
Post-Secondary-School Migration of Young People to Large Regional Centres as a Factor of Depopulation and Disharmonious Regional Development in Poland

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Abstract:

Purpose: The purpose of this article is to demonstrate that the youth internal migrations are not, as is generally accepted, temporary, in order to obtain an education, but permanent in the final intention.

Design/Methodology/Approach: The survey were carried in two different regions: one with a strong (large) regional center and the other with the weaker (smaller) center. In those region secondary education centers of various sizes were selected. There were conducted an auditorium survey among 2380 young people graduating from general secondary schools. The basis of the study was a survey containing several questions and determining five features related to background legal data.

Findings: Education migrations "to study" become the beginning of the final emigration addressed to the metropolitan city as a large academic center. The research results also proved that the process of draining small regions centers by large regional centers leads to a deepening of differences in the development of regions, especially their capitals.

Practical Implications: The results of analysis might be used in shaping an appropriate development policy. They may also indicate the need for more than proportional support for small regional capitals or - looking from a different perspective - to real processes of the territorial division of the country.

Originality/Value: Research results can contribute to the construction of theoretical models regarding migration and local and regional development

Keywords: Student migration, tertiary education, regional development.

JEL classification: J10, J60, O15.

Paper Type: Research study.

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1. Introduction

Depopulation, the aging of society and the related socio-economic problems are among the most serious contemporary problems in the development of Central and Eastern European countries, primarily those that joined the European Union (EU) in 2004 (Markova, 2010; Ciupureanu, 2014; Andrén and Roman, 2014). The main driver of individual countries' depopulation is permanent emigration, mainly to the "old" European Union (EU) (the "EU 15"). This migration, which has been continuing uninterrupted since the 1980s, had two peaks. The first took place in the 1980s and early 1990s and was initially characterised by refugee movements (Stola, 2010) and the "late resettlements" of national minorities, especially of German minorities (Jończy, 2003).

After the death knell of communism in 1989, this was facilitated by the liberalisation of the passport policy of the former Eastern Bloc countries and fuelled by the economic collapse of the centrally managed economy. This transformational migration has been only partially recorded by public statistics in the countries from which people have been emigrating, and therefore cannot be properly researched using only public data sources. Research has indicated that the scale of the actual emigration which occurred at that time, both all across Poland and in individual regions, remains largely underestimated, which to this day leads to a significant overappraisal of the population according to registered addresses (Sakson, 2001; Jończy, 2002; 2010; Śleszyński, 2017). In some regions with widespread relocation to foreign countries, the size of actual overall migration from this period is many times larger than the official changes of registered addresses would indicate (Jończy, 2006; 2010; 2019; Śleszyński, 2001; 2016).

The apogee of transformation-related migration took place during the period of political and economic changes in Central and Eastern Europe, between 1988 and 1993 (Kaczmarczyk and Okólski, 2005), increasing again after the enlargement of the European Union in 2004 and the opening of the borders and of the Western European labour market. Because it was mainly young people who left, especially those born in the sixties and seventies (transformation-related migration) and from the end of the seventies onwards (post-accession migration), migrations caused a significant decrease in the demographic potential of the countries of origin.

Along with emigration, the demographic crisis was also influenced by a change in lifestyle, widespread access to higher education and, as a result, a significant reduction in fertility rates (Jończy and Rokita-Poskart, 2013). Regardless, in individual countries, the increased international and internal mobility was influenced by the post-transformation privatisation of the economy, resulting in (geographically uneven) processes of reduced employment in industry and agriculture (peripheries) as well as slightly later and uneven (albeit in a different way) development of services and administrative and business centres concentrated in large urban areas.

One of the ramifications of the transformation – both in Poland and in other countries of the region – is uneven socioeconomic development in geographic terms, which is manifested in disproportionately faster development of economic activity and the labour market in large regional centres, which in practice refers to larger towns with 300,000–500,000 residents. Research adopting a macro-social perspective has generally deemed the causes of the demographic transition to be the modernisation effect of densification, contributing to the deepening of the backwardness of some smaller centres (Okólski, 2011).

However, it seems that today further intensive demographic processes do not spring mainly from restructuring or unfinished economic transformation. Their important origin lies in the potential of larger urban centres, the strength of their business, administrative, decision-making, and academic centres (Jończy, 2017), and major support from EU funds after 2004 (Wich, 2014). The deepening disparities in the level of development between the large urban agglomerations (especially the “big five”: Warsaw, Wrocław, Krakow, Poznań, and Gdańsk) and peripheral areas, i.e., in practice, almost the entire remainder of Poland, led to a large outflow of the population from the periphery to large regional centres (Jończy, 2015; Śleszyński 2016). Particularly large-scale migration, in the form of an exodus (Jończy, Rokita-Poskart and Tanas, 2013), was characteristic of young people graduating from secondary school in the wake of mass access to higher education in Poland in the late 1990s.

The extent of education at the tertiary level is evidenced by, for example, the net enrolment rate of “higher schools”, which since the beginning of the transformation (1989) increased several times to 35%-43% between 2004 and 2019 (Local Data Bank). Another testament to the universality of tertiary education in Poland is the fact that in the last several years the number of graduates has always been close to the number of births (Jończy, 2019), which was also due to a reduction of the birth rate by half between 1983 and 2003. It is worth noting that, just like international transformation-related and post-accession migration, internal youth migration is also recorded by public statistics only partially and with a delay (Śleszyński, 2016), hence it is not a good basis for analysis. A review of the available literature (*Report on the research on migration in Poland after 1989*, [2019]) also leads to another important conclusion – that *despite the fact internal migrations most likely generate more significant socioeconomic and development outcomes for the majority of the country than the parallel (also large) international migration (Jończy, 2017), these flows arouse little interest of researchers of migration processes compared to emigration abroad*ⁱ. It can be assumed that this stems from both the focus of migration research on international mobility, which enables more attractive international projects, and the dominance of a central and macrosocial perspective in Polish research, in which the effects of migration processes on regional and local communities are less important.

