

Migration informal human capital of returnees to Central Europe: a new resource for organisations

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Abstract

Purpose – This paper aims to investigate the interplay between international migration, soft skills and job and life satisfaction after returns.

Design/methodology/approach – The paper uses the dataset of Human Capital in Poland 2010–2014 representative surveys with 4040 return migrants, who worked temporarily abroad and returned to an origin in comparison with almost 70,000 stayers, who never worked abroad. In this study, Poland is treated as a strategic research site for the labor migration processes, which happened after the biggest European Union enlargement in 2004.

Findings – This study discovered that working abroad had a positive relation with cognitive, intrapersonal and interpersonal competencies, as well as job and life satisfaction. However, the relations differ depending on the key destination country.

Practical implications – This study discusses the implications for future research and practice, offering recommendations to organizations on how to embed employees with these resources in companies and how to support return migrants and their potential employers with the use of migratory informal human capital in personnel management and counseling.

Originality/value – This paper brings quantitative arguments about the hidden impacts of international migration on human capital by uniquely comparing the migrant population with the non-migrant population.

Keywords Migratory informal human capital, Job satisfaction, Life satisfaction, International migration, Return migrants, Organizations

Paper type Research paper

Introduction

When there exist wage differences between countries and there are limited job opportunities in some of them, people from lower waged countries seek work abroad to earn more, even though they may have to accept jobs below their formal qualifications (cf. Parutis, 2014; Trevena, 2013; Johnston, Khatib, & Manley, 2015; Sirkeci, Acik, Saunders, & Přívara, 2018). However, generating income is not the only benefit of temporary work abroad (cf. Williams & Baláz, 2005, 2014; Hagan, Hernandez-Leon, & Domonsant, 2015). Labor migration may also

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help people obtain soft skills, job satisfaction and life satisfaction. We know that for the past three decades, employers have lamented the lack of competencies among employees, especially those recruited from younger age cohorts, which affected their prospects in the labor market (cf. Williams & Baláz, 2005; Haynes & Galasinska, 2016). By improving these competencies and work attitudes, employees can better perform in an organization after return (Williams & Baláz, 2014).

In migration history, there are cases from various parts of the world of bringing back human capital to an origin. Allow us to highlight two of them here – Ireland and Mexico – both linked mostly to return migration from the USA. First, we know that returnees to both Ireland (Barrett & O’Connell, 2001; Barrett & Goggin, 2010; Iara, 2008) and Mexico (Reinhold & Thom, 2009) have higher earnings after accumulating work experience abroad than at home during the same period. Second, human capital accumulation might be also a trigger to return and perform better in the labor market (Dustmann, Fadlon, & Weiss, 2010).

This article considers the case study of massive labor movements – migration and returns – of people from post-communist Central and Eastern Europe (CEE) to Western Europe after the European Union (EU) enlargement of May 2004 on the example of Poland – the biggest country of the region – as the strategic research site (Merton, 1996).

Poland was the biggest of the CEE countries that joined the EU in May 2004. From 2006 on, Poles began to spontaneously migrate on a massive scale, primarily with the purpose of working abroad. One in three Poles who migrated soon after May 2004 attained higher education before migration. According to the results of Statistics Poland, at the end of 2020, around 2,239,000 Poles temporarily stayed abroad. Most of them – around 1,339,000 – stayed in the EU member states. Among the EU countries, the largest number of Polish emigrants stayed in Germany (706,000), the Netherlands (135,000) and Ireland (114,000) (Statistics Poland, 2020). The significant emigration of Poles after 2004 meant that Poles became a significant group among foreigners living in these countries, sometimes even the largest one. In Iceland, at the beginning of 2019, Poles accounted for 43.5% of the total number of foreigners, in Ireland over 21% and in Norway 18%. In the countries in which they gather in the largest numbers, namely, the UK and Germany, they account for almost 14.9% and 7.7%, respectively.

The first decade after Poland’s accession was characterized by outflows of young Polish migrants, as their average age was less than 30 years (Kindler, 2018). The outflows accompanied return mobility. Returns to Poland were dominated by 20- to 29-year-olds in 2009 (60%), but the average age of returnees continued to increase for yet undetermined reasons. In 2017, the proportion of 20- to 29-year-olds dropped to 10%, while the proportion of 30- to 39-year-old returnees increased to 30% (Fries-Tersch, Jones, Böök, de Keyser, & Tugran, 2020).

Our main research question focuses on whether informal human capital covering soft skills, job and life satisfaction, formal human capital covering the years of schooling and experience and status in the labor market differ between those who experienced temporary work abroad and those who remained in the domestic labor market, without any experience of international migration. In other words, does the experience of working abroad make any difference to the human capital of Poles.

Our contribution to past research will be fourfold. First, we will expand the concept of human capital by distinguishing between formal and informal human capital and by creating indexes to measure. Second, we will investigate whether temporary work abroad has any relation with various components of soft skills, job satisfaction and life satisfaction. Third, we will examine whether temporary work abroad can reinforce job performance after return. Fourth, by studying the interplay between temporary work abroad, competencies, job satisfaction and well-being, we will provide an innovative and complementary approach to classical studies on organizational capital.

The article consists of five parts. Following this introduction, we will discuss the theoretical framework to conceptualize interactions between the formal and informal

components of human capital. Next, we will present our methodology by explaining country selection, data, indexes and analysis. The results of the multistep statistical analysis will then be presented, followed by general conclusions and recommendations for companies that employ persons who worked abroad, even if their work positions are below their formal qualifications.

Theory: migrants' formal and informal human capitals

The possible interplay between international labor migration, competencies, job satisfaction and life satisfaction garners much scholarly interest. The massive movements of migrants seeking work abroad from Central Eastern Europe to Western Europe (Black, Pantiru, Okólski, & Engbersen, 2010) after the EU enlargements of 2004 and 2007, legitimized interests in informal human capital as a possible effect of temporary work abroad, beyond direct financial gains (cf. White, Grabowska, Kaczmarczyk, & Slany, 2018; Williams & Baláz, 2005, 2014). After all, 10 CEE countries joined the EU in 2004: the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Cyprus and Malta. Two more countries from CEE – Bulgaria and Romania – joined the EU in 2007, bringing the number of Member States to 27.

The interplay between work abroad, soft skills, as well as life and job satisfaction connects the theories of human capital, international migration and well-being. The traditional human capital theory assumes that greater investments in education yield greater productivity and higher earnings (Becker & Chiswick, 1966). However, the standard measurement of education years fails to distinguish between formal and informal human capital and does not recognize the impacts of any other factors than formal education, namely, the experience of working abroad, learning by observing, learning by communicating and learning by doing (cf. Grabowska, 2018).

