

SOCIO-ECONOMIC CHANGES IN LODZ – THE RESULTS OF TWENTY YEARS OF SYSTEM TRANSFORMATION

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Socio-economic changes in Lodz– the results of twenty years of system transformation

The author's main aim is to define the most important demographic, social, economic and functional changes which took place in Lodz as a result of the political and economic transformation in Poland after 1989. The article is based on the statistical data obtained from the Central Statistical Office (*Główny Urząd Statystyczny – GUS*), as well as on the materials and information gathered at Lodz institutions and firms. The author shows that the transformation led to a serious demographic crisis in Lodz and, consequently, to a strong depopulation of the city. The transformation also affected elements of the social structure, such as education. After 1989, the city started to suffer from mass unemployment. The predominant functions changed as well; processes of deindustrialization and function succession are evident. The structure of industry changed considerably, as did the ownership system; services developed. At the end of the article the author presents a synthetic model of the socio-economic transformations in Lodz, as well as the development prospects for the city.

Key words: Lodz, Poland, socio-economic changes, system transformation

INTRODUCTION

The author presents the demographic, social and economic changes that took place after 1989, in Lodz – the third most populous Polish city. Over 20 years ago, a profound political and economic transformation started in Poland and other countries in Central and Eastern Europe, which is long enough to sum up and evaluate the first stage of this process. Although the transformation affected the whole country, it is most visible in Polish cities (Parysek 2004), especially those with a long industrial tradition, such as Lodz.

The forty years of the communist system in the countries of Central and Eastern Europe caused massive damage to their economies. It was a time when the basic economic rules were not followed and the economy was subordinated to ideology and politics. The fall of the communist system in Europe had become a fact already in the 1980's and led to extremely complex socio-economic changes in former communist countries, that is to the transformation process. It was caused by two types of factors: external and internal. The external factors included the disintegration of international organizations embracing communist countries and controlled by the USSR, such as the Council for Mutual Economic Assistance or the Warsaw Pact. The other external change factor was the advancing integration with the European Union and NATO (Michalski 2010). The internal factors (functioning within the borders of a given country) include social dissatisfaction with the lack of democracy, as well as the economic problems caused by the fall of the communist economy system (Sachs 1992). Apart from Poland, the socio-economic transformation in the former European com-

munist countries affected the Czech Republic and Slovakia (former Czechoslovakia), Hungary, Romania, Bulgaria, the countries of the former USSR, and former Yugoslavia. A particular example of the transformation process was observed in the former German Democratic Republic, which was incorporated into the German Federal Republic in 1990.

The changes initiated in Poland after the Round Table negotiations led to a political agreement between the communist authorities and the Polish opposition, born out of the Solidarity movement. The resolutions of the Round Table included the gradual democratization of socio-political life, as well as the introduction of the free market. The reforms implemented in Poland at the early stage of the transformation period, in the years 1989-1993, were a kind of a "shock therapy" and consisted of a rapid introduction of the liberal economic rules. On the one hand, they led to the decline of many large and poorly managed state enterprises, massive unemployment and hyperinflation. On the other hand, they facilitated the development of private entrepreneurship, the privatization of national wealth and they opened the Polish economy to foreign investors. The first crisis in Poland was followed by an economic boom in 1994-1998, and then by another slow down in the economy. It was overcome shortly before Poland joined the European Union in 2004 (Kołodko 2005). The processes taking place in countries like Poland, the Czech Republic, Slovakia and Hungary, were generally similar everywhere. There were of course local differences, but the initial phase was always characterized by an economic crisis, as a result of introducing the free market rules. Each of these countries went through the privatization processes, which, in the case of huge state enterprises, frequently caused social dissatisfaction. A common effect of the first transformation stage was a high unemployment rate and a temporarily decreased standard of living (Srubar 1994 and Michalski 2005). The transformation had its beneficiaries who took advantage of the privatization processes. There were also those who lost – such as the laid-off workers of the sold-off enterprises. Despite all the resulting problems, the political and economic transformation in the former communist countries allowed them to reduce the economic and civilizational gap, which separated them from the developed West European countries (Atkinson and Micklewright 1992). Apart from the economy, the transformation also strongly affected the demographic and social spheres of life. As regards demographic situation, the countries in Central and Eastern Europe went through a strong crisis as well. In Poland, Slovakia, the Czech Republic and Hungary, the population growth index decreased to negative values in 2002. A result of the abrupt decrease in the population growth was the ageing of the societies and, consequently, negative economic and social effects, for example, problems with the retirement system or the societies' decreasing purchasing power (Michalski 2005). The social structure in cities became diversified or even sometimes polarized, and unemployment, poverty and pathologies had never been so advanced. On the other hand, democratization processes had started, many new social initiatives were developing and the local and regional authorities were gaining significant power.

The situation in the former German Democratic Republic, which had been incorporated into the German Federal Republic, was slightly different. There, the strong social protest against the communist system was sparked off by the

changes in Russia (perestroika), Poland and Hungary. People organized protests in the largest German cities, forcing the government to loosen the political regime's control and start talks with the German Federal Republic (Jesse 2010). In October 1989, Erich Honecker was removed from power, a new government was formed in the German Democratic Republic and the borders with western countries were opened. Later, the Chancellor of West Germany, Helmut Kohl, introduced a 10-point German reunification program, and started negotiations with East Germany. As a result of those negotiations, on 3rd October 1990 the German Democratic Republic lands officially joined the Federal Republic of Germany. Consequently, the eastern lands received huge help from West Germany, for example to cover the cost of a huge revitalization and infrastructure development project, subsidized from the central budget. On the other hand, a great number of young people migrated to the west and the eastern lands became depopulated. Also the economic and functional changes in the area of the former German Democratic Republic did not bring the expected effects; many formerly communist enterprises went bankrupt, despite privatization. In spite of the huge support obtained from the central budget, even today the economic and demographic indexes in the eastern German lands are much lower than those in the west (Szymańska et al. 2008, Szymańska et al. 2009 and Cudny 2012).

RESEARCH THEMES IN LITERATURE

The analysis presented in this article is a part of the study regarding the socio-economic changes in European cities after the fall of communism. Therefore, the author decided to present a review of the major publications on the topic. The first group of scientific publications concerns demographic and social changes in cities. The issues discussed include the changes in the basic population elements, such as population growth, age and sex structure, migration balance, as well as the influence of these elements on the spatial structures of cities (Rydz 1994, Kotowska 1998, Korec 1999, Cudny 2006a, Ondoš and Korec 2006). The publications also present the social polarization, poverty and crime rate in cities (Warzywoda-Kruszyńska and Grotowska-Leder 1996, Pirveli 2001, Rydz 2001, Szymańska and Pappelbon 2001 and Węclawowicz 2001). There are also interesting publications regarding social polarization in the *gminas* (boroughs) and regions of Slovakia (Rochovská and Horňák 2002, Michálek 2004, Rochovská and Horňák 2008).

Another group of publications regards the changes in the spatial structure of cities and transformations of industrial areas (Korec 1997, Domański 2000, Kaczmarek 2004, Cudny and Coudroy de Lille 2006 and Cudny 2008c), as well as the revitalization processes (Kaczmarek 2001).

A separate area in the geographical studies of the changes in cities at the time of transformation includes analyses of their functional structure. Changes of urban functions were examined on the basis of the economic base theory (Matczak and Szymańska 2000), while another object of study was the transformation in the general employment structure (Słodczyk 2000, Walkiewicz 2000, Suliborski 2001, Korec 2002, Szafrńska 2002 and Walkiewicz 2006). In Slovakia, service functions were studied in the context of banking development in the centre of Bratislava (Buček and Pitoňák 1997). The institutional approach to the study of functions was based on the phone and address details. In Polish litera-

ture, the pioneer of this kind of research into the functions of cities in Upper Silesia was Szajnowska-Wysocka (1994, 1995a and 1995b). In Bratislava, interesting works regarding the decentralization and development of local institutions, as well as the influence of these processes on the social structure also appeared (Buček 1998 and 2000).

After 1989, many publications summing up the changes in cities, which followed the transformation, appeared. The works by Maik et al. (1996), Parysek (1998), Matlovič (1999, 2001, 2003 and 2004), Węclawowicz (1999), Liszewski (2001), Matlovič et al. (2001), Słodczyk (2001), Zborowski (2001), Parysek (2002), Korec and Rochovská (2003), Cudny (2006b and 2011), Matlovič and Sedláková (2007) and Young and Kaczmarek (2008) should be mentioned here. Slovak literature is also rich in interesting synthetic works regarding socio-economic and spatial transformations in the capital of the country, Bratislava (Korec and Džupinová 2000, Ira 2001, Korec 2003 and 2006, Ondoš and Korec 2008). Another theme was the role of Bratislava in the trans-border transport system (Korec 1998). Buček (1996) conducted a comprehensive historical analysis of the functional development of Bratislava as the capital. An exceptionally valuable consolidation of Slovak geographical studies of the changes in the cities in the transformation period is the work by Matlovič et al. (2009). The authors presented a summary of the main research trends in urban geography before 1989 and then described those which developed after 1989.

A separate problem, frequently discussed in the literature of the subject, was the conditions and quality of life, and how they changed after 1989. In Polish literature, these terms were defined by Liszewski (1995). Researchers from the Lodz geographical centre produced a number of publications on this topic in reference to the agglomeration of Lodz; they will be presented further in the review of literature. At the Bratislava geographical centre this theme has been intensively explored (Ira 2004 and 2005, Andráško 2006, Ira and Andráško 2008).

The object of study in this article is Lodz and the literature regarding this city is abundant. It includes publications referring to the history of Lodz, such as those by Dinter (1965), Koter (1969), Rosin (1980), or Koter et al. (2005).

