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CHANGES IN POPULATION AND ECONOMY IN ŚLĄSKIE VOIVODSHIP IN THE CONTEXT OF THE SUBURBANIZATION PROCESS

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ABSTRACT. This paper attempts to determine and describe suburbanization stages (especially in the context of political-economic transformations and population changes) and also, to verify classical models of urbanization stages as a system of concentric zones, basing on historical process of development of complex settlement systems of Katowice voivodship (according to the former administrative division), i.e., Katowice conurbation, Rybnik agglomeration, Bielsko-Biała agglomeration, and Częstochowa agglomeration. The analysis includes the population number and the balance of migration between 1975 and 2008, as well as the number of entities of national economy between 1995 and 2008. Every settlement system was divided into its core, such as the main city or a group of cities, and its surrounding area, comprising urban and rural municipalities directly neighbouring the core. The calculations included absolute single-base increments and chain increments.

The analysis showed that the historical processes of urbanization of the Śląskie voivodship reveal significant variations in the way they were shaped in comparison with model-based approaches included in the literature of the subject matter. The agglomeration of Częstochowa is the closest to the concentric model, consisting of urbanization, suburbanization and deurbanization, whereas the remaining settlement systems reveal bigger or smaller differences. Variations between analyzed settlement systems reveal themselves also in contemporary times. The rate of population growth and migration balances divide the systems into different stages of maturity of suburbanization. The earliest were discovered in the Katowice conurbation. As much as the rate of population changes and migration balances significantly differentiated the core areas in comparison with their surroundings, the differences were less obvious in the aspect of business growth rate. This results from the fact that the core areas still retain the majority of workplaces. An increase of business activity around the surrounding areas remains selective, both as to the kind and space, revealing somehow higher rate as far as the agglomeration of Bielsko-Biała is concerned.

KEY WORDS: Poland, Śląskie voivodship, Katowice conurbation, Rybnik agglomeration, Bielsko-Biała agglomeration, Częstochowa agglomeration, suburbanization.

INTRODUCTION

Despite the fact that the notion of suburbanization may carry a variety of different meanings which emphasize different aspects of the process, its core meaning is most frequently associated with the transfer of urban spatial forms and city lifestyle outside the city centres and onto the surrounding areas. At the same time, such an understanding of the process of suburbanization conforms to a broader approach in comparison with mere decentralization of urban areas, i.e., a transfer of population and entities of national economy from the central city into the suburban zone (Lisowski, Grochowski, 2007; Szymańska, Biegańska, 2011). A. Lisowski and M. Grochowski (2007) also mention three following spatial contexts of suburbanization: (a) the first context – within administrative borders of a city, but on the areas which have not been developed so far, particularly in the peripheral areas and the areas adjacent to other settlements; (b) the second context – outside the city limits in the so-called suburban areas; (c) the third context – outside the suburban areas.

Historically, the phenomenon of suburbanization appeared at the beginning of the 20th century and was caused by the development of urban transport, shortage of unoccupied residential areas inside cities and also an increasing role of social stratification of the dwellers. Increasing wealth of some social strata facilitates their emigration from the deteriorated central districts into the suburbs which, due to their vicinity, make daily trips to and from work possible and yet offer better living conditions to the inhabitants of such peripheral areas (Beim, 2009). Thus the phenomenon of suburbanization entails both changes in the density of population and changes in the functional structure. The function of housing that has dominated the city central areas over centuries, seems to have been gradually replaced by the service function (Maik, 1997; Liszewski, Maik, 2000; Szymańska, 2009). ‘This stage of suburbanization is characterized by a rapid development of industry, particularly in its newly founded branches (...). The population of agglomerations increases, but its most rapid rate takes place in their external zones. New service providing spots are founded and the income level of the population grows, which causes higher demands as to the level of life (...). A car and public transport play an important part as a commonly used means of transport...’ (Szymańska, 2007: 47). Although suburbanization is a beneficial process from the point of view of an individual, it may be considered unfavourable from a general standpoint. As J. Parysek (2008) claims, it leads

to irrational use of land, decrease of agriculturally exploited areas, increase of the cost of building and maintenance of infrastructural networks, and increase of traffic.

The classical model of L.H. Klaassen and J.H.S. Paelinck (1979) assumes that suburbanization reveals itself in the form of a concentric zone surrounding a city or an agglomeration. However, there is a question of how the phenomenon of suburbanization changes spatially and structurally together with the increase of complexity of a settlement system?

The research into the suburbanization process conducted until now, emphasizes a possibility of simultaneous occurrence of different stages of this process and an incomplete sequence of particular stages of transformation (Zborowski, 2005; Runge, 2005). The analysis of the historical process of forming complex settlement units of the Śląskie voivodship alone, including the conurbation of Katowice and the agglomerations of Bielsko-Biała, Częstochowa and Rybnik, reveals varied rates and directions of the development of the land and population changes. This is why the area of the Śląskie voivodship is a perfect research area, where consecutive complex settlement systems were founded under different political and economic conditions, which in turn led to the development of varied spatial and functional structures (Rajman, 1977; Gwosdz, 2004; Tkocz, 2008). Currently, the lowering rate of demographic changes additionally differentiates the voivodship into its northern and regressive part, its central part considered relatively stagnant, and its southern, moderately progressive part. The spatial changes of inflow population rate alone allows for distinguishing three major models (Runge, 2005): (a) a vector model, comprising the urban gminas (administrative region of the 3rd order) of Będzin, Bieruń, Łędziny, Częstochowa, Lubliniec, Mikołów, Zawiercie, and Żywiec; (b) a model of two directions, comprising the urban gminas of Cieszyn, Gliwice, Kłobuck, Myszków, and Tarnowskie Góry; (c) a concentric model, comprising the urban gminas of Bielsko-Biała and Pszczyna.

