# THE IMPACT OF SUBURBANISATION IN THE HINTERLAND OF PREŠOV (SLOVAKIA)

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#### **Abstract**

The impact of suburbanisation on the hinterland of Prešov, the third largest town in Slovakia, is presented in the current study. Significant aspects of suburbanisation – selective migration, the spatial differentiation of housing conditions in the suburban zone, social and economic segregation, as well as commercial activities and their distribution, and/or the collapse of a geographical hierarchy – are singled out for particular attention. A theoretical framework is outlined in the first part, based on a brief review of the suburbanisation process and its conceptualisation, as well as its attributes and spatial forms. The specific situation in post-communist countries is briefly analysed. The empirical research subsequently reported in this study, explores basic processes occurring in the Prešov hinterland due to suburbanisation.

#### Shrnutí

### Projevy suburbanizace v zázemí města Prešova (Slovenská republika)

Příspěvek zaznamenává prvotní projevy suburbanizace v zázemí Prešova, třetího největšího města Slovenska. Cílem je především poukázat na některé výrazné aspekty suburbanizace v příměstské zóně, jako jsou selektivní migrace, prostorová diferenciace bydlení, sociální a ekonomická segregace, stejně jako komerční aktivity a jejich rozšíření v zázemí města, či kolaps geografické hierarchie. Teoretická část podává stručný přehled o procesu suburbanizace, konceptualizace příměstské zóny, následně i o atributech a prostorových formách suburbanizace. Stručně jsou analyzovány i specifika suburbanizace v postkomunistických zemích. Empirická část příspěvku představuje základní suburbanizační proscesy v zázemí města Prešova.

**Keywords**: suburbanisation, suburban zone, hinterland, Prešov, post-communist towns, intra-urban structures, selective migration, Slovakia

#### Introduction

**Suburbanisation** is one of the main transformation processes that participate in the changes of the spatial organisation of towns, especially their suburban zones, in the post-communist countries. It is the process occurring in the industrial and post-industrial phase of urbanisation. Through this process the rate of urbanisation is growing of areas lying in the suburban zone and spatially separated from the compact town (the core of town agglomeration). The increase of urbanisation results largely from the development of residential areas as a consequence of the immigration of inhabitants from the inner compact town motivated by desire for higher quality of living and healthier environment, being conditioned by technological progress in transport. On the one hand, the residential suburbanisation is followed by the movement of jobs and commercial activities from the town centre and inner city into the suburban zone, and on the other hand, it is accompanied by the rise of new activities and their permanencies, i.e. commercial suburbanisation, which can at its advanced stage lead to existence of rival marginal towns competing with the original agglomeration. Eventually, the suburbanisation process may end in the change from a mono-centric urban structure into a polycentric one (Matlovič, Sedláková, 2004).

# Theoretical – methodological concept of suburbanisation (a brief survey)

According to Matlovič (2001), suburbanisation is a complex transformation process of contemporary post-communist cities. It occurs in all partial structures of the town (morphological, functional, and socio-demographic). Key space for suburbanisation is represented by a so called suburban zone (rural-urban fringe). Reasons for transformation processes in post-communist cities vary in literature. However, most authors agree on two general factors: (1) factor of socio-economic transformation