There are also many publications concerning the population structure of the city and the whole agglomeration (Dzieciuchowicz 1983 and 1995, Marcińczak 2006 and Janiszewska 2007). Other authors analysed the living conditions of the inhabitants (Dzieciuchowicz 1980 and Kaczmarek 1996 and 1997).

Other studies regarded the changes in the functional structure of Lodz and other towns in the Lodz region (Riley 1997a, 1997b, Wolaniuk 1997, Dzieciuchowicz 2006 and Wolaniuk 2006). Wolaniuk (2010) also analysed the influence of the university functions of Lodz on the changes in the urban space. An important element which was studied was the tourist functions of Lodz and their role in the further development of the city (Cudny 2008b, Liszewski 2009b, Cudny 2010a, 2010b, Cudny and Rouba 2010, Liszewski 2010, Cudny et al. 2011a).

A number of works considered the transformation of the Lodz industrial areas (Piech 2004, Marcińczak and Jakóbczyk-Gryszkiewicz 2006, Cudny 2008a, Kotlicka 2008), as well as the changes in the urban and suburban space of Lodz (Jakóbczyk-Gryszkiewicz 1998). Recently, a number of publications have ap-

peared regarding the Lodz region (Koter et al. 2000, Liszewski, ed. 2001a) and Lodz itself (Liszewski, ed. 2009a).

All the changes, described in the scientific literature, which occurred in the Central European cities after the fall of communism, led to the development of so called post-socialist cities. According to Sýkora (2009, p. 394), “Post-socialist cities are cities in the transition stage. They are characterized by dynamic processes of change rather than static patterns. The urban environment formed under the previous system is being adapted and remodelled to match the new conditions of the political, economic, and cultural transition towards the capitalist society. Many features of a socialist city suddenly stood in opposition to the capitalist principles. The contradictions between the capitalist rules and the socialist urban environment led to the restructuring of the existing urban areas. With time, new capitalist urban developments are having more and more influence on the overall urban organization. The post-socialist developments bring the re-emergence of some pre-socialist patterns, transformations in some areas from the socialist times, and creation of new post-socialist urban landscapes.”

The departure from the legacies of the communist past has been possible due to the multiple transformation dynamics of institutional, social and urban change. While institutional reforms have been largely accomplished, the adjustment of urban land use patterns to new societal conditions still continues. Hence, post-communist cities are still cities in transition (Sýkora and Bouzarovski 2012). The effects of the socio-economic transformations in the cities of the post-communist countries in Central and Eastern Europe, described by a number of authors, have been confirmed in both, the studies of Polish (Ślodziak 2001), Slovak (Matlovič 2004) and Czech (Sýkora 1999) cities, and in the comparative international studies (Matlovič et al. 2001). The changes in the post-socialist cities may be divided into some main groups of transformations (Tab. 1). They include changes in the morphological, functional and socio-demographic urban structure.

Tab. 1. Major transformation processes of the urban structures in post-communist cities

	Urban structure		
	Morphological	Functional	Socio-demographic
Transformation process	suburbanization, gentrification, revitalization, intensification, recession and urban fallows	suburbanization, commercialization, deindustrialization, demilitarization, sacralization, functional fragmentation	suburbanization, gentrification, segregation, separation, regression of socio-economic status

Source: Matlovič et al. (2001, p. 11).

The main transformations in the morphological structure include the development of the suburbs (suburbanization), renewal, modernization and all other positive changes in the space of the old inner city (gentrification and revitaliza-

tion). Moreover, the morphological changes include vertical and horizontal intensification of the buildings, or degradation of the old buildings in the post-industrial areas (recession and urban fallows). As regards the functional structure, the main changes caused by the transformation process include the development of the residential function on the outskirts and in the suburbs of the city (suburbanization), or the construction of new shopping and service centres in these areas (commercial suburbanization). The functional structure is also affected by the development processes in the areas connected with income-bearing (commercial) functions (services and industry), which often develop at the expense of the non-commercial areas (e.g. green areas). We also deal here with industrial regression (deindustrialization), the reduction of the military function in cities (demilitarization), and the development of sacral functions (sacralization). We can also observe another process in the cities, which consists of the growing diversification and mixing of urban functions (functional fragmentation). The socio-spatial structure is affected by processes such as the population migration to the suburbs and outskirts (suburbanization) and an inflow of a new population of a higher economic and social status to the functional centres of cities (gentrification). There is also the spatial separation of groups of different economic and social status and the regression of this status among the people inhabiting the poorer districts (Matlovič et al. 2001).

AIMS, SOURCE MATERIALS AND METHODS OF STUDY

The subject of this paper refers to the socio-economic changes in Lodz occurring due to the political and economic transformation. The author's main aim is to present the effect which the socio-economic changes taking place in Poland since 1989 have had on the population and economy of the city. The aim of the analysis was to define the changes in the number of the population of Lodz, population growth index and migration balance. The article also presents the population age and sex structure, as well as the changes in the level of education and the numbers of working and unemployed people. The next aim was to define the changes in the functional and economic structure of Lodz. The author presented the transformations in the employment structure, as well as in industry and services.

In order to assess the situation more effectively, some of the studied elements were compared to those in other large Polish cities, inhabited by more than 500,000 people: Warsaw, Kraków, Wrocław and Poznań. The analysis was based on the quantitative statistical data, obtained from the Central Statistical Office (*Główny Urząd Statystyczny* – GUS). It was supplemented with qualitative data in the form of case studies used for the analysis of changes in the functional and economic structure of the city. Case studies were used to present the most significant examples of the new Lodz investments and their role in the development of the city. The information necessary to write the article was also obtained by means of qualitative field studies, such as surveys carried out at different offices and companies in Lodz. An additional source of information was the literature regarding the city and its transformations after 1989. Apart from the analysis of the present situation, the article also presents conclusions in the form of a synthetic model of transformations in Lodz after 1989 and the socio-economic prospects for the city.

THE DEVELOPMENT CONDITIONS IN LODZ

Lodz is a city inhabited by 742,000 people (2009) situated in the lowland region of central Poland (Fig. 1). It is the capital of the administrative region of Lodz voivodeship. The location of the city is a great advantage, as it lies at the junction of major transit routes, leading from the north southwards and from the west eastwards. This particular advantage, however, has not been fully exploited yet, due to the poor quality of the transport infrastructure (Liszewski 2009c).



Fig. 1. Location of Lodz and Lodz voivodeship

Source: Author's compilation

The history of Lodz proceeded in several stages. As a separate locality, it appeared in the 15th c. (Koter 1969). In the 19th c., the area of today's city was under Russian occupation; it was a part of the autonomous Kingdom of Poland. In order to enhance its economic growth, its authorities decided to found several new industrial towns (textile industry). One of them was Lodz, whose beginnings as an industrial city date back to 1821. The following years were marked by a dynamic development of the city built by Poles and immigrants from Europe, mainly Germans, Jews and Russians. Serious population and economic changes in Lodz were brought about by the Second World War, after which the city became a mono-ethnic centre, inhabited by Poles¹.

After the war, the new authorities introduced the communist system and centrally planned economy in Poland. Lodz factories were nationalized; the structure of the industry was still based on textile production, mainly for the markets

¹ In 1939 Lodz was inhabited by 388,000 Poles (57.1%), 230,000 Jews (33.8%), 60,000 Germans (8.8%) and 2,000 Russians (0.3%) and other nationalities (Koter et al. 2005). According to the national Census 2002, only 0.3% of the city's inhabitants declared a nationality other than Polish.

of The Council for Mutual Economic Assistance countries. A serious problem suffered by the city was the mono-functional economy and the poor level of services, in comparison to other cities. It was not until 1989 (the start of the political and economic transformation) that significant changes in the socio-economic structure of Lodz began (Koter et al. 2000). It should be stressed here that an important element affecting the present situation of Lodz is also its proximity to the capital of the country, Warsaw. Sometimes it is seen as an advantage, which allows Lodz to take over some investments, for which the short distance to the capital, central location and lower costs are advantageous. However, it is equally often regarded to be a factor which hampers the development of the city. It is pointed out that in situations when investors consider a new business location somewhere in the centre of the country, Lodz usually gives way to Warsaw. This is due to the fact that the capital has a better developed infrastructure, it is close to state institutions and headquarters of other large companies (better investment climate). Warsaw is also one of the richest cities in Poland, offers a lot of jobs with good pay, which attracts migrants from other cities and towns, and causes, among other things, the depopulation of Lodz.

DEMOGRAPHIC AND SOCIAL TRANSFORMATIONS

After 1989, we could observe demographic stagnation in Poland, particularly evident in most Polish cities. It resulted from the changes regarding, among other things, the model of the family and the economic crisis. The latter was very important, as low earnings and price realignment made it very difficult to maintain a larger number of children in a family (Kotowska 1998 and Słodczyk 2001). In this respect, the situation in Lodz is particularly bad. The population of the city has been decreasing (Fig. 2) since 1988 and this trend is going to continue in the future. The situation is really serious, as the depopulation of Lodz is the greatest in comparison to other large Polish cities. Between 1988-2006, the number of the population here decreased by 11%, while in Poznań only by 4%, in Wrocław by 0.7% and in Warsaw and Kraków it increased by 2.8% and 2.5%, respectively (Obraniak 2007, p. 5).

The depopulation of Lodz is caused by the falling population growth rate² and the decreasing migration balance. The low population growth, in turn, results from the decreasing number of births and a high death rate. This again is the outcome of the civilizational changes taking place in Poland since 1989 and the economic crisis in the Lodz region (an economic suppressant to the birth rate). The negative migration balance in Lodz is the result of the low attractiveness of the city due to the high unemployment rate and low earnings. That is why many inhabitants decide to leave for other cities, such as Warsaw or Kraków. After 2004, more and more inhabitants of Lodz started to emigrate abroad². Apart from this, some city inhabitants are moving to the outskirts, which is an element of the suburbanization process.

