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Citation style: Krzysztofik Robert, Zagórska Agata, Kantor-Pietraga Iwona, Malchar-Michalska Dominika, Lamparska Marzena, Dudek Aleksandra. (2021). The impact of regional demographics on Higher Education Policy. An example from Silesia, Poland. "Environmental & Socio-economic Studies" (Vol. 9, iss. 1 (2021) s. 10-22), doi 10.2478/environ-2021-0002



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Original article

The impact of regional demographics on Higher Education Policy. An example from Silesia, Poland

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ABSTRACT

The determinants of higher education policy have their sources in various spheres, such as economic, social, educational, national policy, administrative, and demographic. Problems for the development of higher education also stem from these spheres. One of them is the challenging demographic situation that is a significant element of developing higher education in southern Poland (particularly in the Silesia region). Given this context, this article aims to indicate the policies of the universities in the region which respond to the existing demographic threats. This relationship is to confront student opinions regarding their vision for their education and future career within the current demographic situation. Using research-based on an analysis of university and regional local government strategic documents and surveys carried out among students, we conclude that higher education development policy is responding to the demographic transformation. Meanwhile, students' attitudes to the challenges of the demographic situation is quite "flexible" and relatively ambivalent. This article presents the contrast between the increasingly tricky demographic situation in Silesia, Poland, and the limited response in the two main groups of stakeholders – academic authorities and students – that require shaping higher education policy towards future demographic challenges.

KEY WORDS: higher education policy, demographic problems, university strategies, Silesia

ARTICLE HISTORY: received 15 June 2020; received in revised form 16 January 2021; accepted 20 January 2021

1. Introduction

Higher education policy (HEP) is shaped based on many factors that overlap, or are interrelated, and which determine the ultimate form of a university's structure, its objectives and ultimately the quality of its education, and the possibility of conducting research. Assuming that the subject is the University as an institution and its community, we distinguish between endogenous and exogenous conditions. The former undoubtedly include the intellectual capital of academic staff and students,

but also a university's location in the global and socio-economic space of a country or a particular genius locus – often the result of the long history and tradition of that University (TOMUSK, 2013; ANTONOWICZ, 2015). Nevertheless, every University is under intense exogenous pressure. These include the general socio-economic conditions of a given country and individual features of a political and cultural nature (KWIEK, 2006; BATHMAKER, 2013; BURKE, 2015; McMAHON, 2018). In scientific research, the indicated endogenous and exogenous conditions constitute the background for shaping the HEP

policy (BROWN ET AL., 2011; LOWDEN ET AL., 2011; MCCRACKEN ET AL., 2016; TOMLINSON, 2018; WILLIAMSON, 2008). In our opinion the least visible factors are demographic ones, particularly those that emphasize the problem of structural depopulation or population ageing (VINCENT-LANCRIN, 2008; JOŃCZY & ROKITA-POSKART, 2014; SANTA, 2018).

As a rule, the conclusions from an analysis of previous studies show openness to raising the quality of education as a factor which is increasing the international competitiveness of universities, and which ultimately results in student immigration from other countries and regions (ADCROFT ET AL., 2010; OLSSEN, 2016; KABÓK ET AL., 2017). Another question is broadening access to higher education by promoting mass education (SCOTT, 1995; KIVINEN ET AL., 2007; FIGUEIREDO ET AL., 2017). However, the problem facing smaller universities in post-socialist countries, including Poland, is their comparatively low starting position in the global competition for students (ROBERTSON, 2009; RAUHWARGERS, 2013; ADINA-PETRUTA, 2015) and the intensification of existing demographic threats (BUCHER & MAI, 2005; IZYUMOV, 2010; SANTA, 2018). It could mean that many best practices and strategies successfully used, e.g., in Western European countries, may not work in regional universities of Eastern Europe and other world regions (ALTBACH, 2004; BIRKLAND, 2011; KNIGHT, 2013, WEIBLE & SABATIER, 2013).

As mentioned above, although Polish-language studies exist (cf. among others, ANTONOWICZ & GORLEWSKI, 2011; MOROŃ, 2016), researches on this question are still something of a research gap. While this article uses Poland as an example, the consequences of adverse demographic developments impacting HEP in a globalizing world have a more general dimension.

So how is HEP shaped when very unfavorable demographic phenomena occur? We try to answer this question by presenting the attitudes of students and University authorities from five universities in Poland, located in one geographical region, Silesia, divided into three provinces (Silesian, Opole, Lower Silesian). Furthermore, despite an improving educational offer and research level, these universities are not leaders of the world and European rankings either (THE TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS 2019, 2019).

The authors' investigations concern Poland and underline the coexistence of three phenomena: 1) very unfavorable demographic factors (rapid depopulation, population ageing), 2) relatively low rank position of universities as compared with global competition for student immigration,

and also 3) low or middle position of universities in world academic rankings.

Apart from a few cases, these issues have undeniably been discussed quite shallowly, mainly at the diagnosis level. A research gap undoubtedly exists, particularly concerning the European Union's post-socialist states, regarding direct references to depopulation and changes in the age structure of its inhabitants in the strategic solutions and higher education policy guidelines.

2. Methodology

The analysis concerns two research perspectives. The first perspective applied involved the results of empirical studies carried out in 2018 among students of five Silesian universities located in three provinces, Lower Silesia, Opole, and Silesia: the University of Wrocław, Wrocław University of Economics, the University of Opole in Opole, the University of Silesia in Katowice and the University of Economics in Katowice. Such a selection of high schools resulted from the examination of all universities in one historical region.

These studies focused on the opinions of students concerning taking up their studies and their ideas concerning the selected field of study in their future careers. The research tool used in this case was a questionnaire survey. Purposive sample selection was applied (criteria: university location and the respondent's year and field of study). The surveys covered master's degree (the final year) students of eight social science and humanities programs (economics, management, law, administration, pedagogy, sociology, history, philosophy). The final sample size was 1552 respondents/study units, from 9.5% to 32.9% of students following the above mentioned programs at these universities (Table 1).

Table 1. The number of respondents and their share in the total number of students considered specialties only (Source: by authors)

University	Number of respondents	Share [in %]
University of Wrocław	502	33.0
Wrocław University of Economics	152	10.0
University of Silesia in Katowice	446	29.3
The University of Economics in Katowice	144	9.5
University of Opole	278	18.2
Total	1522	100.0

According to the Likert scale, 20 closed questions have been taken into consideration in the survey with textual answers. The survey questionnaire used in the study contained a demographics section and questions that directly, or indirectly, referred to the demographic situation and challenges in the region of Silesia selected for analysis. In order to implement the research problem presented above, the analysis covered three questions:

1) Where do you intend to work after graduation?

2) What influenced your choice of the field of study, what were the reasons for such a choice? List the three main motivations and rank them in terms of importance.

