



You have downloaded a document from
RE-BUŚ
repository of the University of Silesia in Katowice

Title: Conditions and trends of social-economic changes of Katowice region

Author: Jerzy Runge, Franciszek Kłosowski, Anna Runge

Citation style: Runge Jerzy, Kłosowski Franciszek, Runge Anna. (2003). Conditions and trends of social-economic changes of Katowice region. "Bulletin of Geography" (No. 2 (2003), s. 85-102).



Uznanie autorstwa - Bez utworów zależnych Polska - Ta licencja zezwala na rozpowszechnianie, przedstawianie i wykonywanie utworu zarówno w celach komercyjnych i niekomercyjnych, pod warunkiem zachowania go w oryginalnej postaci (nie tworzenia utworów zależnych).



UNIWERSYTET ŚLĄSKI
W KATOWICACH



Biblioteka
Uniwersytetu Śląskiego



Ministerstwo Nauki
i Szkolnictwa Wyższego

JERZY RUNGE, FRANCISZEK KŁOSOWSKI, ANNA RUNGE

UNIVERSITY OF SILESIA IN SOSNOWIEC

CONDITIONS AND TRENDS OF SOCIAL-ECONOMIC CHANGES OF KATOWICE REGION

ABSTRACT. The paper concerns the evaluation of determinants and identification of trends of social-economic transformations in Katowice region. This is the most urbanised area in Poland. In the conditions of central economy based on intensive industrialisation it was created into a traditional industrial region with abundance of jobs. In terms of demographic transformations, considerable migration inflow was observed here until the 1980s, which was influenced by economic investments and resulted also from the phasic character of demographic cycle. The beginning of political-economic transformations at the beginning of the 1990s revealed weaknesses of the hitherto model of extensive development of this area, which is evidenced by such phenomena as collapse of many industrial plants, old-fashioned branch structure of industry with domination of mining and metallurgy, which requires profound restructuring. All these result in large structural unemployment, which will still increase in the future. This, in turn, causes the increase of disproportions in the conditions and life-style of the region inhabitants. The barrier of restructuring is inefficient amount of financial measures and the territorial scale of the region, therefore the realisation of restructuring programme requires financial support from structural funds of the European Union.

KEYWORDS: traditional industrial region, restructuring, unemployment, political-economic transformation.

SPATIAL AND SOCIAL-ECONOMIC DETERMINANTS OF DEVELOPMENT AND TRANSFORMATIONS IN KATOWICE REGION

Delimitation of borders of Katowice region is quite difficult. The most essential spatial determinants of development and transformation of the region

include consequences of long-lasting influence of state boundaries, which are reflected in its land use, differences in the character of social and economic processes after the first world war, incoherent regional consciousness (Upper Silesia, Dąbrowa Basin) and changes of administration regions after the second world war (Runge, 2002). Therefore there are no relations between the development of social-functional structure and social-economic structures and processes, and the location of administration borders. Delimitation of these borders resulted from political reasons and has never been associated with social-economic and settlement determinants (Kłosowski, Runge, 1999). Katowice region, which developed in such conditions, may be identified with the area of the former Katowickie voivodeship, which existed in the period 1975–1998 (Fig. 1).

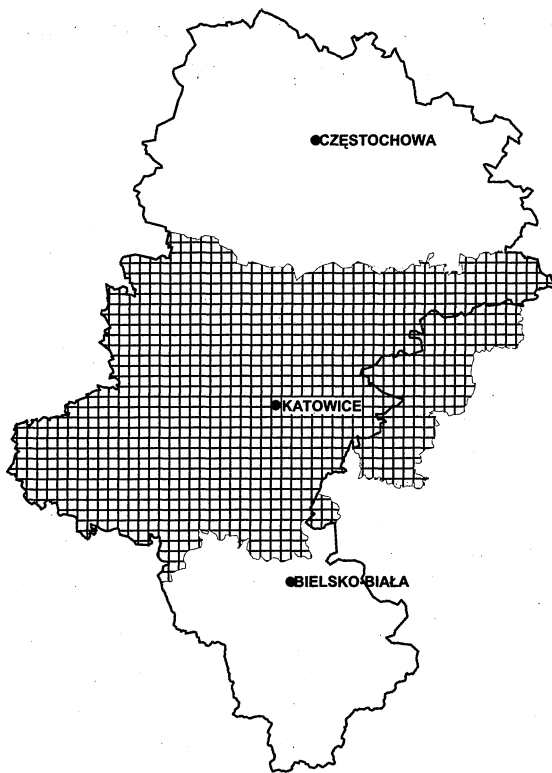


Fig. 1. The location of Katowice region on the background of Śląskie voivodeship

Until the time when state borders were formally delimited in 1742, this area had been a peripheral area in relation to national power centres. When the borders were delimited, it became a contact area (Rykiel, 1985). Social-economic development of Ostrava from one side and Gliwice, Bytom, Rybnik and Katowice from the other side influenced the development of traditional economic

regions in the 19th century, first at the borderland of the sectors of partitioned Poland (Germany, Austria, Russia), and then Poland and Germany. The increase of different kind of transborder connections influenced the development of the borderland region, which corresponded with the central part of the interwar Silesian province. Formal abolition of spatial barrier and intensification of connections within the contact region caused its merger and development (Rykiel, 1991). Therefore the area studied developed in different geopolitical conditions. Since the Silesian wars, it was divided between the invaders, then between Germany and Poland, and finally after 1945 it might develop within one state body.