In our research on internal mobility, based on our findings (Jończy, Rokita-Poskart and Tanas, 2013), we posited that the main component of current internal migration is youth migration undertaken after graduating from secondary school, especially by the graduates of the now available and widely attended universities. In addition, based on findings from previous studies, we assumed that student migration have varied effects for regions with strong (large) and weaker (smaller) regional centres (Jończy, Kwiatkowska, and Rokita-Poskart, 2012). In regions with strong regional centres (in Poland these are especially the five centres mentioned earlier – Warsaw, Wrocław, Kraków, Poznań and the Gdańsk agglomeration) population transfers usually occurⁱⁱ inside the region, from the periphery to its centre or in the immediate vicinity. In the case of regions with the smallest capitals – cities with barely 100,000–200,000 inhabitants – (Gorzów Wielkopolski, Zielona Góra, Opole, and Kielce), population outflows do not take place within the region, but are generally directed towards the nearest “Big Five” city centre.

The purpose of this article, in addition to confirming/strengthening the abovementioned hypothesis, is to demonstrate that these student migrations are not – as is generally accepted – temporary, in order to obtain an education, but permanent in the final intention. Usually, young people expect to stay permanently in the main agglomeration, the academic and regional centre, or its vicinity, but sometimes this is only the first stage of the emigration intended to move further in future, usually abroad.

The structure of this study is as follows: first, we present a review of the existing literature on the subject of depopulation of peripheral areas, later we describe the characteristics of the methodology of our research, and finally we discuss the most important results on the issue. Owing to the limited capacity of this article and the incompleteness of data, we mainly use the results of extensive research concerning two regions: Lower Silesia, with its large capital, Wrocław housing over 640,000 residents in 2018, and neighbouring Opole, a typical small Polish region with a smaller regional centre (approximately 128,000 residents in 2018). Finally, we present a summary and the most important conclusions.

2. Depopulation of Peripheral Areas in European and Polish Research

The problem of depopulation of peripheral areas, occurring mainly as a result of the migration of young people entering adulthood and the related developmental and geographical consequences, is the subject of research of both demographers and geographers, as well as researchers of economics, especially from an approach of sustainable regional development. The existing research focuses especially on displacement in the form of “population drain”: attracting young people to fast-developing and usually large metropolitan centres. This phenomenon, which has recently become particularly visible in Central and Eastern Europe, had already become a problem that limited sustainable development in other areas of the continent as well – including Southwestern Europe, Germany, Portugal, southern

Italy, Greece, and Spain. This process began there in the second half of the twentieth century, when the population was leaving peripheral regions and moving to larger cities (Andrada, 1981).

Depopulation and economic shrinkage of peripheral areas does not, as one might suppose, only apply to rural areas, but it also applies, as research in Germany shows, to urban centres. This problem was quite well-known there at the end of the 1980s in the federal states of East Germany (Haussermann and Siebel, 1988). This outflow intensified after the German reunification, both as migration from the periphery to the centre, and from the East to the West. At present, a large population drain from peripheral areas is still being observed in eastern Germany, and it is characterised by the selectivity which is also typical for Poland. This selectivity consists in the fact that migrations are dominated by young, educated people, mainly women, while men and less-educated people are less mobile: they remain in the peripheral areas more often (Jończy, 2017). In turn, in cities - mainly academic cities such as Erfurt, Halle, Jena, Leipzig and Weimar - there are observed a large surplus of women aged 18-30 - the number of women per 100 men in these cities is much higher than the average for Germany and the entire EU. Studies conducted in the peripheral areas of Germany have also shown that the main factor pushing young people out of their places of residence are worse career prospects and major economic backwardness (Lang, Henn, Sgibnev and Ehrlich, 2015).

Post-transformation migration movements from the periphery to the centre have also affected other areas of Central and Eastern Europe. In some smaller countries of this region, an accelerated development of the capital is particularly visible. This is true for Lithuania, where a strong concentration of population can be noted in the Vilnius agglomeration, while the peripheral areas - both rural areas and smaller cities - are becoming depopulated (Ubarevičienė, van Ham and Burneika, 2016). Similarly, in the Czech Republic, where there is a high concentration of people in the country's capital, Prague, (it is estimated that 12% of the nation's population lives in the city and the surrounding area), and the simultaneous depopulation of the periphery. This is particularly evident in rural areas and in smaller cities which offer worse development opportunities, lower wages, and lower living standards.

Mainly young people leave these places, choosing bigger urban centres for the place of study and residence (Vaishar and Pavlů, 2018). Migration, including student migration towards large cities, also limits the opportunities for the development of peripheral areas and smaller cities in Romania. The analyses carried out there indicate a decrease in the number of companies, a widespread decrease in the number of job offers, and a rapid aging of society (Bănică, Istrate and Muntele, 2017). Migration of the younger population from the periphery towards several major cities can also be observed in Russia. The swelling of large urban centres also takes place at the expense of rural areas and small and medium-sized cities (Mkrtchyan, 2014). The analyses which were performed there proved similar conclusions as in Poland (Jończy, Rokita-Poskart and Tanas, 2013), namely, that

people who left smaller cities for larger centres in order to enrol in university generally do not plan to return (only 30% of university-aged people plan to continue living in peripheral areas). It is expected that this may result in a huge demographic collapse of peripheral areas and faster development of city centres. Scholars suggest that this prevents the creation of sustainable development (Kashnitsky and Mkrtchyan, 2014).