3) What are you planning to do after graduation (please indicate one answer)?

The following research tools were used for the analysis: response distribution and chi-square test of independence. For the presentation of the study results concerning the analysis of the region's demographic situation, cartographic methods were used (a choropleth map).

The second perspective refers to analyzing as large a collection of higher education policy documents as possible, relevant to the article's aims. These included regional (historical regions of Silesia) strategic documents such as development strategies by higher education institutions (HEIs) located in the studied area and other documents considering the role and position of higher education and the academic community in local and regional development. Examination of strategic documents formed the basis of reflection about higher education policy in the research.

The methods used were to facilitate the verification of the following hypothesis: the depopulation of the historical region of Silesia is poorly marked in the university development policy and relatively loosely related to the problem of graduates.

3. Demographic background for higher education in Silesia

Following the 1989 political transformation when Poland introduced a market economy and abandoned the previous socialist system, its demographic problems came to the fore. These were namely: the intensifying consequences of the second demographic transition which started to be accompanied by the consequences of economic changes, characterized by negative phenomena such as urban shrinkage, rising unemployment, more excellent contrast of the GDP and overall standard of living seen in Western European

countries, and the economic crisis in many branches of manufacturing and services (SOULSBY ET AL., 2017; BÖRZEL & LANGBEIN, 2019). All these factors contributed to a decline in the population of all Polish provinces recorded from the 1990s to the present day. Nevertheless, the most harmful feature of these demographic changes was the dramatic fall in the share of people of pre-working age from 29% in 1990 to 18% in 2019 (DEMOGRAPHIC YEARBOOK OF POLAND, 2020), particularly in the context of the increasing share of persons of retirement, from age 13% in 1990 to 20% in 2019 (DEMOGRAPHIC YEARBOOK OF POLAND, 2020).

The socio-economic transformations had many faces in each of the voivodeships of the analyzed historical Silesia. The socio-economic transformation of the Dolnośląskie Voivodeship was relatively sustainable (except for the Sudetes' industrial sub-region), and its capital city, Wrocław, experienced rapid development. This socially and economically diverse voivodeship, especially after 2000, entered a high-speed development path. The Opolskie Voivodeship, with around 1 million inhabitants, has undergone various transformation stages. That is, economic development was accompanied by demographic problems, especially regarding depopulation and an ageing population. The proximity of the Wrocław metropolis and the Katowice conurbation was also important for development. The most complicated situation took place in the Śląskie Voivodeship with the liquidation and restructuring of heavy industry, the negative image of the voivodeship, and the presence of a degraded environment in the central and southern part of this subregion. The demographic costs of transformation had consequences in the phenomenon of urban shrinkage and rapid depopulation (KRZYSZTOFIK ET AL., 2011; STRYJAKIEWICZ, 2014; KRZYSZTOFIK, 2019). Thus, the socio-economic and demographic background of the transformation varied in each voivodeship.

The dramatic depopulation of an extreme majority of Silesian towns compared to other metropolitan regions in Poland and an overwhelming share of rural communities brought and still carries enormous challenges in the spheres of schooling and higher education in this region. In this context, questions as to the future of universities increasingly often a concern such fundamental problems as: i) fall in student and pupil numbers (from around 2 million in the 2007/2008 academic year to 1.3 million in the 2017/2018 academic year); ii) fall in numbers of primary and secondary schools – mainly in cities; iii) fall in numbers of private HEIs (in 2018, 25 of the 380 private institutions entered in the POLON national system

removed from the system, and 47 were in liquidation) and iv) closing down selected sub-fields of study at public HEIs and

The discrepancy between social expectations concerning increased financing of higher education and a fall in the total number of students in real terms (*SZKOLNICTWO WYŻSZE W ROKU AKADEMICKIM 2017/2018*, 2018).

How significant challenges bring demographic decline is presented in Fig. 1A and Fig. 1B. This question concerns two important demographic groups: potential students (aged 16-18 years) and the age group that forms the bulk of the generation studying in Poland (19-24 years). The rapidity and the dramatic nature of these changes are also visible in Table 2. We should add here that the drop in population in the age groups studied has occurred in all large and mid-sized towns of the region (including Wrocław, the 2-million Katowice conurbation, and Opole).

From the perspective of higher education, the impact of the population decline would be more significant still if not for certain local mitigating conditions. In the case of Wrocław, this is substantial immigration to this metropolis, including foreign immigration, mainly from Ukraine post-2010 (*KRZYSZTOFIK*, 2019). In Opole, there is also an inflow of students from Ukraine and a limited inflow from the Silesian province area. The most challenging situation is in the province of Silesia where there is natural population decline and strong emigration. The situation of higher education is "strengthened" by the high demographic potential of the general population. It is a natural human resource for local universities, although Table 2 indicates, for instance, one that is shrinking from year to year. Table 3 indicates also that in the Silesian province, the number of students is comparatively small as compared, for example, to Wrocław.

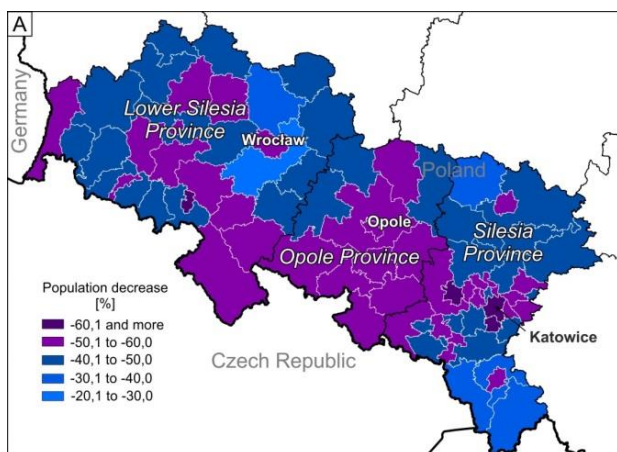


Fig. 1A. Population changes between 2000-2010 by counties

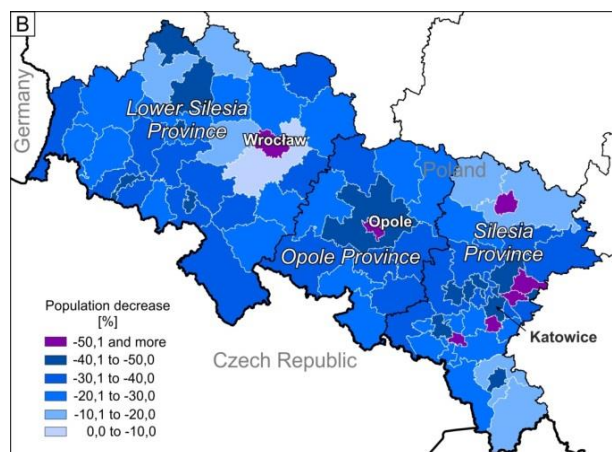


Fig. 1B. Population changes between 2010-2017 by counties

Table 2. Dynamics of population groups – age 16-18 and age 19-24, 2000-2017 (Source: authors own based on data from Central Statistical Office in Poland)