To identify the impact of work abroad on human capital, scholars usually consider standard indicators such as schooling, wages and self-employment. Migrants – especially from CEE – are usually better educated than natives, and they were economically active before leaving for work abroad (Fries-Tersch *et al.*, 2020; cf. 2019 Annual Report on Intra-EU Labor Mobility). As Hagan and Wassink (2020) rightly indicate, migrants are inherently entrepreneurially minded risk-takers, meaning they would likely have earned decent wages or successfully started own businesses even without any migratory experience. Therefore, Hagan and Wassink (2020) showed that classical human capital indicators are not enough to identify the interaction between formal and informal human capital variables.

The seminal work of Sjaastad (1962) on human capital treats both migration and education as investment decisions. From this perspective, migration – like all investments – has costs and returns. People decide to migrate only when the expected net return of a migration investment is positive.

To explain the impact of migration on heuristic human capital, we must revisit the concept of Total Human Capital in the context of geographical labor mobility (cf. Hagan *et al.*, 2015, p. 10). The Total Human Capital in its totality includes both easy-to-measure components of formal education and language skills and incorporates difficult-to-measure sets of manual and technical skills and sociocultural competencies informally learned in social and vocational settings (Hagan & Wassink, 2020; cf. Findlay, Li, Jowett, & Skeldon, 1996). Lulle, Janta, & Emilsson (2021, p. 5; qtd. after Li, Findlay, Jowett, & Skeldon, 1996) argue that “soft skills that stem from migration experience should be included in the notion of ‘total human capital.’”

Baláz, Williams, Moravčíková and Chrančoková (2021) and Janta, Jephcote, Williams and Li (2021) confirmed that the formal and informal components of human capital are indeed different, but they should still be related to each other. The competencies of migrants like self-confidence and communication are impacted by even short-term migratory experiences.

Returnees value these skills mostly for personal development and possible career progressions. The quantitative analysis of Janta *et al.* (2021) provided evidence that intra-EU mobility increases returnees' human capital resources by acquiring various skills abroad. In other words, the skills one obtains depend on how long they are mobile, how often one move, where one go and what one do there. Baláž *et al.*'s study (2021) focuses on the tacit and explicit knowledge transferred by returnees, using the case study of return mobility to Slovakia. The transfer of tacit knowledge is particularly impacted by international mobility, which is conditioned by proximity, interactions, exchanges and observing practical activities.

As Dustman *et al.* (2010) showed, workers acquire hard and soft skills that can be augmented by both formal education and learning by doing while acquiring work experience, also abroad. The level of remuneration that can be earned through these two skills differs per country, as does the rate of human capital accumulation. Thus, people can choose to move to a country that promises higher returns on their investment – formally connected to education and informally to work experience (cf. Dustman *et al.*, 2010).

Through international mobility, people endeavor to improve their existence in many areas of life. McGarry *et al.* (2021) claim that human capital-related resources go hand-in-hand with a broader sense of life measured by life satisfaction: “human capital portfolios of migrants are constructed in tandem with life course development and play a crucial role in determining life satisfaction effects” (McGarry *et al.*, 2021, p. 5).

As Hendriks and Bartram (2019) indicate, subjective well-being could be a way to measure migration effects. Well-being should be measured as a comprehensive indicator that includes many life domains, self-assessment criteria of life satisfaction – namely, the global assessment of a person's quality of life according to their chosen criteria – and their effects. The measurement of well-being allows individuals to evaluate the importance of different aspects of life. Literature on well-being broadly recognizes that life satisfaction varies across individuals and depends on migration duration and location. Moreover, subjective measures of well-being may be informative as objective measures of effects because they include different personal aspirations and expectations. Due to the increasing awareness of objective indicators' limits in evaluating individual and societal well-being, scholars increasingly focus on subjective components of well-being (Bache, 2019; cf. Ambrosetti & Paparusso, 2019).

Until now, human capital, job satisfaction and well-being were considered by scholars separately from international labor migration. Therefore, in isolation, they do not have explanatory power to show complex migratory effects.

Our review of the scholarship led us to choose an approach mixing human capital, job and life satisfaction and migration to formulate the following research questions: How does temporary work abroad impact both formal and informal components of human capital? What are the similarities and differences between stayers and migrants? What is the selectivity of impacts of temporary work abroad on informal human capital by destination country of migration? Therefore, we posit the following hypotheses:

- H1. Temporary work abroad positively influences returnees' soft skills compared to stayers in Poland.
- H2. Poles who experienced temporary work abroad have higher self-assessment of well-being than persons who have never migrated.

This article extends the understanding of relations between temporary work abroad on migrants' performance in the labor market and their life satisfaction when returning – connected to human capital. This article differs also by way of both volume and comprehensiveness of data, which is based on the general human capital survey, in which both migrants and stayers were interviewed. Other studies were generally based on surveys that exclusively focus on migrants only.

Data and the analytical approach

This article employs the integrated dataset of the *Human Capital in Poland 2010–2014* representative surveys for the Polish society. The project was one of the largest surveys investigating human capital, competencies and the labor market in CEE. The research program was conducted by the Polish Agency for Entrepreneurship Development in collaboration with the Jagiellonian University in Krakow. The results of the project allow for the comparison of human capital between migrants-returnees and stayers across different age cohorts.

The methodology of the *Human Capital in Poland* project consisted of seven nationwide field studies, which enable regional (provincial) analyses: employer surveys, job offers studies, working-age population surveys, a search of people registered as unemployed in labor offices, studies on students at upper secondary schools, student surveys and research on training institutions. Our study used data from the five years of all surveys.

The database consists of 88,650 people and 975 variables. Soft competencies were selected from the database for analyses, which were divided into individual and social ones. Individual soft skills were calculated as the average of the behavior sub-dimensions included in the cognitive and personal competencies, while social competencies – as the average of the behavior sub-dimensions indicating the possession of interpersonal competencies. The individual domain related to cognitive aspects of reasoning, knowledge and creativity, while also involving critical thinking, information literacy, argumentation, innovation, flexibility, initiative, appreciation for diversity, reflexivity and the intrapersonal capacity to manage one's emotions and behaviors to achieve goals, including learning. The social domain covered more interpersonal and relational aspects of expressing ideas, interpreting and responding to messages from others, also including communication, collaboration, responsibility and conflict resolution (cf. Grabowska & Jastrzebowska, 2021).