Similar regularities are observed in Poland. They mainly concern medium-sized cities, which experienced closures of large workplaces in the period of transformation and/or lost their status as a voivodship city after the reform of local government in 1998. Young people of academic age and well-educated residents left their homes and moved to larger centres which offered better development prospects and higher wages (Zborowski, Soja, and Łobodzińska, 2012). Major population drain becomes visible not only in typically peripheral regions, but it also occurs within large regions, including Mazowieckie, where the capital of Poland, Warsaw, is located. As it has been established, this applies mainly to women aged 20-24 living in the periphery of the region who migrate to its centre. This outflow causes depopulation of the region's periphery and a strong concentration of people, especially young people, in and around Warsaw. It also deepens the existing developmental differences between the centre of the region and its peripheries (Śleszyński, 2001; 2018; Potrykowska, 2018).

Publications on internal migration in Central and Eastern Europe and Poland, including the internal migration of young people, are hardly sufficient, especially with respect to their vast economic and demographic importance for development processes. The subject of these migrations is most often raised as part of research, publications, and statistical studies on total population movements. Few papers focus on the narrow age group that can be defined as youths, and on the scale, directions, and motives of unregistered migrations. These are primarily studies on youth education, the situation of young people on the labour market, and analytical and diagnostic documents.

3. Research Methods

As youth migration is poorly reflected in the official Polish statistics, we decided to carry out field research on migration done after finishing secondary school. We considered it important that the research method should allow us to compare the scale and directions of migratory movements in geographic terms between regional centres of various sizes. As already mentioned, within the scope of the material presented hereⁱⁱⁱ we concentrated on the comparison of two neighbouring voivodships with cities of different sizes as capitals: Lower Silesia, with a large capital - Wrocław - and Opolskie, with a smaller capital – Opole.

As intensive migration takes place immediately after graduating from secondary school (mainly from general-education high schools) and is not usually officially

registered, identifying the differences in the scale and direction of migration may be very difficult after the young people have already left the place of origin (due to their absence in the area of residence and dispersion caused by migration).

Therefore, we decided to conduct a study of migration intentions immediately before it occurs. A quantitative study was thus carried out among young people at a time when they were still widely present in their area of residence (i.e., shortly before graduating from secondary school), and they already had clear intentions for their future. In order to make comparisons within homogeneous groups in geographic terms (between differently located centres of various sizes and ranks), we concentrated on the most numerous, typologically homogeneous group, representing the most common form of upper secondary education – people graduating from general-education secondary schools – who constituted almost half (49.5%)^{iv} of the representatives of individuals born in particular years in 2017 in Poland. The main purpose of the study was to determine the respondents' intentions as to their plans after high school and further future. Research - in the form of an auditorium questionnaire - was carried out in March, i.e. before final grades were due in the semester, characterised by good attendance and, at the same time, when the vast majority of prospective graduates already have defined plans for after graduation.

Due to the comparative nature of this research, which is aimed at providing knowledge about the differences in migration preferences, in addition to the capitals of both regions, we also selected several smaller secondary-education centres of different sizes. In the case of the Opolskie voivodship, these centres were Opole, Brzeg, Głubczyce, Krapkowice, Namysłów, Nysa, Olesno, Prudnik, and several smaller towns: Dobrzeń Wielki, Głucholazy, Grodków, Niemodlin, and Praszka. In the case of the Lower Silesia voivodship, these centres were Wrocław, Bolesławiec, Głogów, Jawor, Jelenia Góra, Kłodzko, Legnica, Oleśnica, Oława, Środa Śląska, Świdnica, Świebodzice, and Ząbkowice Śląskie.

We made sure that the groups of high school students who we surveyed in individual cities were representative of the entire populations of high school students in the centre. This was particularly important in cities with more high schools and a large number of high school groups. In smaller centres, where the potential number of respondents (high school students of the last years) did not exceed 200 people, we decided to survey all students, while in larger ones, we used quota selection. Due to this method of selecting the respondents, the percentages (rather than numbers) of the answers of respondents who declared particular intentions were used in the interpretation of the results, especially in the comparisons.

There were 831 women and 423 men in the group of 1,254 respondents representing the Opolskie voivodship. In the Lower Silesian voivodship, a total of 1,908 high school graduates were surveyed, including 1,126 women and 782 men^v.

The basis of the study was a survey containing several questions and determining five features related to background legal data. Most of the survey questionnaire questions were closed-ended, but in case the respondents were unable to select any of the suggested answers, they were asked to provide their own response. Of all the survey questionnaire questions, only a few were analysed in this study. The first question concerned young people's plans immediately after graduating from high school, and it asked them to specify the place of further education/work/activity. The following questions differentiated the respondents according to the planned (long-term) place of residence after graduation. An important element of the questionnaire was a form with legal background data. Apart from the usual data, this form also took into account their average marks from the second year of high school, which will allow us to determine in a later analysis whether high school graduates with better or worse school performance are willing to migrate (within the region/outside the region/abroad).

Undoubtedly, the chosen methods has some limitations. The first of these is surely that the study was carried out *ex ante* and not *ex post*. Although it has already been partly justified, it is worth adding that the mirror studies done in the past, i.e. conducted among those already studying at university, have shown a very large (93%-97%) convergence of what the youths declared shortly before their finals exams and where they actually enrolled for university studies (Jończy, Rokita-Poskart and Tanas, 2013). The answers provided were mostly unverifiable (apart from contradictory responses which were removed from the sample); moreover, the answers had different levels of precision and ambiguity.