Province	Population 16-18		Population 19-24	
	2000	2017	2000	2017
Lower Silesian	154773	76837	298183	183028
Opole	57601	27437	102423	65127
Silesian	247998	121736	465693	283447
Silesia (historical region)	460372	226010	866299	531602

Table 3. Number of students within historical Silesia by selected group (Source: authors own on the basis of Higher education in the academic year 2017/2018, 2018)

Province	Total population (thous., Dec. 2017)	Students (thous.)	Female (thous.)	International students (thous.)
Lower Silesia	2904	123.7	69.5	6.7
Opole Province	993	19.6	11.4	1.4
Silesian Province	4560	111.0	63.3	4.5
Silesia (historical region)	8457	254.3	144.2	12.6

4. Between demographic trauma, labour market, and student opinions. Results of empirical study

The significant decrease in the secondary school and student-aged populations in Silesia undoubtedly presents a severe socio-economic problem (KRZYSZTOFIK, 2019). From the psychosocial perspective, it may even be a "generational demographic trauma". The substance of this "generational demographic trauma" lies in absolute helplessness of regional authorities towards challenges of rapid generational depopulation, which results, on the one hand, in delayed political decisions, which are often the decision-makers' failure to react to the emerging negative trends and phenomena, in this case including higher education. On the other hand, in a characteristic alienation of some young people in decisions concerning their future professional and personal terms (KRZYSZTOFIK, 2013; DEMOGRAPHIC YEARBOOK OF POLAND, 2020). The confusion of young generations had its symbolic moment around 2015 when the labour market situation changed diametrically. In most of Poland's regions, including Silesia, an employer's market has now been replaced by an employee's market. Though they are mostly low-paid and in cities, an overabundance of job offers has replaced heretofore common unemployment and relationships on the employer-employee line that were unfavourable to employees, particularly graduates (cf BŁASZCZAK, 2018). The "generational demographic trauma," which may currently be treated as a replacement of the previously objectively tricky situation with a complicated system of (complex) individual decisions from the perspective of persons deciding about their educational path or future career, also has an organizational and social dimension. The social dimension is concerned with the sense of university education in selected fields and some departments and fields of study, development of academic and teaching staff, and university infrastructure. As mentioned, the demographic decline in generations entering student age was previously noticeable, but apart from small private HEIs, it did not significantly impact the organizational situation of HEIs. The increasing and forecast depopulation in the 16-24 year age group shapes a new situation. Questions arise as to which HEIs will experience structural regress, how they will deal with it, and whether, in certain situations, it will be necessary to close down public HEIs. Up to now, public universities were able to cope with the demographic slump. In the 1990s and after 2000, they recorded rapid

growth of student numbers which was related to persons aged 26-40 supplementing their education on a part-time basis (cf. SZAMBELAŃCZYK, 2017).

In the context of the various dimensions of "generational demographic trauma", as sketched out above, the key question is an attempt to capture student responses to this phenomenon and its accompanying socio-economic changes.. In the next part of this article, students' visions concerning their educational paths are also juxtaposed with the determinants of regional education and socio-demographic policy. In the study of student opinions, we found the most valuable opinions to be those that expressed subjective observations regarding the educational choices made and those related to choices that also covered their career plans. They were all directly, or indirectly, related to the demographic context. This should be perceived on the one hand as the falling number of persons aged 16-24 years, but also as an opportunity to find one's place on the regional labour market, which in the long term would be a barrier to the region's further depopulation (MURZYN-KUPISZ & SZMYTKOWSKA, 2015). In this context, we were particularly interested in the views of people studying social sciences and the humanities who, compared with students in technical, engineering, medical, natural sciences, and environmental fields, are the most susceptible to experiences such as: i) low salaries in comparison to qualifications; ii) in many cases, a low number of job offers, or a complete lack of them, and iii) undertaking employment, that does not match their education.

While these phenomena do not apply to all courses of study equally, and may also differ for geographic reasons, and the specific nature of local labour markets, we decided that their analysis concerning humanities and social science courses would give the most objective picture of the challenges facing higher education in the analyzed region of Silesia. In this context, we were interested in opinions collected about two fundamental issues: i) students' education versus finding employment in their profession after graduation (plans concerning their future after graduating, the location with which the future graduate would like to link themselves professionally in the future), and ii) primary motivation for undertaking their studies.

For the demographic issues raised, the critical question concerns the future careers of students after graduation. This is undoubtedly one of the most important (after the family factor and marriage) stimulators of decisions concerning their place of residence. The thorny problem of

professional fulfillment opportunities is covered in the well-researched question at the juncture of students' and higher education graduates' visions (HOLMES, 2013; TYMON, 2013; SULEMAN, 2018). As mentioned, Poland's economic situation, especially in the Silesia region, has improved significantly over the past few years. This can explain the large share of indicators of the desire to find employment outside the public sector, which until recently was an oasis of security on the Polish labor market. Currently, due to relatively lower earnings than in the private sector, its position is falling and differences at the regional level also confirm this (KORENIK, 2017; BARON ET AL., 2019; HEFFNER ET AL., 2019). We should note here that the economy of the Lower Silesian province is the most dynamic, while that of the Opole province is comparatively the least dynamic. Based on the survey results and examined in terms of the three subregions (Silesian, Opole, and Lower Silesian) studied, we note a convergence with their economic situation. Results of the Chi-squared test of independence (Pearson's $\chi^2 = 60.82465$, $df=20$, $p=0.0001$) indicate that the null hypothesis of the independence of students' plans after graduation and location of the HEI (in province) should be discarded. We thus conclude that the professional plans of students in HEIs in different provinces differ. Students of the University of Opole were interested in *public sector jobs* comparatively more often than students in the other two provinces (31% of indications by students in the Opole province versus 26% by students in the Silesia and 18% in the Lower Silesia province). Simultaneously, students of HEIs in the Lower Silesian and Silesian provinces planned to work for an international company almost twice as often (13% and 11% respectively) as students in the Opole province (6%). Another significant difference in students' career plans of a given HEI concerned the desire to establish their own company. In the group of individuals studied, declarations on having one's own business were most often made by students at HEIs in the Lower Silesian province (17%), slightly less often by students from the Opole province (13%), and the least frequently by students from Silesia province (9%).

However, the essential element which was analyzed, which allowed us to diagnose the students' post-graduation plans, was their intended location for employment. The main conclusions from the study conducted were:

- Students at the HEIs in question most often indicated the location they were studying in

as their place of employment after graduation: 31% of total indications;

- The study participants gave their place of origin as their intended place of employment slightly less often: 24%,
- The participants indicated any place where they could find a job: 25% of total indications;
- Out of the studied students group, around 5% stated that they would go abroad to find a job after graduation.