² E.g. in 2003 the number of Lodz inhabitants who emigrated abroad was 245, while in 2006 it was 526 (Obraniak 2007, p. 37)

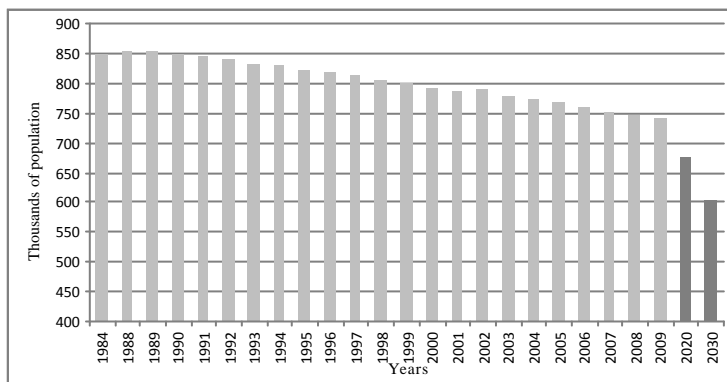


Fig. 2. Changes in the number of the population of Lodz between 1984-2030*

*data for 2020 and 2030 is the prognosis made by the Central Statistical Office

Source: Wojewódzki urząd Statystyczny w Łodzi (1985, 1989, 1990-1996), Urząd statystyczny w Łodzi (1997-2010), Obraniak (2007)

It must be stressed, however, that the process of suburbanization is not the main factor responsible for such considerable population losses in Lodz. For example, in 1989-2002, over 62,000 people left Lodz and at the same time 12,000 new inhabitants moved into the suburban zone (Ogrodowczyk 2006), which was only about 19% of the population that left the city³. What is more, though suburbanization also occurs in other large cities (e.g. Krakow and Warsaw), they do not become so strongly depopulated as Lodz. This shows that population losses in Lodz result mainly from the negative population growth and the inhabitants' migration out of the Lodz region.

According to the Central Statistical Office (GUS) data regarding the population growth and migration balance, the situation of Lodz is extremely unfavourable in comparison with other large cities (Figs. 3 and 4). It reconfirms the serious demographic crisis of the city. The changes described above led to a situation, when in 2007 Lodz lost its position as the second most populated city in Poland and was overtaken by Krakow (GUS, Urząd statystyczny w Poznaniu 2010a, pp. 60-62).

Another significant demographic feature of Lodz' population is the age structure. The population of Lodz is aging as a result of the low growth rate and a considerable outflow of the young inhabitants. This situation is extremely unfavourable and badly affects the labour market, besides creating an additional burden to the social infrastructure (e.g. medical). People in Lodz live shorter lives than in other large cities, which leads to a higher death rate. The city also stands out as regards the male to female inhabitants ratio. The feminization index reaches 120 (GUS 2011) and is among the highest among Poland's large cities. It results from the many years of massive migrations of women to the

³ It should also be stressed that not all the people who settled in the suburban zone in 1989-2002 came from Lodz.

city, where they found work in the textile industry. Feminization is also caused by the ageing process among the population of Lodz. Women's mean lifespan is longer and therefore their number is growing among the ageing inhabitants of Lodz.

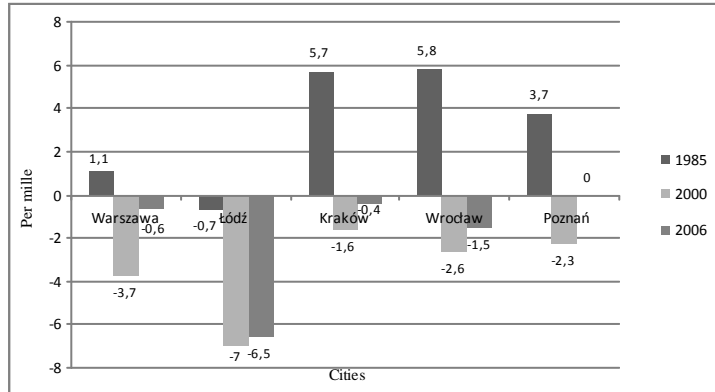


Fig. 3. Population growth per mile in large Polish cities, in 1985, 2000 and 2006
Source: Obraniak (2007)

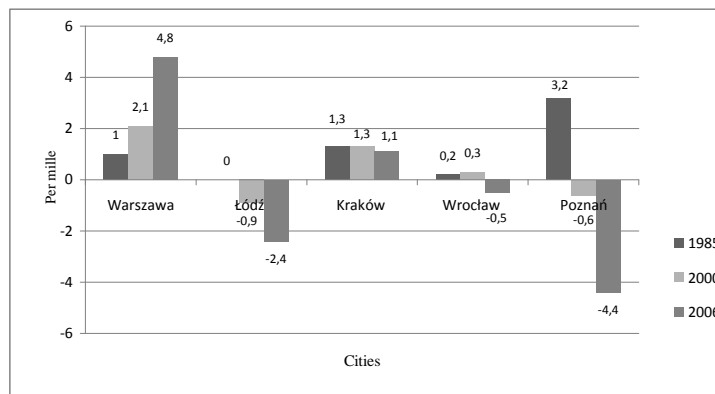


Fig. 4. Migration balance per thousand in large Polish cities, in 1985, 2000 and 2006
Source: Obraniak (2007)

An acute problem in the city is unemployment, related to the changes in the number of working people. Officially, unemployment appeared in Poland in the 1990's as a result of the dissolution of many state factories⁴ (Parysek 1998). In 1997 and 1998, the unemployment rate in Lodz slightly dropped. The unemployment resulted from the new economic reality, work-related migrations by some of the unemployed, as well as many cases of early retirement. Unfortunately, the next years brought another increase in the unemployment rate (2000-

⁴ Before 1989, the unemployment in Poland was concealed – the number of workers employed by the state enterprises was larger than actually needed.

2003). It was not until Poland joined the European Union in 2004 that the economy recovered, the number of working people increased and the number of the unemployed dropped. Despite the fact that the situation improved after 2004, the number of the unemployed in Lodz is still much higher than in other large cities in (Fig. 5) Poland.

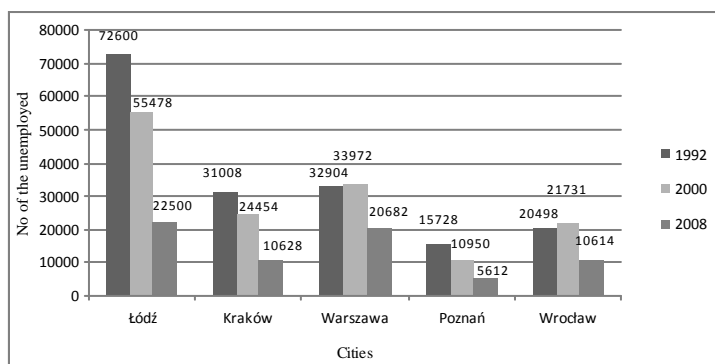


Fig. 5. The number of the unemployed in Lodz and other large Polish cities in 1992, 2000 and 2008

Source: GUS (1994, 2002b, 2009a, 2009b, 2009c, 2010g and 2010h)

This unfavourable situation on the labour market seems even worse if we look at the mean pay in enterprise sector in Lodz. According to the Central Statistical Office (GUS) data in the first half of 2010, it was 3 084 zlotys gross and was much lower than the earnings in comparable cities. It was also lower than the mean national pay, which was 3 198 zlotys gross (Kwiatkowski 2011, p. 15). All these facts put together decrease the attractiveness of Lodz as a place to live and work, and increase the poverty and crime rate. On the other hand, low pays encourage investors. They choose the Lodz region for its skilled and cheap workforce (Cudny 2008c).

A positive aspect of the social changes in Lodz is undoubtedly the improvement of the education structure. The percentage of university graduates increased from 10.4% in 1988 to 14.6% in 2002, and the percentage of people with secondary education went up from 32.8% to 39.6% (Dzieciuchowicz 2009, p. 390). At present, Lodz is the fifth largest university centre in Poland (GUS 2010b). In 2007 the number of students was 49% larger than in 2000, and the number of higher schools increased from 15 to 22 over that time (GUS 2002a and 2008).

FUNCTIONAL – ECONOMIC CHANGES

In the majority of Polish cities, the changes that occurred after 1989 resulted in deindustrialization, a transformation of the industry structure, function succession, privatization and globalization (Cudny 2006a, Domański 2000 and Słodczyk 2000). The functional – economic structure of Lodz underwent similar changes. After the disintegration of the eastern block, Russians started to purchase textiles from other European countries and China. In this way Lodz enter-

prises lost their main market. Moreover, they were badly managed and burdened with excessive employment; therefore they were unable to compete with foreign companies and went bankrupt (Piech 2004). Among the enterprises that closed down were the two largest Lodz textile factories – Poltex and Uniontex, which jointly employed over 25,000 people. (Cudny 2008a). As a result of the bankruptcy of the traditional textile industry, the number of people employed in production decreased and the role of services (Fig. 6) increased⁵. After 1989, new industrial investments were made in Lodz, but due to the considerable automation of modern production, they did not generate as many jobs as in the traditional textile industry. In services, it is still difficult to replace man with machine, therefore in this sector there are still many jobs available. An important structural change which took place at Lodz enterprises after 1989 was also the change in their size structure. Earlier, it was dominated by large firms, employing up to a few thousand workers. In 2007, out of over 94,000 firms functioning in the city, 94.8% were micro-enterprises, employing up to nine persons (Jewtuchowicz and Suliborski 2009, p. 406).

