own businesses as opposed to 10% of households that are not involved in return migration.

The only cross-country study looking at the impact of a temporary migration experience in Western Europe on the labour market performance of CEE return migrants is Iara (2006). She uses a subsample of young males from the Central and Eastern Youth Eurobarometer dataset of spring 2003 and finds that Western European work experience results in a wage premium for temporary migrants once they return to their home country. This is interpreted as evidence for skill transfers taking place during the stay in the host country. Iara also finds that rewards for working abroad depend on the human capital endowment of migrants or ‘stayers’ with better education significantly enhancing the return migration premium.

To sum up, the few studies on return migration to the CEE countries summarized in this section as well as in Table 2 show a relatively homogenous picture. Return migrants and their households tend to benefit economically from the temporary migration experience. In particular most studies find that there is a significant income premium attached to the work experience abroad. Notwithstanding this relatively homogeneous ‘broad picture’ it is important to keep in mind that the comparability of the results is very problematic due to the differences in the country-specific samples and the estimation methods. In addition, some of the studies use very small sub-samples of returnees, at different points in time and hence at other levels of the transition process in the CEE countries.

¹¹Other papers dealing more generally with the issue of remittances are Schiopu and Siegfried (2006) looking at European “neighbouring regions” and Abdih et al. (2008) looking at the relationship between remittances and the quality of institutions in the receiving countries.

Study	Country	Year	N returnees	ATE (%) overall	ATE (%) men	ATE (%) women	ATET (%)	selection ρ	selectivity corrections
Co, Gang, Yun (2000)	Hungary	1993/94	112		7	34*		+	yes
de Coulon, Piracha (2005)	Albania	1998/99	204				25*	-	yes
Epstein, Radu (2007)	Romania	2004	1,293	17*				+	yes
Iara (2008)	CEECs	2003	93	30*				-	yes
Hazans (2008)	Latvia	2006/07	469	15*	20*	6*		-	yes

Notes:
N = sample of returnees included in the estimation of wage equations
ATE = average treatment effect; ATET=average treatment effect on treated
 ρ = correlation of residuals in the wage vs. migration equation

Table 2: Available studies on income effects of return migration in CEECs

Table 2 shows a simplified overview of the discussed papers. All studies tried to control for the endogeneity of return migration when estimating wage functions and to identify the causal effect of work abroad on wages. We designated therefore the obtained differentials as treatment effects - although this is a broad generalisation. Most estimations included only comparisons between return migrants (the treated group) and non-migrants (control group) and estimated some average treatment effect (ATE in Table 2), i.e. the expected effect of return migration on earnings if migrants who return are randomly selected from the total population. Additionally, some studies were able to identify so-called average treatment effects for the treated (ATET in Table 2) which focuses explicitly on the effects for migrants, i.e. what is the difference in expected earnings for return migrants before migration (without treatment) versus upon return (with treatment). Table 2 also reports the corresponding signs of the correlation between the residuals of the wage equation and the return migration equation estimated in each study. These vary across countries and time, but the reasons mentioned above - particularly with regard to the stage of transition at which the return migrants included in the studies initially moved and subsequently came back- make this variation plausible.

3 Data and descriptive statistics

The main data source we use for the analysis of return migration to / from the CEE countries is the EU Labour Force Survey (EU-LFS). What makes the EU-LFS such a valuable source of information in this context is the common standardised set of questions used across the EU and the rather large size of the samples conducted.

For this paper, we pool cross-sections of individuals observed in the ten CEE countries which recently joined the EU¹². To ensure comparability over time and across countries we included the years 2002-2007. It is possible to identify recent return migrants using the retrospective information on the country of residence one year before the survey and the country of birth. Rendall et al. (2003) show that although underestimating the aggregated level, these data provide estimates of returning EU citizens which are more reliable than those for new migrants.

The definition we use to identify return migrants in our dataset is that they have to be born in their current country of residence but resided abroad the year before the survey. We can differentiate among the countries of residence and can also control for the citizenship of the respondents.