conditioned by the fall of social regime at the turn of the 1980s and 1990s; (2) factor of globalisation (Matlovič, 2001). The first case concerns the transformation from communist to capitalist city. The process is accompanied by the change of centrally planned economy to market controlled system, changes in private property, ground rent, and democratisation of political life. In the case of globalisation, trends observed in postcommunist cities are as follows: internationalisation of investment and labour, deregulation of public sector force, deindustrialisation, technological changes, community polarisation, sustainable development advocacy, and the postmodern way of urban life (Matlovič, 2001). According to Zborowski (2000), a tertiarisation occurs in the centre of big Central European cities (concentration of hotels, financial centres, business) and commercionalisation and commercial suburbanisation occurs not far from the centre, around the administrative town limits (hypermarkets, shopping centres). A new space of residential suburbanisation is forming in the suburban zone. Bednář (2003) maintains that the process of commercial suburbanisation in post-communist towns emerges mainly from the transformation and change in the spatial distribution of retail network. Transformation has been realised through price liberalisation, private business opportunities, dissolution of state monopoly, entry of new business entities, privatisation, etc. Transformation appeared with the establishment of the new concept of retail sale – hypermarkets which have brought a radical change into the use of farmland. It mostly concerns land properties at town peripheries. The process of suburbanisation brings the turn of migration from city towards periphery, change in housing structure in town, social segregation, and social stratification. Suburbanisation depends on the size and significance of a town. Most significant signs of suburbanisation could be found around big cities and metropolises. Less significant signs of suburbanisation are to be found also in the vicinity of medium-sized towns.

Suburbanisation development outcomes generally in extensive colonies of family houses built on "green field" in the suburban part of a town. Administratively, this area is not a part of the town but rather of its nearby communities. Eventually, there are changes in the distribution of population between the city and the suburban zone. Central city is loosing its population at the expense of its rural hinterland. Residential suburbanisation is followed by commercial suburbanisation characterised by the shift of services, business and manufacture activities to the suburban zone. In some cases, the central city consequently shows stagnation or even decline. In the last decades, a new phase of suburbanisation and a postmodern suburbanisation are observed (Matlovič, Sedláková, 2003). This phase is characterised by the formation of suburban downtowns that are independent from the

core of the city or from the metropolitan area. Suburban downtowns grow mostly owing to cityward flow from other suburban areas (Ouředníček, 2002 in Matlovič, Sedláková, 2003). Besides the typical commercial activities (wholesale, hypermarkets, industrial parks, transport infrastructure) in the postmodern phase of suburbanisation there are also other non-production activities emerging (high-order business services) which were until recently dominant in the city (e.g. banking, insurance, economy consultancy, real estate agencies, computer and information services, management and marketing firms, solicitorship, science and research).

Sprawling of towns into their surroundings has various forms. New developing areas might be concentrated around the compact town, but also individually scattered in many small localities and rural settlements in wide town surroundings. Sprawling town creates areas with the developing residential and commercial suburbanisation. Agriculture land is replaced by residential and commercial structures. New residential areas and reconstructed parts of villages are accompanied by growing shopping centres, hypermarkets, supermarkets, stores, and industrial zones. One of the typical forms of spatial growth of towns is so-called *urban* sprawl. Sprawl is typical for US countries. Other suburbanisation forms include *leapfrog* development. It is a non-compact development resulting in individual urban areas separated by an open space. Town expansion into the open country is not rapid and regular, but it spreads haphazardly, making marked and fast steps only in one or few directions; other areas, on the other hand, do not develop or even stagnate. The development goes usually along radial communications leading off the compact town. In that case we speak of ribbon development.

### The impact of suburbanisation on the example of Prešov hinterland

Suburbanisation has significant economic, social, and environmental consequences. Low density building brings a marked spatial segregation of human activities like living, housing, employment, shopping, etc. Suburban forms of settlement impose higher claims upon energy, time, space, and finance. People living in isolated residential zones are intensely dependent on commuting by their own car to work, school, for services, culture, and entertainment. The high spatial concentration of certain functions and their considerable spatial segregation produce constant transportation flows impacting environment quality. The social impact of suburbanisation is characterised mostly by segregation and selective migration. There are migrations from the central town to suburban zones realized by households with higher social status. Successively, a segregation between the suburban and inner parts of a town may

emerge. Luxurious family houses in rural land are being established almost exclusively by inhabitants with above-average incomes and with academic education. Their social status is in a conspicuous contrast with that of the country's autochthonous population (Sýkora, 2001).