Admittedly, these tools offered only a very limited question about migration – “Have you ever performed abroad any of the work that you have ever done? No/Yes” – while no information was gathered about the date of migration and return or the interviewee's human capital prior to migration.

This article analyzed data obtained from 71,214 respondents. The respondents were Poles classified as migrants-returnees who had worked abroad for at least three months ($n = 4040$; 5.7% of the total population) and Poles who reported no previous experience of working abroad ($n = 67,174$; 94.3%). Table 1 presents the various categories of variables that fall under formal human capital – years of schooling and labor market experience and status (cf. Becker, 1964; Schultz, 1990; Sjaastad, 1962) – and the categories of variables that fall

| Formal human capital (FHC) | Informal human capital (IHC) |
|--|---|
| <i>Education/schooling</i> mean years in education | <i>Soft skills</i> individual/intrapersonal (cognitive and personal) and social/interpersonal (cf. AUTHORS) |
| <i>Labour market experience and status</i> mean years of work; mean net average income; self-employed; situation on the labor market (employed, unemployed, inactive) | <i>Job satisfaction</i> satisfaction with: earnings, promotion opportunity, the conditions for performing work, employment stability, opportunity for personal development and training, the work itself – job content |
| | <i>Well-being</i> health assessment: physical and mental self-assessment |

Table 1.
Indicators of formal and informal human capital

Source(s): Own elaboration

under informal human capital: soft skills (cf. Grugulis & Vincent, 2009) comprising cognitive, personal and interpersonal skills, as well as the subjective measures of job satisfaction and well-being (cf. Findlay *et al.*, 1996; Li *et al.*, 1996; Williams & Baláz, 2005; Hagan *et al.*, 2015; Grabowska & Jastrzebowska, 2022; Janta *et al.*, 2021; Baláz *et al.*, 2021; Hagan & Wassink, 2020).

The soft skills variables considered in this article refer to individual and social skills (cf. Grugulis & Vincent, 2009). They were selected from 11 categories and subcategories of general skills measured in *Human Capital in Poland*. The categories of social skills included in our analysis covered the social dimension (ease in establishing contact with colleagues and/or clients, cooperation within groups, being communicative and sharing ideas clearly and timely completion of planned actions) and the individual dimension (quick summarizing of large volumes of text, logical thinking, analysis of facts, continuously learning new things, creativity, entrepreneurship and showing initiative; cf. Grabowska and Jastrzebowska (2022)).

The job satisfaction indicator comprised mean counts from six variables about work satisfaction with earnings, promotion prospects, working conditions, employment stability, opportunities for personal development and training and the work itself (job content; Neuberger & Allerbeck, 1978; Zalewska, 2001). The life satisfaction indicator consisted of a subjective health assessment: physical and mental well-being. The survey data from *Human Capital in Poland* contained one item on general subjective well-being that covered health self-assessment: physical and mental. The descriptive statistics for key variables used in Table 1 are presented in Annex 1.

We conducted a four-step analysis of the data. Step one referred to the descriptive statistics to compare formal and informal human capital of migrants-returnees and stayers, supported by a regression model with which we checked for the significance of the impact of migration on soft skills in different age cohorts. In step two, we built formal and informal human capital indexes from the available variables, checking them by reliability analysis. In step three, we tested the indexes using a nonparametric Mann–Whitney *U* test to compare the two groups, without assuming values were equally distributed. In step four, the selectivity of human capital effects – both formal and informal – per destination country was counted as mediums relating to the most popular destinations for Polish labor migrants: Germany, the Netherlands, the UK and Ireland. Samples for the UK and Ireland were joined due to limited sample sizes compared to stayers who did not move to take up temporary work abroad.

To mitigate the imbalances between migrants and stayers' sample sizes, we used the Mann–Whitney *U* test, which is a nonparametric test of the null hypothesis for randomly selected values *X* and *Y* from two populations, in which the probability of *X* being greater than *Y* is equal to the probability of *Y* being greater than *X*. The Mann–Whitney *U* test allowed us to compare migrants and non-migrants.

Findings: international migration's impact on informal human capital

The following steps of the analysis demonstrate our thought processes and the course by which we arrived at our conclusions. All descriptive statistics are presented in the Annexes to this article.

In step one, we presented descriptive statistics to identify components of the formal and informal human capital of migrants-returnees to Poland and stayers in Poland (Annex 2).

Table 2 shows the relationship between human capital variables and temporary work abroad. We considered two groups of variables: one linked to the formal components of human capital like education and labor market performance and one linked to the informal properties of human capital, consisting of competencies (both intrapersonal and interpersonal), job satisfaction and well-being (both physical and mental). We discovered that these variables differed between stayers and migrants. All components were higher

| | Variable | Stayers | | Movers | |
|--|---|------------------------|------|---|------------------------|
| | | <i>n</i> | % | <i>n</i> | % |
| Socio-demographic characteristics: age and birth cohorts | Male | 33,654 | 50.1 | Male | 2,870 71.0 |
| | Female | 33,520 | 49.9 | Female | 1,170 29.0 |
| | 1968–1982 | 23,971 | 60.3 | 1968–1982 | 1,582 57.9 |
| | 1983–1993 | 15,786 | 39.7 | 1983–1993 | 1,150 42.1 |
| Formal Human Capital variables | Employed | 48,682 | 72.5 | Employed | 2,852 70.6 |
| | Unemployed | 5,597 | 8.3 | Unemployed | 488 12.1 |
| | Inactive | 12,895 | 19.2 | Inactive | 700 17.3 |
| | Self-employed | 14.4% | | Self-employed | 14.3% |
| | Average monthly net earnings ¹ | <i>M</i> = 1826.19 PLN | | Average monthly net earnings | <i>M</i> = 2645.10 PLN |
| | Education: Completed years of education | <i>M</i> = 12.39 | | Education: Completed years of education | <i>M</i> = 12.03 |
| | Work experience (in years) | <i>M</i> = 15.87 | | Work experience (in years) | <i>M</i> = 14.44 |
| Informal Human Capital variables | Soft competencies (SOC) | <i>M</i> = 3.86 | | Soft competencies (SOC) | <i>M</i> = 3.90 |
| | Soft competencies (IND) | <i>M</i> = 3.40 | | Soft competencies (IND) | <i>M</i> = 3.45 |
| | Well-being | <i>M</i> = 1.34 | | Well-being | <i>M</i> = 1.41 |
| | Job satisfaction | <i>M</i> = 3.60 | | Job satisfaction | <i>M</i> = 3.68 |

Table 2.