The variables included in our dataset provide individual level information on:

- general demographic characteristics (age, gender, marital status);
- educational attainment;
- the individual's labour market activity and main job (occupation, sector, employment status, work time);
- similar information on the labour market status and occupation retrospectively for one year before the survey;
- income decile the individual is in as well as the corresponding boundaries of the distribution;

¹²For the period considered we end up with only 5 CEECs for which all the relevant variables for our analysis are available: Hungary, Latvia, Lithuania, Poland, and Romania.

table with summary statistics here

Table 3: Descriptive statistics on returnees

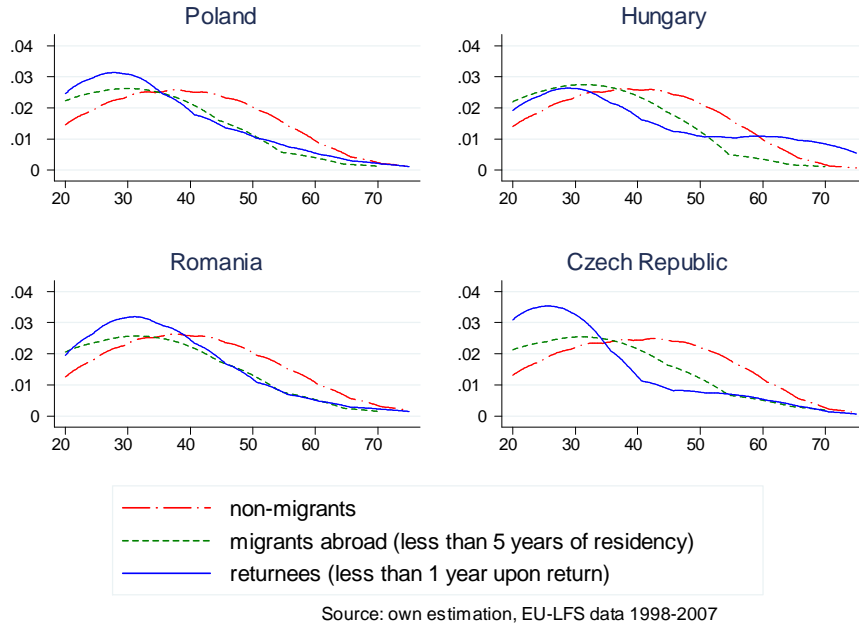


Figure 1: Age distributions (kernel) for selected CEECs

- household characteristics (household size, number of employed persons in the household);

- indicators for regions at NUTS-2 level.

There are some important aspects that need to be highlighted regarding the use of EU-LFS data for analysing return migration. The most important one is that returnees can be identified only during the first year upon their arrival from abroad. It is therefore not possible to analyse the re-assimilation patterns of returnees over a longer time span. Since the probability to be included in the LFS in the first year after return might be lower than afterwards, it is very likely that our sub-sample of recent returnees underestimates the actual magnitude of return flows. We therefore avoid any projections on the aggregated level based on this data. However, given the relatively large sample size and the random selection the data are suitable for an analysis of the selectivity patterns and the performance of recent return migrants in the first year upon return¹³.

4 Empirical strategy

We consider two types of effects induced by return migration. The first one is related to income effects of work experience abroad. Basically, the question here

¹³See Rendall et.al (2003) for more details on the advantages and shortcomings of using the EU-LFS data on migration related questions.