Suburbanization in Northern Rhein and Westphalia reveals a similarly complex character (Heilemann, Kemming, 2002). The researchers emphasize the differentiation of population changes, land use and development of integrated transport which facilitate the origin of a sub-central zone. Such a zone can be identified in terms of internal suburbanization.

The above facts reveal significant differences in the process of urbanization taking place in the area under question. The aim of this paper is an attempt to formulate characteristics of population changes, housing pattern and localization of entities of national economy in the settlement system of Śląskie voivodship in the context of the suburbanization process. The starting point is the historical model of urbanization changes of the area.

HISTORICAL MODEL OF CHANGES IN URBANIZATION OF THE AREA OF THE ŚLĄSKIE VOIVODSHIP

An analysis into the origin and the historic process of the formation of spatial and functional structures of the Śląskie voivodship reveals significant differences in the urbanization process in comparison with model definitions (Fig. 1). Some basic qualities of consecutive stages of the formation of spatial structures have been defined for each of the complex settlement systems, together with major directions the population has migrated in.

Thus, contrary to the classical models provided by L.H. Klaassen and J.H.S. Paelinck (1979), a change in population density profiles was directed from the outside areas towards the centre. Even before the times of industrial growth, in the Middle Ages, urban centres such as Tarnowskie Góry, Toszek, or Gliwice developed on the outskirts of the future conurbation. The area of Katowice consisted then of impassable, densely forested and swampy areas. The discovery of iron ores, as well as the activity of the Wincler family in the 19th century, resulted in the acquisition of city rights by the capital of the region as late as in 1865. Until then, all the industrial development and population inflow concentrated around such cities as Bytom, Gliwice, and Tarnowskie Góry, i.e., around the northwestern and western part of the external zone of what is now the conurbation of Katowice. Only the second stage of changes, which took place between the years 1865 and 1939, conforms to the model of urbanization stages. Not only did Katowice reach the level of other cities then, but it also exceeded them as far as the concentration of development promoting factors was concerned. Due to relatively good supply of housing, businesses or infrastructure in centrally located settlements of the conurbation such as Katowice, Chorzów, Bytom, Siemianowice Śląskie, or Świętochłowice, the decision to commence the process of deglomeration, included in the first regional plan for the voivodship conceived after WW2, assumed mainly an expansion of the housing function in the settlements located in the external zone of the conurbation. At the same time, it facilitated a direct transfer from the stage of agglomeration to the stage of external suburbanization. While the notion of suburbanization is related to decreasing significance of central areas on behalf of the surrounding areas, a further differentiation must be made into its internal and external form. The first refers to a gradual transfer of the peak population density and development into settlements directly neighbouring the centre of the system; the latter denotes a rapid development of settlements located further away from the centre but belonging to the same settlement system. The external suburbanization took place after the year 1945 in the conurbation of Katowice. It revealed itself in various periods of time and at different rates, but it is generally

considered to have expanded in the 1950s and 1960s in Tychy, and in the 1970s in Dąbrowa Górnicza. At the same time the gap of decreasing population density is becoming more and more visible. Chorzów, located centrally in the conurbation, is characterized by a demographic regression; the number of its inhabitants after the year 2000 matched the one at the beginning of the 1950s. After the political and economic transformation the population gap considerably expanded. Not only Chorzów but also its neighbouring cities revealed a permanent demographic regression. Simultaneously the conurbation of Katowice became unattractive as a destination for potential migrations.

Another settlement system under examination is the agglomeration of Rybnik. The environmental factors such as good farming conditions, presence of watercourses and water reservoirs as well as topoclimatic conditions and its location at the major transport route between Poland and Czech Republic promoted settlement. As early as in the Middle Ages the settlement of Żory was founded with Rybnik and Wodzisław Śląski to follow. The discovery of coal strengthened the urbanization processes; hence the 19th century was first and foremost connected with the development of the central part of the newly formed agglomeration. The migratory movements were directed towards the centre. The years between 1850 and 1939 on the one hand continued the urbanization processes, but on the other created grounds for strengthening the multi-spatial character of the changes as a result of expansion of mining fields. The 1950s introduced a new quality into the image of urbanization as it was. The decision to transform Jastrzębie Zdrój from a little resort into a large industrial centre changed considerably the spatial structure of the entire area. One could possibly call it a stabilized morphological form of a settlement system. At the same time the years 1960s and 1970s became a transition period between the stages of urbanization and indirect suburbanization. Not only the settlements directly neighbouring major cities develop, but also the settlements located further away from them. Similarly to the conurbation of Katowice, 1989 begins the period of population drop, resulting on the one hand from little increment or natural decrement, but on the other from a shortage of factors to attract immigrants.