Movers and stayers: formal human capital and informal human capital

Note(s): ¹There is a statistically significant difference between the earnings of migrants and non-migrants, as tested by the Mann-Whitney *U* statistic $Z = -17,235; p < 0.001$

Source(s): Own elaboration

among migrants, namely, intrapersonal competencies, interpersonal competencies, job satisfaction and life satisfaction. The difference between migrants-returnees and stayers was statistically significant ($p < 0.001$, checked with the Mann-Whitney *U* test), confirming the findings of [Dustmann, Fadlon and Weiss \(2011\)](#), who showed that human capital is utilized where its price is higher. Thus, those who could have a better return from formal education remained in the domestic labor market and those who could not, went abroad, acquired competencies and capitalized on them after returning. This was proven by the average wage level: people who had done temporary work abroad earned better pay after return. Moreover, the first step of our analysis showed that job satisfaction and physical and mental well-being were higher among migrants ($p < 0.001$). However, the lack of data before migration means that we could not prove the existence of any causal relation between work abroad and assumed components of informal human capital. Based on the regression model of [Grabowska and Jastrzebowska \(2022\)](#), we can nevertheless conclude that international migration affects cognitive, intrapersonal and interpersonal competencies, albeit the effect differed among various birth cohorts. Among respondents born in 1968–1989 – before the symbolic date of the fall of communism in Poland in 1989 – we found that temporary work abroad had a greater tendency to improve soft skills in the area of interpersonal competencies (e.g. communication skills), while those born after 1989 showed more improvement in the area of individual cognitive and interpersonal skills. However, since the latter respondents would have been young at the time of migration, this may also have to do with their life course transitions to adulthood.

The second step of our analysis sought to build separate indexes for formal and informal human capital by testing them with the data from two groups of stayers and migrants to provide further evidence for our initial assumptions shown in the descriptive statistics in [Table 2](#).

The Formal Human Capital Index (FHC Index) consisted of five variables: status on the labor market, self-employment, average monthly net earnings, completed years of education and work experience (in years). All variables were standardized, after which their averages were calculated.

The Informal Human Capital Index (IHC Index) consisted of four variables: soft skills (individual/cognitive, intrapersonal and social/interpersonal, well-being and job satisfaction) (Grabowska & Jastrzebowska, 2022). These variables were also standardized, followed by average calculation.

The variables included in both indexes were analyzed for reliability. Cronbach’s alpha for the IHC Index was $\alpha(4) = 0.561$, which proved satisfactory. In turn, Cronbach’s alpha for the FHC Index was $\alpha(5) = 0.418$. Moreover, Cronbach’s alpha analysis of the component factors after their removal showed that removing the “Work experience (in years)” component increased the alpha coefficient to $\alpha(4) = 0.527$. Thus, we decided not to include this factor in the index (Table 3).

In step three, the nonparametric Mann–Whitney U test (Table 4) was performed to compare migrant-returnee and stayer groups in terms of FHC and IHC Indexes. This revealed statistically significant differences between the groups in IHC Index [$U(N_{\text{stayers}} = 67,174; N_{\text{migrants}} = 4040) = 125576756.500, Z = -7.970, p < 0.001$]. There were no differences between groups for the FHC Index ($p > 0.05$). These results statistically corroborated our initial assumptions that migrants have more informal capital: competencies, job satisfaction and life satisfaction. Moreover, it contributed to evidence on the impact of international migration on various tacit and non-validated properties of human capital, both from Europe (Williams & Baláz, 2005; Baláz et al., 2021; Janta et al., 2021; McGarry et al., 2021; Grabowska & Jastrzebowska, 2021, 2022) and from the USA and Mexico (Hagan et al., 2015; Hagan & Wassink, 2020).

| | Formal human capital index | Informal human capital index |
|--|----------------------------|------------------------------|
| α | $\alpha(5) = 0.418$ | $\alpha(4) = 0.561$ |
| Z* Well-being | – | 0.605 |
| Z Job satisfaction | – | 0.575 |
| Z Interpersonal competencies | – | 0.406 |
| Z Intrapersonal competencies | – | 0.343 |
| Z Professional situation | 0.288 | – |
| Z Conducts business or agricultural activity | 0.369 | – |
| Z Average monthly net earnings | 0.222 | – |
| Z Education: years of education completed (estimate) | 0.366 | – |
| Z Work experience (in years) | 0.527** | – |

Table 3. Reliability analysis for the variables making up the formal and informal human capital indexes

Note(s): *All variables included in both indexes were previously standardized. ** Based on the analysis, a decision was made not to include the Work experience variable in the *Formal Human Capital index*. As a result, $\alpha(4) = 0.527$

Source(s): Own elaboration

| | Stayers (average rank) | Movers (average rank) | Z | p |
|------------------------------|------------------------|-----------------------|--------|--------|
| Formal Human Capital Index | 35647.26 | 34946.33 | –2.105 | n.i |
| Informal Human Capital Index | 35456.93 | 38111.14 | –7.970 | <0.001 |

Table 4. Mann–Whitney U test to compare stayers and movers

Note(s): *Descriptive statistics for both indexes are displayed in Annex 2

Source(s): Own elaboration

In step four, we calculated the selectivity of formal and informal capital enhancements (Table 5) by key destination countries for Polish migrants: Germany (74%), UK and Ireland (63%) and the Netherlands (62%). Notably, the selectivity of Polish migrants in the survey data of *Human Capital in Poland* does not fully match the migration selectivity in the *EU Labor Force Survey* (cf. Kaczmarczyk & Okólski, 2008). Following Poland's accession to the EU in May 2004, the UK became the primary destination country for Polish migrants, putting Germany – which had topped the list by a large margin for a century – in second place. Moreover, a new destination country appeared as important for Poles – Ireland – which our analyses treated jointly with the UK due to the limited sizes of the samples. The Netherlands also moved up the list of receiving countries for Polish migrants, so in our analysis, it ranked third. No other destination countries were considered in our study, as the sample sizes for these countries in the *Human Capital in Poland 2010–2014* survey were too small.

Our selectivity analysis (Table 4) showed that when divided into migration destination countries, different components of the informal human capital of Polish migrants were impacted.

