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The Return of Selective Young Adult Migration: Post-Brexit Reversal of Poland's EU Accession Migration Trends

Powrót selektywnej migracji młodych dorosłych: Post-brexitowe odwrócenie trendów migracyjnych po akcesji Polski do UE

Abstract

This article explores how Brexit has reversed migration trends shaped by Poland's 2004 EU accession, focusing on young adults aged 19–34. Using data from the Polish Labour Force Survey (2015–2019) and the Migrant Selectivity Index (MSI), it traces shifts in the socio-demographic profiles of Polish migrants. Key findings include a masculinisation of migration flows, a decline in tertiary-educated migrants, and growing mobility among individuals with intermediate education from rural areas—patterns resembling pre-accession dynamics. These changes reflect labour market realignments, with Germany surpassing the UK as the top destination. The study argues that Brexit not only disrupted post-accession migration but reactivated older selectivity mechanisms, reshaping human capital flows within the EU. By quantifying selectivity, it offers new insights into how geopolitical shifts affect labour mobility, regional development, and transnational skill distribution.

Keywords: Brexit, Post-accession Migration, Labour Mobility, Migrant Selectivity Index, Labour Market Dynamics.

JEL: F22, J15, J19, J61

Streszczenie

Artykuł analizuje, w jaki sposób Brexit odwrócił trendy migracyjne ukształtowane po akcesji Polski do UE w 2004 roku, koncentrując się na młodych dorosłych w wieku 19—34 lat. Wykorzystując dane BAEL (2015—2019) oraz Indeks Selektywności Migracyjnej (MSI), badanie ukazuje zmiany w profilu społeczno-demograficznym polskich migrantów po referendum brexitowym. Kluczowe wyniki to maskulinizacja przepływów, spadek liczby migrantów z wyższym wykształceniem oraz wzrost migracji osób z wykształceniem średnim z terenów wiejskich — wzorce przypominające okres sprzed akcesji. Zmiany te odzwierciedlają nowe potrzeby rynków pracy, szczególnie w Niemczech, które wyprzedziły Wielką Brytanię jako główny kierunek migracji. Artykuł pokazuje, że Brexit nie tylko zakłócił dotychczasowe kanały migracyjne, ale także przywrócił wcześniejsze mechanizmy selektywności, wpływając na przepływ kapitału ludzkiego w UE.

Słowa kluczowe: Brexit, migracja poakcesyjna, mobilność pracy, Wskaźnik Selektywności Migrantów, dynamika rynku pracy.

JEL: F22, J15, J19, J61



1. Introduction

The 2004 enlargement of the European Union (EU) changed migration flows within Europe. The 'post-enlargement migration' (Ruspini, 2005; Kahanec & Zimmermann, 2010; Górny et al., 2019) or 'post-accession migration' (Kaczmarczyk et al., 2009; Anacka & Okólski, 2010) marked a significant shift in labour mobility within Europe. Post-accession migration refers to the large-scale movement of people from Central and Eastern European (CEE) countries to Western Europe following the 2004 EU enlargement, which granted citizens of new member states—such as Poland—the right to freely move and work across the EU. A notable feature of this migration was a high proportion of young, educated individuals seeking better economic opportunities, particularly in countries like the UK and Ireland, and later increasingly in Germany and the Netherlands. Each EU member state could impose transitional periods (up to seven years) before admitting migrants from the new member states. The UK, Ireland, Sweden and (non-EU) Norway were the first to open their labour markets to Poland, while the rest of the EU-15 did so with a transition period and/or imposed some conditions on migrants. Migration flows to Western Europe from the CEE countries, including Poland, surged, driven by economic disparities, high youth unemployment in CEE—particularly in Poland—and the allure of better opportunities in the liberal labour markets of the UK and Ireland (in the case of the UK, immediate access to the British labour market and the language were the reasons why it became the main destination country - Okólski & Salt, 2014). Over three to four million individuals migrated westward within a short timeframe, exploiting the EU's economic principle of free labour movement (Black et al., 2010). This migration met critical labour shortages in the destination economies, enhancing productivity and supporting economic growth (Barrett & Duffy, 2008). However, it also raised concerns about brain drain and demographic shifts in the origin countries, including Poland.

A unique feature of the post-accession migration wave was a large proportion of young, educated individuals under 35, referred to as 'easy transnationalists' for their ability to integrate into new environments while maintaining ties with their origin countries (Ryan et al., 2015). However, Brexit, beginning in 2016, disrupted these patterns, redirecting flows and influencing the selectivity of migrants. This article explores how these dynamics evolved, emphasising their economic implications for labour markets, skill distribution, and policy considerations in both the origin and destination countries.