The third settlement under scrutiny is the agglomeration of Bielsko-Biała, divided until 1950 by a state border first, and then by an administrative border. The western part of the city, i.e., Bielsko, was granted its city rights as early as in the second half of the 13th century, while the eastern part in 1723. Both were separated by the Biała River which, paradoxically enough, allowed for economic development of both parts; Bielsko became a centre of textile industry and Biała promoted weaving industry. In 1772 the state border between Austria and Poland became an internal Austrian border, making Biała part of the Austrian Galicia region. In 1784 the customs border was abolished; for a short time the

history of the area was further complicated by incorporation of Biała, together with the Principality of Oświęcim into German Federation between the years 1820 and 1850. This reflected the pattern of the conurbation of Katowice which between the years 1795 and 1807 was part of the so-called New Silesia, which in turn was a result of the military power of Prussia and the expansion of its territorial demands further east in comparison with the territories Prussia had acquired in the first half of the 18th century during Silesian Wars. With the third partition of Poland, Prussia entered the areas located east of the Przemsza and Brynica Rivers, creating the so-called New Silesia. In 1850 Biała, together with the province of Małopolska were regained by Austria and the border between Bielsko and Biała became an administrative, internally Austrian border again. As late as in 1950 both settlements were reunited into one city and the process of proper adjustment of its spatial and functional structures began. In 1975 the city became the capital of the voivodship, which facilitated development of its population and economy, particularly the automotive industry. The process of indirect suburbanization commenced, especially in the western part of the back-up area of the city. After 1989 this tendency was strengthened further, which resulted in the rapid development of Jaworze.

The urbanization model that is closest to its classical representation is the one of Częstochowa. It was granted its city rights in 1356 and in 1502 the act was renewed, this time on the basis of the Magdeburg Law. Its peripheral location in relation to the administrative centre of the state contributed to frequent changes in its national status; in 1793 the second partition of Poland left it in the hands of Prussia only to return to Poland in 1807 and to incorporate it in the Russian Partition in the 1830s until WW1. As late as in the interwar period the city went back under Poland's rule. Although the agglomeration of Częstochowa was characterized by the lowest immigrant attractiveness rate compared with other settlement systems of the province, it was an important pole of social and economic activity, especially for the inhabitants of the northern part of the region. Moreover, a considerable difference between the sizes of the central city and other cities and towns of the province, caused to a great extent by the transboundary location of the area and the impact of the partitions, produced certain 'overrepresentation' of the impact the migrations had on its development. The vicinity of recreationally attractive areas of the Kraków and Częstochowa Upland, especially in the southeast of the supporting area of the agglomeration of Częstochowa, led to the establishment of a number of seasonal or all-year tourist resorts. For example, such settlements as Żarki, Kroczyce, or Myszków have reached the status of development poles in this respect. Similarly to the cases already mentioned in this paper, the tendencies in population migrations directed outside the centre became significantly stronger after 1989.