The conducted analysis of independence indicates (Pearson's $\chi^2 = 60.20484$, $df=12$, $p=0.0000$) that student opinion on their intended place of employment differs by province. Among individuals studying at HEIs in the Lower Silesian province, 40% intended to find a job after graduation in the town they were studying in (for students of HEIs in the Silesian and Opole provinces, this was 24% and 23% respectively, so almost half as many). On the other hand, around 30% of students of HEIs in the Opole province gave their place of origin as their place of employment after graduation. In the case of students from the Silesian and Lower Silesian provinces, this was 25% and 21%, respectively. It should be added that students from the Lower Silesian HEIs were less disposed than students from the other two regions to undertake employment where they could find it (around 20% of indications by students from the Lower Silesian province versus 29% of indications for students from Silesia and Opole).

We take students' opinions concerning their future regarding residence and employment as a kind of confrontation between the real situation experienced and their own expectations, needs, and visions of future life – both professional and personal. These latter issues are well reflected in the question of motivation for undertaking studies.

Their analysis showed that students of the University of Opole, located in Opole, relatively more often than students of universities from the other two voivodeships, considered their interests as one of the most important reasons for studying at a given university (43.2% of indications for the motive as the main reason; 73.4 % of indications as one of the top three motives). In the case of students at HEIs in the Lower Silesian province (the University of Wrocław, and Wrocław University of Economics), the share of those indicating this motivation as their main one and one of the three most important reasons for undertaking studies at a given HEI was 36.4% and 68% respectively. For HEIs in the Silesian province (the University of Silesia, the University of Economics in Katowice), these were 38.1% and 62.7%, respectively.

To verify the H_0 hypothesis on the independence of variables X and Y, where X is the rank of *interests* as the main reason for undertaking studies at a given HEI, and Y, is HEI location (province), the chi-squared test of independence was used. Based on the calculations conducted, the hypothesis H_0 should be rejected. The alternative H_1 (a 5% level of significance was adopted for all tests conducted) should be deemed correct: there is a relationship between variables X and Y (results of the independence test: Pearson's $\chi^2= 35.46$; $df=8$; $p=0.00002$). From the analysis of independence conducted, it appears that it may be assumed that the distribution of ranks given by students for their *interests* as the motivation for starting studies at a given HEI differs between students of HEIs by province.

For the second most frequently named motivation for undertaking studies at all the universities in question, i.e., *future employment prospects*, the percentage of indications did not differ significantly by province and was around 65% in all regions. Also, the distribution of ranks given by students of different HEIs to this motivation did not differ by province. This is confirmed by the result of the test of independence (Pearson's $\chi^2= 12.58$; $df=8$; $p=.12711$) according to which there is no basis for rejecting the H_0 null hypothesis on the independence of the variables X and Y, where X is the rank of *future employment prospects* as the main reason for undertaking studies at a given HEI, and Y, the location of an

HEI (province). This result means that the motivation in question had a similar significance (weight) for all students, irrespective of the HEI's location. It may be expected that students assume that obtaining a diploma from an HEI (regardless of its location) provides a chance for finding a "better" job, and that is why they undertake their studies.

Additionally, it is worth noting that the most significant differences in the percentage of indications given by students of HEIs in different provinces may be seen for two motivations for starting studies at a given HEI, namely *convenient access to the HEI* and *the HEI's prestige*. The first of the motivations named was far more often indicated as necessary by students of HEIs in the Opole and Silesian provinces (34.9% and 31% respectively indicated this reason as one of the three most important ones) than by students of HEIs in the Lower Silesian province (11.6% of indications). On the other hand, *HEI's prestige* was an important motivation for 43.1% of students from the Lower Silesian province.

When we attempt to summarise the survey results, the following conclusion arises. Namely, in their choice of studies, students are motivated by their interests. However, increasingly often, they take into account not so much the possibility of finding employment in the region but of finding employment consistent with their interests and which are possibly well paid (Table 4).

Table. 4. Share of interests (%) as the main reason for undertaking studies HEI (Source: own compilation)

Disciplines	University of Silesia	University of Economics in Katowice	University of Wrocław	Wrocław University of Economics	University of Opole
Economics	-	31.9	17.3	18.2	32.8
Management	-	22.2	-	33.3	-
Law	34.3	-	26.7	-	35.4
Administration	14.1	-	24.6	-	26.5
Sociology	40.0	-	63.0	-	50.0
History	52.0	-	67.2	-	69.2
Pedagogics	69.9	-	51.8	-	63.5
Philosophy	81.0	-	75.0	-	-

5. Higher education management policies for depopulation

From a policy perspective, higher education in a depopulating region should be considered from two perspectives. The first is from the bottom-up

perspective and takes into account university policy concerning the problem in question. Apart from the students themselves, stakeholders include university authorities, university staff, their associations, and some research and educational units connected to universities. The second is a

top-down perspective and should take into account the regional policy on universities, the role of higher education, and the function of academic towns and regions as a factor strengthening their development. In this case, the key stakeholders are regional and local authorities, businesses, and other organizations and institutions supporting local and regional socio-economic development. Stakeholders are more represented in Poland's higher education governance than in other European countries (cf. MAGALHAES ET AL., 2013; LABANAUSKIS & GINEVICIUS, 2017). All stakeholders, both directly connected with higher education and those connected to regional and local development, took part in social consultations. Consultation concerning the formulation of assumptions and contents of strategic documents, which should in principle include references to the analyzed issue of the relationship between higher education, and population decline, and population ageing (STRATEGIA ROZWOJU UNIwersYTETU EKONOMICZNEGO W KATOWICACH 2018-2025, 2018; STRATEGIA ROZWOJU UNIwersYTETU EKONOMICZNEGO WE WROCLAWIU, 2015; STRATEGIA ROZWOJU UNIwersYTETU OPOLSKIEGO W LATACH 2015-2020, 2015; STRATEGIA ROZWOJU UNIwersYTETU ŚLĄSKIEGO W KATOWICACH NA LATA 2012-2020, 2012; STRATEGIA ROZWOJU UNIwersYTETU WROCLAWSKIEGO NA LATA 2013-2020, 2013).

In this place of the article, an attempt is made to establish the overlap of regional policies to develop higher education with a regional policy on the analyzed demographic issues. Special attention was given to issues such as: i) whether these policies refer to the demographic problems raised in the article, and ii) if yes/no, were appropriate tools and guidelines for solving the problems arising proposed?