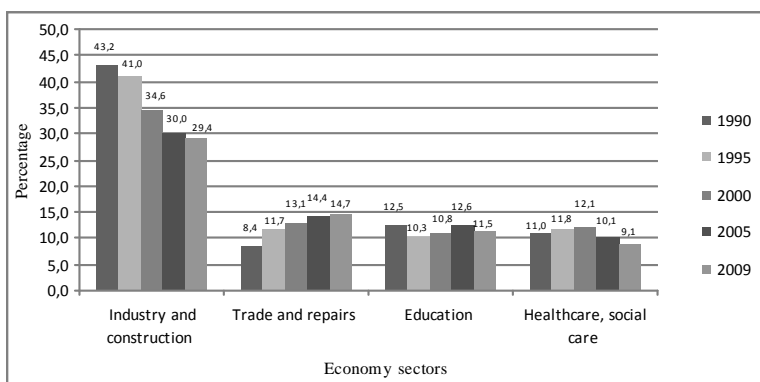


Fig. 6. Employment structure among the inhabitants of Lodz in selected sectors in 1990, 1995, 2000, 2005 and 2009

Source: Wojewódzki urząd Statystyczny w Łodzi (1991), Urząd statystyczny w Łodzi (1996, 2001, 2006 and 2010)

Looking at the employment structure in the three basic economic sectors, namely agriculture, industry and services, it is easy to notice the growing domination of services and the decreasing employment in industry in recent years. This tendency is typical of most Polish cities, where after the intensive industrialization and urbanization in the communist times, the economic structure changed and became service-oriented (Ślodziak 2001). Similar tendencies can be observed in cities in other countries of Central and Eastern Europe. After 1989, industry stopped being the predominant activity in Lodz for the first time

⁵ The problems in industry in Poland and Lodz started in the 1980s (lower profitability, outdated technologies). The early 1990s made the already existing problems more evident and graver.

in its history. The changes in employment in industry and services point to the processes of deindustrialization⁶ and function succession, which means the replacement of some functions (industrial) by other (e.g. services and housing) (Ślōdczyk 2001). It can be seen in the figures referring to the employment structure in the city, as well as the structure of land use. In Lodz there are large areas where the industrial functions have been replaced by the service or residential functions (Piech 2004 and Cudny 2008a).

As part of the transformation, industry in Lodz underwent considerable changes as regarded the lines of production. Traditional branches were replaced by more modern ones. New investors were foreign companies, mainly American, German and Italian. The largest new investments in Lodz are Dell (the largest outlet in Europe), Gillette (the largest outlet in the world), Bosch-Siemens and Indesit⁷. The group of large investors also includes the Polish company producing construction materials – Atlas⁸ (data provided by the City Council Office). These companies produce goods mainly for the western markets, first of all for the European Union. This makes the situation very different from the times before 1989, when production was sent, first of all, to the Soviet market.

Since 1997, parts of the city and the voivodeship have belonged to the Lodz Special Economic Zone (*Łódzka Specjalna Strefa Ekonomiczna – ŁSSE*), which is an important location factor. It attracts investors by offering tax exemptions, attractive real estate prices, central location and availability of a skilled and cheap workforce. The Zone is one of the best functioning areas of this type in Poland, with large Lodz companies, like Dell, Bosch-Siemens, Gillette, Indesit, being based there (Cudny 2008c).

As was mentioned earlier, in terms of employment, the currently leading economic sector in Lodz is the service sector. The most important types of service activity are trade and repairs. Unfortunately, activity related to modern services, such as information and communications, or science and technology, is still rare. (Jewtuchowicz and Suliborski 2009). The increasing percentage of services in the employment structure in Lodz also comes from the fact that the investors are huge international companies. The main service investments include the Infosys outsourcing centre (an Indian company), founded in 2007 (in the former Philips building). The city also has enormous shopping centres – Manufaktura, opened in 2006, and Port Lodz⁹, opened in 2010. Apart from these largest commercial enterprises, there appeared many smaller supermarkets and malls in the city. According to the Central Statistical Office, in 2009 there

⁶ Although industry is currently losing importance in the employment structure, it is still a major economic sector generating Gross National Product and offering new solutions and technologies (e.g. High Tech industry).

⁷ Bosch, Siemens and Indesit form one of the largest clusters in Europe (i.e. groups of interrelated companies dealing with the same line of production [www.sjp.pl]) – household appliances.

⁸ Dell, Bosch – Siemens, Gillette and Atlas employed about 7 000 people. The level of investment reaches about 783 million dollars (Cudny 2008c).

⁹ Manufaktura was created on the 27 hectare revitalized area of a former textile factory, Poltex. The investor was a French company Apsys. The enterprise generated 3 000 jobs in services (Cudny 2008a). Port Lodz is the largest shopping centre in Lodz, with the largest Ikea outlet in Poland.

were over 90 of them in Lodz (GUS 2010c). As regards the number of this type of shop in Polish cities, Lodz comes third, after Warsaw and Poznań. Some experts believe that the number of large supermarkets in Lodz is already too high, considering the current purchasing power of the city inhabitants.

Tourism is also developing in Lodz; in recent years the number of the sold bed-places has grown considerably. In 2001, there were about 180,000 of them, while in 2009 – 320,000, which means an increase of over 75% (Liszewski 2010). Lodz is a city where the hotel business has received much invests. In the late 1980's, the city had nine categorized hotels, and in 2008 there were 16 of them (Wiśniewska 2009). The most important new hotels are The Andel's at the Manufaktura centre, Qubus, Ibis, Campanile, Focus and Ambassador. They were built in Lodz because of the economic development of the city, an inflow of foreign investments and the fact that it is a trading centre (International Lodz Fairs). An important event was the opening of a modern sports and entertainment centre, Lodz Atlas Arena, in 2009, which attracts spectators from the whole country. Moreover, Lodz has one priceless advantage – its central location, which makes it a conference and training centre for companies from all over Poland (Cudny 2010b and Cudny and Rouba 2010).

Another effect of the transformation was the process of privatization. Before 1989, only a few per cent of firms were private. In 2009, the situation reversed – the public sector was represented by 2.2% of firms, while the private sector – by 97.8% (GUS 2010d)¹⁰. Privatization is accompanied by globalization, which has produced an inflow of foreign companies to Lodz (Cudny 2008c). The overall value of foreign investments in Lodz in 2007 reached 2.7 billion Euros. The investment capital flowed mainly from France (22%), the United States (21.5%) and Germany (18.5%) (Jakóbczyk-Gryszkiewicz 2011).

Significant effects of the economic transformation include spatial changes. A part of the urban tissue was degraded, including some of the former industrial areas and the old houses in the city centre. Some of these areas transformed into urban fallows, and others were revitalized thanks to new service and housing investments.

After 1989, Lodz also received considerable pre-accession and post-accession (since 2004) funds from the European Union, which were used for developing the city sewerage system, building a sewage treatment plant and developing the road and tramway systems. There are also plans to create *The New City Centre*; it is a revitalization project worth about 450 million Euros, pertaining to a part of the city centre (data obtained from the City Council Office).

An interesting recent initiative has been the creation of the Technology Accelerator Innovation Centre at the University of Lodz. It is to support innovative technological undertakings by counselling and helping to obtain funds. If combined with the modern industry developing in Lodz (e.g. Dell), it may form a high technology cluster in Lodz in the future (University of Lodz materials).

¹⁰ It was similar in other large cities, e.g. in 2009 the percentage of private firms in the overall number of firms in Warsaw was 98.7% (GUS 2010e), in Wrocław it was 96.6% (GUS 2010f).

CONCLUSIONS

The author decided to present the main conclusions regarding the transformation of Lodz in the form of a synthetic transformation model. In the human geography literature, the first advanced analyses using models appeared in the 1960's (Haggett 1965, Chorley and Haggett 1967). It was then that a new human geography paradigm appeared, which replaced the earlier descriptive approach to the analysis of geographical phenomena. It was based on the models explaining the geographical reality (Hubbard et al. 2004, p.155). Scientific models are extremely valuable, because the world is such a complex structure that it is impossible to present all its components. Therefore, a researcher must focus on the most important qualities of the analysed phenomena (Haggett 2001).

According to the definition formulated by S. Berezowski (1980), a model is a set of assumptions made in a given science when analysing a problem, in order to simplify, facilitate or even enable somebody to solve it – it is called a nominal model. The author believes that a model can also be a set of objects, occurrences or situations, replacing a complicated or more difficult to grasp real, existing set, though their basic components are similar. This type of model is defined as a virtual model of a given set of occurrences (Cudny et al. 2011b). According to Cudny et al. (2011b), geographical studies feature two approaches to modelling the studied reality. They depend on how and on what basis the models are created. The first approach consists of creating theoretical-analogous models. In this case, the model is a certain verbal or symbolical system, picturing another element of reality through analogy. The other approach consists in creating mathematical models. In this case, mathematical, econometric methods and statistical indexes are used (Chojnicki 1999). In this article, the author devised a virtual theoretical-analogous model of the changes in Lodz during the transformation period.

While constructing the model of the socio-economic changes in Lodz after 1989, the author modified his earlier conception (Cudny 2011). He assumed that transformations are caused by two groups of factors: external (outside the city) and internal (related to the city). These factors (Fig. 7) affect the city either in a positive or a negative way, leading to its development or decline. The main external change factors are the democratization of life and introduction of the free market economy.

Those factors were political and resulted from the agreement reached in Poland during the Round Table talks in 1989. It was an agreement between the communist authorities and the opposition, which opened the way to initially partial and later full political and economic freedom, which triggered a number of further changes, such as the development of private entrepreneurship and an inflow of foreign investments. As a consequence, the ties with the former USSR and other countries from The Council for Mutual Economic Assistance were broken off. This undoubtedly had a huge negative impact on the textile industry, which was then the economic base of the city. The next important external factor affecting the situation of Lodz after 1989 was the integration with the EU, which started in the 1990's and was finalized in 2004. The integration resulted in attracting more foreign investors, an easier access to West European markets

and inflow of EU funds, which were used for developing the infrastructure and other purposes. A very important external factor was also the central location of the city, which was considered as an advantage when locating new industrial and service investments.