Compared to migrants who did temporary work in the Netherlands and the UK and Ireland, migrants who worked in Germany were predominately employed (66%), among the employed dominated people born between 1968 and 1982 (56.5%), who earned the lowest wage ($M = 2473.88$ PLN), but most often, they established their own businesses (16%). The group of the employed had the highest job satisfaction ($M = 3.71$) but the lowest well-being ($M = 1.37$) and individual competencies ($M = 3.35$). Moreover, the migrants who worked temporarily in Germany had the highest level of formal human capital and the lowest informal capital. There were various possible explanations for this. First, many well-educated Polish people (e.g. teachers, nurses and local clerks) worked in Germany in seasonal jobs in

| | Germany | | The Netherlands | | British Isles | | Stayers | |
|-------------------------------|----------|------|-----------------|------|---------------|------|----------|------|
| | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % | <i>n</i> | % |
| <i>Sex</i> | | | | | | | | |
| Man | 592 | 74.0 | 113 | 62.4 | 254 | 63.3 | 33654 | 50.1 |
| Woman | 208 | 26.0 | 68 | 37.6 | 147 | 36.7 | 33520 | 49.9 |
| Formal human capital | | | | | | | | |
| <i>Job situation</i> | | | | | | | | |
| Employed | 542 | 67.8 | 104 | 57.5 | 272 | 67.8 | 48682 | 72.5 |
| Unemployed | 98 | 12.3 | 36 | 19.9 | 56 | 14.0 | 5597 | 8.3 |
| Inactive | 160 | 20.0 | 41 | 22.7 | 73 | 18.2 | 12895 | 19.2 |
| <i>Year of birth</i> | | | | | | | | |
| 1968–1982 | 290 | 56.5 | 67 | 48.6 | 163 | 52.8 | 27957 | 55.0 |
| 1983–1993 | 223 | 43.5 | 71 | 51.4 | 146 | 47.2 | 22871 | 45.0 |
| Self-employed (%) | 15.9 | | 9.4 | | 10.7 | | 14.4 | |
| M net average income (PLN) | 2473.88 | | 2737.55 | | 2723.06 | | 1826.19 | |
| M years in education | 11.69 | | 11.40 | | 12.53 | | 12.39 | |
| FHC index | 0.11 | | −0.07 | | 0.09 | | 0.14 | |
| Informal human capital | | | | | | | | |
| M job satisfaction | 3.71 | | 3.57 | | 3.65 | | 3.59 | |
| M well-being | 1.37 | | 1.45 | | 1.43 | | 1.34 | |
| M soft skills (IND) | 3.35 | | 3.39 | | 3.62 | | 3.40 | |
| M soft skills (SOC) | 3.80 | | 3.80 | | 3.95 | | 3.86 | |
| IHC index | 0.03 | | 0.08 | | 0.19 | | 0.02 | |

Source(s): Own elaboration

Table 5.
Destination countries:
comparisons of
components of formal
and informal human
capital

agriculture (cf. Grabowska, 2019). Second, due to the fact that they worked seasonally and in a pendulum mode (e.g. nine months in Poland and two to three months in Germany) – without embedding into the German labor market – they did not acquire or enhance competencies. Third, the German labor market is orientated towards the recognition of formal education and vocational training.

We found the highest levels of well-being among migrants who worked in temporary jobs in the Netherlands ($M = 1.45$), although they also displayed the lowest job satisfaction ($M = 3.57$) despite earning the highest wages ($M = 2737.55$ PLN). This high level of job and life satisfaction among Polish returnees might do with observing Dutch employees who are very effective and draw a clear line between working time and leisure time, which the migrants learned from them (cf. Peters, Den Dulk, & Van Der Lippe, 2009). Migrants from Poland to the Netherlands were younger than those who migrated to Germany and the UK and Ireland. Meanwhile, the migrants who did temporary work in the UK and Ireland were the best-educated group ($M = 12.53$ years of education), which agrees with the findings of Kaczmarczyk and Okólski (2008) based on the *Labor Force Survey*.

Migrants to the UK and Ireland had the highest level of competencies, both individual ($M = 3.62$) and social ($M = 3.95$) among all those migrating to the top destination countries for Polish migrants. This confirms previous findings among migrants from Slovakia to the UK (Baláz & Williams, 2004) and Poles based on the same dataset (Grabowska & Jastrzebowska, 2022). This may have to do with several factors. First, the British labor market and workplaces were both open and agile, recognizing the role of competencies (cf. Haynes & Galasinska, 2016). Second, the English-speaking environment and the acquirement of communication and self-expression skills were crucial for Polish migrants (cf. Baláz & Williams, 2004; Hagan *et al.*, 2015; Janta *et al.*, 2021; Baláz *et al.*, 2021; Hagan & Wassink, 2020). And third, learning by observing and communicating in teams (cf. Grabowska, 2018). Young post-accession migrants from Poland to the UK – many of whom were recent graduates – generally worked below their formal education level. This switch between completely different environments of university study to factory work or the service industry may have taught the migrants agility and resilience to boredom while instilling respect for manual labor and teamwork (cf. Grabowska, 2018). The fourth factor was the young age of Polish migrants to the UK and their mobile transitions to adulthood, including first jobs abroad and financial independence (cf. Robertson, Harris, & Baldassar, 2018). International migration provided them with competencies in combating adversity, autonomy and independence (cf. Janta *et al.*, 2021). According to Dustmann *et al.* (2010, p. 66), it was shown that, under some conditions, the model can generate a brain gain. The basic idea is that some countries are learning spots with a learning-friendly environment where one can learn competencies more effectively and transfer them home.

Conclusion: migration informal human capital as the new capital for organizations

In this article, we found a positive relationship between temporary work abroad, soft skills, job satisfaction and life satisfaction. Although the literature defines human capital as a strategic resource for organizations that is universally valuable and cannot be fully imitated by people in an organization (cf. Crook, Todd, Combs, Woehr, & Ketchen, 2011; Grant, 1996; Kogut & Zander, 1992), we showed that temporary changes of work settings between countries, sectors, branches and job descriptions can positively affect the informal components of human capital. They are impacted by learning by observing, communicating and doing things abroad. This calls for a better understanding of individuals in an organization (cf. Newman, Bloom, & Knobe, 2014) to generate various profits. As Newman *et al.* (2014, p. 120) assert, “organizational members must be motivated to

first deploy their human capital and then deploy it in the right way (i.e. towards the development of valuable routines and capabilities).” The approach focused on the better understanding of employees in an organization opens new opportunities for individuals returning after spending time doing temporary work abroad to deploy various components of their informal human capital.