In this article, we investigate whether Brexit—a geopolitical event that began with the 2016 public referendum and culminated in the UK's formal exit from the EU in 2021—has led to shifts in post-enlargement migration patterns from Poland. Specifically, we assess how these changes have affected the economic and social dynamics of EU labour mobility. Preliminary evidence suggests that Brexit has reconfigured migration flows from East to West within the EU and redirected mobility within the remaining EU-27 member states, particularly among young adults. By analysing changes in migrant selectivity using data from the Polish Labour Force Survey (LFS), this study highlights the economic implications of these migration

patterns. This analysis underscores the critical role of migration in addressing labour shortages, supporting productivity, and balancing demographic challenges, while also revealing the economic costs for countries of origin like Poland, which face potential skill gaps and brain drain as a result of outward migration. Although brain circulation—where migrants return with enhanced skills—is often viewed positively, it remains a concern here because return rates are limited, and the reintegration of returnees into the domestic labour market is often inadequate, meaning the benefits of brain circulation are not fully realised (cf. Grabowska et al., 2025).

This article is structured as five sections: introduction and motivation, literature review, data and methods, results, and discussion and conclusions. The motivation part highlights the significance of migration patterns following the 2004 EU enlargement and explores Brexit's transformative impact on EU labour mobility. The literature review examines migrant selectivity from economic and demographic perspectives, linking migration trends to their socio-economic consequences. In the data and methods part, the study focuses on young adult migrants (aged 19–34) who dominated post-accession flows, utilising LFS data covering 18 quarters (2015–2019) to analyse changes during the post-Brexit period. The results reveal shifts in migrant profiles, including a redirection of flows within the EU-27, increased masculinisation, and a rise in migrants with intermediate education. The discussion section interprets these findings in the context of normalised migration patterns post-Brexit, addressing implications for labour markets, demographic challenges, and economic policy in both the countries of origin and destination. The conclusions summarise the study's contributions.

2. Literature review

Migration is multifaceted and driven by a combination of economic, social, political, cultural, and personal factors. Theoretical and empirical literature highlights a range of motivations including income differentials, employment opportunities, political instability, social networks, conflict, educational aspirations, and lifestyle preferences (De Jong & Gardner, 2013; Hagen-Zanker, 2008; Sirkeci, 2009; Dudu & Rojo, 2022). While such diverse drivers coexist, economic motives—especially employment and wage disparities—tend to dominate migration decisions in former socialist CEE countries like Poland. This is particularly evident in the context of post-accession migration, where the EU's open labour market provided immediate economic incentives for young and skilled individuals facing domestic labour market constraints. In the Polish case, high youth unemployment rates around 2004, limited local opportunities for upward mobility, and a growing awareness of international wage gaps made economic factors the manifest driver of emigration.

Economic studies on migration extensively explore the push and pull factors influencing individuals' decisions to migrate, emphasising economic opportunities, wage differentials, and labour market dynamics (Lee, 1966; Zimmerman, 1996; Kahanec & Zimmermann, 2010). These studies underscore that migration is not random but often shaped by the socio-demographic and economic characteristics of

migrants, a concept framed within migrant selectivity theory. This theory examines how individuals select themselves for migration or are selected by circumstances (Borjas, 1987; Chiswick, 1999), particularly in response to economic incentives or disruptive events, such as Brexit (Kilkey & Ryan, 2021).

Migrant selectivity is a complex concept, but its economic dimensions are especially relevant for understanding labour market impacts and human capital redistribution. Migrants with specific attributes, such as higher education, technical skills, or entrepreneurial ambition, are more likely to migrate due to the potential economic returns in destination countries (Borjas, 1987; Chiswick, 1999). This positive selection contributes to labour market efficiency in destination countries but can exacerbate brain drain in the regions of origin. Conversely, negative or intermediate selection—where low or average-skilled individuals migrate—may address labour shortages in sectors like agriculture or construction but often limits the economic integration and upward mobility of migrants (Biavaschi & Elsner, 2013).

Empirical evidence supports the importance of skill-biased migration in shaping global welfare. Biavaschi et al. (2020) demonstrate that individuals with tertiary education are four times more likely to migrate than their less-educated counterparts, enhancing productivity and innovation in destination economies, particularly in OECD countries. However, this skill bias also creates disparities in the countries of origin, as the loss of highly skilled workers can hinder long-term economic development.