External transformation factors		Effects	Internal transformation factors	
C R I S I S	Breaking off economic ties with the eastern markets after 1989	Decline of traditional industry	Domination of large, unflexible state enterprises	C R I S I S
		Bankruptcy of most state companies		
		Appearance of urban fallows		
D E V E L O P M E N T	Inflow of cheap textiles from the Far East	Mass unemployment, low earnings	Monofunctional economy, domination of traditional industry and poorly developed services	D E V E L O P M E N T
		Growing demographic crisis and social problems		
D E V E L O P M E N T	Introduction of democracy	Inflow of foreign investments	Unfavourable demographic situation	D E V E L O P M E N T
		Restructuring of industry, appearance of high technology industry, household appliance industry cluster. Development of services, function succession, replacing industry with services		
D E V E L O P M E N T	Integration with the European Union	New trading partners in Western Europe	Large areas of old, degraded buildings in the city centre	D E V E L O P M E N T
		Obtaining European Union funds		
D E V E L O P M E N T	New localization factors, e.g. Lodz Special Economic Zone	Development of urban infrastructure	Abundant cheap and skilled workforce (technical jobs)	D E V E L O P M E N T
		Increased tourist traffic. Chance for tourism development in the city		
D E V E L O P M E N T	Development of entrepreneurship in Poland and intensive privatization	Revitalization of some post-industrial areas through service and housing investments	Multicultural heritage of Lodz	D E V E L O P M E N T
		Strong university centre		
D E V E L O P M E N T	Localization in the centre of the country, on European transit routes			D E V E L O P M E N T

Fig. 7. Model of changes in Lodz during the transformation period

Source: Cudny (2011) – modified.

Among the internal factors, the most significant ones include the domination of obsolete industry (before 1989), the unfavourable demographic situation, and a large, cheap, skilled workforce. It was an extremely important fact that the post-war economy of Lodz was based on large old-fashioned state enterprises. The underdevelopment of services was much more severe in Lodz than in other large Polish cities. The crisis in the textile industry was particularly acute in Lodz, because the city lacked other well-developed types of activity, which could have stimulated the economic development of the city in the 1990's.

The effects of the socio-economic transformation in Lodz were both, positive and negative. They included the phenomena described in the article: the demographic crisis, changes in industry, function succession and spatial

changes. The demographic crisis seems most acute; despite over 20 years of transformations, it still has not been brought under control. Łódź was also particularly badly affected by the decline of the textile industry. However, recent years have brought many new industrial and service investments. This seems to be relieving the problems resulting from the decline of the textile production in the early 1990's, at least to a certain extent. Other significant effects of the transformation include the development of the urban infrastructure (using the EU funds), tourism and the revitalization of large fragments of the city.

Tab. 2. Prospects for the socio-economic changes in Łódź

Changes		
Demographic	Social	Economic
Change directions		
Positive: –	Positive: – Further improvement of the education structure. – In the short-term perspective: stabilization of the unemployment figures.	Positive: – In the short-term perspective: further inflow of investors. – Possibility to create a High Tech cluster in Łódź (based on Łódź universities and enterprises, such as Dell). – Better use of the tourist potential of Łódź for tourism development in the city. – Transport infrastructure development in Łódź and the region – positive location factor. – Revitalization of the city centre – creating new jobs and sites for services.
Negative: – Continuation of negative population growth rate. – Further population decline. – Intensive ageing of the community. Endangering urban economy by demand reduction and increased service costs (social care, health care). – Increasing feminization index – imbalance of sexes.	Negative: – Continuation of negative migration balance. – In the long-term perspective: danger of investors moving to regions with lower pay (Romania, Ukraine, Belarus), possible increase in unemployment. – In the long-term perspective: possible considerable increase of poverty due to the growing number of people living on very modest retirement pensions. A result of the community ageing.	Negative: – In the long-term perspective: possible freezing of investments due to crisis, limiting the consumption capacity of the Polish and European market. Polish companies will reduce investments and the foreign ones will look for new locations outside Poland and Europe. – Limitation of infrastructure investments due to the reduction of EU funds after 2012.

On the basis of the analysis conducted in this article, the author defined the development prospects for Łódź in the nearest future. They have been grouped as demographic, social and economic changes (Tab. 2). It seems that the greatest danger to the future of the city is the deep demographic crisis in Łódź, as well as the economic problems, such as the global economic crisis and fewer

investment opportunities in the region. On the positive side, unemployment and poverty seem to have become stabilized. Given the well-working local and regional policy, this may enhance the development and reduce later negative possibilities. Lodz may benefit from a better use of its tourist potential, the development of the high technology cluster, infrastructure development and the planned revitalization of the city centre.

It must be stressed that currently there are two opposing prospects in Lodz. The first one is related to the crisis resulting from the socially difficult transformation of the old-fashioned economic structure of the city and from the grave demographic crisis. The other is related to the appearance of new investors in different industries and services. As long as positive economic changes (restructuring and new investments) continue in the future, the demographic situation may improve (the increased population rate and migration balance may rise) and the revitalization of the urban space may be faster.

REFERENCES

- ATKINSON, A.B., MICKLEWRIGHT, J. (1992) *Economic transformation in Eastern Europe and the distribution of income*. Cambridge (Cambridge University Press).
- ANDRAŠKO, I. (2006). Percepcia kvality života v mestských štvrtiach Bratislavy. *Geografická revue*, 2, 227-240.
- BEREZOWSKI, S. (1980) *Metody badań w geografii ekonomicznej*. Warszawa (WSIP).
- BUČEK, J. (1996). Mesto, štát a územie (Prípadová štúdia hlavného mesta Slovenskej republiky – Bratislavy). *Acta Facultatis Rerum Naturalium Universitatis Comenianae, Geographica*, 36, 127-250.
- BUČEK, J. (1998). Decentralizácia v samospráve veľkých miest na Slovensku po r. 1990. *Sociológia*, 30, 345-362.
- BUČEK, J. (2000). Sublocal decentralisation – the case of Slovak big cities. *Environment and Planning C: Government and Policy*, 18, 57-78.
- BUČEK, J., PITONÁK, D. (1997). City-centre transformation in Bratislava – modernisation and financial sector invasion. In Kovács, Z., Wießner, R., eds. *Prozesse und Perspektiven der Stadtentwicklung in Ostmitteleuropa*. Münchener Geographische Hefte, 76, pp. 157-168.
- CHOJNICKI, Z. (1999). *Podstawy metodologiczne i teoretyczne geografii*. Poznań (PWN).
- CHORLEY, R.J., HAGGETT, P., ed. (1967) *Socio-economic models in geography*. London (Open University Setbook, Methuen & Co).
- CUDNY, W. (1999). Fizjonomia ul. Piotrkowskiej w świetle badań behawioralnych. In Jakóbczyk-Gryszkiewicz, J., Kłysik, K., eds. *Nauki Społeczne a Edukacja Społeczności*, t. 2, *Materiały XLVIII Zjazdu PTG w Łodzi*. Warszawa (PTG).
- CUDNY, W. (2006a). *Przemiany przestrzenne i funkcjonalne Tomaszowa Mazowieckiego w okresie transformacji*. Łódź (ŁTN).
- CUDNY, W. (2006b). Socio-economic changes in medium-sized towns in Poland during the transformation period. *Acta Facultatis Studiorum Humanitatis et Naturae Universitatis Prešoviensis, Folia Geographica*, 10, 53-58.
- CUDNY, W. (2008a). Rola prywatnych inwestorów w rewitalizacji terenów przemysłowych Łodzi. *Prace Komisji Krajobrazu Kulturowego PTG*, 10, 379-385.
- CUDNY, W. (2008b). The Radeagast Station Holocaust Monument – its history, contemporary function and perception in the eyes of tourists and Łodz inhabitants, *Bulletin of Geography, Socio – Economic Series*, 9, 97-106.