It is not our intention to posit migratory informal human capital as entirely distinct from other forms of capital, such as psychological (Luthans & Youssef, 2004, 2007; Luthans, Youssef, & Avolio, 2007) and social capital (cf. Granovetter, 1985; Bourdieu, 1986; Coleman, 1988; Nahapiet & Ghoshal, 1998; Putnam, 2000). Our intention is to demonstrate that experience with temporary work abroad can connect various types of capital in which “human capital is concerned with “what you know”, social capital is concerned with “who you know”, and psychological capital is concerned with “who you are” and “who are you becoming”” (Newman *et al.*, 2014, p. 121). Although we did not test in detail all the indicators of psychological and social capital described in the literature, we did find many proxies in our analysis and theoretical proposal of migratory informal human capital. Moreover, our study was limited by the number of available variables in the *Human Capital in Poland* survey, but through its combination with other results, also from qualitative studies (cf. Grabowska & Jastrzebowska, 2021), we explained the migratory-impacted informal human capital in greater depth and detail.

Some efforts were previously made to bring migratory-developed human capital to organizations (Baláz & Williams, 2004; Williams & Baláz, 2005) and community levels (cf. Hagan *et al.*, 2015), but the team and institution/organization levels remain under-studied. These other studies took information about the migratory informal human capital from a single group of migrants who usually self-reported their performance, behaviors, states and attitudes, while it would be better to use several sources like their co-workers or employers.

Therefore, future research should measure pre-migration informal human capital and compare it to the situation after returns. Moreover, it should measure the motivations and behaviors of individuals with different levels of migratory informal human capital in organizations, as the potential variables include staying in an organization, absenteeism, creativity, innovative activities, commitment to work, relations with colleagues and supervisors, dealing with emotional labor (cf. Hochschild, 1979; Bolton & Boyd, 2003; Grabowska, 2019), social and charity behaviors. Furthermore, future studies should investigate where migratory informal human capital can be used better in organizations – both multinational and others – how stayers treat migrants in organizations, and what policies organizations employ toward migrants-returnees.

Therefore, we wish to encourage researchers to explore the potential multi-level applications of migratory informal human capital research in order to study the hidden mechanisms by which migratory informal human capital affects individual, team and organizational performance. Our study showed that temporary work abroad positively affects work satisfaction and well-being as well as competencies. We would also like to know whether the presence of a migrant-returnee has any spill-over effects on teams and organizations: Are teams more satisfied as a whole, and if so, to what extent? How many returnees can bring positive effects to an organization? Such an analysis could combine organizational and migration studies.

Recommendations for organizations

This article has evidenced that return migrants have higher soft skills, job satisfaction and life satisfaction than people who never migrated. We named it the migratory informal human capital, which is linked to their experience of working abroad. It is an unrecognized and unused resource in the labor market. Therefore, below we would like to offer a catalog of recommendations for organizations on how to recognize and utilize migratory informal

human capital in the labor market, especially for those who worked abroad either beyond or below their formal qualifications and fell out of their professional path after return.

Thus, we group our recommendations into (1) tailor-made for a returnee and (2) tailor-made for the potential employer of a returnee, either from business or public institution.

First, returnees should sell various components of migratory informal human capital and prepare portfolios highlighting new human capital resources by, e.g. facilitating self-assessment of soft skills gained abroad, which will make returnees aware of these abilities. Moreover, a reflexive interview with an employment service, e.g. job advisor asking key questions, seems to be crucial in facilitating the transfer of informal human capital: What have you gained besides money while working abroad in country X? What did you transfer next to money? Return migrants should also ask their former foreign employers/colleagues for recommendation letters that highlight soft skills. Return migrants can be further motivated to promote their informal human capital brought from abroad by listening to stories/testimonials of others who returned from the same country. Moreover, what will help return migrants is learning about research evidence by employees about the impact of migration on soft skills and that return migrants with enhanced soft skills can contribute to better quality workplaces, which brings more job satisfaction and happier people in a workplace.

Second, employers should appreciate and employ the soft skills of a returnee through, e.g. highlighting migration-enhanced soft skills in returnees' résumés and cover letters. Job fairs are equally important in this respect as they allow returnees to talk to future employers about the importance of appreciating soft skills. A returnee may also show the potential employer a report after an interview between a returnee and a job adviser and recommendation letters brought from abroad written by former bosses and colleagues that highlight soft skills. Thus, employers should consider hiring human resource (HR) specialists who deal with soft skills so that they will better recognize the soft skills of returnees from various countries. Moreover, it is important to remind employers that for many years they lamented employees' lack of soft skills and show the employer's research evidence that migrants in all types of jobs acquire and enhance soft skills while working and living abroad.

Openness to employing a returnee and their new migration-affected soft skills is a first step to gaining access to a new HR available in the labor market. The next step would be to consider the evidence-based advice presented in this article.

References

- Ambrosetti, E., & Paparusso, A. (2019). Measuring immigrants' subjective well-being. Briefs on methodological, ethical and epistemological issues, 2. Available from: www.migrationresearch.com (accessed 15 December 2021).
- Bache, I. (2019). How does evidence matter? Understanding 'what works' for wellbeing. *Social Indicators Research*, 142, 1153–1173. doi: [10.1007/s11205-018-1941-0](https://doi.org/10.1007/s11205-018-1941-0).
- Baláz, V., & Williams, A. M. (2004). 'Been there, done that': International student migration and human capital transfers from the UK to Slovakia. *Population, Space and Place*, 10, 217–237. doi: [10.1002/psp.316](https://doi.org/10.1002/psp.316).
- Baláz, V., Williams, A. M., Moravčíková, K., & Chrančoková, M. (2021). What competencies, which migrants? Tacit and explicit knowledge acquired via migration. *Journal of Ethnic and Migration Studies*, 47(8), 1758–1774. doi: [10.1080/1369183X.2019.1679409](https://doi.org/10.1080/1369183X.2019.1679409).
- Barrett, A., & Goggin, J. (2010). Returning to the question of a wage premium for returning migrants. *National Institute Economic Review*, 213, R43–R51. doi: [10.1177/0027950110380326](https://doi.org/10.1177/0027950110380326).
- Barrett, A., & O'Connell, P. J. (2001). Does training generally work? The returns to in-company training. *Industrial and Labor Relations Review*, 54, 647–662. doi: [10.1177/001979390105400307](https://doi.org/10.1177/001979390105400307).
- Becker, G. (1964). *Human capital* (2nd ed.). New York: Columbia University Press.