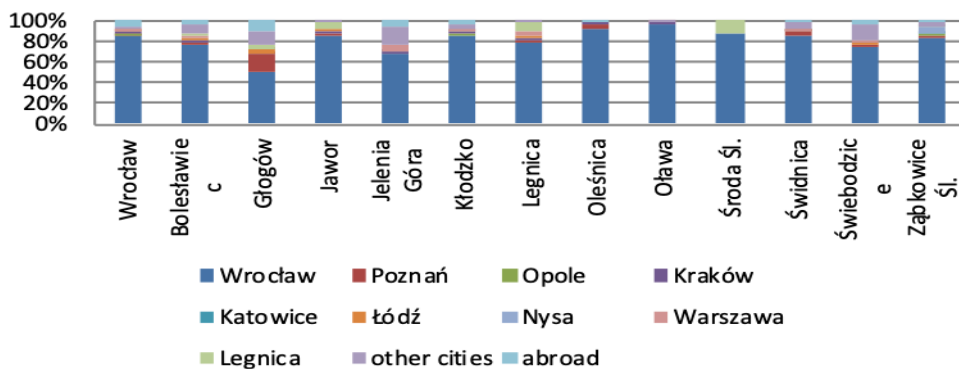
Apart from some relatively clear-cut and unambiguous issues (the question about gender, the number of people living in a household, the city of intended university studies) or reasons for one's decisions (e.g., the reason for choosing the university), there were also questions regarding less precise and more remote issues (destination, place of residence) in the case of which the answers did not necessarily have to be fully true in the future yet to come, which was due to a number of factors. Therefore, some of the data obtained should be interpreted as a good illustration of the preferences and mental states of the subjects, while others should be taken with the necessary interpretative caution. It should be emphasised that this study analyses the data and declarations about which the respondents had no major doubts. A number of other issues related to this research are contained in other published or prepared studies^{vi}.

4. Results

The first of the issues examined was the respondents' plans for their future after graduation. As it was established, the vast majority of the respondents in all centres of both regions - generally over 80% and sometimes even over 90% - intend to continue their education after high school.

In view of the prevailing intention to continue learning, the key was to determine the intended place of study. The answers of the respondents from both surveyed regions show large differences related to the different force of impact of both capitals and the two academic centres of different sizes. In the case of the centres from the Lower Silesian Voivodship - with the capital city Wrocław - a large urban and academic centre, the distribution of responses proves the high desirability of this city which attracts the majority of high school graduates (Figure 1).

Figure 1. The intended place of study of the surveyed high school students from the Lower Silesian Voivodship

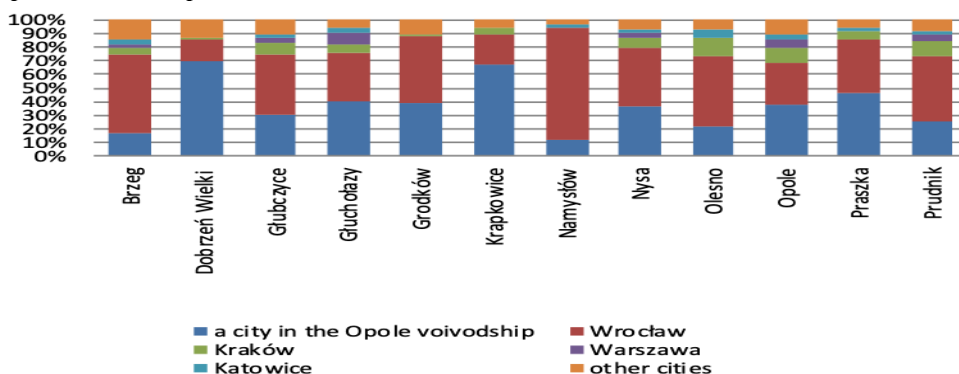


Source: Own elaboration.

The vast majority of respondents (from 50% to almost 96% of high school graduates who intend to continue their studies) plan to study in Wrocław. It must be stressed that three of the examined secondary education centres (Głogów, Jelenia Góra, Legnica) are also academic centres, but are definitely less preferred by young people from these cities (or their vicinity).

In turn, in the case of the Opolskie Voivodship, for the vast majority of respondents, the most preferred place to continue their education is not the academic centre located in their home region, but a city outside the voivodship. The majority (though a relatively narrow one) of high school students from only three small centres selected the Opole region as their intended place of study - see Figure 2. In the remaining centres, there was a clear (several times higher) predominance of preferences for a centre located outside the voivodship. The presented summary also proves that the drain of Opole youth to the university is greatly directed towards Wrocław, which is the nearest metropolitan urban centre. From among the respondents who intend to study outside the Opole region, on average about two-thirds are looking to study in Wrocław. It is noteworthy that in the majority of the analysed centres, the percentage of respondents who plan to study in Wrocław is larger than those who prefer all of the universities in the Opole region combined.

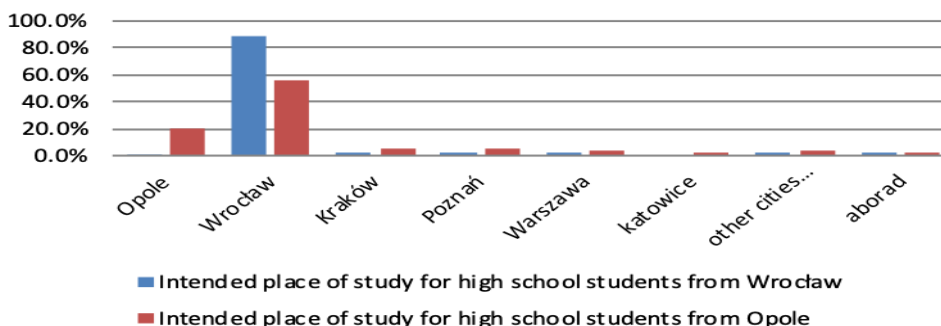
Figure 2. The intended place of study of the surveyed high school students from the Opole Voivodship



Source: Own elaboration.

The comparison of the study results among high school graduates in both regional capitals (Figure 3) is particularly important for demonstrating the different power to attract/retain young people between the neighbouring large (Wrocław) and smaller (Opole) academic centres. While Wrocław (five high schools were surveyed), keeps approximately 88% of high school graduates in its academic centres, Opole (four high schools were surveyed) retains 20.8%, which is over four times less. At the same time, the proportion of Opole high school students who plan to stay in Opole is less than half the percentage of those who plan to study in Wrocław (56.2%).