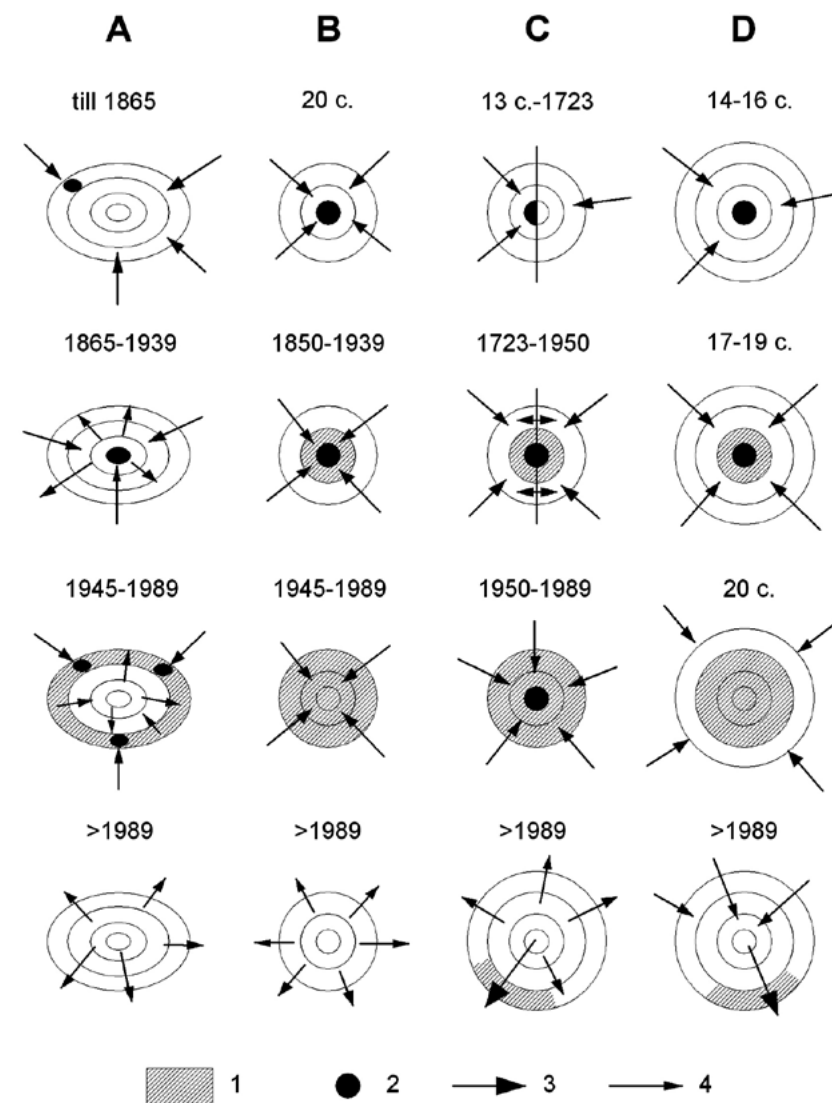


Fig. 1. Historical models of urbanization of complex settlement systems in Śląskie voivodship
 Explanation: A – Katowice conurbation; B – Rybnik agglomeration; C – Bielsko-Biała agglomeration; D – Częstochowa agglomeration; 1 – zone of intensive urbanization; 2 – towns of intensive urbanization; 3 – dominated directions of population migration; 4 – directions of population migration

Source: By authors

ELEMENTS OF THE SUBURBANIZATION PROCESS IN THE AREA OF THE ŚLĄSKIE VOIVODSHIP BETWEEN THE YEAR 1975 AND 2008

The differences in the urbanization pattern of complex settlement systems which have been mentioned before must have been reflected in the postwar rate of their numerous social and demographic characteristics. At the same time, one can assume the existence of territorial differences between them in the form of the system core and its surroundings. Up until now, attempts at showing these differences as the core versus the surrounding and peripheral areas of a conurbation/agglomeration have been taken randomly. The few researches include a paper by R. Adamczyk (2008) which tackled the issue of development of rural areas in the external zone of the conurbation of Katowice.

In order to finally settle the issues discussed above, the analysis conducted in this paper included the number of the population and the migration balance for the years 1975–2008 with an additional analysis of housing economy and entities of national economy over the years 1995–2008. For each settlement complex its core was determined, comprising a main city or a group of cities, together with urban and rural gminas directly neighbouring the core. Using the data compiled for the years 1977–2008 calculations of the single-base and chain increment were made (Sobczyk, 1995). The first allow for an investigation of the rate of a phenomenon in relation to its starting year treated as a basis for reference which equals 100, while the other reflect the scale of changes always in relation to the preceding year (Fig. 1).

And thus, in the case of the agglomeration of Częstochowa, until 1994 a population growth had been noted in the core of the settlement system (Fig. 2a). In the years that followed, this rate significantly dropped and the population of Częstochowa decreased remarkably. This is why increments in population in the direct vicinity of the centre became noticeable after 1994; the scale of these increments slightly surpasses 5 thousand people. Such a shape of the graphs shows that the decreasing population of Częstochowa does not match suburbanization processes in its direct vicinity (Fig. 2b). From 1990 onwards, the negative migration balance has been maintained, while the gminas neighbouring the core cannot stop migrations to remote regions. The agglomeration of Częstochowa is an example of external suburbanization.

The rate of population and the migration balance looked different in the agglomeration of Bielsko-Biała (Fig. 3a). Its peak population was reached in 1991, however, in the years that followed its rate was almost stagnant, revolving around the same level, while the significance of the surroundings was growing considerably. The breakthrough year was 2005 when the rate of changes in population in the surroundings of Bielsko-Biała exceeded that of the main city.

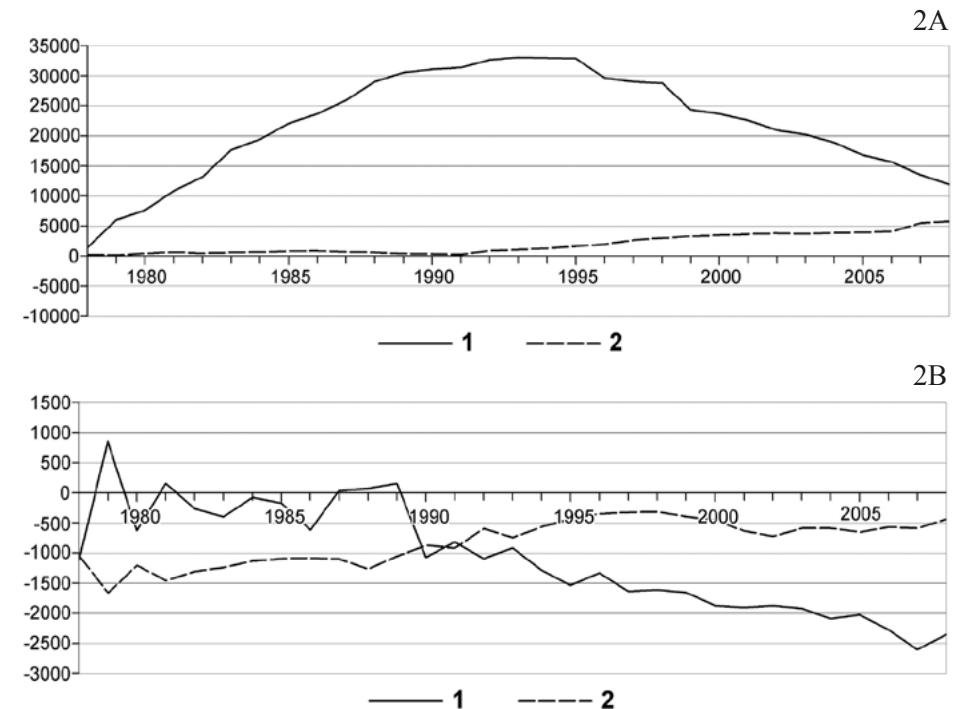


Fig. 2. Dynamics of population and migration balance in Częstochowa agglomeration and its surrounding