In connection with the impact of suburbanisation on the society, Pahl (1965) speaks of a so-called collapse of geographical and social hierarchies. Instead of rounded bundles of functions at particular hierarchical levels collected at appropriate nodes, the whole process precipitates by population's mobility. Likewise, the segregation of incoming groups with their links back to the city undermines the traditional social hierarchies of rural areas. Functions and services move towards customers from centre to suburbs. Unexploited land properties remain in inner cities with old industrial deteriorating buildings, and with markedly soil-polluted areas (brownfields). Developers prefer greenfields for new construction. The purchase of land for development leads to the loss of productive farmland, smaller units, and fragmentation of holdings (Sedláková, 2003).

In the following part of the paper we will describe some of the problems concerning the impact of suburbanisation.

### SLOVAKIA

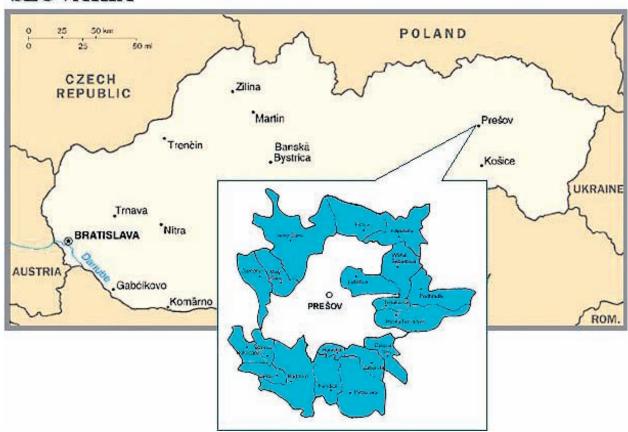


Fig.1: The geographical location of Prešov and communes in its suburban zone

### Selective migration in the hinterland of Prešov

Migrations from central town to suburban zones realized by households with higher social status is generally a typical feature of suburbanisation. The town is distinguished by the fall of migration increase, gradually changing into migration decrease of its population. On the contrary, the hinterland of a town and the surrounding villages notice the inflow of city like immigrants who participate in residential suburbanisation in that area. However, the intensity of migration within the suburban zone is distributed unequally. There is a qualitative and quantitative selection, namely the number of immigrants, their education, origin, and the target area they have

selected. These tendencies are being observed in the hinterland of the town of Prešov as well (Tab. 1, 2).

A recent analysis has shown that the suburban zone of Prešov was in 1996–2003 spatially differentiated in terms of migration increase of population (Tab. 2). Villages with the highest average annual migration increase (over 10‰) were Ľubotice, Záborské and Petrovany. A rather high migration increase (7-10‰) can be identified also in Podhradík, Dulová Ves, Fintice, Veľký Šariš, Vyšná Šebastová, and Župčany. Other villages experienced either a less significant migration increase (Bzenov, Haniska, Kapušany, Kendice, Malý Šariš, Rokycany, Ruská Nová Ves, Teriakovce), or even

YEAR	Number of population	Migration increase/ decrease		Natural increase/ decrease		Total increase/ decrease		
		abs.	%0	abs.	%0	abs.	%0	
1991	87 475	656	7.5	823	9.4	1479	16.9	
1992	88 954	292	3.3	812	9.1	1104	12.4	
1993	90 058	100	1.1	805	8.9	905	10.0	
1994	90 963	484	5.3	566	6.2	1050	11.5	
1995	92 013	168	1.8	506	5.5	674	7.3	
1996	92 687	-12	-0.1	472	5.1	460	5.0	
1997	93 147	-70	-0.8	384	4.1	314	3.4	
1998	93 461	-24	-0.3	353	3.8	329	3.5	
1999	93 790	-111	-1.2	298	3.2	187	2.0	
2000	93 977	-127	-1.4	208	2.2	81	0.9	
2001	92 774	-207	-2.2	122	1.3	-85	-0.9	
2002	92 584	-366	-3.9	132	1.4	-234	-2.5	
2003	92 375	-471	-5.1	132	1.4	-339	-3.7	
total:		312		5.613		5.925		