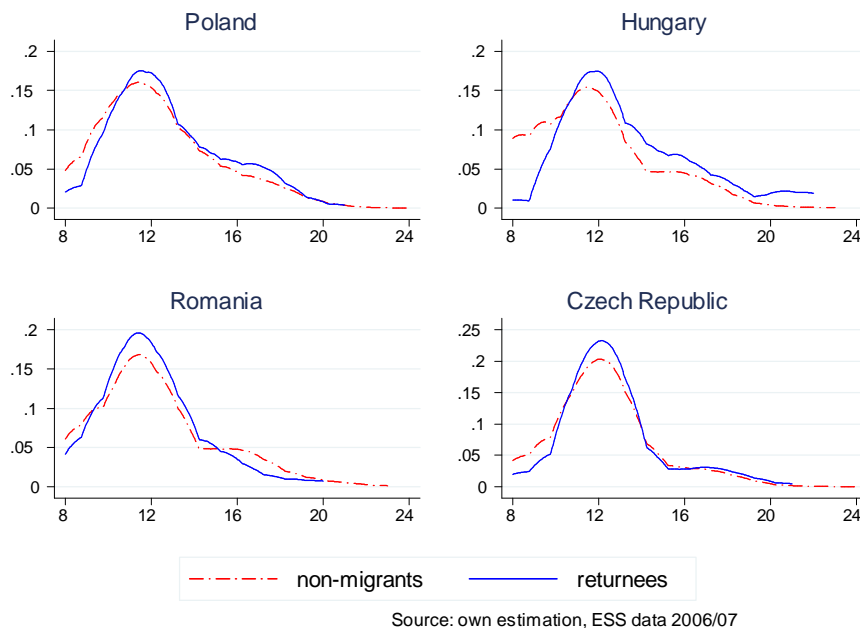


Figure 2: Completed years of education (kernel densities)

is if migrants' position on the income distribution upon return is higher than that of similar workers who did not move for work abroad and subsequently returned to their home countries. The second type refers to occupational choices and particularly to the decision to switch into self-employment after returning. Do return migrants have a higher propensity to be self-employed than non-migrants and if so, how can this be explained.

For types of effects return migration is potentially endogenous¹⁴.

4.1 Income effects

The income variable in the EU-LFS data provides information about the income decile the individual is in. Additionally, we can assign for individuals in most of the CEE countries upper and lower bounds to these deciles available in the corresponding cross-sections of the EU-LFS after 2002.

We take into account the endogeneity of return migration in two alternative ways: (i) using only the income deciles as categorical indicators and (ii) using also the actual values of the boundaries of the income deciles. For the latter, we reconstruct the income distribution with an interval regression technique and use the predicted income in a treatment effects model. For the former, we allow for endogenous return migration in a bivariate ordered probability model. This can

¹⁴See e.g. Hazans (2008), Wahba and Zenou (2008) and Tunali(1986) for a more general discussion.

be derived from a latent model with two variables determined by:

$$y_i^* = \alpha_i' X_i + \delta m_i + \varepsilon_{inc} \quad (1)$$

$$m_i^* = \zeta_i Z_i + \varepsilon_{mig} \quad (2)$$

where α is the vector of unknown parameters corresponding to the human capital characteristics which determine individual incomes and ζ like in (8). The return migration variable is observed like in (9) while the categorical income (decile) is observed such that:

$$y_i = \begin{cases} 1 & \text{if } y_i^* \leq b_1 \\ 2 & \text{if } b_1 \leq y_i^* \leq b_2 \\ \vdots & \\ 10 & \text{if } b_9 \leq y_i^* \end{cases} \quad (3)$$

The cutoffs b_i are unknown in the categorical analysis. The error terms are distributed as bivariate standard normal distribution:

$$\varepsilon_{inc} \sim N(0, 1) \quad (4)$$

$$\varepsilon_{mig} \sim N(0, 1). \quad (5)$$

and the two decisions are allowed to be correlated:

$$\text{corr}(\varepsilon_{inc}, \varepsilon_{mig}) = \rho_{inc} \neq 0.$$

We estimated this model as a bivariate ordered probit using an available maximum likelihood method¹⁵. We used the household and regional characteristics in order to identify the migration decision.

Additionally, we made use of the corresponding bounds of the income deciles and estimated interval regressions with a dummy variable indicating the migration status. As above, the coefficient of this dummy variable is biased since individuals do not randomly self-select into return. In order to correct this bias we estimated two step treatment regressions using household and regional variables as instruments to identify the selection equation.

4.2 Occupational choices

A second possible effect of return migration on the labour market performance of returnees relates to their occupational choices defined as either non-participation, self-employment or dependent employment. In order to analyse this effect we first estimate a multinomial model of occupational choices in which we consider return migration as a purely exogenous decision. We introduce then the residuals from a separately estimated migration equation into the same multinomial model. Since these are significant only for the self-employment decision, we estimate a recursive bivariate choice model in order to account for the simultaneity of the two decisions: i.e. to be self-employed and to be a return migrant.