Because of its economic potential, which attracted large demographic potential through the migration inflow and also considerable spatial mobility on the local employment market, the area studied showed considerable spatial differentiation of the level of regional conscientious. This conscientious was slightly higher in the locations of smaller migration intensity, where migration turnover was smaller and the conscientious effectiveness was larger. In these locations, the percentage of native population was larger (e.g. Ruda Śląska, Świętochłowice, Zabrze) (Rykiel, 1985; Runge, 1996). However, the development of regional consciousness as an element of a certain stage of region development or as a criterion of region identification may only be used in relations to the areas which are spatially, socially or economically closed (Runge, in press).

Historical process of region development led to the formation of two settlement systems, i.e. Katowice conurbation and Rybnik conurbation together with the associated subregional centres and numerous local settlement systems. The latter make a transitional zone between Katowice and Rybnik conurbations, and monocentric agglomerations of Bielsko-Biała on the south and Częstochowa on the north (Runge, 1999a).

Degglomeration of Katowice conurbations in the 1950s and 1960s and changes of borders of towns and rural districts were important determinants of regional structure transformations. The derivative of degglomeration is not only the development of satellite centres (Tychy, Gołonóg, Żory), but also changes of spatial-functional structure of the marginal zone of the conurbation (Rajman, 1969; Berezowski, 1980; Runge, 1996). The changes of administration borders of towns and districts, which occurred in the 1970s and 1980s consisted in central incorporation of rural districts and small towns to the neighbouring large towns. In the 1990s, following the regulations concerning local government, the opposite process occurred, namely exclusion from the area of large towns these units, which wanted to gain independence.

As far as social-economic changes are concerned, the most essential determinants include:

1. Consequences of political-economic transformation including a decreasing role of traditional industries, growth of social-economic problems, especially in monofunctional centres;

2. Changes in the traditional industries of the region, which used to be driving forces of its development (transformations in coal mining, tertialisation of economy, development of special economic zones), significantly influence the situation on the employment market. The process of restructuring has occurred however very slowly due to the inertia of the existing structures and also due to external economic conditions. The restructuring of still predominating industries (coal mining and iron metallurgy) was forced by political-administration decisions including also economic factors (Tkocz, 2001).

The economic crisis of the 1980s and entering quite new political-economic reality in the 1990s cause considerable transformations in this large, traditional region. These transformations are associated with the appearance of negative consequences of extensive development of the region in the post-war period. Therefore an attempt is made in this work to distinguish essential trends of demographic and economic trends which have occurred in the conditions of political-economic transformations of a traditional industrial region.

DEMOGRAPHIC-SOCIAL PROCESSES AND STRUCTURES

Katowice region belongs to the most urbanised areas in Poland. In 1997 it concentrated 55 towns populated by 3,382.6 thousand inhabitants, which is 86.5% of the total number of population in this region (in Poland towns are populated by 61.6%). Urbanisation index is 8.3 towns per 1,000 km², whereas in Poland this index is 2.8. In the size structure, large towns predominate, each exceeding 200 thousand inhabitants and 5 towns of this size include 36.4% of urban population of the region. These towns together with 6 additional towns from the next size interval (100–200 thousand inhabitants) concentrate 60.0% of urban population of the region studied. All this considerably agglomerated settlement system belongs to the most transformed and complex settlement systems in Poland (Rajman, 1997). Its core is made of 14 towns, which form Katowice conurbation. The whole region was populated by 3,908.6 thousand people and the population density was 587.7 people per 1 km², i.e. 5 times as many as the mean value for Poland (124 people per 1 km²).

In the period 1950–1997 the population of the former Katowice province increased from 2,362.0 thousand to 3,908.6 thousand, i.e. to 165.5% (Table 1). The population increase had different rate in time. In the period 1950–1975, a very dynamic increase of demographic potential occurred from 2,362.0 thousand to 3,487.9 thousand people, i.e. to 147.7%. In the period 1975–1991 its rate decreased significantly from 3,487.9 thousand to 4,006.6 thousand i.e. to 114.9%. In the period 1991–1997, the decrease of population is observed from 4,006.6 thousand to 2,908.6 thousand, i.e. to 96.8%. This trend has continued in the succeeding years.

CONDITIONS AND TRENDS OF SOCIAL-ECONOMIC CHANGES OF KATOWICE REGION

After the period of intensive demographic development, influenced by the dynamic development of the industry, gradual restraint in population dynamics has occurred. This was associated with the finalisation of cycles of industrial investments in the late 1970s and gradual increase of symptoms of economic crisis in the 1980s. Only in the 1960s and 1970s the population dynamics occurred here more intensively than in neighbouring provinces (Runge, 1993). Until the end of the 1970s, the importance of the area studied was associated with the size and spatial influence of the employment market. Some of the characteristic of this period are as follow: almost 2.0 million people employed in non-agricultural activities; over 500 thousand people commuting to the towns of the region and almost 400 thousand commuting from the towns of the region; spatial size of every-day migrations reaching Bielsko-Biała, Częstochowa, Kraków and Opole (Runge, 1996).