Migration from Poland has deep historical roots, with significant waves occurring during the late 19th century, post-World War II, and again following the fall of Communism in 1989. The most substantial recent wave began after Poland's accession to the EU in 2004, when the liberalisation of labour markets in countries like the UK, Ireland, and Sweden enabled mass emigration. Between 2015 and 2019—the period covered in this study—Poland consistently ranked among the top countries of origin for migrants within the EU. According to the UK Office for National Statistics, Polish-born individuals were the one of the largest overseas-born groups in the UK from July 2020 to June 2021, though this population began to decline following the Brexit referendum in 2016 due to uncertainties over residency rights and labour conditions. Meanwhile, Germany became the primary destination for Polish migrants, with significant flows also observed to the Netherlands and Norway. Eurostat data corroborate these trends, showing that Polish migration—especially among young adults aged 19-34—was among the highest in the EU during this period. However, similar labour-driven migration patterns were observed in other CEE countries, suggesting that while Poland's migration scale was notable, the underlying dynamics were part of a broader regional trend.

The 2004 EU enlargement, which opened labour markets to workers from ten new member states, provides a compelling context for studying migrant selectivity. The migration flows from CEE, particularly Poland, to Western Europe were dominated by young, educated individuals seeking better economic opportunities (Favell & Recchi, 2009; Barrett & Duffy, 2008). These selective flows addressed labour shortages in the destination countries, boosting economic growth and productivity. Migration plays a vital role in addressing labour shortages, supporting

productivity, and contributing to economic growth in the destination countries (OECD, 2014; Dustmann et al., 2010). Migrants often fill critical gaps in the labour market, enhance workforce flexibility, and bring diverse skills that can stimulate innovation and overall economic performance. However, the outflow also strained the labour markets of the countries of origin, triggering policies to mitigate brain drain and retain talent (Drinkwater et al., 2009).

Brexit introduced a new dimension to intra-EU migration dynamics, reshaping flows and altering migrant profiles. Early studies suggest that Brexit redirected migration from the UK to other EU destinations, such as Germany and the Netherlands, as migrants responded to new visa restrictions and labour market uncertainties (Lulle et al., 2019). This shift underscores the interplay between economic factors and policy frameworks in shaping migration patterns.

Building on the backdrop of the above literature review, this study examines the possible impact of Brexit on migration selectivity, focusing on Polish migrants—one of the largest CEE migrant groups. Using data from the LFS and the Migrant Selectivity Index, we address the following research question: How has the selectivity of young adult migrants (ages 19–34) from Poland evolved in the post-Brexit-referendum EU, and what are the economic implications of these changes for labour markets in the countries of origin and destination? Addressing this question will help to understand the economic consequences of migration by linking selectivity patterns to broader labour market dynamics.

3. Data and methods

In this article, Poland is chosen for the case study because it is the largest country in CEE in both demographic and economic terms: with a population of more than 38 million and the highest GDP in the region (World Bank, 2019), Poland has also been the largest source of post-accession migrants to Western Europe since the 2004 EU enlargement. In the period 2004–2020, more than 2.2 million Poles left Poland (Statistics Poland), with one-third of those with third-level education usually being young adults (19–34).

We critically use public statistics in Poland concerning migration data to explore our leading question about a possible change in post-accession migration flow composition. No synchronised dataset exists for Polish emigrants and immigrants. Statistics Poland uses different Polish and foreign datasets to publish its reports. One of those sources is the Polish Labour Force Survey (BAEL – Badanie Aktywności Ekonomicznej Ludności).

While the Polish Labour Force Survey (LFS/BAEL) is a reliable source for analysing labour market outcomes of the resident population, it presents notable limitations when studying migration. The LFS is not designed to capture individuals who have fully emigrated or entire households that have relocated abroad, leading to a significant attrition problem and potential sample bias. As a result, it disproportionately includes seasonal, temporary, or circular migrants whose households remain in Poland. We acknowledge this as a major data limitation. Nonetheless,

given the scarcity of comprehensive, longitudinal datasets on Polish migrants, especially those linking socio-demographic characteristics to migration behaviour, the LFS remains one of the few available sources that enable systematic analysis of migrant selectivity—particularly when interpreted with methodological caution. We therefore justify its use here, while fully recognising its constraints.