Explanation: A – absolute one-basic increases – population; B – absolute one-basic increases – migration balance; 1 – core of agglomeration; 2 – surrounding of agglomeration

Source: By authors

This is how the internal suburbanization was initiated as a result of developmental impulses in the gminas directly neighbouring Bielsko-Biała. A significant part in the process was played by migration with the core suffering from constant chain decrements (Fig. 3b). An opposite tendency was only noted in the years 1981–1982. In the vicinity of the central city, however, the significance of this phenomenon increased; this particularly refers to Jaworze, which enjoys a reputation of a place that is especially attractive for residence in the opinion of many more than just the inhabitants of the southern part of the voivodship.

The conurbation of Katowice is another settlement system being analyzed in this paper. The rate of changes in its population resembles that of the agglomeration of Częstochowa, yet its peak point came earlier and lasted longer, between the years 1987 and 1990 (Fig. 4a). And while the diagram of single-base increments

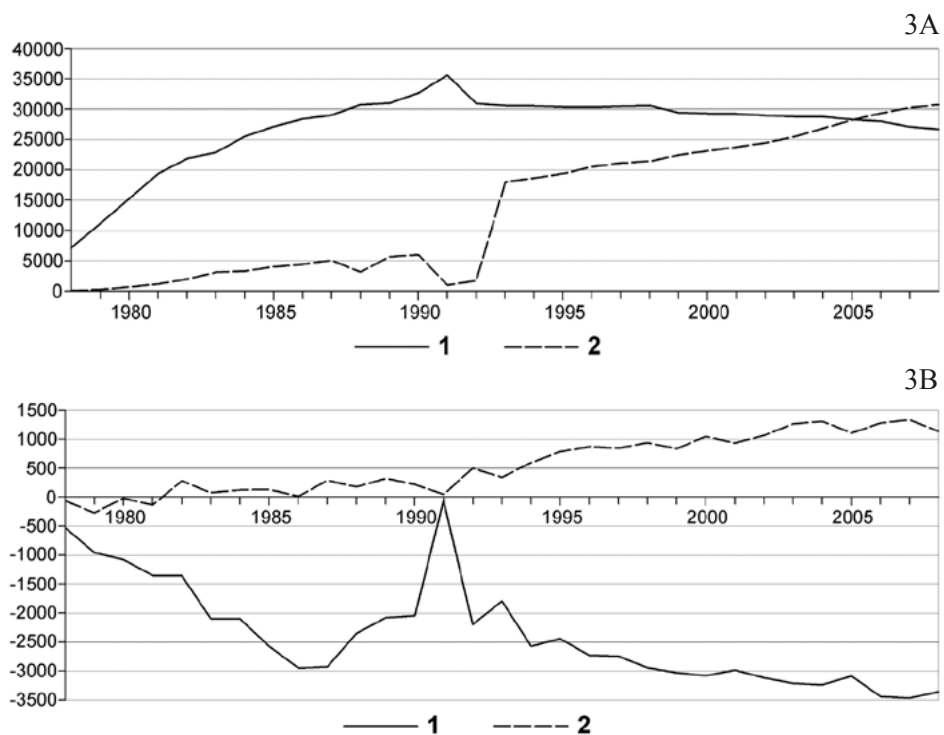


Fig. 3. Dynamics of population and migration balance in Bielsko-Biała agglomeration and its surrounding
 Explanation: A – absolute one-basic increases – population; B – absolute one-basic increases – migration balance; 1 – core of agglomeration; 2 – surrounding of agglomeration

Source: By authors

for Częstochowa is almost symmetrical, it is assymmetrically bent leftwards for the conurbation of Katowice. Until 1990 the cities of the Katowice conurbation had revealed increments, later followed by decrements, while the agglomeration of Częstochowa continuously revealed increments. On the top of that, since 1990, the conurbation of Katowice has been characterized by a higher rate of changes of population in its surroundings and somehow lower in its core.