- CUDNY, W. (2008c). Special economic zones in Poland as a part of globalisation processes. In Siwek, T., Baar, V., eds. *Globalisation and its impact on localities*. Ostrava (University of Ostrava), pp. 129-137.
- CUDNY, W. (2010a). Film festivals in Łódź as a main component of urban cultural tourism. *Bulletin of Geography Socio-Economic Series*, 15, 131-141.
- CUDNY, W. (2010b). Hotel Qubus jako przykład nowego obiektu noclegowego w Łodzi. *Turystyka i Hotelarstwo*, 15, 145-158.
- CUDNY, W. (2011). Model przemian miasta postsocjalistycznego – przykład Łodzi. *Studia Miejskie*, 4, 153-160.
- CUDNY, W. (2012). Socio-economic transformation of small towns in Eastern Germany after 1990 – Colditz case study. *Bulletin of Geography Socio-Economic Series*, 17, 33-43.
- CUDNY, W., COUDROY DE LILLE, L. (2006). Specjalne strefy ekonomiczne, wolne strefy miejskie: nowe przestrzenie w mieście? In Jażdżewska, I., ed. *Nowe przestrzenie w mieście ich organizacja i funkcje: XIX Konwersatorium wiedzy o mieście*. Łódź (ŁTN), pp. 79-90.
- CUDNY, W., GOSIK, B., ROUBA, R. (2011a). Festiwal kultury chrześcijańskiej w Łodzi jako przykład produktu turystycznego – wydarzenie. *Ekonomiczne Problemy Usług*, 66/648, 89-100.
- CUDNY, W., GOSIK, B., PIECH, M., ROUBA, R. (2011b). *Praca dyplomowa z turystyki. Podręcznik akademicki*. Łódź (ŁTN).
- CUDNY, W., ROUBA, R. (2010). Funkcja hotelarska w kompleksie Manufaktura w Łodzi na przykładzie hotelu Andel's. *Turystyka i Hotelarstwo*, 15, 125-144.
- DINTER, H. S. (1965). *Dzieje wielkiej kariery. Łódź 1332-1860*. Łódź (Wydawnictwo Łódzkie).
- DOMANSKI, B. (2000). Tereny przemysłowe w miastach Polski – kierunki i bariery przekształceń In Jażdżewska, J., ed. *Miasto postsocjalistyczne organizacja przestrzeni miejskiej i jej przemiany: XIII Konwersatorium wiedzy o mieście*. Łódź (Wydawnictwo UŁ), pp. 139-143.
- DZIECIUCHOWICZ, J. (1980). Kompleksowa rejonizacja warunków mieszkaniowych ludności wielkiego miasta (przykład Łodzi). *Acta Universitatis Lodzianensis, seria II*, 22, 21-38.
- DZIECIUCHOWICZ, J. (1983). Z badań nad strukturą geodemograficzną wielkiego miasta: segregacja przestrzenna płci i wieku ludności Łodzi. *Acta Universitatis Lodzianensis. Folia Geographica*, 2, 29-63.
- DZIECIUCHOWICZ, J. (1995). *Determinanty demograficzne i społeczno-ekonomiczne redystrybucji przestrzennej ludności aglomeracji miejskich. Przykład aglomeracji łódzkiej*. Łódź (Wydawnictwo UŁ).
- DZIECIUCHOWICZ, J., ed. (2006). *Usługi nierynkowe w przestrzeni miejskiej Łodzi*. Łódź (Wydawnictwo UŁ).
- DZIECIUCHOWICZ, J. (2009) Przemiany ludnościowe Łodzi na przełomie XX i XXI wieku. Prognoza demograficzna Łodzi. In Liszewski, S., ed. *Łódź monografia miasta*. Łódź (Łódzkie Towarzystwo Naukowe), pp. 381-399.
- GUS (1994). *Miasta w Polsce*. Warszawa (GUS).
- GUS (2002a). *Ważniejsze dane*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_02m00_01.pdf; accessed 2012-03-12.
- GUS (2002b). *Bezrobotni zarejestrowani w urzędach pracy*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_02m05_40.pdf; accessed 2012-03-12.
- GUS (2008). *Ważniejsze dane*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_08m00_03.pdf; accessed 2012-03-12.
- GUS (2009a). *Bezrobotni zarejestrowani*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/poznan/ASSETS_09m06_02.pdf; accessed 2012-03-12.

- GUS (2009b). *Bezrobotni zarejestrowani, stopa bezrobocia oraz oferty pracy*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/warsz/ASSETS_09_wwa_05_06.pdf; accessed 2012-03-12.
- GUS (2009c). *Bezrobotni zarejestrowani, stopa bezrobocia oraz oferty pracy*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/krak/ASSETS_09m06_08.pdf; accessed 2012-03-12.
- GUS (2010a). *Miasta w liczbach 2007-2008*, Warszawa (Główny Urząd Statystyczny w Poznaniu).
- GUS (2010b). *Notatka na temat szkół wyższych w Polsce*. Available at: http://www.stat.gov.pl/gus/5840_8864_PLK_HTML.htm; accessed 2012-03-12.
- GUS (2010c). *Sklepy według form organizacyjnych*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_10m11_04.pdf; accessed 2012-03-12.
- GUS (2010d). *Podmioty gospodarki narodowej według sektorów i form własności*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_10m19_01.pdf; accessed 2012-03-12.
- GUS (2010e). *Podmioty gospodarki narodowej według sektorów własności i rodzajów*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/warsz/ASSETS_10_wwa_19_06.pdf; accessed 2012-03-12.
- GUS (2010f). *Podmioty gospodarki narodowej według sektorów własności i wybranych form prawnych*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/wroc/ASSETS_10_11_01.pdf; accessed 2012-03-12.
- GUS (2010g). *Bezrobotni zarejestrowani, stopa bezrobocia oraz oferty pracy*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/wroc/ASSETS_10_04_02.pdf; accessed 2012-03-12.
- GUS (2010h). *Bezrobotni zarejestrowani w urzędach pracy*. Available at: http://www.stat.gov.pl/cps/rde/xbcr/lodz/ASSETS_10m06_08.pdf; accessed 2012-03-12.
- GUS (2011). *Miasta w liczbach 2009, CD Appendix*. Warszawa (Główny Urząd Statystyczny w Poznaniu).
- HAGGETT, P. (1965). *Location analysis in human geography*. London (Edward Arnold).
- HAGGETT, P. (2001). *Geography: a global synthesis*. Harlow (Pearson Education).
- HUBBARD, P., KITCHIN, R., VALENTINE G. (2004) *Key thinkers on space and place*, London (Sage).
- IRA, V. (2001). Transformačné procesy a vnútromestská štruktúra Bratislavy v 90. rokoch. In Mariot, P., Mikulík, O., eds. *Stav a vývoj socioekonomického systému v SR a v ČR na prelome tisícročí*. Bratislava (Geografický ústav SAV), pp. 58-62.
- IRA, V. (2004). City in the mind: behaviorálno-geografické hodnotenie kvality života v meste. *Geografické štúdie*, 12, 46-52.
- IRA, V. (2005). Quality of life and urban space (case studies from city of Bratislava, Slovakia). *Europa XXI*, 12, 83-96.
- IRA, V., ANDRÁŠKO, I. (2008). Quality of life in the urban environment of Bratislava: two time-spatial perspectives. *Geografický časopis*, 60, 149-178.
- JAKÓBCZYK – GRYSZKIEWICZ, J. (1998). *Przeobrażenia stref podmiejskich dużych miast. Studium porównawcze strefy podmiejskiej Warszawy, Łodzi i Krakowa*. Łódź (Wydawnictwo UŁ).
- JAKÓBCZYK-GRYSZKIEWICZ, J. (2011). Łódź u progu XXI w. *Studia Miejskie*, 4, 131-138.
- JANISZEWSKA, A. (2007). *Dobór przestrzenny i demograficzno – społeczny małżeństw zawieranych w Łodzi*. Łódź (Wydawnictwo UŁ).
- JESSE, E. (2010) *Systemwechsel in Deutschland: 1918/19-1933-1945/49-1989/90*. Köln (Böhlau).
- JEWUCHOWICZ, A., SULIBORSKI, A. (2009) Gospodarka Łodzi na przełomie XX i XXI wieku, In Liszewski S., ed. *Łódź monografia miasta*. Łódź (Łódzkie Towarzystwo Naukowe), pp. 400-409.

- KACZMAREK, J. (1996). *Dzienna ścieżka życia mieszkańców Łodzi a warunki życia w mieście*. Łódź (ŁTN).
- KACZMAREK, S. (1997). Marzenia mieszkańców Łodzi o warunkach zamieszkania. *Sprawy Mieszkaniowe, Instytut Gospodarki Mieszkaniowej*, 1, 62-72.
- KACZMAREK, S. (2001). *Rewitalizacja terenów przemysłowych: nowy wymiar w rozwoju miast*. Łódź (Wydawnictwo UŁ).
- KACZMAREK S., (2004). Tereny przemysłowe w miastach – problem czy wyzwanie?, In Słodczyk, J., ed. *Przemiany struktury przestrzennej miast w sferze funkcjonalnej i społecznej*. Opole (Wydawnictwo Uniwersytetu Opolskiego), pp. 155-163.
- KOŁODKO, G. W. (2005) Introduction: the seven lessons the emerging markets can learn from Poland's transformation. In Kolodko, G. W., ed. *The Polish miracle: lessons for the emerging markets*. Aldershot (Ashgate Publishing Limited), pp. 15-25.
- KOREC, P. (1997). New tendencies of manufacturing development in Bratislava. *Münchner Geographische Hefte*, 45, 131-140.
- KOREC, P. (1998). Transformation of the border transport system in the Vienna-Bratislava-Győr region. *European Planning Studies*, 6, 599-609.
- KOREC, P. (1999). Predpoklady zmien sociálno-priestorovej štruktúry slovenských miest. *Acta Facultatis Studiorum Humanitatis et Naturae Universitatis Prešovensis, Folia Geographica*, 3, 28-35.
- KOREC, P. (2002). The transformation of basic functions of Bratislava after 1989: trends and spatial consequences. *Acta Universitatis Carolinae. Geographica*, 37, 85-103.
- KOREC, P. (2003). Bratislava's perspective in Europe. *Hallesches Jahrbuch für Geowissenschaften, Reihe A: Geographie und Geoökologie*, 25, 7-17.
- KOREC, P. (2006). Changing urban structure of Bratislava at the beginning of 21st century. *Acta Geographica Universitatis Comenianae*, 46, 141-159.
- KOREC, P., DŽUPINOVÁ, E. (2000). Vývoj rozmiestnenia bytového fondu na území Bratislavy, zákonitosti a osobitosti tohto procesu. *Geografický časopis*, 52, 51-65.
- KOREC, P., ROCHOVSKÁ, A. (2003). Big cities of Slovakia, the laws and specific features of their development after 1989. In Kowalczyk A., ed. *Geographical space at the turn of the century. Theoretical and methodological challenges*. Warszawa (Warsaw University), pp. 65-73.
- KOTER, M. (1969). Geneza układu przestrzennego Łodzi przemysłowej. *Prace Geograficzne IG PAN*, 79, Warszawa (IGiPZ PAN).
- KOTER, M., KULESZA, M., PUŚ, W., PYTLAS, S., eds. (2005). *Wpływ wielonarodowego dziedzictwa kulturowego Łodzi na współczesne oblicze miasta*. Łódź (Wydawnictwo UŁ).
- KOTER, M., LISZEWSKI, S., SULIBORSKI, A. (2000). *Łódź i region Polski środkowej. Podręcznik wiedzy o regionie dla licealistów*. Łódź (ŁTN).
- KOTLIČKA, J. (2008). *Przemiany morfologiczne terenów przemysłowych Łodzi*. Łódź (ŁTN).
- KOTOWSKA, I. E. (1998). Teoria drugiego przejścia demograficznego a przemiany demograficzne w Polsce. *Studia Demograficzne*, 4, 3-36.
- KWIATKOWSKI, E. (2011). *Łódzki rynek pracy na tle dużych miast w Polsce, Presentation from conference: Monitorowanie rynku pracy dla edukacji Łódź 2011*. Accessed: http://www.obserwatorium.wckp.lodz.pl/konferencja_01.htm; accessed: 2012-02-12.
- LISZEWSKI, S. (1995). Zróżnicowanie przestrzenne poziomu i jakości warunków życia ludności w aglomeracjach miejskich (program badań, pierwsze wyniki). *Acta Universitatis Lodziensis, Folia Geographica*, 20, 207-221.
- LISZEWSKI, S. (2001). Model przemian przestrzeni miejskiej miasta postsocjalistycznego. In Jażdżewska, I., ed. *Miasto postsocjalistyczne – organizacja przestrzeni*.