Although the main aim of the LFS is to track the situation in the Polish labour market, the questionnaire also contains questions about the migration history of respondents and other household members who are absent at the time of the survey. The LFS thus provides a snapshot of households with migrants where at least one household member still lives in Poland. However, this means that households consisting entirely of migrants are not included in the sample. Another concern is that respondents may not admit having migration experience or hide this information about other persons in the household, for example, if they were working without the necessary documents. Consequently, Polish migrants are underrepresented in the LFS (Statistics Poland, 2018, p. 31), with sampling errors caused by the small sample size and the different targets of the LFS. However, it is crucial to remember that migrants are generally a specific, hidden, subpopulation in a much larger population, since there is a challenge with sampling as there are no complete registers from which to draw the sample for migrants.

Our data covers Polish adult migrants (at least 18-year-old respondents) who have been abroad for at least three months and are still registered in Poland as inhabitants. The LFS data concerning migrants is not publicly available, and we purchased the raw datasets from Poland Statistics in 2020. The average sample size for the 18 quarters is 78,200, of which ca. 0.9 % are migrants. The preparation of data for the proper analysis of selectivity is very demanding. The survey questionnaire interviews of household members are based on a 2-(2)-2 scheme. This means that each household is under research for two quarters, excluded from the study for the following two quarters, and then covered again for two consecutive quarters. (Statistics Poland, 2018). Despite having many drawbacks (Anacka & Fihel, 2013), the LFS remains a valuable source of information about Polish migrants, if not the most important one, despite its limitations. The LFS is also one of the sources used by Statistics Poland to produce public statistics. Due to the LFS data methodology, we must strongly emphasise that our results concern mainly seasonal or circular migrants whose families remain in Poland. We performed our analysis of Polish migrants using the LFS dataset from the first quarter of 2015 to the second quarter of 2019 (a total of 18 quarters). The period was justified by the timing of the exit of the UK from the EU - started by a public referendum in 2016 and ending with legal exit on 31 January 2020. We decided to include all quarters in our analysis (as opposed to focusing only on selected quarters) in order to analyse seasonal patterns. Our funding possibilities covered 18 quarters of this period.

For this article, we calculated a migrant selectivity index for the young adult population (19–34) as a testimonial population for this phenomenal post-accession migration, as in the post-enlargement selectivity analysis, this group dominated the flows. We performed our analysis of Polish migrants using the LFS dataset from the first quarter of 2015 to the second quarter of 2019 (a total of 18 quarters). The

period covered the Brexit process and was limited to available funding as we needed to pay for the datasets from LFS.

While our dataset does not include information on migrants' economic activity, it is important to acknowledge that some of the young adults captured in the LFS defined here as individuals aged 19-34 who have lived abroad for at least three months—may have been international students. EU-funded educational programmes such as Erasmus have played a notable role in shaping post-accession mobility patterns among young Polish people. Participation in Erasmus not only facilitates temporary academic stays abroad but often serves as a stepping stone for longer-term migration by expanding students' social networks, language skills, and familiarity with destination countries' labour markets (see Krzaklewska, 2008; Favell & Recchi, 2009). Although our data do not allow us to isolate this subgroup, previous research suggests that Polish students abroad—particularly those in the Erasmus programme —have contributed to the broader trend of educational and lifestyle-driven mobility, blurring the lines between study and labour migration. Therefore, while the LFS primarily captures labour-related mobility, the presence of mobile students likely adds further complexity to the profile of young adult migrants from Poland.

In demography, migrant selectivity is defined by a *migrant selectivity index* (*MSI*), which is based on the following formula (cf. Cieślak, 1992):

$$MSI_{V=i} = \frac{\frac{M_{V=i}}{M} - \frac{P_{V=i}}{P}}{\frac{P_{V=i}}{P}}$$
(1)

Where:

 $MSI_{V=i}$ – index for category *I* of variable *V*;

 $M_{V=i}$ and $P_{V=i}$ – the number of migrants and the number of people in the general population, respectively, falling into category (or value) I of variable V.

M and P – the overall numbers of migrants and people in the general population, respectively.