Tab. 1: The population movement balance in Prešov in 1991 - 2003

COMMUNITY	1996	1997	1998	1999	2000	2001	2002	2003	1996 - 2003		
	Migration increase/ decrease (%o)										
Bzenov	8.70	7.03	5.55	-1.39	-18.23	-2.74	9.67	0.00	1.07		
Dulová Ves	0	17.95	10.70	1.76	-3.51	15.25	6.71	9.98	7.36		
Fintice	-5.47	-2.04	10.82	16.58	6.47	11.10	3.06	16.15	7.08		
Haniska	7.68	-1.90	15.04	-15.30	7.60	5.33	29.31	-10.53	4.65		
Janov	0	-3.94	11.90	0	-15.75	3.61	-7.09	14.49	0.40		
Kapušany	13.51	6.20	2.04	-0.50	7.55	11.24	-2.44	3.38	5.12		
Kendice	8.20	-4.79	11.52	8.60	12.31	6.16	1.24	0.61	5.48		
Lubotice	19.08	3.52	1.74	18.08	8.04	-6.29	46.15	32.76	15.39		
Malý Šariš	1.81	5.27	1.68	-6.60	-1.59	-12.42	19.70	16.31	3.02		
Petrovany	4.86	19.21	16.61	-6.48	0	14.70	21.75	15.18	10.73		
Podhradík	-6.08	6.02	3.05	9.26	-8.93	45.32	5.88	28.65	10.40		
Radatice	-8.96	-13.00	-14.27	11.78	1.30	-5.26	-3.96	0.00	-4.05		
Rokycany	4.59	3.01	-2.97	-1.45	2.84	0	4.03	-3.96	0.76		
Ruská Nová Ves	9.07	-3.38	-10.20	4.41	12.04	6.51	-6.38	6.27	2.29		
Teriakovce	5.17	-23.75	-13.30	0	12.95	23.02	2.53	10.05	2.08		
Veľký Šariš	19.87	0	-30.00	10.17	9.77	6.62	23.10	31.97	8.94		
Vyšná Šebastová	8.20	10.09	0	0	3	5.23	19.65	22.91	8.63		
Záborské	4.68	2.34	6.94	-2.34	47.40	53.53	26.48	12.17	18.90		
Župčany	0	16.55	7.78	-3.39	11.07	7.43	12.37	8.72	7.57		
Prešov	-0.13	-0.75	-0.26	-1.18	-1.35	-2.23	-3.95	-5.11	-1.87		

Tab. 2: The migration balance between Prešov and its hinterland communities in 1996-2003 Source: Statistical Office of SR

a migration decrease (Radatice). In terms of absolute figures, most people moved to Kanaš¹, Záborské, Kendice, Vyšná Šebastová.

An important factor when identifying suburbanisation and evaluating the selective migration and suburbanisation impact in the hinterland is the origin of immigrants moving to the suburban zone. By the origin of immigrants we mean the place from which the immigrants moved (their former residence). An important and peculiar feature to suburbanisation is in that case a rather

high percentage of immigrants comming from the town of Prešov. The greatest share of immigrants from Prešov (over 70%) shows the comune of Kanaš and the community of Vyšná Šebastová. Other villages with a high share of immigrants originating from Prešov (60%-70%) are Lubotice, Veľký Šariš, Podhradík, and Haniska. The immigrants of Prešov origin predominate also in the village of Záborské, Malý Šariš, and Fintice (50%-60%). Immigrants comming from other, mostly neighbouring communities and towns dominate in the remaining part of the area under study.