The estimated model assumes that the decision to become self-employed is following a latent index function which includes return migration as an endogenous

¹⁵See Sajaia(2008 a and b) for more details about the estimation method.

dummy variable (m_i) along with other characteristics (X_i) which influence the individual's utility from self-employment:

$$s_i^* = \beta_i' X_i + \gamma m_i + \varepsilon_{self}, \quad (6)$$

with the rule for observing the actual decision given by:

$$s_i = (\beta_i' X_i + \gamma m_i + \varepsilon_{self} > 0) = \begin{cases} 1 & \text{for self-employed, i.e. : } s_i^* \geq 0 \\ 0 & \text{for non-self-employed, i.e. : } s_i^* < 0 \end{cases} \cdot (7)$$

Similarly, the decision to migrate and return is assumed to follow a latent index function given by

$$m_i^* = \zeta_i Z_i + \varepsilon_{mig}, \quad (8)$$

with the observation rule for the choice to move/return or to stay given by:

$$m_i = (\zeta_i Z_i + \varepsilon_{mig}) = \begin{cases} 1 & \text{for returnees, i.e. : } m_i^* \geq 0 \\ 0 & \text{for non-migrants, i.e. : } m_i^* < 0 \end{cases}, \quad (9)$$

where Z_i are those characteristics of individual i which are influencing his utility from having work experience abroad.

There are thus four possible outcomes of this decision process: (i.) the individual decides to migrate, return and be self-employed upon return (i.e. $s_i = 1$, $m_i = 1$), (ii.) the individual decides not to migrate but to be self-employed (i.e. $s_i = 1$, $m_i = 0$), (iii.) the individual decides to migrate but not to be self-employed upon return (i.e. $s_i = 0$, $m_i = 1$), and (iv.) the individual decides not to migrate and also not to be switch into self-employment (i.e. $s_i = 0$, $m_i = 0$). We treat the two decisions s_i and m_i as independent with $E[\varepsilon_{self}] = E[\varepsilon_{mig}] = 0$ and correlated with the coefficient

$$corr(\varepsilon_{self}, \varepsilon_{mig}) = \rho_{self} \neq 0$$

-variables and identification come here

5 Discussion of results

5.1 Mobility decisions

The probit estimates in Table 4 confirm theoretical predictions of the migration literature. Migrants returning from abroad are predominantly male and tend to have a medium or high level of educational attainment. They also belong to households in which more persons are working and where thus more sources of income are potentially available. As expected, the size of the household as well as the marital status have the opposite effect: the presence of children and of spouses in the household might deter potential migrants from leaving to work abroad. These control variables are however likely to be endogenous, therefore the results should be interpreted merely in descriptive terms.

Our estimates also suggest that the likelihood to be a return migrant declines with age. There are two potential explanations for this which are not mutually exclusive. First, we included in our sample only recent returnees, i.e. those who were residing abroad one year before the survey. Excluding migrants who returned earlier automatically makes our selected group younger than the whole population

of returnees. Second, the fact that migrants return at a younger age supports the hypothesis of a life-cycle strategy. Migrants choose the timing and the optimal duration of their stay abroad so that they maximise the economic benefits from their work experience abroad. As suggested by Dustmann (1996) these benefits are larger "the earlier it is clear whether migration is temporary or permanent".

Regional dummies are strong predictors of return migration. This is a plausible result due to the importance of network ties, peer pressure and local interactions for mobility decisions. Many previous studies on migration from Central and Eastern Europe (as well as other parts of the world) acknowledged the clustering of migrants in specific regions both at origin and at destination.

Both household characteristics and the regional distribution of returnees play an important role in our identification strategy. We use them as instruments when estimating the effects of return migration on occupational choices and income. Previous results show that these hardly impact upon the labour market performance but are strongly correlated with migration choices.

We will further use the probit models from Table 4 as first-step selections in income regressions and their residuals to test the endogeneity of return migration for occupational choices.

5.2 Income effects

Some prima facie evidence on the pecuniary returns to work experience abroad can be obtained using the income deciles from the EU-LFS to run ordered univariate probability models. In the ordered probit estimates (Table 6), the coefficients of return migrant dummies are highly significant (at the 1% level) and positive for all countries considered. This means that, holding all other relevant characteristics constant, returnees are in a higher income decile than comparable non-migrants.