To this end, the development strategies of the five analyzed HEIs (the University of Wrocław, Wrocław University of Economics, University of Opole, the University of Silesia in Katowice, the University of Economics in Katowice), development strategies of the three provinces in which these universities are located: Lower Silesian (STRATEGIA ROZWOJU WOJEWÓDZTWA DOLNOŚLĄSKIEGO, 2013), Opole (STRATEGIA ROZWOJU WOJEWÓDZTWA OPOLSKIEGO DO 2020 R., 2012), Silesian (STRATEGIA ROZWOJU WOJEWÓDZTWA ŚLĄSKIEGO „ŚLĄSKIE 2020+”, 2013), were analyzed.

It should be concluded that all strategic documents note the issue of demographic losses. However, these are mainly analyses of the phenomenon. There are no issues regarding strategic solutions and the resulting policies. This is most apparent in the Strategies of the Opole and Silesian provinces. Although there is no direct

reference to the dangers brought by depopulation and ageing to higher education, demographic issues are widely discussed. This problem still looks worse at the university level. We were particularly interested in depopulation, ageing, and demographic problems when analyzing these documents. None of the phrases above appears in the University of Opole, the University of Economics in Katowice, or Wrocław University of Economics strategies. The strategy of the University of Silesia has two mentions of the term 'demographic slump', which is incorrect as a permanent natural decline and immigration characterize this province's demographic dynamics; thus, slumps and booms are invisible in practice. Nevertheless, it should be noted that this problem is only emphasized in the University of Silesia document: *"The demographic decline will result in decreased enrolment levels, affecting especially part-time programs and those programs which already have limited popularity among candidates"* (STRATEGIA ROZWOJU UNIwersYTETU ŚLĄSKIEGO W KATOWICACH NA LATA 2012-2020, 2012).

The strategy of the University of Wrocław even includes a chapter entitled: "Demographic situation of the country and region." This chapter finally refers to, a demographic decline in age groups of young persons in the Lower Silesia province, and is based on empirical data, with the conclusion that: *"These processes will have a significant impact on student numbers and changes in the education structure, particularly palpable in part-time programs conducted by public and non-public HEIs"* (STRATEGIA ROZWOJU UNIwersYTETU WROCLAWSKIEGO NA LATA 2013-2020, 2013).

The brevity, or lack of references to one of Silesia's two crucial problems, is reflected in further proposals contained in strategies by HEIs in this region. Namely, references to relationships and the correlation of the two issues were not made in any way. In all universities' strategic documents, we do, of course, find provisions for the improvement of conditions for teaching, raising the level of teaching, diversifying the educational offer; however, these provisions form a broad vision of the development of higher education with no more in-depth analysis which would take into account the significant decrease in the population of educational age.

From this perspective, we should comment on policy for dealing with regional demographic challenges. Because in most cases, they were not emphasized in any particular way, apart from a single instance (University of Silesia), we do not find an appropriate toolset for mitigating or counteracting the negative phenomena observed.

The above mentioned reference to slowing down the fall in student numbers has a structural and perhaps quite a defensive nature. It assumes a greater openness to international students, a reconciliation of sorts that the HEI will have fewer students from Poland. In the University of Silesia strategy, we thus read: *"More and more programs and courses are offered in foreign languages, especially in English, although their numbers are still insufficient. The lack of a broader program offer in English impedes the inflow of international students. The gradual departure from a mass character of tertiary studies in Poland caused by the demographic slump creates an opportunity and a necessity to open the University to international students. Thus, it gives the University a chance to gain a place in the world higher education system"* (STRATEGIA ROZWOJU UNIwersytetu Śląskiego w Katowicach na lata 2012-2020, 2012).

Of course, in itself, communicating the HEIs' development strategies versus important developmental issues is correct. As mentioned above, they contain all the most critical expectations that HEIs worldwide set themselves, both concerning teaching and scientific development. Their disadvantage is that there is an apparent taboo against showing what threats universities are facing. When we analyze the development strategies of HEIs, we usually see a need to soften the facts concerning quite significant problems and challenges. The effect of this is an evident 'mismatch' between the strategic analysis and the strategic objectives proposed.

This taboo also has a regional dimension. As the document (JOŃCZY, 2013) notes, many secondary school graduates in the Opole region are interested in studying in a neighbouring academic centre: Wrocław. The lack of practically any reaction to this fact in strategic documents of Opole's HEIs is puzzling. Thus here, we may signal absolute helplessness versus challenges also in an intraregional (Silesian) dimension.

A partial explanation of this taboo lies, we believe, in the transfer of political responsibility for the demographic situation in regions to regional and local governments. This may be supported by the fact that the three analyzed strategies of the Silesian provinces' indicate and emphasize demographic problems. All three strategies (STRATEGIA ROZWOJU WOJEWÓDZTWA DOLNOŚLĄSKIEGO, 2013; STRATEGIA ROZWOJU WOJEWÓDZTWA OPOLSKIEGO DO 2020 R., 2012; STRATEGIA ROZWOJU WOJEWÓDZTWA ŚLĄSKIEGO „ŚLĄSKIE 2020+”, 2013) cover depopulation and ageing both in their diagnosis and in their regional policy guidelines, also proposing some packages of preventive actions. However, it should

be noted that the documents cited almost completely lack direct references to the relationship between depopulation and the situation of universities. In all three regional strategies, local universities are placed in crucial stimulators of further social growth.

Nevertheless, the region's ongoing depopulation and ageing require the academic community to solve the present situation. Unfortunately, the local government milieu is often uninterested in cooperation related to the regional decision-makers' conformism. This conformism manifests itself in the implementation of visions based on optimistic assumptions, visions that cannot be exploited by political opponents, or visions grounded in the "here and now."

6. Discussion

Considering the results of the questionnaire survey conducted on the education visions held by students of social science and humanities programs and considering the analysis of documents presenting universities' policies in the depopulating region of Silesia, two significant issues arise which require discussion.

First, we should ask ourselves whether the phenomenon of depopulation impacts how students' attitudes towards their professional careers are shaped. The second important aspect is our attempt to answer whether universities' policies about the ongoing demographic changes can be more 'offensive' than before? Especially if we assume that depopulation is a form of peripherization (cf. KARLSEN ET AL., 2017).

From the perspective of HEI functioning in rapidly depopulating regions, the questions posed above have fundamental importance. Due to the progressive depopulation, these problems should also cause visible concern among regional stakeholders in higher education policy. The facts indicated in this article on the scale of the negative demographic phenomena, the 'idealism' of educational choices visible in the questionnaire surveys, and the confidence in the future conspicuous in conversations with students indicate an attitude of failure to notice the discussed threats. How should this paradox be understood?