- Becker, G. S., & Chiswick, B. S. (1966). Education and the distribution of earnings. *American Economic Review*, 56(2), 358–369.
- Black, R., Pantîru, C., Okólski, M., & Engbersen, G. (2010). *A continent moving west? EU enlargement and labor migration from central and eastern Europe*. New York: Amsterdam University Press.
- Bolton, S. C., & Boyd, C. (2003). Trolley dolly or skilled emotion manager? Moving on from hochschild's managed heart. *Work, Employment and Society*, 17(2), 289–308. doi: [10.1177/0950017003017002004](https://doi.org/10.1177/0950017003017002004).
- Bourdieu, P. (1986). The forms of capital. In Richardson, J. G. (Ed.), *Handbook of theory and research for the sociology of education*. Greenwood Press.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95–120. doi: [10.1086/228943](https://doi.org/10.1086/228943).
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96, 443–456. doi: [10.1037/a0022147](https://doi.org/10.1037/a0022147).
- Dustmann, C., Fadlon, I., & Weiss, Y. (2010). Return migration, human capital accumulation and the brain drain CReAM Discussion Paper, 13/10.
- Dustmann, C., Fadlon, I., & Weiss, Y. (2011). Return migration, human capital accumulation and the brain drain. *Journal of Development Economics*, 95, 58–67. doi: [10.1016/j.jdeveco.2010.04.006](https://doi.org/10.1016/j.jdeveco.2010.04.006).
- Findlay, A. M., Li, F. L. N., Jowett, A. J., & Skeldon, R. (1996). Skilled international migration and the global city: A study of expatriates in Hong Kong. *Transactions of the Institute of British Geographers*, 21(1), 49–61. doi: [10.2307/622923](https://doi.org/10.2307/622923).
- Fries-Tersch, E., Jones, M., Böök, B., de Keyser, L. and Tugran, T. (2020). 2019 annual report on intra-EU labor mobility. Available from: <https://ec.europa.eu/social/BlobServlet?docId=21589&andamp%3BlangId=en> (accessed 15 December 2021).
- Grabowska, I. (2018). Social skills, workplaces and social remittances: A case of post-accession migrants. *Work, Employment and Society*, 32(5), 868–886. doi: [10.1177/0950017017719840](https://doi.org/10.1177/0950017017719840).
- Grabowska, I. (2019). *Otwierając głowy. Migracje i kompetencje społeczne*. New York: Wydawnictwo Naukowe Scholar.
- Grabowska, I., & Jastrzebowska, A. (2021). The impact of migration on human capacities of two generations of Poles: The interplay of the individual and the social in human capital approaches. *Journal of Ethnic and Migration Studies*, 47(8), 1829–1847. doi: [10.1080/1369183X.2019.1679414](https://doi.org/10.1080/1369183X.2019.1679414).
- Grabowska, I., & Jastrzebowska, A. (2022). *Migration and the transfer of informal human capital: Insights from central Europe and Mexico*. Routledge. doi: [10.4324/9781003011545](https://doi.org/10.4324/9781003011545).
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3). doi: [10.1086/228311](https://doi.org/10.1086/228311).
- Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109–122. doi: [10.1002/smj.4250171110](https://doi.org/10.1002/smj.4250171110).
- Grugulis, I., & Vincent, S. (2009). Whose skill is it anyway? 'soft' skills and polarization. *Work, Employment and Society*, 23(4), 597–615. doi: [10.1177/0950017009344862](https://doi.org/10.1177/0950017009344862).
- Hagan, J. M., & Wassink, J. T. (2020). Return migration around the world: An integrated agenda for future research. *Annual Review of Sociology*, 46, 533–552. doi: [10.1146/annurev-soc-120319-015855](https://doi.org/10.1146/annurev-soc-120319-015855).
- Hagan, J. C., Hernandez-Leon, R., & Domonsant, J. -C. (2015). *Skills of the "unskilled:" work and mobility among Mexican migrants*. University of California Press. doi: [10.1525/9780520959507](https://doi.org/10.1525/9780520959507).
- Haynes, M., & Galasinska, A. (2016). Narrating migrant workplace experiences: Social remittances to Poland as knowledge of British workplace cultures. *Central and Eastern European Migration Review*, 5(2), 41–62.

- Hendriks, M., & Bartram, D. (2019). Bringing happiness into the study of migration and its consequences: What, why, and how? *Journal of Immigrant and Refugee Studies*, 17(3), 279–298. doi: [10.1080/15562948.2018.1458169](https://doi.org/10.1080/15562948.2018.1458169).
- Hochschild, A. (1979). Emotion work, feeling rules, and social structure. *American Journal of Sociology*, 85, 551–575.
- Janta, H., Jephcote, C., Williams, A. M., & Li, G. (2021). Returned migrants acquisition of competencies: The contingencies of space and time. *Journal of Ethnic and Migration Studies*, 47(8), 1740–1757. doi: [10.1080/1369183X.2019.1679408](https://doi.org/10.1080/1369183X.2019.1679408).
- Iara, A. (2008). Skill diffusion by temporary migration? Returns to western European work experience in central and east European countries WIIW Working Paper No. 46.
- Johnston, R., Khattab, N., & Manley, D. (2015). East versus west? Over-qualification and earnings among the UK's European migrants. *Journal of Ethnic and Migration Studies*, 41(2), 196–218. doi: [10.1080/1369183X.2014.935308](https://doi.org/10.1080/1369183X.2014.935308).
- Kaczmarczyk, P., & Okólski, M. (2008). Demographic and labor-market impacts of migration on Poland. *Oxford Review of Economic Policy*, 24, 600–625. doi: [10.1093/oxrep/grn029](https://doi.org/10.1093/oxrep/grn029).
- Kindler, M. (2018). Poland's perspective on the intra-European movement of Poles. Implications and governance responses. In *Between mobility and migration* (pp. 183–204). Springer. doi: [10.1007/978-3-319-77991-1_10](https://doi.org/10.1007/978-3-319-77991-1_10).
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3, 383–397. doi: [10.1287/orsc.3.3.383](https://doi.org/10.1287/orsc.3.3.383).
- Li, F. L., Findlay, A. M., Jowett, A. J., & Skeldon, R. (1996). Migrating to learn and learning to migrate: A study of the experiences and intentions of international student migrants. *International Journal of Population Geography*, 2(1), 51–67. doi: [10.1002/\(SICI\)1099-1220\(199603\)2:13.0.CO;2-B](https://doi.org/10.1002/(SICI)1099-1220(199603)2:13.0.CO;2-B).
- Lulle, A., Janta, H., & Emilsson, H. (2021). Introduction to the special issue: European youth migration: Human capital outcomes, skills and competencies. *Journal of Ethnic and Migration Studies*, 47(8), 1725–1739. doi: [10.1080/1369183X.2019.1679407](https://doi.org/10.1080/1369183X.2019.1679407).
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management. *Organizational Dynamics*, 33, 143–160. doi: [10.1016/j.orgdyn.2004.01.003](https://doi.org/10.1016/j.orgdyn.2004.01.003).
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, 33, 321–349. doi: [10.1177/0149206307300814](https://doi.org/10.1177/0149206307300814).
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. New York: Oxford University Press.
- McGarry, O., Krisjane, Z., Sechi, G., MacÉinrí, P., Berzins, M., & Apsite-Berina, E. (2021). Human capital and life satisfaction among circular migrants: An analysis of extended mobility in Europe. *Journal of Ethnic and Migration Studies*, 47(8), 1883–1901. doi: [10.1080/1369183X.2019.1679421](https://doi.org/10.1080/1369183X.2019.1679421).
- Merton, R. K. (1996). *On social structure and science*. New York: University of Chicago Press.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23, 242–266. doi: [10.2307/259373](https://doi.org/10.2307/259373).
- Neuberger, O., & Allerbeck, M. (1978). *Messung und Analyse von Arbeitszufriedenheit: Erfahrungen mit dem Arbeitsbeschreibungsbogen (ABB)*. New York: Rubber.
- Newman, G. E., Bloom, P., & Knobe, J. (2014). Value judgments and the true self. *Personality and Social Psychology Bulletin*, 40, 203–216. doi: [10.1177/0146167213508791](https://doi.org/10.1177/0146167213508791).
- Parutis, V. (2014). 'Economic migrants' or 'middling transnationals'? East European migrants' experiences of work in the UK. *International Migration*, 52(1), 36–55. doi: [10.1111/j.1468-2435.2010.00677.x](https://doi.org/10.1111/j.1468-2435.2010.00677.x).
- Peters, P., Den Dulk, L., & Van Der Lippe, T. (2009). The effects of time-spatial flexibility and new working conditions on employees' work-life balance: The Dutch case. *Community, Work and Family*, 12(3), 279–297. doi: [10.1080/13668800902968907](https://doi.org/10.1080/13668800902968907).