If return migration is endogenous to the probability of being in a higher income decile, these coefficients are biased. As discussed above, we correct this bias by estimating the joint probability distribution of the ordered income variable (deciles) and of return migration¹⁶. In order to identify the model we use household characteristics and regional dummies as instruments in the migration equation.

The estimation results reported in Table 7 confirm that the income and the return migration equations (pooled for all CEE countries considered) are negatively correlated ($\rho = -.255$). In the context of the Roy-model of self-selection, this is an indicator that returnees' expected wages are lowered by their unobservable characteristics. If return migrants had decided not to move their earnings would have been lower than that of a randomly selected non-migrant. This negative selection of return migrants also means that in fact the effect of return migration on the probability to be in a higher income decile is biased downwards in the univariate ordered model.

In addition to looking at income deciles, we also use the information on the boundaries of income deciles available in the EU-LFS. Using the lower and upper ends of the deciles enables us to run an interval regression¹⁷. The estimated coefficients are reported in Table 8. Consistent with the previous estimates based on income deciles only, the coefficients of the returnee dummies are significant and

¹⁶See Sajaia (2008a and b) for details on the Stata routine used.

¹⁷In order to pool all the countries, we used the deflated log wages at the level of the year 2002.

positive both in the CEE countries as a whole and in all individual countries¹⁸. Returnees earn on average a wage premia of about 10 to 30%.

Like in the estimation for the discrete case, the coefficients of return migration are biased if we do not control for the endogeneity of migration. We do this in the context of a two-step treatment effects regression reported in Table 9.

The signs for both the coefficients and the correlation of the wage and return equations ($\rho = -.14$) are similar with those in the estimation based on income deciles only.

Returnees are negatively selected in terms of unobservable characteristics. The corrected wage premium for work experience abroad is on average 30%.

5.3 Occupational choices

Turning to the effects of return migration on occupational choices we estimated multinomial logit models assuming first that return migration is exogenous for the choice over non-participation, self-employment, and dependent employment. The results reported in the first column of Table 5 show that after controlling for all relevant individual characteristics return migrants are more likely not to participate in the labour market or to be self-employed rather than employees. We included only a dummy for being a return migrant without controlling for the migration decision. Most other coefficients have the expected sign. Men are more likely than women to participate in the labour market and more likely to be self-employed rather than employees. Persons with a high level of educational attainment are also more likely to participate in the labour market but they are less likely to be self-employed.

We test the endogeneity of migration for occupational choices by including the residuals of the migration equation in the multinomial model¹⁹. The second column in Table 5 indicates that these are significant only in the equation for the self-employment decision. In order to account for the endogeneity of migration we estimate a bivariate probit model which allows the two decisions (return migration and self-employment) to be correlated.

As the third column in Table 5 suggests, we find that after controlling for endogeneity returnees are less likely to switch into self-employment than non-migrants.

This result is in line with the findings of Wahba and Zenou (2008) on a sample of Egyptian returnees. They develop a theoretical search model to accommodate the effect of return migration on entrepreneurial decisions. Their main argument is that temporary work abroad is an opportunity to accumulate human and physical capital but may lead to a loss of social capital back home which makes it more difficult to become self-employed.

6 Conclusions

Our paper presents some new evidence on how work experience abroad affects the labour market performance of return migrants in CEE countries. We focused on

¹⁸Only in the case of Poland the significance level is lower (5% instead of 1%).

¹⁹The generalised probit residuals were calculated following Gourieroux et al. (1987)

effects for occupational choices and for the labour income upon arrival in the home country. Pooled cross-sections extracted from the EU-LFS allowed us to conduct the empirical analysis from a cross-national perspective. The EU-LFS includes a question on place of residence one year before which enabled us to identify a sample of about 2,500 recent returnees across 7 countries for the period 2002-2007.

In terms of observable characteristics we find that return migrants are positively selected in most countries included in our analysis. At the time of return they are younger both compared to non-migrants and to the recent migrants still residing abroad. Apart from Romania, all countries seem to attract returnees who attained more years of formal education than non-migrants.