The image of the rate of migration balance for the above settlement systems also reveal some degree of similarity (Fig. 3b, 4b). After 1977 the conurbation of Katowice suffered from decreasing chain increments, i.e., a weakening rate of migration balance. However, one can observe many fluctuations in this tendency over time. The rate of migration balance for the surroundings of the conurbation of

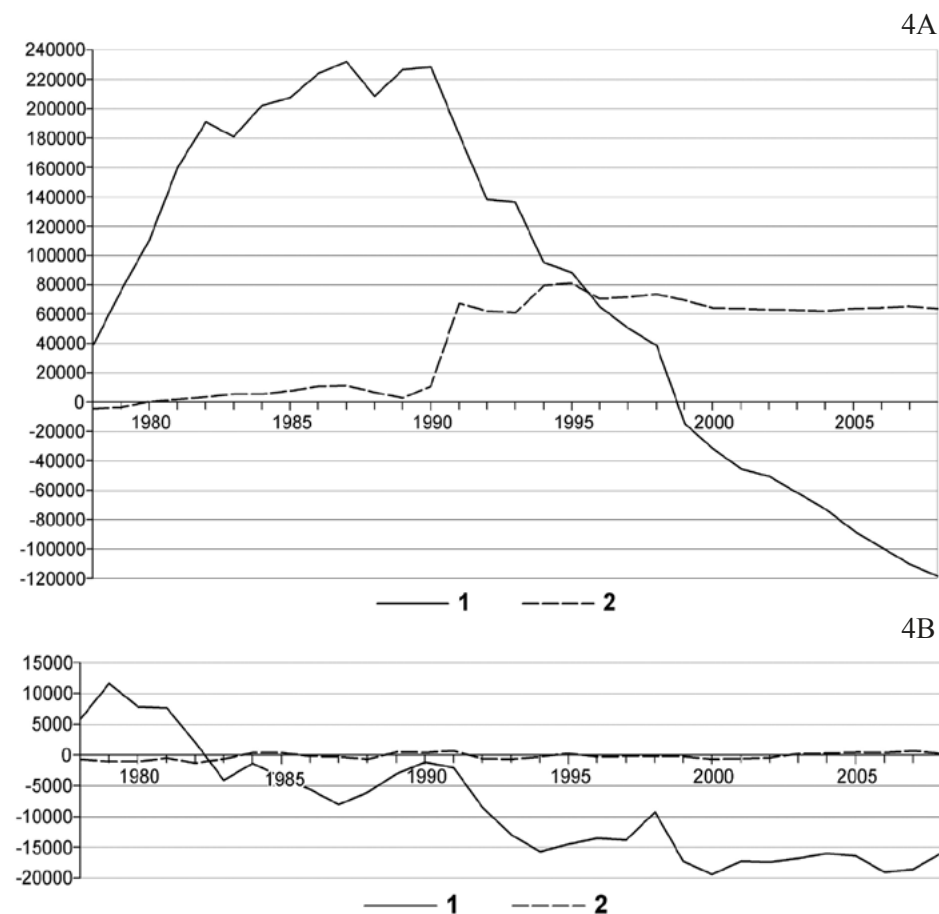


Fig. 4. Dynamics of population and migration balance in Katowice conurbation and its surrounding
 Explanation: A – absolute one-basic increases – population; B – absolute one-basic increases – migration balance; 1 – core of conurbation; 2 – surrounding of conurbation

Source: By authors

Katowice is close to zero, which proves external suburbanization. The decrement of population and migratory outflow do not cause an inflow of population to the closest settlement, but the ones located further away, especially in the southern part of the voivodship.

The fourth settlement system under scrutiny is the agglomeration of Rybnik. The single-base increments of its population slightly vary over time. A weak culmination rate is noticeable at the beginning of the 1980s, yet in the following

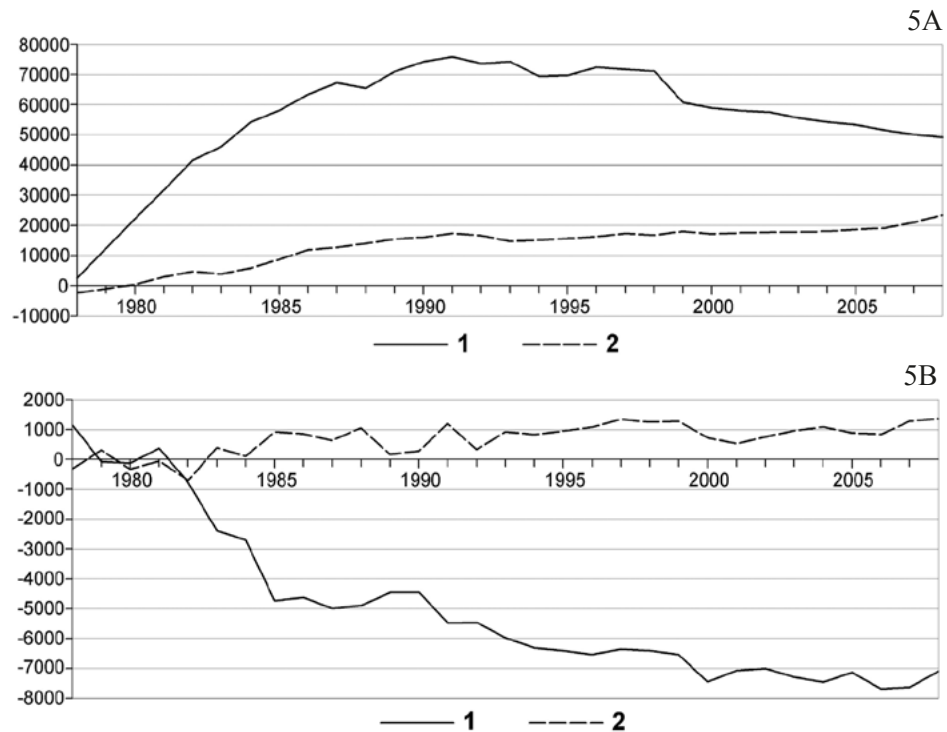


Fig. 5. Dynamics of population and migration balance in Rybnik agglomeration and its surrounding