Figure 3. Intended place of study for high school students from Opole and Wrocław



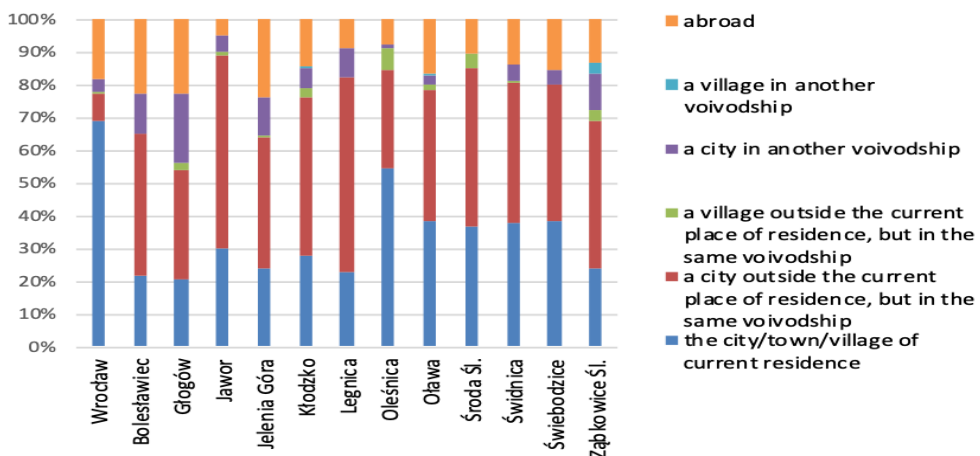
Source: Own elaboration.

It is worth noting that, although the study was based only on a comparison of intentions (and not facts) of migration, it should be assumed that these intentions will most likely be acted upon. This is suggested by both mirror studies conducted among graduates of the Wrocław universities who come from the Opole region (Jończy, Rokita-Poskart and Tanas, 2013) and the relative ease of admission to most university programmes, which stems from the decreasing number of youths entering “academic” age. This is also supported by the findings of earlier studies indicating

that if high school graduates choose a metropolitan centre, the preference for the city of intended study is stronger than for than the type or programme of study. As a result, high school graduates who were not admitted into a specific programme at a particular university in Wrocław (or in another large centre) most often choose the same university programme at another university in the same city or another programme in the same urban centre (Jończy, Rokita-Poskart and Tanas 2013).

The analysis of the respondents' responses on their future intended place of residence leads to fuller and more significant conclusions (Figures 4 and 5). The possible selection of answers to this question included the current place of residence, another city located in the home region, another village located in the home region, a village outside the region (but in Poland), a city outside the region (but in Poland), and living abroad. The results reveal that for centres located in the Lower Silesian Voivodship, the only city which keeps its own youth is Wrocław, where almost 70% of current high school graduates intend to stay. In all other centres there is a noticeable trend to migrate: either to move within one's home region to a "other city," which is preferred by a larger number of respondents than by those who intend to stay in their current place of residence. In 72.9% of cases, this "other city" is Wrocław, so intentional migration is therefore migration to the centre of one's home region.

Figure 4. Intentions of respondents from the Lower Silesian Voivodship regarding their future permanent residence

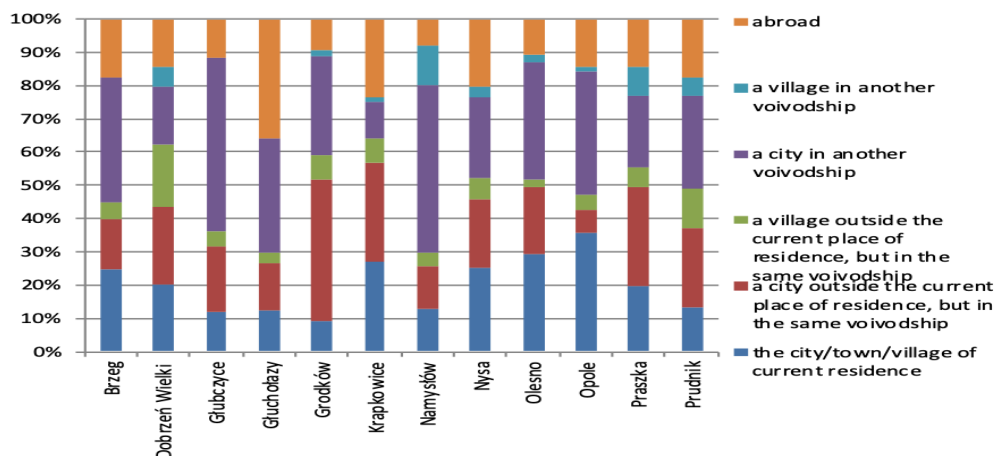


Source: Own elaboration.

The findings from the Opole region are very similar to the findings from Lower Silesia (except Wrocław) in terms of the proportion of people who plan to ultimately remain in their current place of residence. This percentage is also definitely a minority (the highest percentages were observed in the better developing larger cities of the region, but even there it is generally only 20%–40%). The percentage of high school graduates who plan to live abroad in the future is also identical in both

regions (15.8%). The crucial difference is the destination of the youths who intend to change their place of residence. While for the respondents from Lower Silesia it is mainly the capital of their own region, for the respondents from the Opole region it is a “city outside the voivodship” (two-thirds of the students provided this answer), which is in fact the nearest well-developing large city, i.e. also Wrocław.