Outflow selectivity exists if the index assumes a non-zero value for a given variable's category (value). A positive MSI value means that migrants falling into a specific category of a given variable are relatively more numerous than people in the general population with the same characteristic. In contrast, a negative value (equal to or higher than -1) means the opposite. The higher the positive value and the lower the negative MSI value, the stronger the selectivity (Kaczmarczyk et al., 2009, p. 10; Anacka & Okolski, 2010). In other words, an MSI score of zero for a given characteristic indicates that individuals with that particular trait are equally represented both among migrants and the general population. That means that with regard to that characteristic, people have *the same* characteristic(s), not different. A negative MSI value means migrants with certain traits leave the country less eagerly than other groups. At the same time, positive indicators are evidence of an overrepresentation of people from the group in question among migrants

compared to society (Grabowska-Lusińska & Okólski, 2009, pp. 121–122). Using the MSI, scholars have determined which people – categorised in terms of human capital characteristics – migrate to which destination countries (Ibidem). For instance, as per post-EU accession outflow migration from Poland, the youngest cohort of Polish migrants, a well-educated and fairly gender-balanced group, were shown to migrate to the UK and Ireland. These analyses also helped answer questions that some host municipalities had about the challenges of integrating migrants from CEE.

We calculated *migrant selectivity* for migrants from Poland in 2015–2019 using the selectivity index formula presented in the conceptual part of this article and data about migrants' and non-migrants' characteristics: age, gender, education, and household domicile. We also took into consideration the destination country for those who had moved. By looking at each quarter separately, we could see changes in selectivity according to characteristics. We then took a closer look at the subsample of young adult migrants by creating a joint dataset of young migrants in all quarters (deleting duplicates so that each person appeared only once).

Before we present the results, we must also mention other limitations of the LFS data. Firstly, households with migrants are not randomly selected. This is because when someone from a migrant household stays in Poland, they can be surveyed. Those migrant households who left Poland - in other words - all household members left - cannot be surveyed because there is no information available for a survey questionnaire. Secondly, the number of migrant households in the dataset had been gradually decreasing. The gradual decrease in the number of migrant households in the dataset between 2015 and 2019 may partly reflect broader economic and political developments in Poland during this period. Notably, according to World Bank data, Poland experienced steady economic growth, with GDP per capita (current USD) increasing and the national unemployment rate declining from around 7.5% in 2015 to below 4% by 2019. These improvements likely reduced the economic push factors that had previously driven large-scale emigration, especially among young adults. Additionally, domestic policy initiatives, such as increased social benefits (e.g., the "Family 500+" child benefit programme introduced in 2016), may have made remaining in Poland more attractive for families and young workers. Although causality cannot be established directly from the dataset, these structural changes offer a plausible context for the observed decline in migrant households.

4. Results

Applying the concept of *migrant selectivity*, we take for this article the movements of people from East to West after the EU enlargements (Black et al., 2010). The initial accession selectivity index (pre- and post-) was calculated for Polish migrants (cf. Kaczmarczyk & Okólski, 2008; Grabowska-Lusińska & Okólski, 2009; Mioduszewska, 2008). According to these results, migrants who left Poland after 1 May 2004 were more diversified regarding their place of origin than before the enlargement. However, people from the countryside and small and mid-sized towns were still more likely to move than the inhabitants of cities. More information can be found in table 1. These results were confirmed by Anacka and Fihel (2012), who proved the existence of the *elite mechanism*.

Representatives of particular socio-demographic groups are more prone to migrate than the rest of society. In the case of Polish post-accession migration, young people gender-balanced from rural areas with medium education are most prone to go abroad.

Table 1. *Migration selectivity for three categories of place of residence among pre- and post-accession out-migrants from Poland*

Period	Place of residence		
	Cities*	Small and mid-sized towns**	Countryside
Before EU enlargement	-0.30	0.10	0.15
After EU enlargement	-0.22	0.11	0.08

^{* ≥100,000} inhabitants.

Source: Based on Labour Force Survey, Statistics Poland; pre- and post-accession calculations based on Kaczmarczyk & Okólski, 2008; Grabowska-Lusińska & Okólski, 2009, p. 124, table 10.1.