Explanation: A – absolute one-basic increases – population; B – absolute one-basic increases – migration balance; 1 – core of agglomeration; 2 – surrounding of agglomeration

Source: By authors

years the graph in Fig. 5a reveals a weak decreasing tendency. In the case of the surroundings it reveals a slight increase, which could suggest a steady urbanization tendency (Fig. 5b). Despite the fact that the rate of migration balance considerably decreased, the drop was too small to initiate the process of suburbanization. This statement is further supported by the small scale of chain increment of migration balance, calculated for the surroundings of the agglomeration of Rybnik. It remained positive and as early as in 1982 exceeded the level that matched the graph for the core, yet the size of the difference does not matter much. There is another reason for this, that is, the spatial structure of the area. The agglomeration of Rybnik, especially its western and southwestern parts, is dominated by residential areas consisting of individual, one-storey

housing. It constitutes a wide, well developed suburban zone of Pszów, Rybnik, Rydułtowy, and Wodzisław Śląski.

As it was mentioned before, the transfer of population from cities to suburban areas is accompanied by the population's increasing business activity (Lisowski, Grochowski, 2007). The settlement units of the Śląskie voivodship under research are no exception. However, in this case the statement of an escape of entities of national economy is not valid, as between the years 1995–2008 both the core parts of the agglomerations and their surroundings revealed an increase in the number of entities of national economy (Table 1).

Table 1. Entities of national economy in the agglomerations and conurbation of the Śląskie voivodship and their surroundings in 1995 and 2008

Specification	A		B	C		B
	1995	2008		1995	2008	
Bielsko-Biała agglomeration	16,985	23,476	138.2	94.8	133.8	141.2
Surrounding of Bielsko-Biała agglomeration	4,944	9,763	197.5	52.7	92.3	175.1
Częstochowa agglomeration	21,641	25,507	117.9	83.5	106.7	127.8
Surrounding of Częstochowa agglomeration	4,340	5,675	130.8	60.9	75.7	124.3
Katowice conurbation	155,875	214,276	137.5	64.9	97.6	150.4
Surrounding of Katowice conurbation	15,367	26,668	173.5	41.7	75.8	181.8
Rybnik agglomeration	20,818	30,839	148.1	49.4	76.8	155.5
Surrounding of Rybnik agglomeration	6,606	11,571	175.2	40.1	67.4	168.1

Explanation: A – entities of national economy; B – rate of changes 1995=100; C – entities of national economy per 1,000 inhabitants

Source: Own calculation on the basis of the Regional Database of the Central Statistical Office (Główny Urząd Statystyczny)

The difference was discovered only in the rate of the growth which was much higher in all the surrounding areas of the conurbation and the agglomerations than in their core parts. The highest growth rate of entities of national economy and at the same time the biggest difference in comparison with the core part was noted in the agglomeration of Bielsko-Biała. The opposite end is occupied by the agglomeration of Częstochowa, where both the core part and its surroundings reveal a weak increasing tendency. It is worth noting that the highest growth rate of entities of national economy of all the agglomerations and conurbation under research was discovered in the agglomeration of Rybnik, which resulted from expanding the area's economy by new functions, unrelated to the dominant coal mining industry.

Analyzing the changes of population in its economic aspect, it shows that as a result of a drop in population in the core areas in the years 1995–2008, the growth rate of business saturation in these areas is higher than it seems while analyzing the absolute number of entities of national economy. On the other hand, the growth of population in the surrounding areas, except for the conurbation of Katowice, weakens the rate of business saturation in these areas. At the same time, it is worth mentioning that business saturation of the core parts and their surroundings still considerably vary with the surrounding areas in the lead. The differences are relatively insignificant only in the agglomeration of Rybnik and its surroundings. Despite an increase in business activity in the surroundings of the conurbation and agglomerations, observations of daily oscillatory traffic show that for the majority of the inhabitants of the suburbs of the Śląskie voivodship it is the core parts of the agglomerations and conurbation that have remained their main labour market.

An image similar to the above is reflected in housing policy. A general tendency to improve both quantitative and qualitative indexes characterizing housing policies of gminas of Śląskie voivodship (Kłosowski, 2010) reveals first and foremost a differentiation of the rate of changes in the analyzed systems (Table 2). An increase in population within the areas surrounding the agglomerations and

conurbation in Śląskie voivodship causes a higher rate of increment of housing facilities, rooms, or generally usable area. The highest rate is present within the agglomeration of Bielsko-Biała and the lowest in the surrounding areas of Katowice conurbation. Interestingly enough, relatively insignificant differences in the rate between the core part and the surroundings occur in the agglomeration of Rybnik.

However, taking into account changes in population per 1,000 inhabitants, it seems that between 1995 and 2008 the rate in the core parts of complex settlement systems and their surroundings is similar. Still, the fact remains that considerably better housing conditions occur in the surrounding areas of agglomerations and conurbation of Śląskie voivodship when compared with their core parts; usually it converts to 30% larger usable area of flats per capita. However, such a situation is standard bearing in mind the reasons for this type of population migrations, the most important of which is an improvement of both natural and housing environment, which is most easily achieved through the model of an own detached house with a garden.