Figure 5. *The intentions of the respondents from the Opole voivodship regarding their future permanent residence*

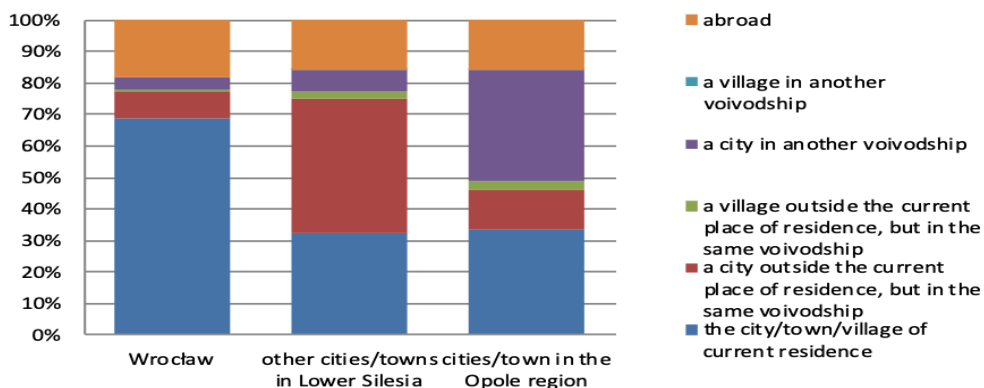


Source: Own elaboration.

A comparison of the intentions of the respondents from both regions and an additional isolation of the respondents from Wrocław (Figure 6) leads to the conclusion that while the planned migration of young people will involve mass population flows for both regions (except for those from the only metropolitan city - Wrocław), the fundamental difference lies in the different types (though in this particular case, not in a specific direction) of the migration. The migration which prevails in the Opole voivodship does not occur within the region, as is typical for respondents from the Lower Silesian voivodship and other regions^{vii} with strong centres (where it takes the form of migration from the periphery to the central zone - main agglomeration), but it occurs towards the nearest large and dynamic metropolitan centre, preferred by about 30-40% of the respondents.

Furthermore, the convergence of the selected city of study and the future place of residence is clearly noticeable, which supports the hypothesis that the youth migration “to the university” is not migration for education, but it is a migration with a permanent move, the barely the first stage of which is to obtain higher education in the destination city of future residence. A closer analysis of this issue (Jończy, Rokita-Poskart, and Tanas, 2013) indicates that young people who intend to live in Wrocław in the future attempt to study in this city, thinking that studying in Wrocław (and not, e.g. in Opole followed by a move to Wrocław) will facilitate their entering the labour market, “acclimatisation,” and later life in this city.

Figure 6. The intentions of the respondents regarding their future permanent residence



Source: Own elaboration.

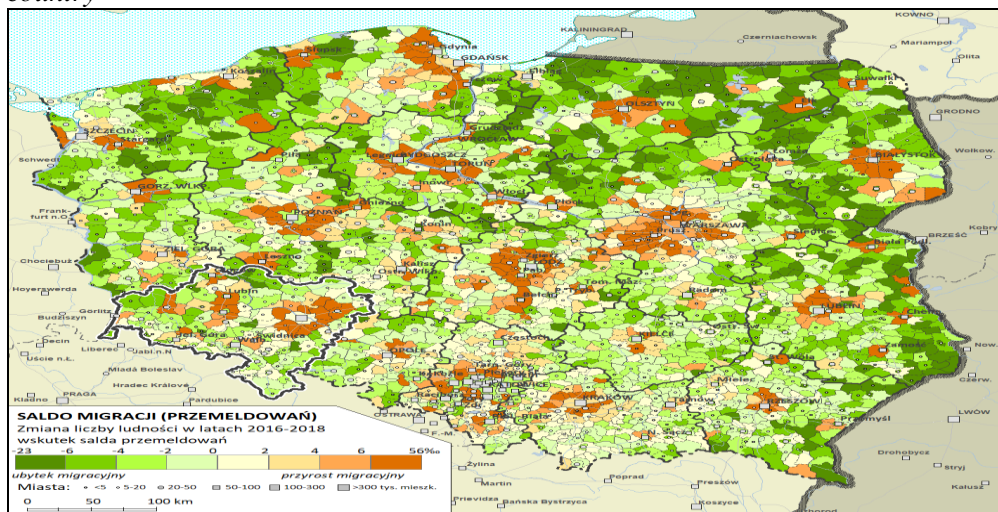
Therefore, these results not only suggest that for the majority of the respondents, migration to university is the beginning of definitive migration, but also that the size of the centre and its attractiveness as a provider of good jobs is of key importance for youth migration, not only the fact that a given city is an academic centre or the regional capital. A comparison of results for the Opole region (with Opole) and non-metropolitan Lower Silesian centres (excluding Wrocław) indicates overwhelming similarities. About one-third of the respondents plan to stay at their hometown, and 15.8% intend to go abroad. Similarly, more than one-third are looking to move to the nearest large, attractive regional centre. However, if the capital of the region does not have these features, a move outside the region is in order. Our study confirms that the same regularities are observed in other areas of the country which have been less comprehensively studied (Wielkopolskie, Lubuskie, Podkarpackie, Łódź, and Śląskie Voivodships). To put it simply, it can be said that large metropolitan centres in Poland, especially the “Big Five,”^{viii} strongly drain the peripheral areas, especially small and medium-sized cities, including smaller capitals of the regions. In addition to Opole, this applies especially to Zielona Góra, Gorzów Wielkopolski, and Kielce as well as Olsztyn, Białystok, Lublin, and Szczecin.

Neither the function of capitals or the seats of universities or universities of technology prevented the draining process from these centres. It is worth noting that the drain of young people towards metropolitan centres is also not determined by general factors affecting the quality of life, which, according to *Social diagnoses* (Czapiński, Panek, 2015) for example, are very similar in the Wrocław and Opole subregions, but it is mainly influenced by employment prospects in terms of attractive and highly qualified work. We must also remember that so far this process has been relatively slowed down by the general improvement in the labour market, a symptom of which is a sharp reduction in unemployment. The further transfer of young people to universities is caused by the large structural and geographic

discrepancies between the (high) qualifications of young people and the (mismatched) structure and the number of available jobs for highly qualified people. The easy (and free) access to higher education for young people from the periphery entails the need to look for employment in large metropolitan centres or abroad. The same structural and geographic factors, including infrastructural factors, also determine the predominance of women among the migrants.