- zeni miejskiej i jej przemiany: XIV Konwersatorium wiedzy o mieście. Łódź: (Wydawnictwo UŁ), pp. 303-310.
- LISZEWSKI, S., ed. (2001a). *Zarys monografii województwa łódzkiego*. Łódź (ŁTN).
- LISZEWSKI, S., ed. (2009a). *Łódź monografia miasta*. Łódź (ŁTN).
- LISZEWSKI, S. (2009b). Miejska przestrzeń eksploracji turystycznej. Przykład Łodzi. *Turyzm*, 19, 59-65.
- LISZEWSKI, S. (2009c). Wstęp, In Liszewski S., ed. *Łódź monografia miasta*. Łódź (Łódzkie Towarzystwo Naukowe), pp. 9-23.
- LISZEWSKI, S., ed. (2010). *Ruch turystyczny w Łodzi i województwie łódzkim w roku 2009*. Łódź (ŁTN).
- MAIK, W., SOKOŁOWSKI, D., JAROSZEWSKA – BRUDNICKA, R., BRUDNICKI, R. (1996) Miasta województwa toruńskiego w okresie transformacji systemowej. *Acta Universitatis Nicolai Copernici, Nauki Matematyczno – Przyrodnicze*. 97, 129-149.
- MARCIŃCZAK, S. (2006). *Przemiany struktury społeczno – przestrzennej Łodzi w latach 1988-2005*. PhD thesis, Katedra Geografii Miast i Turyzmu, Wydziału Nauk Geograficznych Uniwersytetu Łódzkiego, Łódź.
- MARCIŃCZAK, S., JAKÓBCZYK-GRYSZKIEWICZ, J. (2006) Lokalizacja wewnątrzmijska bezpośrednich inwestycji zagranicznych w Łodzi. *Przegląd Geograficzny*, 78, 515-536.
- MATCZAK, A., SZYMAŃSKA, D. (2000). Baza ekonomiczna małych miast powiatowych w świetle pomiarów bezpośrednich. Studium porównawcze Brodnicy i Łasku. In Ślodyczek, J., ed. *Społeczne, gospodarcze i przestrzenne przeobrażenia miast*, Opole (Uniwersytet Opolski), pp. 95-114.
- MATLOVIČ, R. (1999). Osłabienie wzrostu dużych miast słowackich jako skutek transformacji społeczno-ekonomicznej w ostatnim dziesięcioleciu. In Kaczmarek, J., ed. *Przestrzeń miejska – jej organizacja i przemiany: XII Konwersatorium wiedzy o mieście*. Łódź (Wydawnictwo UŁ), pp. 81-90.
- MATLOVIČ, R. (2001). Transformačné procesy a ich efekty v intraurbánnych štruktúrach postkomunistických miest. *Acta Facultatis Rerum Naturalium Universitatis Matthiae Belii, Geografické štúdie*, 8, 73-81.
- MATLOVIČ, R. (2003) Ville postsocialiste – nouvelle dynamique des structures intra-urbaines. *Hommes et Terres du Nord*, 4, 28-41.
- MATLOVIČ, R. (2004) Tranzitívna podoba mesta a jeho intraurbánnych štruktúr v ére postkomunistickej transformácie a globalizácie. *Sociológia*, 36, 137-158.
- MATLOVIČ, R., IRA V., KOREC, P., ONDOŠ, S. (2009). Urban structures and their transformation (the contribution of Slovak geography). *Geographia Slovaca*, 26, 71-99.
- MATLOVIČ, R., IRA, V., SÝKORA, L., SZCZYRBA, Z. (2001). Procesy transformacyjne struktury przestrzennej miast postkomunistycznych (na przykładzie Pragi, Bratysławy, Oľomuńca oraz Preszowa). In Jażdżewska, I., ed. *Miasto postsocjalistyczne - organizacja przestrzeni miejskiej i jej przemiany (2)*. Łódź (Wydawnictwo UŁ), pp. 9-21.
- MATLOVIČ, R., SEDLÁKOVÁ, A. (2007). Transformation processes of the urban space in postcommunist cities. In Malikowski, M., Solecki, S., eds. *Przemiany przestrzenne w dużych miastach Polski i Europy Środkowo-Wschodniej*. Kraków (Nomos), pp. 32-46.
- MICHÁLEK, A. (2004). Chudoba na lokálnej úrovni (centrá chudoby na Slovensku). *Geografický časopis*, 56, 225-247.
- MICHALSKI, T. (2005) *Changes in the demographic and health situation among post-communist members of the European Union*. Pelpin (Wydawnictwo Bernardinum).
- MICHALSKI, T. (2010) International transitions in Central Europe after 1989. In Michalski, T., Kuczabski, A., eds. *Selected aspects of transformation in countries of*

- Central and Central + Eastern Europe. A book dedicated to Professor Oleh Shabliy upon the 50th anniversary of scientific work.* Pelpin (Wydawnictwo Bernardinum).
- OBRANIAK, W. (2007). *Ludność Łodzi i innych wielkich miast w Polsce w latach 1984-2006.* Łódź (Urząd Statystyczny w Łodzi).
- OGRODOWCZYK, A. (2006). Budownictwo mieszkaniowe w strefie podmiejskiej Łodzi – przykład gminy Nowosolna, In Marszał T., ed. *Łódź wybrane zagadnienia zagospodarowania przestrzennego.* Łódź (Wydawnictwo UŁ), pp. 213-227.
- ONDOŠ, S., KOREC, P. (2006). Súčasnė dimenzie sociálno-demografickej priestorovej štruktúry Bratislavy. *Sociológia*, 38, 49-82.
- ONDOŠ, S., KOREC, P. (2008). The rediscovered city: a case study of post-socialist Bratislava. *Geografický časopis*, 60, 199-213.
- PARYSEK, J. (1998). Efekty procesu transformacji społeczno-gospodarczej w Polsce. Bilans okresu 1989-1996. In Parysek J., Rogacki H., *Przemiany społeczno-gospodarcze Polski lat dziewięćdziesiątych.* Poznań (Bogucki Wydawnictwo Naukowe), pp. 25-46.
- PARYSEK, J. (2002). Wewnętrzne i zewnętrzne uwarunkowania transformacji przestrzenno – strukturalnej i rozwoju miast polskich w końcu XX wieku. In Słodczyk, J., ed. *Przemiany bazy ekonomicznej i struktury przestrzennej miast.* Opole (Uniwersytet Opolski), pp. 15-32.
- PARYSEK, J. (2004) The socio-economic and spatial transformation of Polish cities after 1989, *Dela*, 21, 109-119
- PIECH, M. (2004). *Przemiany funkcjonalne terenów przemysłowych w latach 1988-1996 (W granicach kolei obwodowej).* Łódź (ŁTN).
- PIRVELI, M. (2001). Stratyfikacja społeczna i jej skutki przestrzenne. In Jażdżewska, J., ed. *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany (2): XIV Konwersatorium Wiedzy o Mieście.* Łódź (Wydawnictwo UŁ), pp. 47-54.
- RILEY, R. C. (1997a). Central area activities in post-communist City: Łódź, Poland. *Urban Studies*, 34, 453-470.
- RILEY, R. C. (1997b). Retail change in post-communist Poland. With special reference to Ulica Piotrkowska, Łódź. *Geography*, 52, 27-37.
- ROSIN, R., ed. (1980). *Łódź dzieje miasta, t.1.: do 1918 r.* Warszawa – Łódź (PWN).
- ROCHOVSKÁ, A., HORŇÁK, M. (2002): Sociálna polarizácia spoločnosti a jej regionálny priemet na území Slovenska a Bratislavy. *Miscellanea Geographica*, 9, 131-142.
- ROCHOVSKÁ, A., HORŇÁK, M. (2008). Chudoba a jej percepcia v marginálnych regiónoch Slovenska. *Geografia Cassoviensis*, 2, 152-156.
- RYDZ, E. (1994). *Przeobrażenie demograficzno-osadnicze struktur wewnętrznych aglomeracji nadmorskich.* Słupsk (WSP).
- RYDZ, E. (2001). Problem bezdomności w Polsce na przykładach miast Pomorza Środkowego. In Jażdżewska, J., ed. *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany (2): XIV Konwersatorium wiedzy o mieście.* Łódź (Wydawnictwo UŁ), pp. 121-134.
- SACHS, J. (1992) The economic transformation of Eastern Europe: the case of Poland. *Economics of Planning*, 25, 5-19.
- SŁODCZYK, J. (2000). Rola funkcji przemysłowej w miastach regionu opolskiego w świetle struktury pracujących. In Słodczyk, J., ed. *Spoleczne, gospodarcze i przestrzenne przeobrażenia miast.* Opole (Uniwersytet Opolski), pp. 287-200.
- SŁODCZYK, J. (2001). *Przestrzeń miasta i jej przeobrażenia.* Opole (Uniwersytet Opolski).
- SRUBAR, I. (1994) Variants of the transformation process in Central Europe. A comparative assessment. *Zeitschrift fur Soziologie*, 23, 198-221.
- SULIBORSKI, A. (2001). *Funkcje i struktura funkcjonalna miast.* *Studia empiryczne – teoretyczne.* Łódź (Wydawnictwo UŁ).