CONCLUSIONS

The research into suburbanization of complex settlement systems of the Śląskie voivodship, based on the historic changes in settlements and their population, allow for the formulation of the following general statements.

First and foremost, taking historical processes of urbanization of the Śląskie voivodship as the starting point for research, one can notice significant variations in their shape when compared with the model approaches presented in many reference books mentioned in this paper. The agglomeration of Częstochowa is the closest to the concentric model, with the processes of urbanization, suburbanization and deurbanization; the remaining settlement systems reveal smaller or bigger differences. Very much so, the development of the conurbation of Katowice is unique due to its direction from the peripheral areas towards the centre. Historically, such surrounding cities and towns as Będzin, Bytom, Gliwice, Mikołów, and Tarnowskie Góry were the first to appear, while Katowice and its neighbouring cities and towns developed as late as in the second half of the 19th century, with their city rights obtained in the 19th or even 20th century. The largest city in the conurbation now, namely, the city of Katowice, took over the part of the administrative centre as late as in the interwar period. What is more, the settlement systems of the conurbation of Katowice, together with the agglomeration of Bielsko-Biała, were formed under the conditions of a political and administrative division of the territory due to the consecutive partitions of

Table 2. Housing economy in the agglomerations and conurbation of the Śląskie voivodship and their surroundings in 1995 and 2008

Specification	A		B	C		B	D		B
	1995	2008		1995	2008		1995	2008	
Bielsko-Biała agglomeration	56.7	66.3	116.9	194.0	237.7	122.6	3,303.0	4,378.1	132.5
Surrounding of Bielsko-Biała agglomeration	36.9	47.6	129.1	138.5	198.0	143.0	2,627.2	4,059.8	154.5
Częstochowa agglomeration	89.0	96.0	107.9	276.0	315.9	114.5	4,688.8	5,784.8	123.4
Surrounding of Częstochowa agglomeration	27.6	31.1	112.7	96.5	126.9	131.5	1,884.0	2,688.5	142.7
Katowice conurbation	844.3	868.1	102.8	2,696.5	2,868.1	106.4	45,215.0	49,961.8	110.5
Surrounding of Katowice conurbation	132.3	146.5	110.7	485.0	557.8	115.0	8,685.8	11,128.7	128.1
Rybnik agglomeration	118.7	132.2	111.4	435.7	505.3	116.0	7,754.0	9,365.1	120.8
Surrounding of Rybnik agglomeration	53.5	62.5	116.9	231.0	288.6	125.0	4,342.6	5,709.2	131.5

Explanation: A – number of dwellings (in thousands); B – rate of changes 1995=100; C – number of rooms (in thousands); D – usable floor space of dwellings (in thousands in m²)

Source: Own calculation on the basis of the Regional Database of the Central Statistical Office (Główny Urząd Statystyczny)

Poland. The urbanization processes of the agglomeration of Rybnik became significant only after WW2, due to development of coal mining industry there.

Secondly, the differences between the settlement systems that have been mentioned in this paper also hold in contemporary times. The population rate and migration balance alone divide the settlements into different types of progress suburbanization has reached there. This was first revealed in the conurbation of Katowice and then in the agglomeration of Bielsko-Biała. The agglomeration of Rybnik, due to the private housing dominating its spatial structure, especially in the western part of city and its back-up area, has not even begun the process of suburbanization, while the agglomeration of Częstochowa reveals lower rate of population growth in its surrounding zone than in its central part. However, since 1990 it has been the surrounding zone that has played a more important role in the migratory processes.

Thirdly, the tendencies in population are accompanied by matching processes of changes in housing policies which, as a result, cause higher rate of increment of houses, rooms and usable area of flats in the surrounding areas, as well as better qualitative parameters of housing, when compared with their core parts. It is clearly noticeable in the case of all the analyzed settlement systems, although the case of the agglomeration of Bielsko-Biała is perhaps the most spectacular in this respect.

Fourthly, the aspect of population is accompanied in these areas by specific economic tendencies. While in the first case the rate of population change and migration balance significantly differentiated the core areas in relation to their surroundings, in the latter the differences are not so clearly visible. This results from the fact that the core areas have still retained the largest proportion of the labour market. An increase of business activity in the surroundings of the core areas remains selective as to the kind and space. Relatively highest growth rate in the number of entities of national economy in the surrounding areas was detected in the agglomeration of Bielsko-Biała, while a similar weak tendency for growth was discovered in the agglomeration of Częstochowa. This provokes a conclusion that the correlation between the processes of suburbanization in the core and its surroundings will not always be evident, as these phenomena may occur at a certain delay. What is more, the direction and the rate of the demographic suburbanization do not have to match each other.

In order to obtain a better picture of the process of suburbanization in the Śląskie voivodship, a further expansion of the scope of the research is necessary. This entails research into its spatial aspect and including in the research the gminas that are located further away from the central unit. This is of particular interest as far as the conurbation of Katowice is concerned in the way the conurbation of Katowice and Kraków challenge each other.

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