This enumerated trend of the rapid swelling of five large centres and the mass drain of almost the entire rest of the country are confirmed to some extent by Przemysław Śleszyński's analyses based on statistical data - see Figure 7 - although they only contain records of formally registered migration.

Figure 7. The recorded balance of population migration between 2016 and 2018 of the communes of the Lower Silesian voivodship compared with the rest of the country



Source: Based on inter-municipal check-out and check-in registries of the Central Statistical Office. See Dolińska, Jończy and Śleszyński 2020.

Returning to the study results among high school graduates, it is worth adding one more important issue which has not been discussed in this paper: the results obtained indicate that planned youth migration is not only a concentrated mass outflow in one direction (towards Wrocław), but that it also has the hallmarks of a brain drain. This is indicated by the surveyed students' preferences in relation to their average marks in school^{ix}. Individuals from the Opole region who declare their intention to study outside the region have better marks than youths who plan to study in their home region. This is also substantiated by a comparison of the preferences of respondents in individual schools. In the best-ranked Opole high schools, the percentage of students intending to study outside the region and in Wrocław is the highest and - vice versa - the percentage of those intending to stay in Opole is the lowest. In

weaker schools, the percentage of students who plan to leave the city is smaller (Dolińska, Jończy, Rokita-Poskart, 2018).

This division is also observable in the size of the academic centres to which students with different academic results intend to go. Generally, we can note the regularity that graduates with the best results move to large centres, while those with worse grades migrate to smaller ones. In the case of people from regions with small capitals (Opole, Gorzów Wlk., Kielce) or less attractive capitals (Olsztyn, Białystok, Lublin, Łódź), or who live on the outskirts of regions, these are not usually centres in their regions, but those located in the Big Five.

5. Concluding Remarks

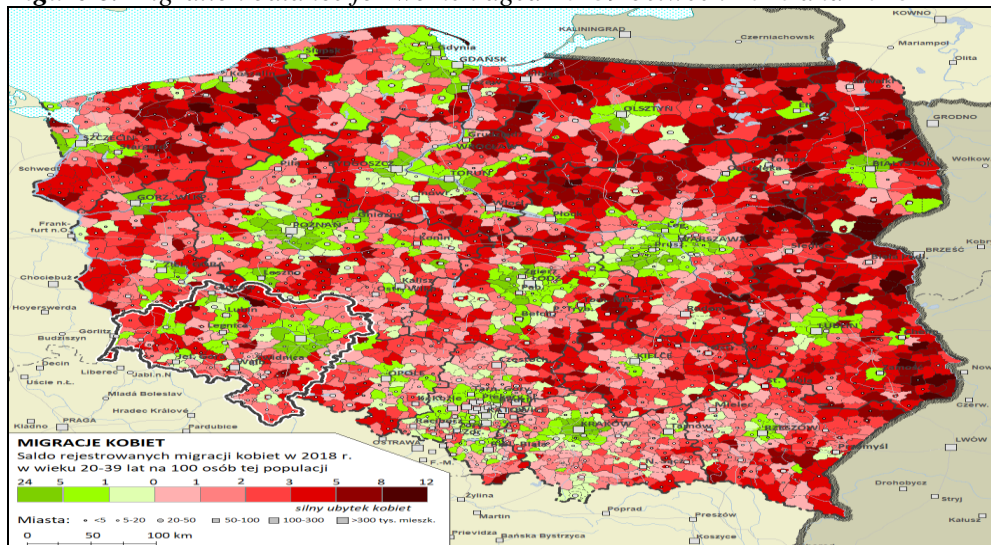
The findings presented herein, although generally - for methodological reasons - they are based on the declarations of young people and not accomplished actions, lead to a number of important conclusions that can be used as contributions to theory. These contributions are related to the two hypotheses formulated at the beginning. The relationship between these hypotheses requires us to start from confirming the second one, which posits the permanent nature of the migration to the university in a large regional centre - in this case to Wrocław. The definitive - already in the intent - nature of the migration to university in Wrocław verifies the strong relationship between the preferred place of study and the intended place of future residence.

This is also supported by the results of other cited studies, which point to an even stronger role of the city's rank in the respondents' preferences than the ranking of the university. Therefore, it seems justified to interpret migration "to university" as not a temporary migration (i.e. with the intention of returning). This migration, in the analysed conditions (of the post-transformation disharmonious economic and geographic development of Poland) is rather (because it is in the vast majority of cases) the beginning of the final emigration to the metropolitan city, and simultaneously, a large academic centre (or at least in the first stage to this centre, and in subsequent stages to suburban centres and/or abroad). Hence, migrants do not move exclusively/mainly to study, as university studies are just the first step for them.

Our results also confirm the first of the hypotheses. They indicate that in the relatively fast-developing^x (but small) Opole region, with a relatively fast-developing centre (but relatively small compared to other centres with similar functions) - Opole - there is a mass exodus of youth to the neighbouring, much larger metropolitan centre - Wrocław. Our research indicates that similar drain and "bypassing" of small academic centres and smaller regional capitals occurs in other regions without metropolitan centres. It should be noted that almost unlimited access to university studies is a circumstance which favours this process, but it is determined and directed by the possibility of employment and development.