Poland's accession to the EU reinforced the trend of male migration from Poland (the MSI score increased from 0.2 to 0.35). One of the main characteristics of Polish post-enlargement migration is the high ratio of educated people (MSI = 0.42). However, migrants' formal qualifications and occupations differ between destination countries (Grabowska-Lusińska & Okólski, 2009). For instance, the youngest migrants, a well-educated and fairly gender-balanced group, primarily migrate to the UK and Ireland. Even though both countries opened their labour market simultaneously, Polish migrants with similar qualifications took different kinds of jobs in the UK than in Ireland. Studies have shown that in the UK, Polish migrants work primarily in the secondary labour market (Kaczmarczyk, 2006; Tyrowicz & Kaczmarczyk, 2015), while in Ireland, a similar proportion of migrants performed both simple jobs and jobs requiring high qualifications (Kaczmarczyk, 2006). Comparing the profiles of Polish migrants in the UK and other countries, Okólski and Salt (2014) also found that Poles in the UK were more educated than Polish migrants who had chosen different destination countries. In the British flow there was an over-representation of migrants with higher education diplomas; this over-representation was especially pronounced immediately after accession (cf. Grabowska-Lusińska & Okólski, 2009). We calculated the selectivity index for each quarter from the first quarter of 2016 to the second quarter of 2019. The most apparent tendency is that throughout the entire period, young people (19-34 years old) were more likely to migrate. The selectivity index values for young adult people fluctuate each year and are always highest in the second part of the year (this may be due to young people leaving after completing some level of education). Below, we present the selectivity index values for each quarter calculated for the general and youth subsample (ages 19–34).

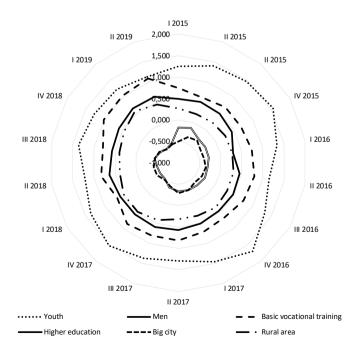
Regarding the place of residence before migration (also being the place of residence of the members of respondents' households who remained in Poland), in

^{** &}lt;100,000 inhabitants.

the general population sample, people from rural areas had a higher propensity for migration. Conversely, people from big cities were less likely to move. Young people from rural households and big cities had negative selectivity index values, meaning that young people from small and mid-sized towns were most likely to migrate. Moreover, the index values among respondents from rural areas were much closer to 0 and stable, while the values in big cities were more negative and fluctuated.

Regarding educational attainment in 2015–2019, in the general population, having a degree (higher education) resulted in a lower probability of migration (contrary to the post-accession period, cf. Grabowska-Lusińska & Okólski, 2009). Conversely, people with vocational education had positive index values, peaking towards the end of the observed period. The positive selectivity of vocational education in conjunction with the masculinisation of the migration flows can be attributed to the demand for specific technical and manual skills and certain occupational positions in the destination countries of the EU, diminished by the UK because of Brexit. In the youth subsample, the selectivity index value remained negative for young people with both higher and vocational education; young people with intermediate education were most likely to migrate. Also, the selectivity index value for the group with higher education steadily decreased over the surveyed period, while for the vocational education group, the value was higher and remained stable. This means that young adult migrants have a different educational profile than older migrant groups, and may target other occupational positions abroad.

Figure 1. *Migrant selectivity 2015–2019, general population in Poland*



Source: Author's work based on Labour Force Survey, Statistics Poland.

 Higher education Basic vocational training ---- Big city - Rural area 10 2015 0.00 20 2019 2Q 2015 -0.1010 2019 -0,20 3Q 2015 0.30 -0.40 40 2015 40 2018 0.50 -0,60 -0.70 30 2018 10 2016 20 2018 20 2016 1Q 2018 3Q 2016 40 2017 4Q 2016 3Q 2017 1Q 2017 2Q 2017

Figure 2. *Migrant selectivity 2015–2019, young adults in Poland*

Source: Author's work based on Labour Force Survey, Statistics Poland.

We consolidated the LFS data on young adult migrants (ages 19–34) across the 18 quarters. We connected records using the unique codes consisting of variables IDEN (ID), NRM (number of households) and NRO (number of persons) and erased duplicates so that for each person, we had only one record (the first quarter in which a person appeared in the dataset). This left us with 2733 records.

The young adult migrant population was strongly masculinised, consistent with the findings of the quarter-by-quarter analysis described above. This may relate to the LFS's sampling method and its limitations. Due to the continued observance of traditional gender roles in Poland, the head/breadwinners of households are more likely to migrate (temporarily, seasonally) to work abroad while the other members of the household stay in Poland and, as a result, are included in the LFS survey. The subsample of migrants prepared for this analysis was, therefore, strongly masculinised (nearly 70 per cent of the migrant population with 1892 male migrants).