Following the political transformation in Poland, and many CEE countries, studying became a kind of remedy to the problems of the labour market: rising unemployment, low salaries, partially illegal employment (cf. MOREAU & LEATHWOOD, 2006; NÚÑEZ & LIVANOS, 2010). Simultaneously, the broad opening of higher education to a larger number of students (development of private schools and part-time studies) established an

educational and professional pathway model wherein half of the secondary school graduates going on to study became as apparent as attending secondary school. HEIs thus became more easily accessible, allowed individuals to wait out a difficult period in the labour market in the hope of its improvement, and, equally significantly, to raise their qualifications to gain another advantage in an increasingly competitive labour market. From the political point of view, this also gave the authorities the possibility of a 5-year delay in the labour market entry for subsequent graduate year groups (EDUKACJA DLA PRACY..., 2007).

Already in the 1990s, a quite peculiar situation was apparent in which it was depopulation that had become the remedy for labour market problems, also for young people and graduates. It should be added that the decline of university and secondary school graduates in subsequent years was incredibly "valuable". Of course, this "remedy" was never expressed aloud anywhere. Instead, it appeared in informal comments of political decision-makers. Without taking away from the validity of this phenomenon and some form of "political consent" to it, it should be noted that it imperceptibly became a kind of norm in Poland's political transformation. If bearing in mind its dramatic nature, depopulation could be treated as a solution to the existing socio-economic problems; it imperceptibly became one of the models for mitigating some social issues in Poland. However, around 2013/2014, an evident improvement occurred in the labor market situation, involving the high availability of jobs: initially mainly in the blue-collar sector, and from 2015 also in white-collar professions. The employer's market turned into an employee's market. At this time, many companies and institutions started to have problems finding employees. Unfortunately, depopulation is progressing, particularly in the age group of persons in education. At this point, visions for the development of higher education become the "victim" of visions for improving Poland's general socio-economic situation. The comfortable existence of HEIs, educating a large share of youth in each year group, has been replaced by a problem concerning all HEIs with a decreasing number of prospective applicants. When analyzing HEI development strategies, we may feel that the previous comfortable situation caused a "lack of vigilance" with regard to the challenges brought by deepening depopulation. The question remains whether HEI authorities can prevent this, or more realistically, how they can adapt to it. For instance, the University of Silesia's strategy proposes greater internationalization, including many English

taught courses. Without criticizing this direction, the inflow of students from Ukraine, who undertake Polish studies, is more noticeable. Unfortunately, programs that offer courses in English have extreme competition with other Polish and European metropolises. This does not mean, however, that they should not be expanded (cf. Also: VAN DEN WENDE, 2009; URBANOVIČ & WILKINS, 2013).

Another policy accent of some universities in Poland (e.g., the University of Wrocław, University of Silesia) is striving for an elite status and an increasing focus on research versus teaching. Polish universities also face global competition in this respect, mainly for financial reasons. In informal conversations and comments, university authorities often state that a research focus will in the future be the remedy for the falling number of applicants. However, the question always arises of will we eventually come to the point of critical point in this issue as well, and will universities have to be transformed into research institutes?

The developmental priority emphasized in all analyzed HEI strategies in Silesia is the need for varied specializations, educational offerings, and interdisciplinarity. These solutions, which are undoubtedly wanted and are already being implemented, run counter to the population decline discussed here. Many of the proposals in this area have not been implemented because of low applicant numbers. Some specializations have been closed. Others were maintained only because of special scholarships paid to students on these programs. The phenomena described are increasingly counter to students' educational needs, which are revealed in the survey. In the case of social studies and humanities programs, the most important reason for choosing a study program, are still the individual's interests. For some specializations such as philosophy or history, these choices are increasingly confronted with a falling number of applicants for such programs. It is also interesting to note that within the "threatened" specializations and programs, the greatest need to continue education in may be seen in the third cycle (Ph.D.) of studies. In "marketable" programs – law, administration, management, economics, and education studies – the situation is slightly better. Suppose we attempt to summarise the question of students' educational choices. In this case, we may conclude that the problem of depopulation in Silesian HEIs is directly proportional to the need to develop one's passions, self-improvement, and the desire to study a subject that allows professional fulfillment. This undoubtedly melancholy conclusion is softened because most students attempt to reconcile this approach with

a practical one, aimed at obtaining a high salary or prestigious employment.

7. Conclusion

The deteriorating demographic situation in many European regions directly impacts HEI functioning and creates new challenges concerning HEP. These regions include Silesia in Poland, as examined in this research. Further depopulation and decline among persons aged 0-18 years is forecast. These are the age groups that form the reservoir for development of universities in the next two decades. The HEP implemented in this region so far is not satisfactory, particularly from the perspective of HEIs. This is not only the result of a lack of dedicated solutions to mitigate the mounting problems. Characteristically, in many universities' strategies, these threats are not mentioned even at the diagnosis level. Confidence in the future concerning university development among stakeholders responsible for shaping HEP in the Silesia region is likely strengthened by facts such as a relatively high number of inhabitants, the inflow of students from Ukraine, and promotion of higher education at the national level. Based on the analyses of documents and the discussion presented in this article, we conclude that the HEP of Silesian universities is not keeping up with regional demographic challenges.

Nevertheless, the demographic decline in general and concerning young people, European and global competition for students, and the state promotion of vocational schooling, whose lack is a severe gap in Poland's socio-economic system, intensifies. These factors give an impression of a balance between opportunities for, and barriers to, higher education development. Nonetheless, it should be noted that the determinants of development are increasingly based on visions of immigration. This HEI development model, recognizable from many West European, or North American universities, has a decisive limiting factor in southern Poland universities. This factor is global and European competition (cf. TOMUSK, 2000; ROBERTSON, 2009; RUST & KIM, 2012).

The factor strengthening the situation of Silesian HEIs is undoubtedly also the fact that there is a demand for the offered programs. Students studying these programs have a vision of educational development that is primarily based on fulfilling their passions and interests. At this point, a different problem appears, however. In Poland, professional satisfaction is in strong opposition to the salaries offered in many professions, the public sector, and higher education.

This article aims not to indicate specific solutions for individual HEIs, or even the whole region. Despite the threat of the demographic situation, the context for each University is different. Some of the solutions already adopted should certainly not be questioned. Even those whose ultimate result may be HEI consolidation, or closure of some institutions (cf. CURAJ ET AL., 2015; SZAMBELAŃCZYK, 2017). First, what should be noted is the shaping of strategies on a "built to suit" basis. Changing dimensions concerning some solutions and structures seems to be an essential worry. The second issue is abandoning the taboo visible in HEI strategies and concerning the region's demographic situation. This is an important issue even for the programs that are more marketable (economics, marketing, law, administration). Another challenge where higher education's role may be recognized is in improving the financial situation in professions in which social sciences and humanities graduates form the majority.