Therefore, the main factor in post-secondary-school migration is the inconsistency of the changes in the structure of education with the structural changes on the labour market, the discrepancy being the greater the more peripheral the area is. The geographically and structurally uneven development of the labour market, which especially varies between the periphery and large regional centres, means that the labour market of a small region and its centre is able to absorb a disproportionately smaller number of graduates who are almost as numerous there (the share of students in individual birth-year groups) as in large agglomerations. Peripheral/non-metropolitan labour markets are also characterised by a lower proportion of jobs for women than large centres with a concentration of administrative and management functions, higher-order services, and the high-tech sector. This results in a growing surplus of young women over men in large agglomerations and a deficit of them in the periphery - see Figure 8.

Figure 8. Migration balance for women aged 20–39 between 2016 and 2018



Source: Based on inter-municipal check-out and check-in registries of the Central Statistical Office. See Dolińska, Jończy and Śleszyński 2020.

As a consequence, in the specifically analysed case (Lower Silesia/Opole), the demand for people with higher education in the Wrocław centre is disproportionately larger than in the Opole centre. This is due not only to the difference in the size of centres and their labour markets, but especially to the structure of jobs in the medium-sized and large cities. At the same time, the share of people with higher education in the workforce is not so diverse between the centre and the periphery. As a result, university graduates find it much harder to find employment in the periphery or even cities of up to 200,000–300,000 residents than in large regional centres. In regions without a large centre, such as the Opole region, only 30%–40% of graduates can take up work in line with their aspirations (Rauziński, 2013).

The results of our non-comprehensive research (Dolińska and Jończy, 2019) show that the situation is similar in other non-metropolitan regions and on the periphery of metropolitan regions, especially^{xi} in small and medium-sized towns, also in ex-voivodship capitals. Aware of the prospect of not finding employment consistent with their education, young people decide to move to large centres when choosing a university. Migration to university thus marks the beginning of the intended permanent migration, which ends in urban centres, functional large cities, or foreign countries.

It is worth noting that this process of draining small regions and centres by large regional centres widens the gap in the development of individual regions, especially in their capitals. Furthermore, while in regions with strong centres (in Poland, it is especially the aforementioned “Big Five”) migration can be treated as a kind of intra-regional modernisation bound up with the restructuring of the economy and the geographic and structural levelling of surpluses on the labour market, in the regions with small capitals, especially Opole, Świętokrzyskie, or Lubuskie^{xii}, it is clearly associated with depopulation and brain drain. This problem is even more serious from a local perspective of the most rapidly depopulating townships, communes, and towns. As indicated by studies conducted in local areas, the number of people with particular birth years has decreased up to thirtyfold over the last 60 years in some local communities (Jończy, 2017).

To sum up, contemporary migration to university is undertaken by a large number of youths born at the end of the 20th century. These seemingly educational and temporary migrations evolve into definitive migration and lead to a widening of the already significant gap in the development between voivodships with large and well-developing cities and weaker regions with smaller capitals. Weak regions with small centres lose both demographic potential, future fiscal potential (Jończy and Rokita-Poskart 2011), and entrepreneurial and innovative potential (the best high school graduates are leaving).

Thus, the divide between small and large urban centres will continue to deepen. Even greater disparities appear at the township and commune level (Śleszyński, 2017). This process is not only evidence of the asynchronous development of education and the labour market in Poland, but it also shows the growing disharmony of Poland’s development, which must aggravate the economic and social differences between large regional agglomerations and the periphery. It may also point to the need for more than proportional support for small regional capitals or - looking at it from a different perspective - the advisability of another territorial division of the country, one more suited to real processes and spheres of influence.

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Notes:

ⁱ As the Report on the state of research on migration in Poland after 1989 proves, the number of studies on internal mobility prepared by the Committee for Migration Research of the Polish Academy of Sciences is very small, and is mostly part of geographical research.

ⁱⁱ An analysis of official statistical data proves that this is the case for all large regional centres, with the exception of Łódź, which has a smaller impact as a large regional centre, develops more slowly, and is “surrounded” by other large dynamic centres.

ⁱⁱⁱ Two extensive monographic studies are being prepared in parallel to this article.

^{iv} In the Opolskie voivodship, the share of youths attending high school is 40.4% of all secondary-school students, and in Lower Silesia it is 48.1%.

^v The significant disproportion between the women and men taking part in the survey results from the predominance of women over men typical of general-education secondary schools.

^{vi} An analysis of the scale of labour migration based partly on the results of the empirical studies presented here will be included in the publication being prepared at the Department of Economics and Development Research, edited by A. Dolińska and R. Jończy and devoted to economic migration in southwestern Poland in terms of the situation on the labour market.

^{vii} The authors also carried out research in several centres from several other regions. They prove a strong attraction - after Wrocław - of such centres as Poznań, Kraków, Warsaw, and the Tri-City area, and a definitely weaker attraction (with a significantly negative migration balance) of all other ones, including smaller regional centres and ex-voivodship cities.

^{viii} It is worth noting that Łódź, the third largest city in Poland, has no power of attraction similar to the Big Five, which demonstrates that the size of the centre alone, if there is a strong shortage of other factors (labour market, location, standard of living, etc.) may not be sufficient motivation.

^{ix} Due to the time when the study was conducted (before the final exams), the average mark at the end of the penultimate year of secondary school was recorded.

^x The Opole voivodship through connections with foreign countries and the quality of infrastructure stand out in Poland in terms of a high standard of living. However, it has a limited supply of highly qualified jobs, which means that the city is not able to absorb even half of its young graduates at the current graduation rate.

^{xi} Research shows that the strongest post-secondary-school drain concerns small and medium-sized cities. In rural areas, it is slightly smaller (Dolińska, Jończy and Śleszyński, 2020).

^{xii} Our research conducted in the Lubuskie voivodship, in both of its main centres - Zielona Góra and Gorzów Wielkopolski - reveals that the regularities involving the drain of high school graduates by neighbouring large centres (Wrocław and Poznań) are even more blatantly clear there.