 $<sup>1)\</sup> Kana \check{s}-a\ commune\ within\ the\ administrative\ area\ of\ Velk\acute{y}\ \check{S}ari\check{s}.\ In\ further\ analyses\ we\ will\ concentrate\ only\ on\ Kana\check{s},\ not\ on\ the\ town\ as\ a\ whole.$ 

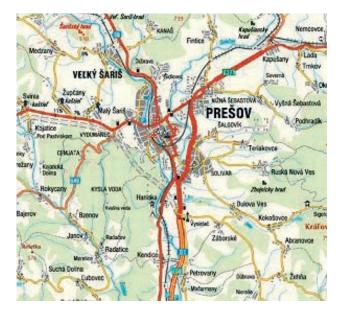


Fig.2: The town of Prešov and its hinterland

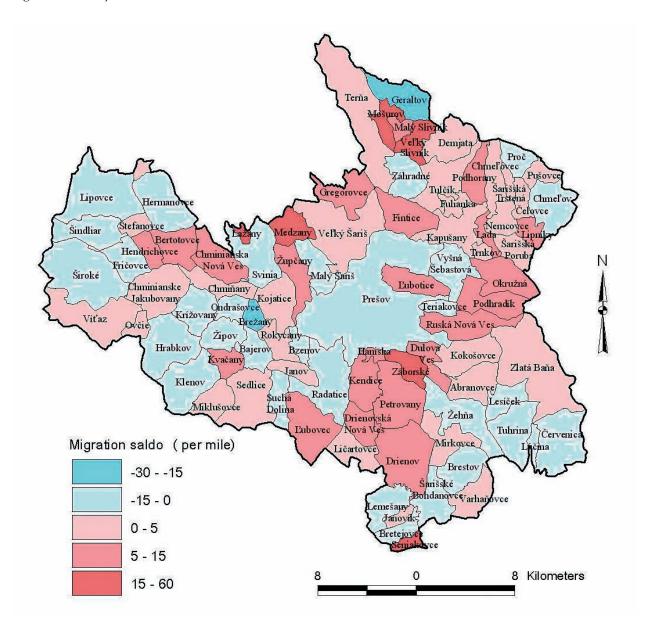


Fig. 3: The balance of migration within communities of the Prešov district in 1996-2004

The social structure of population movement has been studied on the basis of migration characteristics, since no more detailed data were available at the moment. It would be also useful to take into account data concerning the economic structure and the financial situation of residents. This would also help to even closer specify the

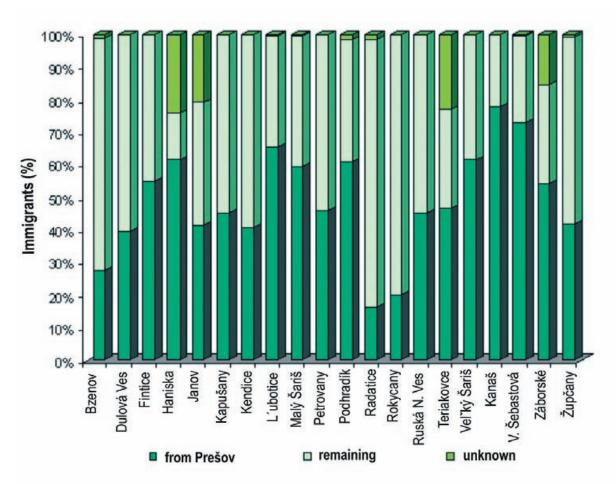


Fig. 4: The origin of immigrants coming from selected communities of the Prešov hinterland (1991-2002)

areas with the developing suburbanisation, which will be the goal of a further research.

# Contrast in the population's education structure in the Prešov hinterland

Education of immigrants is another factor that contributes to social disparities among people in the suburban zone. People moving from the inner town to peripheries are usually of a higher social status, their education being mostly academic. Gradually, a significant contrast may grow between people from the inner town and its periphery. Within our research area of Prešov and the town's surroundings we have identified communities which recorded a significant increase of inhabitants with academic education emigrating from Prešov in the last years. Suburbanisation is quite well developed in these communities.