- SÝKORA, L. (1999) Changes in the internal spatial structure of post-communist Prague. *GeoJournal* 49, 79-89.
- SÝKORA, L. (2009) Post-socialist cities. In Kitchin, R., Thrift, N., eds. *International Encyclopedia of Human Geography*. Oxford (Elsevier), pp. 387-395.
- SÝKORA, L., BOUZAROVSKI, S. (2012) Multiple transformations: conceptualising postcommunist urban transition. *Urban Studies*, 49, 43-60.
- SZAFRAŃSKA, E. (2002). Przemiany struktury funkcjonalnej miast województwa łódzkiego. In Ślodziak, J., ed. *Przemiany bazy ekonomicznej i struktury przestrzennej miast*. Opole (Uniwersytet Opolski), pp. 181-192.
- SZAJNOWSKA – WYSOCKA, A. (1994). Przemiany funkcji Sosnowca w świetle rozwoju systemu instytucyjnego w okresie 1946-1987. In Koter, M., Tkocz, J., eds. *Zagadnienia geografii historycznej osadnictwa w Polsce*. Toruń, Łódź (Uniwersytet Mikołaj Kopernika w Toruniu, Uniwersytet Łódzki), pp. 153-160.
- SZAJNOWSKA – WYSOCKA, A. (1995a). *Podstawy zorganizowania miast konurbacji górnośląskiej*. Katowice (Wydawnictwo Uniwersytetu Śląskiego).
- SZAJNOWSKA – WYSOCKA, A. (1995b). Przestrzeń instytucyjna konurbacji górnośląskiej. In Dwucet K., Szczypek T., eds. *Wybrane zagadnienia geograficzne: pamięci geografów Uniwersytetu Śląskiego Józefa Szaflarskiego i Piotra Modrzejewskiego*. Sosnowiec (Wydział Nauk o Ziemi Uniwersytetu Śląskiego, Polskie Towarzystwo Geograficzne. Oddział w Katowicach), pp. 107-116.
- SZYMAŃSKA, D., PAPPELBON, J. (2001). Przystępczość w przestrzeni miejskiej na przykładzie miasta powiatowego Ostróda. In Jażdżewska I., ed. *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany (2): XIV Konwersatorium wiedzy o mieście*. Łódź (Wydawnictwo UŁ), pp. 77-94.
- SZYMAŃSKA, D., ŚRODA-MURAWSKA, S., BIEGAŃSKA J. (2008). Germany – two demographically different states? *Bulletin of Geography. Socio-economic Series*, 10, 85-31.
- SZYMAŃSKA, D., ŚRODA-MURAWSKA, S., ŚWIDERSKA, K., ADAMIAK, C. (2009). Internal migration in Germany in 1990 and 2005. *Bulletin of Geography. Socio-economic Series*, 12, 109-120.
- URZĄD STATYSTYCZNY W ŁODZI (1996, 2006, 2010). *Statystyka Łodzi*. Łódź (US w Łodzi).
- URZĄD STATYSTYCZNY W ŁODZI (1997-2010). *Rocznik statystyczny województwa łódzkiego*. Łódź (US w Łodzi).
- WALKIEWICZ, D. (2000). Przemiany strukturalne funkcji przemysłowych miast województwa płockiego w latach 1987-1994. *Acta Universitatis Lodzensis, Folia Geographica Socio Oeconomica*, 3, 113-129.
- WALKIEWICZ, D. (2006). *Przemiany struktury funkcjonalnej miast wojewódzkich w latach 1975-1995*. Łódź (Wydawnictwo UŁ).
- WARZYWODA – KRUSZYŃSKA W., GROTOŃSKA – LEDER, J. (1996), *Wielkomiejska bieda w okresie transformacji*. Łódź (Instytut Socjologii UŁ).
- WĘCŁAWOWICZ, G. (1999). Miasto polskie w transformacji – kształtowanie się miasta postsocjalistycznego. In Liszewski, S., ed. *Zróżnicowanie przestrzenne struktur społecznych w dużych miastach: XI Konwersatorium wiedzy o mieście*. Łódź (Wydawnictwo UŁ), pp. 33-44.
- WĘCŁAWOWICZ, G. (2001). Przestrzeń ubóstwa – nowy czy stary wymiar zróżnicowania społeczno – przestrzennego w miastach Polski. *Przegląd Geograficzny*, 73, 451-475.
- WIŚNIEWSKA, W. (2009). Przebudowa przestrzenna i funkcjonalna Łodzi po 1989 r. In Liszewski S., ed. *Łódź monografia miasta*. Łódź (Łódzkie Towarzystwo Naukowe), pp. 432-482.
- WOJEWÓDZKI URZĄD STATYSTYCZNY W ŁODZI (1985, 1989-1996). *Rocznik statystyczny województwa Łódzkiego*. Łódź.

- WOLANIUK, A. (1997). *Funkcje metropolitalne Łodzi i ich rola w organizacji przestrzeni*. Łódź (ŁTN).
- WOLANIUK, A. (2006). Przemiany funkcji metropolitalnych Łodzi na przełomie XX i XXI wieku. In Słodczyk, J., Szafranek, E., ed. *Kierunki przekształceń struktury gospodarczej i społeczno-demograficznej miast*. Opole (Wydawnictwo Uniwersytetu Opolskiego), pp. 33-46.
- WOLANIUK, A. (2010). *Uniwersytety i ich rola w organizacji przestrzeni*. Łódź (Wydawnictwo UŁ).
- ZBOROWSKI, A. (2001). Procesy globalizacji w mieście postsocjalistycznym, In Jazdzewska I., ed. *Miasto postsocjalistyczne – organizacja przestrzeni miejskiej i jej przemiany (2): XIV Konwersatorium wiedzy o mieście*. Łódź (Wydawnictwo UŁ), pp. 95-106.
- YOUNG, C., KACZMAREK, S. (2008). The socialist past and postsocialist urban identity in Central and Eastern Europe. The Case of Łódź, Poland. *European Urban and Regional Studies*, 15, 53-70.

Waldemar C u d n y

SOCIÁLNE A HOSPODÁRSKE PREMENY V LODŽI – VÝSLEDKY DVADSIATICH ROKOV TRANSFORMÁCIE

Témou článku sú sociálne a hospodárske premeny poľského mesta Lodž, ktoré sú výsledkom celkovej politickej transformácie v Poľsku od roku 1989. Autor načrtáva dosah transformácie na demografickú, sociálnu, funkčnú a hospodársku štruktúru Lodže. Opisuje pohyb obyvateľstva po roku 1989. Upozorňuje na fakt, že v 90. rokoch minulého storočia poklesol nárast obyvateľstva a migračná bilancia sa prehupla do negatívnych čísel. Následkom toho mesto začalo rýchlo strácať obyvateľov a prišlo o druhú priečku v rebríčku miest s najvyšším počtom obyvateľov v Poľsku. Obyvateľstvo Lodže starne od roku 1989, a to predstavuje vážny problém pre budúcnosť. Významným sociálnym dôsledkom transformácie bol vznik masovej nezamestnanosti, ktorá je v Lodži dodnes najvyššia v porovnaní s ostatnými veľkými mestami Poľska. Jej úroveň neklesla až do hospodárskeho oživenia po vstupe Poľska do EÚ.

Ďalej autor v článku diskutuje o hospodárskych a funkčných premenách mesta. Prvým následkom transformácie bol rozpad nmoderného textilného priemyslu a vstup mesta do postindustriálnej fázy. V súčasnosti už priemysel nezohráva takú významnú rolu v zamestnaneckej štruktúre Lodže (30 % roku 2008). Iné zmeny sa týkali aj samotného profilu priemyslu: tradičný textilný priemysel nahradili moderné odvetvia, ako výroba domácich elektrospotrebičov a elektronický priemysel. Súčasne sa rozvíjali služby. Badať to v dominancii tohto sektora v zamestnaneckej štruktúre. Do mesta prišli nové veľké investície do služieb v podobe veľkých nákupných stredísk. Zmeny v hospodárstve priniesli aj intenzívnu privatizáciu a globalizáciu evidentnú vo veľkom množstve zahraničných investícií.

Predložené analýzy jasne ukazujú, že najväčšou hrozbou pre mesto Lodž je demografická kríza. Okrem toho je ešte vždy problémom nezamestnanosť a nízke mzdy. Naopak, medzi pozitívne prvky patrí modernizácia hospodárskej a funkčnej štruktúry mesta, ako aj prílev zahraničného kapitálu (moderné priemyselné technológie). Je potrebné zdôrazniť, že v súčasnosti má Lodž dve protichodné perspektívy: pozitívnu spojenú s priaznivými funkčno-hospodárskymi premenami a negatívnu spojenú so sociálnymi problémami. Ak budú pozitívne zmeny v hospodárstve pokračovať, je možné, že sa v budúcnosti zlepši aj demografická situácia, napríklad zvýšeným prírastkom obyvateľstva alebo migráciou.