Table 1. Population changes of Katowice region in the period 1970–1997

YEARS	POPULATION IN THOUSAND			PERCENTAGE OF RURAL POPULATION
	KATOWICE REGION	TOWNS	RURAL AREAS	
1970	3,244.7	2,765.6	479.1	85.2
1975	3,487.9	3,024.0	463.9	86.7
1980	3,733.9	3,265.4	468.5	87.5
1985	3,916.4	3,433.5	482.9	87.7
1991	4,006.6	3,495.0	511.6	87.2
1997	3,908.6	3,382.6	526.0	86.5
		POPULATION DYNAMICS		
1970–1980	115.1	118.1	97.8	X
1980–1991	107.3	107.0	109.2	X
1991–1997	97.6	96.8	102.8	X
1970–1997	120.5	122.3	109.8	X

Source: Authors elaboration based on year-books of Katowickie voivodeship

Because of limitations in the industrial development of Katowickie voivodeship (administrative regions of the 1st order) in 1982, the role of other provinces in migration inflow to Katowickie voivodeship finished (Runge 1998). Since that moment, population changes are determined by interregional factors. The maximum of population former Katowice voivodeship reached in 1991 (4,006.6 thousand) and since then population decrease has occurred. This results from the values of constituents of real growth, i.e. natural growth and migration rate. In the period 1975–1986, both constituents were very large influencing rapid population increase. The demographic increase and intensive migration inflow to the work in

the industry overlapped at that time. In the 1980s in the whole country, the overlapping of the decrease stage of demographic cycle and consequences of political-economic changes (e.g. collapse of co-operative house building, beginning of unemployment) restrained the migration inflow and mitigated the dynamics of population changes. In 1993, the domination of migration outflow over inflow started. This domination reached 5–6 thousand people per year and occurred mainly in large and medium towns (Runge A., Runge J., in press). Moreover, three years later, natural decrease (–85 people) occurred for the first time in the post-war history of the region. The process of society ageing has occurred (Runge, 1999b).

The hitherto picture of interregional migrations changed considerably in the mid 1980s, when positive and even increasing migration balance occurred in rural areas of the province. Instead migrations towards large urban centres, rural districts and small towns became more attractive. They became more competitive than the largest towns because they had often offered better employment or housing conditions. The migration outflow from large towns resulted also from the fact that the immigrants in the 1960s and 1970s were attracted to this region by well-paid jobs (especially in coal mining and metallurgy) and possibilities of fast access to flats. Political-economic transformation (together with liquidation of factories, mass redundancy and unemployment meant for part of these people unsettlement of their life stabilisation and they had to make a decision to come back to their homeland, usually beyond Katowice region (Runge, 1993). The extinction of development impulses took place according to the size structure of the towns – first, the development of large towns was delayed (as early as in the mid 1980s), then the population dynamics of medium-size towns lessened (in the mid 1990s) and recently the stagnation in population of small towns has been observed (Runge A., in press).

Taking into account development perspectives, ageing of the inhabitants and unemployment are the most challenging social-demographic problems. The percentage of population in postproductive age increase from 11.6% in 1975 to 14.4% in 2001. The index of demographic old age increased from 12.3% in 1980, which shows the initial state of old age to 16.8% in 2001, which evidences advanced state of old age (according to Rosset, 1975) (Table 2). Similar trends occurred in the whole country, where the index increased from 13.2% to 16.8%.

The forecasting by Main Statistical Office decrease of population of Silesian Province to 95.4% (from 4,830 million people in 2001 to 4,606 million people in 2030) will be accompanied by decrease of population percentage in the age groups 0–17 and 18–44 and simultaneously a considerable increase of population percentage in the age of 60 and more. This ageing results from one hand from the limitation of the inflow of young population to the region and even from encouraging young people to leave the region, and on the other hand from the fact that in near future the numerous generation of demographic increase of the 1950s will reach the age of 60. This will cause the increase of econo-

mic loading of population. The index of economic loading has always been low, which resulted from the inflow of population in productive age associated with concentration of jobs in this region. Its value depended on the proportion between demographic increase groups and decrease groups, and productive and non-productive age groups. The entering of post-productive age group of the demographic increase of the 1950s will cause considerable increase of low (so far) level of economic loading. It should be emphasised that large part of population in productive (employable) age does not work either due to studies or disability pension or because they are unemployed. Therefore the real loading of the employed part of population by unemployed one is much larger.

Table 2. Sex and age structure of Katowice region population in the period 1975–2001

YEARS	PERCENTAGE OF POPULATION IN THE AGE OF 60 AND MORE	NUMBER OF PEOPLE IN NON-PRODUCTIVE AGE PER 100 PEOPLE IN PRODUCTIVE AGE	NUMBER OF WOMEN PER 100 MEN
1975	–	62.1	100.8
1980	12.3	59.5	101.4
1985	12.1	63.5	102.7
1991	13.4	64.0	104.7
1997	14.9	59.1	105.3
2001	16.8	56.3	106.1

Source: Authors' elaboration based on year-books of Katowickie voivodeship and Śląskie voivodeship

Together with ageing of population, and also smaller importance of the industry in the employment structure, the level of population feminisation has increased from the state of sex balance in 1975 from the value of 100.8 women per 100 men, to warped sex structure in 2001 – 106.1 women per 100 men. In the whole period, the feminisation index in Poland was 106 women per 100 men.