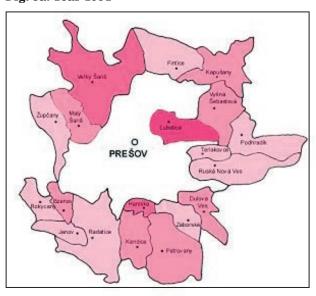
In 1991, the highest shares of highly educated inhabitants were recorded in Lubotice (6.7%), Haniska

(5.2%) and Veľký Šariš (4.2%). A rather low percentage of people with academic education was found in Janov, Podhradík, Rokycany, Radatice, Teriakovce, and Záborské (Fig. 5a). The situation changed at the end of the 1990s. Several communities come to the fore, the number of people with academic education is growing there rather markedly (Fig. 5b). Significant changes in educational structure, especially the growth of highly educated people, were identified in Lubotice, Podhradík, Haniska, Vyšná Šebastová, Záborské and the town Veľký Šariš with its commune of Kanaš.

# Spatial differentiation of housing in the suburban zone, solitary residential areas with above-standard housing

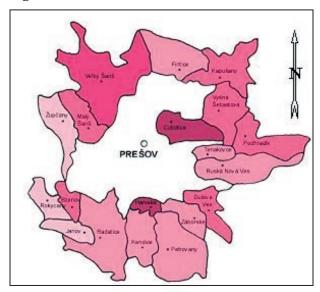
The process of residential suburbanisation brings a certain differentiation of living and housing in the town hinterland. The process does not develop evenly in all directions, but there is a qualitative selection. People coming from the town prefer a quiet, tranquil and

Fig. 5a: Year 1991



10%

Fig. 5b: Year 2001



6

Share of inhabitants with a cademic education

Figs. 5a, 5b: Development of the share of population with academic education in the hinterland of Prešov in 1991-2001.

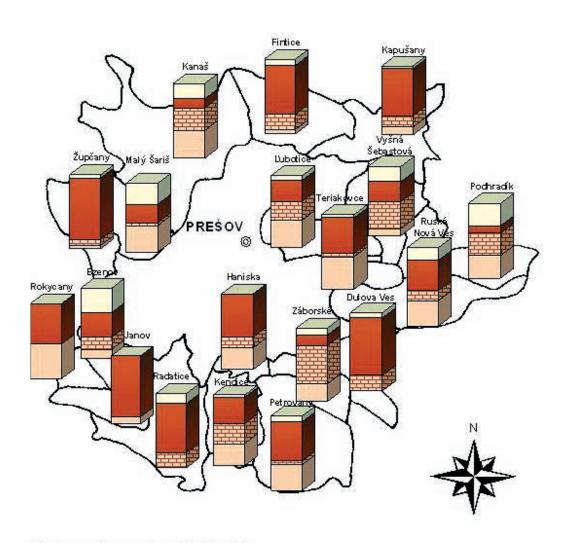
healthy environment with an easy access to the city and with a high-quality infrastructure. The new residential areas are characterised by a specific architectural style - mostly family houses, villas, houses built to order and above-standard houses. We have identified such constructions and areas in the commune of Kanaš in the town Veľký Šariš, Záborské, Ľubotice, and Teriakovce (Figs. 6-10 – see cover p. 3). In the near future it is possible to identify the suburbanisation processes (with reference to the number of building permits and structure of builders -Fig. 11) also in Vyšná Šebastová, Teriakovce, Malý Šariš, Kapušany, and Fintice. In terms of spatial form, it is a dispersed development accompanied by the construction of solitary objects on the open land in the above communities. Another spatial form of residential suburbanisation in our area is a leap-frog development, which has a character of smaller clustered family houses separated from other compact areas by unbuilt open lands. Allochthonous inhabitants strongly contrast with autochthonous people and create spatially and socially isolated zones within or at the periphery of the community. Immigrants from the city bring with them the urban way of life, intensely bound to the city both in terms of work and recreation.