Consistent with previous (country-specific) results from the empirical literature, our cross-country estimates show that returnees receive significant income premia both from self-employment and from dependent employment. At the same time the results suggest that being exposed to work abroad increases the propensity of migrants to either not participate in the labour market or to switch into self-employment upon return. The intuition behind this finding is that return migrants lack characteristics which are valued on the home labour market (like e.g. network ties and specific labour market experience and local human capital) and possess others which make them prone to become self-employed (like e.g. entrepreneurial skills and risk proclivity).

With regard to the selectivity on unobservables the evidence is rather mixed. While this appears to be negative when estimating the individual income effects it turns out positive for the decision to switch into self-employment.

Both results confirm other empirical and theoretical findings on the performance and occupational choices of return migrants. The intuition behind is that migrants lack characteristics which are valued on the home labour market (like e.g. network ties and specific labour market experience and local human capital) and possess others which make them prone to become self-employed (like e.g. entrepreneurial skills and risk proclivity).

At this point it is still very early to draw policy implications from the analysis. The fact that return migrants can expect a reward for their temporary migration decision in the form of a higher income after they return tends to make it more attractive for potential migrants to leave their home country temporarily and to return after a certain period abroad. In other words, it would tend to enhance the relative attractiveness of temporary migration as opposed to permanent migration. It would also suggest that migrants have a stronger incentive to return once the economic outlook in the host countries worsens relative to the situation in the home country. A thorough investigation of important issues relating to return migration such as its impact on the human capital stock of the home country and – possibly – the enhancement of the entrepreneurial base by increasing the number of self-employed in the workforce would require a more detailed investigation as regards the professional development of return migrants after their return to the home country.

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	CEEC	Poland	Romania	Hungary	CZ. Rep.	Lithuania	Latvia
male	0.158 (0.025)***	0.354 (0.068)***	0.110 (0.061)*	-0.122 (0.085)	-0.018 (0.066)	0.198 (0.053)***	0.282 (0.104)***
age	-0.025 (0.001)***	-0.026 (0.004)***	-0.020 (0.004)***	-0.021 (0.005)***	-0.013 (0.004)***	-0.035 (0.003)***	-0.024 (0.006)***
medium education	0.306 (0.041)***	0.620 (0.124)***	0.034 (0.073)	0.356 (0.142)**	0.608 (0.160)***	0.541 (0.100)***	0.455 (0.166)***
high education	0.268 (0.047)***	0.616 (0.139)***	-0.340 (0.128)***	0.716 (0.155)***	0.813 (0.172)***	0.437 (0.107)***	0.516 (0.194)***
persons working in hh	0.068 (0.015)***	0.043 (0.039)	-0.052 (0.038)	-0.069 (0.055)	0.110 (0.044)**	0.117 (0.029)***	0.080 (0.067)
household size	-0.040 (0.015)***	-0.112 (0.040)***	0.042 (0.036)	0.022 (0.051)	-0.059 (0.041)	-0.034 (0.038)	-0.050 (0.061)
married	-0.094 (0.043)**	0.240 (0.151)	0.141 (0.127)	0.140 (0.163)	-0.251 (0.114)**	-0.332 (0.083)***	-0.078 (0.158)
constant	-0.044 (0.112)	0.165 (0.302)	1.252 (0.231)***	-0.814 (0.372)**	0.363 (0.315)	-0.774 (0.226)***	-1.921 (0.408)***
observations	897305	154457	161335	212300	171929	57240	27817

Notes:

Standard errors in parentheses. Control dummies for countries, years, and regions included.

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

Own estimation, data from EU-LFS (2002-2007).