The largest problem of the employment market in the region is the decrease of the employed number. In the period 1975–1997, the number of the employed decreased from 1,540.6 thousand to 1,204.9 thousand, i.e. to 78.2% (Table 3). The employment supply in the 1970s increased as the numerous age-group of demographic high entered the employment market. Before 1971, the increase of new employees in national economy was usually 200–300 thousand people per year, whereas in the period 1971–1974 it went up to 400 thousand. Before 1990, due to political reasons, the unemployment could not exist, therefore it was necessary to create new jobs. The realisation of this policy of full employment was influenced by development of traditional industries and labour-consuming manufacture techniques. In the 1980s, the growth rate of the employed number was getting smaller. This resulted from the fact that the conditions of the exten-

sive model of economic development got worse and the age-group of the demographic low of the 1960s entered the employment market. Since 1988, a continuous decrease of the employed number has occurred.

Table 3. Employment and unemployment changes in Katowice region in the period 1975–2001

YEARS	EMPLOYMENT TOTAL	INCLUDING INDUSTRY AND CONSTRUCTION	UNEMPLOYMENT
IN THOUSAND			
1975	1540.6	1053.2	–
1980	1627.1	1089.9	–
1985	1585.7	1026.0	–
1990	1513.7	924.7	(1992) 148.3
1995	1489.6	771.7	151.4
1997	1204.9	680.3	103.7
2001	935.2	462.4	250.2

Source: Authors' elaboration based on year-books of Katowickie voivodeship and Śląskie voivodeship

Changes of administration division in 1999 and lack of reductions, which would help to compare changes of phenomena in time make it difficult to analyse employment dynamics during the last two years. It was estimated however that the decrease of the employed number has intensified.

The regress of employment in the public sector was accompanied by its increase in private sector. In the period 1990–1996 the public sector released 345.9 thousand employees and the employment in the private sector in the same time increased by 309.9 thousand. In general the employed number decreased only by 36 thousand people. The level of unemployment was however much larger, and in 1992, the number of the unemployed was 148.3 thousand, and reached 172.2 thousand in 1994. This resulted from liberal regulations concerning registrations of the unemployed. In the period 1994–1997, the number of the unemployed decreased because crucial decisions concerning economy restructuring were still postponed, which was forced by trade unions. This resulted also from the sharpened regulations concerning the registration of the unemployed. However recently, in the conditions of restructuring of mining and other industries, the unemployment has increased sharply reaching 250.2 thousand in 2001. The unemployment rate in the region reaches 16.0%, but it is considerably differentiated. It reaches the largest values in typical mining centres (e.g. Siemianowice Śląskie – 26.9%, Świątchłowice – 24.1%, Żory – 25.7%). In polyfunctional centres the unemployment rate is smaller and the smallest one occurs in Katowice – 7.1%.

The problem consists not only of the increasing number of the unemployed but also from considerable percentage of long-lasting unemployment. Half of the unemployed does not receive unemployment benefit and they have been out of work for over 2 years. Such large, as compared to the number of the employed, population of the unemployed has the character of structural unemployment. More plants of traditional industries have been liquidated or their activity was limited then new jobs were created, especially in the third sector. The analysis of the number of the employed in three selected spheres, i.e. industry, construction and market services revealed underdevelopment of market services. In the industry and construction the number of the employed decreased, and in case of market services, slight increase was recorded only in Dąbrowa Górnicza, Mysłowice, Świątchłowice and Żory. This type of economic activity in the beginning of the 1990s showed dynamic increase and created new jobs but at the end of the 1990s it was limited as a result of economic recession and growing impoverishment of the society.

At present the most unfavourable situation on the employment market occurs in Dąbrowa Górnicza, Sosnowiec, Bytom, Zawiercie, Chorzów, Zabrze and Katowice. In the period 1991–1995 such situation occurred mainly in Olkusz-Zawiercie area and in the margins of Rybnic Coal Basin. The shift of the most unfavourable features on the employment market towards the centre of Katowice conurbation results from the fact that in the first years of political-economic transformation the scale of the work commuting from the furthest areas was limited to the towns of the region centre. This was followed by the occurrence of the largest unemployment in the neighbourhood of these settlement units. At present the unemployment is the largest in the centres of the largest accumulation of industrial potential and it occurs not only in the centres of monofunctional economic structures but also in polyfunctional towns. There is a considerable increase of unemployment among university graduates and because of the decrease of the employed number in the largest towns (relatively also to the decreasing population), negative demographic processes will intensify.