# Commercial suburbanisation and its impact in the hinterland of Prešov

As we have already mentioned, residential suburbanisation is followed by the movement of new jobs and commercial

activities from the centre and inner city into the suburban zone. This is accompanied by the rise of new activities and their permanency, i.e. commercial suburbanisation, what can in its advanced phase lead to the development of rival marginal towns competing with the original agglomeration. Eventually, the suburbanisation process may end in the change from monocentric urban structure into polycentric one. Commercial areas such as shopping centres, hypermarkets, supermarkets, department stores, warehouses, industrial objects, car services and car stores, and services of various character nowadays follow the trend of suburban development, concentrating along the important transport communications, slip roads and railways and leaving the central city. Commercial areas are distributed unevenly and sporadically on greenfields. They take and fill the areas formerly exploited by agriculture. The model of such an suburban development is slowly emerging also in the hinterland of Prešov. There are several areas with the concentration of commercial objects in this town, whose highest density is observed along main roads leaving the city: international communications E 50, 1/68, highway D1 Prešov - Budimír (community 11 km NE from Prešov), and 1st class road No. 18 with the following streets: Bardejovská, Duklianska, Košická, Levočská, and Petrovanská (see Figs. 12, 13).

However, the processes of commercial suburbanisation in the town of Prešov are of lesser significance and their impact is therefore rather low, too. Some persisting



## The type and percentage of builders in selected communities (%):

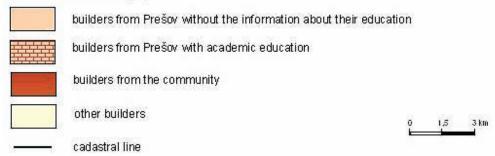


Fig. 11: Builder types and percentages in selected communities (%) Author: A. Sedláková

problems are seen in unregulated development, land fragmentation, high heavy trafficked roads, impersonalization, and many others. In the Prešov area there are many commercial objects situated not exclusively along the important communications, but they can be also found in housing estates and near the centre (e.g. Kaufland in the housing estate of Sídlisko III., Billa in the housing estate of Sekčov). On that account we state the opinion that the commercial suburbanisation in the hinterland of Prešov is now in its initial phase of development.

### Conclusion

Suburbanisation is one of the main transformation processes that participate in the changes of the spatial organisation of towns, especially their suburban zones, in the post-communist countries. The process is characterised by the development of residential areas q.v. the result of immigration of inhabitants from the inner compact town motivated by the desire for higher quality of living and healthier environment, and is conditioned by the technological progress in



Fig. 12: Supermarket Baumax in the hinterland of Prešov (Photo A. Sedláková)

transport. The residential suburbanisation is followed by the commercial one. There are two general factors for the transformation processes in post-communist cities according to the majority of authors: the factor of socio-economic transformation conditioned by the fall of social regime at the turn of the 1980s and 1990s, and the globalisation factor. Suburbanisation has significant economic, social, and environmental consequences. Low density building brings a considerable spatial segregation of human activities such as living, housing, employment, shopping, etc. High spatial concentration of certain functions and their considerable spatial segregation produce constant transportation flows which impacts the quality of living environment. The social impact of suburbanisation is characterised mostly by segregation



Fig. 13: Supermaket Kaufland in the hinterland of Prešov (Photo A. Sedláková)

and selective migration. Luxurious family houses in rural land are being established almost exclusively by inhabitants with above-average incomes and academic education. Commercial areas are distributed unevenly and sporadically on greenfields. They concentrate along important transport communications, slip roads and railways leaving the central city. They take and fill the areas formerly exploited by agriculture. However, the processes of commercial suburbanisation in the town of Prešov are of less significance, therefore their impact is rather low as well. To conclude, as many authors say, it is impossible to stop the process of suburbanisation therefore it is inevitable to take measures for its controlled development.

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Fig. 6: Residential suburbanisation in Záborské



Fig. 7: New suburban houses in Lubotice



Fig. 8: New suburban houses in Lubotice



Fig. 9: New suburban houses in Lubotice



 $Fig.\ 10: Residetial\ suburbanization\ near\ Pre\'sov$ 

Figs. 6-10: Examples of family houses in the suburban zone of Pre'sov

 $(Photo\,A.\,\,Sedl\'{a}kov\'{a})$