Table 4: Probability of being a return migrant

	multinomial logit 1	multinomial. logit 2	bivariate probit
non-participant equation			
male	-0.423 (0.022)***	-0.439 (0.021)***	
high education	-1.808 (0.038)***	-1.813 (0.036)***	
residual		-0.631 (0.152)***	
<i>return migrant</i>	<i>1.354</i> (0.058)***	<i>-1.706</i> (0.346)***	
constant	-1.069 (0.090)***	-2.220 (0.092)***	
self-employed equation			
male	0.697 (0.021)***	0.704 (0.022)***	0.396 (0.011)***
high education	-0.633 (0.036)***	-0.628 (0.038)***	-0.129 (0.019)***
residual		0.919 (0.195)***	
<i>return migrant</i>	<i>0.503</i> (0.073)***	<i>2.754</i> (0.477)***	<i>-1.448</i> (0.050)***
constant	-2.332 (0.087)***	-1.145 (0.091)***	-1.413 (0.046)***
return migrant equation			
male			0.247 (0.023)***
high education			0.301 (0.042)***
hh persons work			0.041 (0.011)***
constant			-0.790 (0.099)***
ρ			1.442
obs. nr.	90623	90479	90646

Notes:

Standard errors in parentheses. Base outcome for models 1 and 2 is "employee".

Controls for age, household size, marital status, country, year, and region included.

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

Own estimation, data from EU-LFS (2002-2007).

Table 5: Occupational choices

	CEECs	Poland	Hungary	Lithuania	Latvia	Romania
ordered probit estimates for income deciles						
medium ed.	1.015 (0.013)**	1.102 (0.024)**	1.058 (0.029)**	0.796 (0.036)**	0.729 (0.038)**	0.935 (0.029)**
high ed.	2.933 (0.015)**	3.07 (0.027)**	3.304 (0.039)**	2.538 (0.039)**	2.434 (0.045)**	2.724 (0.034)**
age	0.141 (0.002)**	0.175 (0.004)**	0.094 (0.007)**	0.069 (0.005)**	0.034 (0.006)**	0.078 (0.005)**
age square	-0.145 (0.003)**	-0.178 (0.005)**	-0.094 (0.009)**	-0.08 (0.006)**	-0.07 (0.007)**	-0.072 (0.007)**
male	0.99 (0.007)**	1.101 (0.012)**	0.716 (0.021)**	0.962 (0.018)**	1.178 (0.025)**	0.761 (0.016)**
part-time	-3.028 (0.020)**	-3.104 (0.032)**	-3.326 (0.074)**	-3.326 (0.046)**	-2.401 (0.063)**	-0.401 (0.112)**
<i>returnee</i>	1.835 (0.121)**	0.172 -0.272	1.468 (0.425)**	2.593 (0.148)**	2.156 (0.311)**	0.832 (0.300)**
obs. nr.	264193	90490	31401	41999	22862	53274

Notes:

Standard errors in parentheses. Controls for occupations, sectors, household size, marital status, country, year, and region included.

* significant at 5%, ** significant at 1%

Own estimation, data from EU-LFS (2002-2007).

Table 6: Categorical income regressions

CEECS		
	ordered probit income	return migration equation
age	0.067 (0.003)***	-0.025 (0.002)***
age square	-0.075 (0.003)***	
male	0.498 (0.009)***	0.225 (0.040)***
medium ed.	0.496 (0.014)***	-0.003 (0.067)
high ed.	1.467 (0.016)***	-0.047 (0.077)
part time	-1.565 (0.023)***	
hh size		-0.078 (0.021)***
<i>returnee</i>	1.645 (0.122)***	
rho	-0.255	
cut 1	0.937	
cut 2	1.419	
cut 3	1.772	
cut 4	2.08	
cut 5	2.468	
cut 6	2.721	
cut 7	3.015	
cut 8	3.408	
cut 9	3.904	
cut 10	1.347	
obs. nr.	61439	

Notes:
Standard errors in parentheses. Controls for marital status, country, years, regions, sectors and occupations included.
*significant at 10%; ** significant at 5%, *** significant at 1%
Own estimation, data from EU-LFS (2002-2007).