Regarding educational attainment, most young migrants had attended secondary education (with or without passing the final exam¹). This group constituted

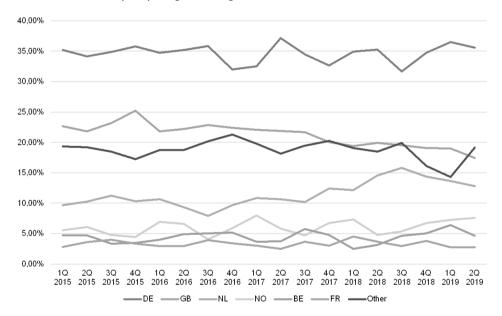
¹ In the context of the Polish school system, secondary education includes two main tracks: general secondary education (liceum) and technical or vocational secondary education (technikum or vocational schools). Attending general or technical secondary school may culminate in the matura, a national final exam required for university admission. However, some students complete secondary

almost half of the sample, with secondary vocational education being more common than general secondary education. Migrants with basic vocational education were the second-largest group, constituting slightly over one-quarter of the sample. Respondents with tertiary education were a minority: about one in five migrants had bachelor's or master's degrees.

Over half of the young migrant subsample lived in rural areas before migration. Again, this may be due to the makeup of the LFS sample, as households in rural areas are more likely to be multigenerational (making it more likely for at least one household member to have remained in Poland and, therefore, be eligible to participate in the survey). Also, town-based households are more likely to migrate (e.g., because they tend to live in rented apartments, while in rural areas, residents tend to be homeowners).

Finally, we examined the selectivity of destination in which young adult migrants resided at the time their household was included in the survey in Poland.

Figure 3.Destination selectivity for young adult migrants from Poland, 2015–2019



Source: Author's work based on Labour Force Survey, Statistics Poland.

Germany became the leading destination country, followed by the UK, which is still on the destination maps due to, at that time, unclear residence procedures between the 2016 referendum and legal exit on 31 January 2020. The third country,

education without taking or passing this exam, which limits access to higher education but still qualifies them as having completed secondary schooling. To clarify for readers unfamiliar with this system, we now refer to this category as: "secondary education, with or without the matura exam".

the Netherlands, was the destination of half as many young migrants as Germany. Ireland rather ceased to be on the post-enlargement migration destination map in the studied period. Together, the three primary destination countries accounted for almost 70% of the respondents, which shows that young adult migration from Poland is concentrated in a small number of destination countries.

In this section of the article, we analysed LFS datasets for each quarter from the first quarter of 2015 to the second quarter of 2019. The selectivity index values show that men are more likely to migrate than women, and younger people (ages 19–34) are more likely to migrate than the older population. In the young adult subsample, people from small and mid-sized towns were more likely to leave their households behind when migrating to a foreign country. In the general sample, people living in rural areas were most likely to migrate. Regarding educational attainment, in the youth subsample, people with an intermediate level of education were most likely to move abroad, while in the general sample, the selectivity index values were highest for basic vocational education. Therefore, the selectivity index values are slightly different in the youth subsample – the typical young adult migrant is a person from a small or mid-sized town with a secondary level of education. In contrast, the typical migrant comes from a rural area and has basic vocational education.

We also prepared a joint young adult migrant subsample by consolidating the datasets. Analysing the descriptive statistics of this subsample revealed that it was strongly masculinised, with secondary education being the most common level of educational attainment. Most respondents were from rural areas. The masculinisation and other characteristics of the migrants in the youth subsample may be due to the LFS method of sampling.

Our migrant selectivity analysis of the LFS data is not without limitations, most of which relate to the sampling procedure. Firstly, certain households are more likely to participate in studies of this kind, and response rates have declined, with fewer respondents every quarter. Especially significant for the MSI is the likelihood that migrants whose household remains behind in the country of origin have different characteristics than migrants who migrate along with their entire households. Due to the nature of the LFS and its questions, the data only includes migrants who are part of the respondent's household and are residing in Poland; because young migrants may still be perceived as part of the household by their parents, this may mean that young migrants are overrepresented. Moreover, we do not have data on a migrant's present economic activity - some of them, especially in the younger age group, may still be studying and spending time abroad temporarily under the Erasmus programme (cf. Dąbrowska-Resiak, 2019; Cuzzocrea & Krzaklewska on Polish students' Erasmus mobilities). However, due to the educational structure of our sample, this group would probably be in the minority. Despite their limitations, LSF quarterly datasets are still a valuable data source on Polish migrants and non--migrants. We believe that our analysis sheds light on the selectivity of migration between various types of migrant households.