-
- Putnam, R. (2000). *Bowling alone: The collapse and revival of the American community*. Simon and Schuster. doi: [10.1145/358916.361990](https://doi.org/10.1145/358916.361990).
- Reinhold, S., & Thom, K. (2009). Temporary migration, skill upgrading, and legal status: Evidence from Mexican migrants. MEA DP, 182. doi: [10.2139/ssrn.1443944](https://doi.org/10.2139/ssrn.1443944).
- Robertson, S., Harris, A., & Baldassar, L. (2018). Mobile transitions: A conceptual framework for researching a generation on the move. *Journal of Youth Studies*, 21(2), 203–217. doi: [10.1080/13676261.2017.1362101](https://doi.org/10.1080/13676261.2017.1362101).
- Schultz, T. W. (1990). *Human capital investment*. New York: Commercial Press.
- Sirkeci, I., Acik, N., Saunders, B., & Přívara, A. (2018). Barriers for highly qualified A8 immigrants in the UK labor market. *Work, Employment and Society*, 32(5), 906–924. doi: [10.1177/0950017017726912](https://doi.org/10.1177/0950017017726912).
- Sjaastad, L. A. (1962). The costs and returns of human migration. *The Journal of Political Economy*, 70(5), 80–93. doi: [10.1086/258726](https://doi.org/10.1086/258726).
- Statistics Poland. (2020). *Informacja o rozmiarach i kierunkach czasowej emigracji z Polski w latach 2016–2020*. New York: Główny Urząd Statystyczny.
- Trevena, P. (2013). Why do highly educated migrants go for low-skilled jobs? A case study of polish graduates working in london. In Glorius, B., Grabowska-Lusinska, I., & Kuvik, A. (Eds.), *Mobility in transition*. Amsterdam University Press.
- White, A., Grabowska, I., Kaczmarczyk, P., & Slany, K. (2018). *The impact of migration on Poland: EU mobility and social change*. UCL Press. doi: [10.2307/j.ctv550d7m](https://doi.org/10.2307/j.ctv550d7m).
- Williams, A. M., & Baláž, V. (2005). What human capital. Which migrants. Returned skilled migration to Slovakia from the UK. *International Migration Review*, 2(39), 439–468. doi: [10.1111/j.1747-7379.2005.tb00273.x](https://doi.org/10.1111/j.1747-7379.2005.tb00273.x).
- Williams, A., & Baláž, V. (2014). *International migration and knowledge*. Routledge. doi: [10.4324/9780203894651](https://doi.org/10.4324/9780203894651).
- Zalewska, A. (2001). Arkusz Opisu Pracy O. Neubergera i M. Allerbeck – adaptacja do warunków polskich. *Studia Psychologiczne*, 39(1), 197–217.

Annex 1Human capital
of return
migrants

| | <i>n</i> | M | SD | Minimum | Maximum |
|--|----------|---------|---------|---------|----------|
| Professional situation (Labor Force Survey) | 88,560 | 0.72 | 0.90 | 0.00 | 2.00 |
| Self-employment | 88,560 | 0.12 | 0.32 | 0.00 | 1.00 |
| Average monthly net earnings (PLN) | 38,518 | 1774.80 | 1510.66 | 1.00 | 60000.00 |
| Education: completed years of education (estimation) | 88,560 | 12.07 | 2.70 | 5.00 | 21.00 |
| Soft skills (social – interpersonal) | 88,534 | 3.79 | 0.81 | 1.00 | 5.00 |
| Soft skills (individual – cognitive and intrapersonal) | 88,541 | 3.34 | 0.84 | 1.00 | 5.00 |
| Job satisfaction | 37,514 | 3.60 | 0.71 | 1.00 | 5.00 |
| Well-being – physical and mental | 88,351 | 1.35 | 0.48 | 1.00 | 2.00 |

Source(s): Own elaboration based on Human Capital in Poland survey

Table A1.
Statistics for key
variables

29**Annex 2**

| | FHCI | IHCI |
|----------|-------|-------|
| M | -0.01 | 0.00 |
| Me | 0.00 | 0.01 |
| Mo | -1.02 | 0.01 |
| SD | 0.65 | 0.68 |
| Slant | 0.57 | 0.68 |
| Kurtosis | 2.35 | 2.41 |
| Min | -1.47 | -1.47 |
| Max | 10.20 | 10.20 |

Source(s): Own elaboration based on Human Capital in Poland survey**Table A2.**
Statistics for formal
human capital index
(FHC) and informal
human capital
index (IHC)**Corresponding author**Izabela Grabowska can be contacted at: igrabowska@kozminski.edu.pl

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