The essential trends of demographic transformations of the region include:

1. Decrease of the dynamics of population real growth, especially in large towns, which caused, at first, relatively larger activity of small towns in this sphere, which are located directly in the neighbourhood of Katowice and Rybnik conurbations, and now only activity of rural areas (Runge, 1999b);
2. Process of demographic ageing of the inhabitants of the region is also observed in the towns which several years ago were assumed as demographically young centres (towns, where large industrial investment were located, influenced the inflow of young population – Dąbrowa Górnicza, Jastrzebie Zdrój, and satellite towns of housing function – Tychy) (Runge, 2002). Demographic ageing and the process of population decrease in large towns indicate occurrence of suburbanisation in the 1980s. The lifting of develop-

ment impulses to smaller towns in the 1990s suggested occurrence of the contraurbanisation stage (Runge, 1999b).

3. Changes in the employment structure accompanied by its decrease, which resulted in growing unemployment but also increase of employment in the private sector.
4. The decrease of the employed number and increase of unemployment accompanied by the disproportions between the centres of economic activity and these, which were the most effected by negative consequences of social-economic transformation (caused usually by their monofunctional structure) led to appearance and increase of social conflicts of different type and increase of social pathologies. Social contrasts have been growing both between different localities and within individual areas of these towns and they concern the conditions and quality of every-day life including also housing situation (Runge, 2002).

PROBLEMS OF ECONOMY RESTRUCTURING

Katowice region, which recently used to be one of the typical examples of industrial areas, which originated in the 2nd Kondratiew's cycle closely related to industrial revolution and its attributes – coal and steel. The industry became the basis of development and relative prosperity of its inhabitants. All the society and economic life of the region was conformed to the industry. The economic policy of Poland after 1945 supported the development of heavy industry and mining and it was described by Jałowiecki (1993, p. 10) as follows: “while traditional industries of Western Europe went into deep recession, in the so called “socialistic countries”, which showed autarkic economy that balanced almost totally in the frames of one “camp”, there was structural development of industries doomed to extermination”. This description suites perfectly Katowice region. Despite the reconstruction or extension of the existing industrial plants, many new investments were located here and until the 1990s it was a leading area in terms of the value of investment expenditure. The construction of new mines (24 mines were built), smelter plants (including the largest in the region – Katowice smelter) or factories of machine engineering industry (e.g. low-capacity car factory in Tychy, which is now FIAT Auto Poland) did increase the economic potential of the region (in 1988, Katowice province delivered 17% of industrial production of Poland) but only in limited way influenced the change of resource structure of the region (Syrek, 1976) (Table 4). Two different stages may be distinguished concerning changes of industry structure in the period 1946–1989. These are as follows:

- since 1946 to mid 1970s, when percentage of fuel-power industry and metallurgical industry decreased in favour of more up-to-date machine and electrical engineering industry;

CONDITIONS AND TRENDS OF SOCIAL-ECONOMIC CHANGES OF KATOWICE REGION

— since the mid 1970s to 1989, when the structure became retarded due to repeated increase of the percentage of fuel-power industry.

Overconcentration of the industry was accompanied by constant underdevelopment of services, especially concerning social infrastructure (Kłosowski, 1997).

Table 4. Changes of industry structure of Katowickie voivodeship in the period 1946–1989 (in % of the employed)

INDUSTRY BRANCHES	YEARS		
	1946	1975	1989
Fuel-power industry	52.6	43.5	56.2
Metallurgy	18.9	13.6	11.3
Machine and electrical engineering	13.2	22.3	17.9
Others	15.3	20.6	14.6

Source: Tkocz, 2001, p. 61.

It is not surprising therefore, that the following effects occurred in this region (Szczepański, 1998, p. 45):

- ecological disaster (natural system),
- monofunctionality of economy and predomination of heavy industry (manufacture system),
- deformed structure of employment connected with low education capital of the employees (system of social infrastructure),
- disintegration of regional community (social-cultural system),
- chaotic town-planning and architectonic space (settlement system).

This is why it was necessary to subject this region to restructuring processes because it reached the borders of development possibilities. According to Klasik (1988) it became an area “of increase without development” and according to Kukliński (1991) it became the most monstrous and pathologic example of the policy of negative restructuring, belonging to the most disastrous areas of Europe.

Since the late 1980s, many scientific elaborations were written showing the aims and directions of the region restructuring (e.g. Klasik, 1987; 1988; Błasiak et al., 1994), strategies of region development (e.g. *Regional contract for Katowickie voivodeship 1995*; *Strategy of development of Śląskie voivodeship 1999*) and plans of industry restructuring (mainly coal mining). Because of the lack of proper realisation tools, financial measures and competence of local administration to their direct implementation, they have been executed in a limited scale (Barański, 1999). The only exceptions are plans of coal mining restructuring as their realisation level was much larger due to large financial measures assigned for this purpose.

Implementation (irrespective of realisation level) of restructuring programmes of the region economy, activity of part of the community and entering of new businesses (including foreign investments) have influenced growing process of economy transformations. This process is most evident in terms of structure changes in sector aspect (Fig. 2). Restructuring of the industry takes place throughout different means such as modernisation, change of the production profile but also through liquidation of the most environmentally arduous, technologically old-fashioned and inefficient industrial plants or their sections. This has resulted in considerable reduction of employment. In the period 1990–2001 over 230 thousand people lost their jobs, which caused increasing unemployment rate, which accounted to 15.7% in the whole Śląskie voivodeship.