References

- Adcroft A., Teckman J., Willis R. 2010. Is higher education in the UK becoming more competitive? *International Journal of Public Sector Management*, 23, 6: 578–588.
- Adina-Petruta P. 2015. Global university rankings - a comparative analysis. *Procedia Economics and Finance*, 26: 54–63.
- Altbach P.G. 2004. Globalisation and the University: Myths and realities in an unequal world. *Tertiary Education and Management*, 10, 1: 3–25.
- Antonowicz D. 2015. *Między siłą globalnych procesów a lokalną tradycją. Polskie szkolnictwo wyższe w dobie przemian*. Wydawnictwo Naukowe UMK, Toruń.
- Antonowicz D., Gorlewski B. 2011. *Demograficzne Tsunami. Raport Instytutu Sokratesa na temat wpływu zmian demograficznych na szkolnictwo wyższe do 2020 roku*. Instytut Rozwoju Kapitału Intelktualnego im. Sokratesa, Warszawa.
- Baron M., Bartoszek A., Błazy R., Gasidło K., Janiszek M., Klasik A., Markowski T., Mazur-Belzyt K., Palmen L., Pancewicz A., Pięta-Kanurska M., Runge J., Twardoch A., Wrana K. 2019. *Budowanie atrakcyjności przestrzeni miejskich (Building the Attractiveness of Urban Spaces)*. Studia KPZK PAN, Warszawa.
- Bathmaker A.M., Ingram N., Waller R. 2013. Higher Education, Social Class and the Mobilisation of capitals: recognising and playing the game. *British Journal of Sociology of Education*, 34, 5/6: 723–743.
- Birkland T.A. 2011. *An Introduction to the Policy Process, Theories, Concepts and Models of Public Policy Making*. Routledge, New York.
- Błaszczak A. 2018. Zbliża się zmierzch rynku pracownika. *Rzeczpospolita*. Retrieved from <https://www.rp.pl/Rynek-pracy/311229884-Zbliza-sie-zmierzch-ryнку-pracownika.html>
- Börzel T.A., Langbein J. 2019. Core-periphery disparities in Europe: is there a link between political and economic divergence? *West European Politics*, 42, 5: 941–964.

- Brown P., Lauder H., Ashton D.N. 2011. *The Global Auction: The Broken Promises of Education, Jobs and Incomes*. Oxford University Press, Oxford.
- Bucher H., Mai R. 2005. *Depopulation and its consequences for the regions of Europe*. DG III Social cohesion, Brussels.
- Burke C. 2015. *Culture, Capital and Graduate Futures: Degrees of Class*. Routledge, London.
- Curaj A., Georghiou L., Harper J.C., Egron-Polak E. (eds.) 2015. *Mergers and Alliances in Higher Education: International Practice and Emerging Opportunities*. Cham: Springer International Publishing.
- Edukacja dla pracy. Raport o rozwoju społecznym. Polska – 2007*. 2007. UNDP, Warszawa.
- Figueiredo H., Biscaia R., Rocha V., Teixeira P. 2017. Should we start worrying? Mass higher education, skill demand and the increasingly complex landscape of young graduates' employment. *Studies in Higher Education*, 42, 8: 1401–1420.
- Heffner K., Klemens B., Solga B. 2019. Challenges of Regional Development in the Context of Population Ageing. Analysis Based on the Example of Opolskie Voivodeship. *Sustainability*, 11, 19, 5207.
- Holmes L. 2013. Competing perspectives on graduate employability: possession, position or process? *Studies in Higher Education*, 38, 4: 538–554.
- Izyumov A. 2010. Human costs of post-communist transition: Public policies and private response. *Review of Social Economy*, 68, 1: 93–125.
- Jończy R. (ed.). 2013. *Exodus absolwentów szkół średnich województwa opolskiego do dużych ośrodków regionalnych kraju i za granicę*. Wojewódzki Urząd Pracy w Opolu, Uniwersytet Ekonomiczny we Wrocławiu, Opole.
- Jończy R., Rokita-Poskart D. 2014. Educational migrations as a factor of the depopulation of the intermetropolitan region. *Economic and Environmental Studies*, 14, 1: 9–20.
- Kabók J., Radišić S., Kuzmanović B. 2017. Cluster analysis of higher-education competitiveness in selected European countries. *Economic Research-Ekonomska Istraživanja*, 30, 1: 845–857.
- Karlsen J., Beseda J., Šima K., Zyzak B. 2017. Outsiders or Leaders? The Role of Higher Education Institutions in the Development of Peripheral Regions. *Higher Education Policy*, 30, 4: 463–479.
- Kivinen O., Hedman J., Kaipainen P. 2007. From Elite University to Mass Higher Education: Educational Expansion, Equality of Opportunity and Returns to University Education. *Acta Sociologica*, 50, 3: 231–247.
- Knight J. 2013. The changing landscape of higher education internationalisation – for better or worse? *Perspectives: Policy and Practice in Higher Education*, 17, 3: 84–90.
- Korenik S. 2017. Procesy rozwoju gospodarczego w przestrzeni Dolnego Śląska - wybrane problemy (Economic Development Processes in Lower Silesian Space - Selected Problems). *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu (Research Papers of the Wrocław University of Economics)*, 490: 11–20.
- Krzysztofik R. (ed.). 2019. *Przemiany demograficzne miast Polski. Wymiar krajowy, regionalny i lokalny*. Instytut Rozwoju Miast i Regionów, Warszawa-Kraków.
- Krzysztofik R. 2013. "Zagłada miast" - Projekt Shrink Smart - The Governance of Shrinkage within an European Context na Uniwersytecie Śląskim. [in:] N. Szajewska, M. Lipińska (eds.) *Zarządzanie rozwojem miast o zmniejszającej się liczbie mieszkańców (w kontekście perspektywy finansowej 2014-2020)*. Senat Rzeczypospolitej Polskiej, Warszawa: 45–56.
- Krzysztofik R., Runge J., Kantor-Pietraga I. 2011. *Paths of Shrinkage in the Katowice Conurbation. Case Studies of Bytom and Sosnowiec Cities*. Wydział Nauk o Ziemi Uniwersytetu Śląskiego, Sosnowiec.
- Kwiek M. 2006. *The University and the state. A study into global transformations*. Peter Lang, Frankfurt and New York.
- Labanauskis R., Ginevičius R. 2017. Role of stakeholders leading to development of higher education services. *Engineering Management in Production and Services*, 9, 3: 63–75.
- Lowden K., Hall S., Elliot D., Lewin J. 2011. *Employers' Perceptions of the Employability Skills of New Graduates*. University of Glasgow, SCRE Centre, Glasgow.
- Magalhaes A., Veiga A., Ribeiro F.M., Sousa S., Santiago R. 2013. Creating a common grammar for European higher education governance. *Higher Education*, 65, 1: 95–112.
- McCracken M., Currie D., Harrison J. 2016. Understanding graduate recruitment, development and retention for the enhancement of talent management: sharpening 'the edge' of graduate talent. *The International Journal Human Resource Management*, 27, 22: 2727–2752.
- McMahon W.W. 2018. The total return to higher education: Is there underinvestment for economic growth and development? *The Quarterly Review of Economics and Finance*, 70: 90–111.
- Moreau M.P., Leathwood C. 2006. Graduates employment and the discourse of employability: a critical analysis. *Journal of Education and Work*, 19, 4: 305–324.
- Moroń D. 2016. Wpływ przemian demograficznych na szkolnictwo wyższe w Polsce. *Studia Ekonomiczne*, 290: 107–116.
- Murzyn-Kupisz M., Szmytkowska M. 2015. Studentification in the post-socialist context: The case of Cracow and the Tri-City (Gdansk, Gdynia and Sopot). *Geografie*, 120, 2: 188–209.
- Núñez I., Livanos I. 2010. Higher education and unemployment in Europe: an analysis of the academic subject and national effects. *Higher Education*, 59, 4: 475–487.
- Olszen M. 2016. Neoliberal competition in higher education today: research, impact and accountability. *British Journal of Sociology of Education*, 37, 1: 129–148.
- Rauhwarig A. 2013. *Global University Rankings and their Impact – Report II*, European University Association, Brussels.
- Robertson S.L. 2009. Europe, Competitiveness and Higher Education: An Evolving Project. [in:] R. Dale, S.L. Robertson (eds.) *Globalisation and Europeanisation in Education*. Symposium Books, Didcot Oxfordshire: 101–119.
- Rust V.D., Kim S. 2012. The Global Competition in Higher Education. *World Studies in Education*, 13: 5–20.
- Santa R. 2018. The Future of European Higher Education in an Age of Demographic Headwinds: The Impact of Demographic Decline on Higher Education System Structures Funding in Romania Poland Russia. [in:] A. Curaj, L. Deca, R. Pricopie (eds.) *European Higher Education Area: The Impact of Past and Future Policies*. Springer, Cham: 369–386.
- Scott P. 1995. *The Meanings of Mass Higher Education*. The Society of Research into Higher Education and Open University. Bristol (PA), Buckingham.
- Soulsby A., Hollinshead G., Steger T. 2017. Crisis and change in industrial relations in Central and Eastern Europe. *European Journal of Industrial Relations*, 23, 1: 5–15.
- Strategia rozwoju Uniwersytetu Ekonomicznego w Katowicach 2018-2025*. 2018. Uniwersytet Ekonomiczny w Katowicach, Katowice.
- Strategia rozwoju Uniwersytetu Ekonomicznego we Wrocławiu*. 2015. Uniwersytet Ekonomiczny we Wrocławiu, Wrocław.
- Strategia rozwoju Uniwersytetu Opolskiego w latach 2015-2020*. 2015. Uniwersytet Opolski, Opole.