4. Discussion and conclusions

Building on the economic literature on migration selectivity, this study investigates the impact of Brexit on the selectivity patterns of Polish migrants, focusing on young adults (ages 19–34)—a critical demographic within the labour force and postenlargement migration flows. Using data from the LFS and the MSI, the analysis evaluates how Brexit has reshaped migration flows. Due to the LSF methodology, our dataset includes only those migrants who continue to have a household in Poland, which means it is a more accurate source of data on temporary, seasonal, and circular migrants than long-term migrants.

The findings provide an answer to the research question: How has the selectivity of young adult migrants (ages 19–34) from Poland evolved in the post-Brexit referendum EU, and what are the economic implications of these changes for labour markets?

First, the study reveals a structural shift in migration selectivity following the Brexit referendum. While pre-Brexit migration flows included a more balanced gender distribution and a higher share of tertiary-educated individuals, post-Brexit patterns show a masculinisation of flows and an increased propensity for migration among individuals with intermediate education from rural areas. This reflects changes in labour market demands within destination countries like Germany, where technical and vocational skills are in high demand. The reallocation of human capital highlights a transition away from predominantly academic skill sets to more practical, labour-oriented skills. However, this shift must be interpreted in the broader context of migration selectivity and access to various forms of capital—physical, financial, informational, and human—which are necessary to undertake migration. Following EU accession in 2004, the liberalisation of labour mobility and improved access to transnational networks, language education, and migration information allowed individuals from smaller and mid-sized towns with intermediate education levels to engage in international mobility more readily. This democratisation of migration opportunities broadened the socio-demographic base of Polish migrants. Importantly, the prevalence of down-skilling among highly educated migrants also complicates the narrative of skill reallocation. Due to the limited recognition of foreign credentials and language barriers in destination countries, many Polish migrants with academic backgrounds accepted lower-skilled or manual jobs—particularly in the UK, Ireland, and Germany—even in the preaccession and early post-accession periods. Therefore, the observed shift toward vocational profiles in recent years may reflect both a change in who migrates and a continuation of earlier trends in labour market mismatch abroad.

Second, Brexit has redirected migration flows from the UK to other EU destinations, such as Germany and the Netherlands. The reduction in UK-bound migration is primarily due to changes in visa regulations and economic uncertainties, which have made alternative EU countries more attractive. This shift aligns with labour shortages in specific sectors across the EU, demonstrating the responsiveness of migration to policy and economic conditions.

Economically, these changes have profound implications for both origin and destination countries. For Poland, the continued outflow of young, skilled individuals

exacerbates labour shortages in key sectors, particularly in rural areas, where the migration of intermediate-skilled workers creates imbalances in local labour markets. This underscores the urgent need for policies that incentivise retention or return migration to mitigate the economic costs of skill shortages. Conversely, destination countries benefit from a steady supply of migrants who address critical labour shortages and contribute to productivity and economic growth. However, challenges related to integration, particularly for rural and vocationally trained migrants, require targeted support to maximise migrants' economic contributions and ensure social cohesion.

Third, the study advances the conceptual framework for analysing migrant selectivity by integrating economic and socio-demographic perspectives, leveraging the MSI to quantify changes in migration patterns. The MSI proves especially effective in highlighting over- or under-representation of specific traits among migrants, offering a nuanced understanding of how Brexit has reshaped intra-EU labour mobility.

In conclusion, the research underscores the dynamic nature of intra-EU labour mobility and its sensitivity to geopolitical shocks like Brexit. The findings emphasise the need for adaptive migration policies that balance the labour market needs of countries of origin and destination. For Poland, strategies to retain young adults and foster economic opportunities in rural areas are critical. For destination countries, aligning migrant manpower with labour market demands and supporting integration can optimise economic outcomes. This study offers insights into the evolving patterns of migration selectivity, contributing to a deeper understanding of human capital mobility fifteen years after Poland's accession to the EU, and the post-Brexit referendum period. These insights show complexities of migration in an interconnected and shifting geopolitical landscape, and they highlight the reconfiguration of post-accession migration from Poland.

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Data availability

The data and materials used in this study are publicly available through Eurostat or Statistics Poland. The datasets, including migration variables, were purchased from Statistics Poland.

Declarations

The dataset, analysis, and interpretation do not include personal data and can freely flow and be used in the EU [cf. Regulation (EU) 2018/1807 of the European Parliament and of the Council of 14 November 2018 on a framework for the free flow of non-personal data in the European Union].

Competing interests

There are no competing interests.

Authors' contributions

Equal distribution of contributions between authors.

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