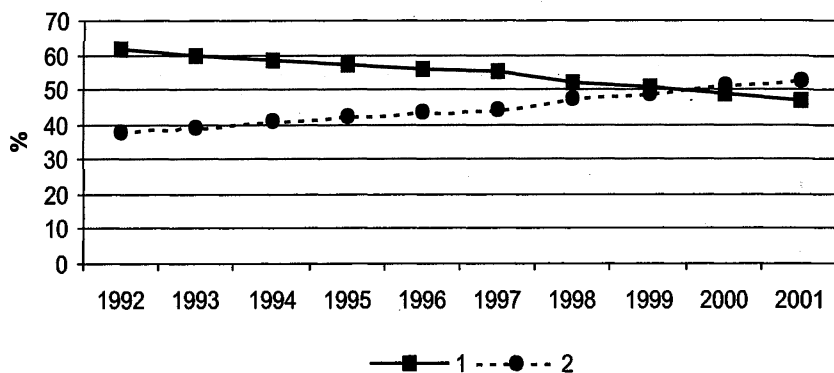


Fig. 2. Changes of economic structure of towns in Katowice region in the period 1992–2001
 Explanations: 1 – percentage of the employed in industry sector, 2 – percentage of the employed in service sector.

On the other hand, there has been an increase of the number of the employed in services by 50 thousand. This was influenced by the following factors:

- general underdevelopment of services and therefore large potential demand,
- increased possibilities of activity and increase of the activity of part of the society resulting from the introduction of free market economy;
- separation of independent service units from large industrial plants,
- demand for new or poorly active so far services both from the side of an individual consumer and businesses (e.g. marketing, advertisement, financial services, brokerage services, etc.),

as a result, the number of people employed in services in 1998 in Katowic- kie voivodeship exceeded the number of the employed in industry and in 2000 in the whole industry sector (industry and construction). Thus, at the turn of the 20th and 21st century, there was a change in the character of the region, from industrial (industrial-service) to service-industrial one (Kłosowski, in press).

The problem of restructuring of the industry itself is much more complex. Although 250 thousand people left mining since the late 1980s, the general structure of industry branches has not changed and there is still leading (but with decreasing trend) position of traditional industries (Tkocz, 2001) (Table 5). Positive elements of changes include development of processing industry of pro-market character, technological changes which lead to the decrease of the emission of pollution, increase in production efficiency, quality improvement and improvement of production offers to fulfil the needs of consumers. However so far the essential changes have not occurred in the industry structure which would consist in structure modernising by development of complex structure with large participation of high-tech industries. This concerns for example the computer market. Despite large possibilities connected with the presence of universities including Silesian Technical University and large demand for computer products and services, Katowice region belongs only to medium domestic centres producing computer hardware and software, whereas Warszawa, Gdańsk, Wrocław, Kraków and Poznań are much ahead (Bogdanow, 2001). This situation may change if the concept Motorway of the Companies of New Technologies (connected with A4 motorway), which comes from Wrocław through Katowice region to Kraków will become realised.

Table 5. The selected elements of employment in the industry of Katowickie and Śląskie voivodeships in the period 1993–2001 (in %)

SPECIFICATION	KATOWICKIE VOIVODESHIP		ŚLĄSKIE VOIVODESHIP	
	1993	1997	1998	2001
Mining	53.1	48.4	38.2	35.2
Production activity				
Production of metals	12.6	12.8	8.6	7.9
Production of machines and devices	8.6	8.5	8.7	8.9
Production of food and drinks	4.1	5.2	7.8	8.8
Production of goods from metal	3.8	5.4	6.3	7.5
Production of goods from other non-metallic resources	2.6	2.6	3.2	3.4
Production of textiles and furs	2.5	2.7	3.7	3.7
Production of goods from rubber and plastic	1.8	2.1	2.7	3.3
Production of electrical machines and appliances	1.6	2.1	3.2	3.1

Source: Authors' calculations.

Also trends connected with the development of services are not really so favourable. Although in the period 1994–2001 there was a fast development of services towards companies and businesses (i.e. sections which directly influence economic development), but the largest dynamics occurred in the section of public

administration and national defence, which causes increase of bureaucracy. The leading sections in the structure of services in towns of Katowice region in 2001 included: trade and repairs (21%), health service and social service (17%), estate service, hire service and business keeping service (16%) and education (15%).

In order to support the process of economy restructuring, both the government and the individual towns take up activities aimed in activation of transformations and creation of new jobs. Among them there is Katowice Special Economic Zone which was set up in 1996. It consists of 5 subzones, which are main sites of location of the largest investments, which were recently set up. This mainly concern Gliwice subzone (e.g. location of Opel car factory) and Tychy (Isuzu and Delphi plants). Also individual districts try to help in development of new businesses by establishing local incubators of initiatives.

The restructuring includes also transformations in proprietary structure. As compared to other regions of Poland, Silesian region in terms of changes in this structure is delayed. This results from one side from economic structure, where basic role is played by large mines or smelter plants, which usually generate losses and therefore are difficult in privatisation. On the other hand in Silesian province there is large percentage of services of public character such as education, health service, social service and public administration. The factor, which limits privatisation process is also associated with resistance of trade unions, which do not support any proprietary changes. As late as at the turn of the 20th and 21st centuries in the towns of the region the value of 50% of private business was exceeded in the employment structure. The foreign capital played an important role in this process taking into account both its participation in the privatisation of the existing companies and in the construction of new industrial plants and service agencies. Katowickie voivodeship is one of the most attractive areas for investments. In the 1990s, the value of foreign investments reached about 3 milliard dollars, which makes about 10% of all the foreign investments in Poland.