- Strategia rozwoju Uniwersytetu Śląskiego w Katowicach na lata 2012-2020 (University of Silesia in Katowice - development strategy 2012-2020). 2012. Uniwersytet Śląski, Katowice.
- Strategia rozwoju Uniwersytetu Wrocławskiego na lata 2013-2020. 2013. Uniwersytet Wrocławski, Wrocław.
- Strategia Rozwoju Województwa Dolnośląskiego. 2013. Uchwałą nr XXXII/932/13 z dnia 28 lutego 2013 r. Urząd Marszałkowski Województwa Dolnośląskiego, Wrocław.
- Strategia Rozwoju Województwa Opolskiego do 2020 r. 2012. Samorząd Województwa Opolskiego, Opole.
- Strategia Rozwoju Województwa Śląskiego „Śląskie 2020+”. 2013. Wydział Planowania Strategicznego i Przestrzennego Urząd Marszałkowski Województwa Śląskiego, Katowice.
- Stryjakiewicz T. (ed.). 2014. *Kurczenie się miast w Europie Środkowo-Wschodniej*. Bogucki Wydawnictwo Naukowe, Poznań.
- Suleman F. 2018. The employability skills of higher education graduates: insights into conceptual frameworks and methodological options. *Higher Education*, 76, 2: 263–278.
- Szambelańczyk J. (ed.) 2017. *Konsolidacja w sektorze szkolnictwa wyższego*, Rada Główna Nauki i Szkolnictwa Wyższego, Warszawa.
- Szkolnictwo wyższe w roku akademickim 2017/2018*. 2018. GUS, Warszawa. Available online: https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/5488/8/5/1/szkolnictwo_wyzsze_w_roku_akademickim_2017-2018_dane_wstepne.pdf (accessed on 1 January 2021).
- The Times Higher Education World University Rankings 2019*. 2019. Available online: https://www.timeshighereducation.com/world-university-rankings/2019/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats (accessed on 1 January 2021).
- Tomlinson M. 2018. Conceptions of the value of higher education in a measured market. *Higher Education*, 75, 4: 711–727.
- Tomusk V. 2000. When East Meet West: Decontextualizing the Quality of East European Higher Education. *Quality in Higher Education*, 6, 3: 175–185.
- Tomusk V. 2013. The Globalisation Challenge for European Higher Education. [in:] P. Zgaga, U. Teichler, J. Brennan (eds). *Convergence and Divergence, Centres and Peripheries*. U. K. Peter Lang Publishing Group, Oxford: 141–160.
- Tymon A. 2013. The student perspective on employability. *Studies in Higher Education*, 38, 6: 841–856.
- Urbanovič J., Wilkins S. 2013. Internationalisation as a Strategy to Improve the Quality of Higher Education in Small States: Stakeholder Perspectives in Lithuania. *Higher Education Policy*, 26: 373–396.
- Van den Wende M. 2009. European Responses to Global Competitiveness in Higher Education. [in:] J.A. Douglass, C.J. King, I. Feller (eds). *Globalization's Muse: Universities and Higher Education Systems in a Changing World*. Public Policy Press/Center for Studies in Higher Education, Institute of Governmental Studies. Berkeley: 317–339.
- Vincent-Lancrin S. 2008. What is the Impact of Demography on Higher Education Systems? A Forward-looking Approach for OECD Countries, Higher Education to 2030, 1: *Demography*.
- Weible C.M., Sabatier P.A. 2017. *Theories of the Policy Process*. Boulder, CO: Westview Press.
- Williamson J.G. 2008. Globalization and the Great Divergence: terms of trade booms and volatility in the poor periphery 1782–1913. *European Review of Economic History*, 12, 3: 355–391.

Sources

- Central Statistical Office in Poland. Available online: <https://stat.gov.pl/> (accessed on 1 January 2021).
- Demographic Yearbook of Poland [Rocznik Demograficzny Polski] (2020). Warsaw: GUS. Available online: <https://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2020,3,14.html> (accessed on 1 January 2021).