Table 7: Bivariate ordered probit for income deciles

	CEECs	Poland	Hungary	Lithuania	Latvia	Romania
interval regression on log income						
medium ed.	0.206 (0.003)**	0.216 (0.005)**	0.164 (0.005)**	0.169 (0.009)**	0.163 (0.012)**	0.194 (0.006)**
high ed.	0.594 (0.003)**	0.615 (0.006)**	0.516 (0.006)**	0.544 (0.009)**	0.625 (0.014)**	0.587 (0.007)**
age	0.028 (0.001)**	0.027 (0.001)**	0.011 (0.001)**	0.012 (0.001)**	0.001 -0.002	0.015 (0.001)**
age square	-0.029 (0.001)**	-0.026 (0.001)**	-0.011 (0.001)**	-0.014 (0.002)**	-0.01 (0.002)**	-0.013 (0.002)**
male	0.197 (0.002)**	0.218 (0.003)**	0.11 (0.003)**	0.212 (0.004)**	0.3 (0.008)**	0.161 (0.003)**
part-time	-0.527 (0.004)**	-0.563 (0.006)**	-0.491 (0.011)**	-0.641 (0.010)**	-0.7 (0.021)**	-0.052 (0.023)*
returnee	0.21 (0.026)**	0.125 (0.051)*	0.248 (0.079)**	0.367 (0.034)**	0.345 (0.092)**	0.16 (0.059)**
constant	5.282 (0.010)**	5.787 (0.016)**	10.664 (0.021)**	5.846 (0.025)**	4.539 (0.039)**	5.83 (0.023)**
<i>sigma</i>						
obs. nr.	212529	90490	31401	41999	22862	53274

Notes:

Standard errors in parentheses. Controls for occupations, sectors, household size, marital status, country, year, and region included.

* significant at 5%, ** significant at 1%

Own estimation, data from EU-LFS (2002-2007).

Table 8: Interval regression for log income

	Poland		Hungary		Latvia		Romania		CEEcs	
	wage equation	migration equation	wage equation	migration equation	wage equation	migration equation	wage equation	migration equation	wage equation	migration equation
age	0.033*** (0.000)	0.00215 (0.0238)	0.008*** (0.0037)	0.473** (0.217)	0.0104*** (0.00027)	0.00766 (0.0160)	0.014*** (0.00014)	0.119** (0.0526)	0.025*** (0.000)	0.00348 (0.0091)
age2	-0.032*** (0.000)	-0.0246 (0.0315)	-0.006*** (0.0004)	-0.720** (0.342)	-0.012*** (0.00032)	-0.0473** (0.022)	-0.012*** (0.00017)	-0.176** (0.0718)	-0.026*** (0.0001)	-0.033*** (0.0121)
male	0.221*** (0.001)	0.251*** (0.0786)	0.125*** (0.0011)	-0.183 (0.223)	0.207*** (0.000)	0.181*** (0.0460)	0.165*** (0.0051)	0.222* (0.129)	0.198*** (0.0000)	0.195*** (0.029)
hhsiz		-0.116*** (0.0407)		-0.047 (0.1170)		0.0273 (0.02940)		0.0817 (0.0653)		-0.061*** (0.015)
married		0.149 (0.231)		-0.0934 (0.516)		-0.401*** (0.07680)		-0.680*** (0.2140)		-0.201*** (0.052)
med. ed.	0.229*** (0.001)		0.174*** (0.00163)		0.216*** (0.0016)		0.197*** (0.0076)		0.215*** (0.047)	
high ed.	0.642*** -		0.537*** (0.00203)		0.587*** (0.00178)		0.588*** (0.00094)		0.600*** (0.00056)	
self empl.	0.031*** (0.00108)		0.015*** (0.002)		0.0136*** (0.0014)		0.0214*** (0.0077)		-0.003*** (0.0047)	
returnee	0.113*** (0.013)		0.341*** (0.0471)		0.563*** (0.0144)		0.127*** (0.00468)		0.361*** (0.00671)	
constant	5.938*** (0.005130)	-0.388 (0.5010)	10.75*** (0.00830)	-8.850** (3.455)	6.108*** (0.00916)	-1.322*** (0.311)	5.899*** (0.0089)	-2.014** (0.988)	5.573*** (0.0023)	-0.936*** (0.184)
ρ		0.135		0.322		0.070		0.625		-0.140
obs. nr.	33178	33178	10405	10405	11587	11587	13048	13048	133348	133348

Notes:

Standard errors in parentheses. Controls for occupations, sectors, household size, marital status, country, year, and region included.

* significant at 5%, ** significant at 1%

Own estimation, data from EU-LFS (2002-2007).

Table 9: Two step treatment effects regression for wages and return migration