Taking into account the hitherto process of restructuring of the economy in Upper Silesian region, the change of economic structure in sector aspect, i.e. from industrial to service-industrial, is not a problem because this process has steadily and systematically occurred. The real problem of restructuring consists in the following aspects:

- the restructuring can not cause the excessive reduction of jobs because this generates the increase of difficult social problems;
- the restructuring should influence the economy and its individual sectors and branches in such a way so they could follow world's trends and become competitive in global system. This is especially important in the context of Poland entering the European Union, because the companies from this region will have to compete other firms in a common European market, which will include also Upper Silesian market.

It is consoled however, that side by side with economic changes, also transformations in other spheres take place, which directly or indirectly influence the progress in restructuring. This process requires considerable effort of the regional community, which often has to gain new professions or qualifications and to adjust to new requirements and needs of the employment market. In this respect, favourable changes occur especially among young people, where the increase of secondary and university education is observed. This situation is much worse in case of older people with factory jobs (and primary and professional education), which are less flexible in this respect. The transformations concern also other elements associated with e.g. development of infrastructure (especially road system in form of A4 motorway or Road Cross-Regional Motorway) or improvement of the condition of natural environment. Such elements occurred many times in restructuring plans and strategies of region development and, from one side they increase the investment attractiveness of the region, and on the other hand they influence the improvement of every-day life of the region inhabitants.

CONCLUSIONS

The analysis of the basic trends of demographic and economic changes in Katowice province indicates the following:

1. The turning point of demographic transformations occurred earlier than that concerning economic transformations. This was the result of responding (especially of migration) to growing symptoms of the collapse of extensive model of industrial development. Changes of conditions of economy functioning were possible only as a result of political-economic transformation.
2. Since 1982, the decrease of population development has occurred and character of demographic processes has changed. Until the 1980s, this development was mainly based on external feeding (large migration inflow), and then in was based on the decreasing natural growth. This resulted in the process of regional population closing. As a result of diminution of the external migration feeding, the role of internal conditions of demographic development will increase, which needs to seek the interregional forms of economic activity.
3. In the 1990s, an essential change in the directions of migration flow occurred. In rural areas positive migration balance was recorded for the first time, whereas the predomination of migration outflow occurred in many towns.
4. Since 1982, for the first time in the post-war period, urbanisation processes have occurred more rapidly (but their rate decreased) than industrialisation processes, which collapsed.
5. Demographic changes are directly influenced by trends of economic changes. In the situation of too slow process of economy restructuring the de-

mand for work grows too slowly as compared to its supply. The appearance and then growth of the unemployment in the 1990s involved many social problems connected with differentiation of life quality between individual towns and in their areas.

6. The experiences of other countries show that restructuring of economy in traditional industrial regions is a difficult, expensive and long-lasting process. It is same in case of Katowice region. Despite essential changes in economic structure (it should be emphasised that they occur in the difficult process of the transformation of the whole Polish economy), there are still much to do, so that, according to the most recent scenario of Klasik (1988) this region could become an important area in Europe. One of the basic barriers of realisation of the hitherto plans, concepts, and strategies was inefficient amount of financial measures. We should hope therefore that together with Poland entering the European Union more measures will come from structural funds which will intensify further restructuring and which will not be limited to branch restructuring but will have wider aspect, including spatial aspect, like e.g. project of Emscher Park in Ruhr Basin.

REFERENCES

- Barański, M.** 1999: Kontrakt regionalny dla województwa katowickiego. *Dorobek i opinie*. Prace Naukowe Uniwersytetu Śląskiego, Nr 1773.
- Berezowski, S.** 1980: Wielki okręg czy aglomeracja okręgów? Górnośląski Okręg Przemysłowy i jego obrzeże. *Studia nad Ekonomiką Regionu*, t. 10, Katowice: Śląski Instytut Naukowy, pp. 33–71.
- Błasiak, W., Nawrocki, T. and Szczepański, M. S.** 1994: *Górny Śląsk 2005, Scenariusze restrukturyzacji*. Katowice: Towarzystwo Zachęty Kultury.
- Bogdanov, D.** 2001: Uwarunkowania rozwoju rynku komputerowego w Polsce. *Studia i Monografie* Nr 308, Opole: Uniwersytet Opolski.
- Jałowiecki, B.** 1993: Polityka restrukturyzacji regionów – doświadczenia Europejskie. *Studia Regionalne i Lokalne* Nr 11 (44).
- Klasik, A.** 1987: Scenariusze przyszłości tradycyjnego regionu Przemysłowego. In: Klasik, A., editor, *Kształtowanie tradycyjnego regionu przemysłowego*, *Studia nad Ekonomiką Regionu*, t. 16, pp. 38–57.
- Klasik, A.** 1988: Restrukturyzacja regionu katowickiego. *Tezy. Studia nad Ekonomiką Regionu*, t. 18, pp. 88–101.
- Klosowski, F.** In press: *Restrukturyzacja gospodarki miast regionu Górnośląskiego*. Opole: Uniwersytet Opolski.
- Klosowski, F. and Runge J.** 1999: Podziały obszaru województwa katowickiego a kształtowanie się zróżnicowań demograficzno-społecznych. *Czasopismo Geograficzne LXX*, z. 3–4, pp. 319–335.
- Kukliński, A.** 1991: Restrukturyzacja polskich regionów jako problem współpracy europejskiej. In: Kukliński, A. and Jałowiecki, B., editors, *Restrukturyzacja polskich*

- regionów jako problem współpracy europejskiej*, Studia Regionalne i Lokalne, Warszawa: Uniwersytet Warszawski, t. 1 (34), pp. 319–329.
- Rajman, J.** 1969: Procesy urbanizacyjne w zewnętrznych strefach aglomeracji Górnośląskiego Okręgu Przemysłowego. *Studia Śląskie. Seria Nowa*, t. 15, Opole: Instytut Śląski, pp. 315–338.
- Rajman, J.** 1997: Struktura przestrzenna ludności i osadnictwa aglomeracji katowickiej w okresie transformacji gospodarczej. In Korcelli, P., editor, *Agglomeracje miejskie w procesie transformacji: VI, Zeszyty IGiPZ PAN nr 46*, Warszawa, pp. 39–52.
- Rosset, E.** 1975: *Demografia Polski*, Warszawa: PWN.
- Runge, A.** In press: Miasta średnie w sieci osadniczej Śląska. *Miasta w okresie przemian, Zeszyty Naukowe Uniwersytetu Opolskiego*.
- Runge, A. and Runge, J.** In press: Demographic transformations of the largest town of Silesian Province. *Zeszyty Naukowe Uniwersytetu Opolskiego*.
- Runge, J.** 1993: Główne kierunki przeobrażeń demograficzno-społecznych w województwie katowickim w latach 1975–1990. *Geografia w Szkole*, z. 2, pp. 67–75.
- Runge, J.** 1996: Struktura rynku pracy regionu tradycyjnego i jego otoczenia na przykładzie województwa katowickiego. *Prace Naukowe UŚ nr 1198*.
- Runge, J.** 1998: Ruchliwość przestrzenna ludności województwa katowickiego na tle przemian społeczno-ekonomicznych regionu. In Szymańska D., editor, *Ruchliwość przestrzenna ludności w okresie przemian ustrojowych*, Toruń: Wydawnictwo Uniwersytetu Mikołaja Kopernika, pp. 215–229.
- Runge, J.** 1999a: Osadnictwo. In Szajnowska-Wysocka, A. Z., editor, *Studium wiedzy o regionie śląskim, Prace Naukowe Uniwersytetu Śląskiego nr 1755*, pp. 51–83.
- Runge, J.** 1999b: Ludność. In Szajnowska-Wysocka, A. Z., editor, *Studium wiedzy o regionie śląskim, Prace Naukowe Uniwersytetu Śląskiego nr 1755*, pp. 15–50.
- Runge, J.** 2002: Zewnętrzne i wewnętrzne czynniki przemian struktury przestrzenno-funkcjonalnej regionu katowickiego. In Namyślak, B., Kozieł, R., editors, *Współczesne procesy transformacji w układach lokalnych i regionalnych w Polsce, Przekształcenia regionalnych struktur funkcjonalno-przestrzennych t. VII*, Uniwersytet Wrocławski, Wrocław.
- Runge, J.** In press: Determinanty przemian społeczno-ekonomicznych regionu katowickiego. *Prace Naukowe Uniwersytetu Gdańskiego*.
- Rykiel, Z.** 1985: Zagadnienia regionalnych systemów osadniczych. *Studia KPZK PAN t. 88*.
- Rykiel, Z.** 1991: Rozwój regionów stykowych w teorii i w badaniach empirycznych. *Prace Habilitacyjne IGiPZ PAN*.
- Syrek, M.** 1976: *Przemysł regionu katowickiego 1945–1974*. Katowice: Wydawnictwo Śląsk.
- Szczepański, M. S.** 1998: *Opel z górnictwem pióropuszem*. Katowice, Wydawnictwo Śląsk.
- Tkocz, M.** 2001: Restrukturyzacja przemysłu regionu tradycyjnego. Katowice: *Prace Naukowe Uniwersytetu Śląskiego Nr 1998*.

CORRESPONDENCE TO:

Jerzy Runge
Department of Economic Geography
Faculty of Earth Science, University of Silesia
Będzińska 60, 41-200 Sosnowiec, Poland
[e-mail: jrunge@wnoz.us.edu.pl]

Franciszek Kłosowski
Department of Economic Geography
Faculty of Earth Science, University of Silesia
Będzińska 60, 41-200 Sosnowiec, Poland
[e-mail: fklosows@wnoz.us.edu.pl]

Anna Runge
Department of Economic Geography
Faculty of Earth Science, University of Silesia
Będzińska 60, 41-200 Sosnowiec, Poland
[e-mail: arunge@wp.pl]