

Édité par l'Université des Sciences et Technologies de Lille

# ESPACE

avec le concours des Universités d'Artois, de Picardie, Paris I, Liège,

# POPULATIONS

de l'Université Libre de Bruxelles, de l'Université Catholique de Louvain

# SOCIÉTÉS

et du Centre National de la Recherche Scientifique

**extrait**

**extract**



Luděk SÝKORA  
Zdeněk ČERMÁK

Department of Social Geography  
and Regional Development,  
Faculty of Science,  
Charles University,  
Albertov 6, 128 43  
Praha 2  
Czech Republic

# City growth and migration patterns in the context of 'communist' and 'transitory' periods in Prague's urban development

---

## INTRODUCTION

The main aim of this contribution is to overview the role of migration in Prague's urban development during both communist period and post-1989 transition. At the beginning, we outline the population growth of Prague in past 150 years and changes in the intra-urban pattern of population

growth and decline. Next sections are devoted to migration. We focus on both the role of migration in the overall population growth of the city as well as on the intra-urban migration which importantly shapes the spatial distribution of population within the city.

---

## THE GROWTH OF THE CITY AND INTRA-URBAN PATTERN OF POPULATION CHANGE

Prague has always been the largest settlement at the top of urban hierarchy in the Czech Republic. Prague's share on the population of the country has increased, since the beginning of urbanisation in the first half of 19<sup>th</sup> century, from two to twelve percent. Its population has grown ten times from 120 thousand in 1850 to 1.2 million at the end of the 20<sup>th</sup> century.

The city growth started in the first half of the 19<sup>th</sup> century, conditioned by rapid industrialisation and, in the context of Central and Eastern Europe, relatively early urbanisation. At that time Bohemia and Moravia were the most industrialised parts of the Austro-Hungarian Empire, and their settle-

ment structure was quickly transformed by the first wave of urbanisation, based on the rapid concentration of population into large cities and their metropolitan areas and to the newly industrialised regions (Musil and Ryšavý 1983). The extensive urbanisation and concentration into large settlements continued between two world wars. At that time, the development in Prague metropolitan area got a new impetus with Prague gaining the status of capital city. The population of Prague reached the level of one million just before the beginning of the Second World War.

The Second World War resulted in population decline and the pre-war size of the city

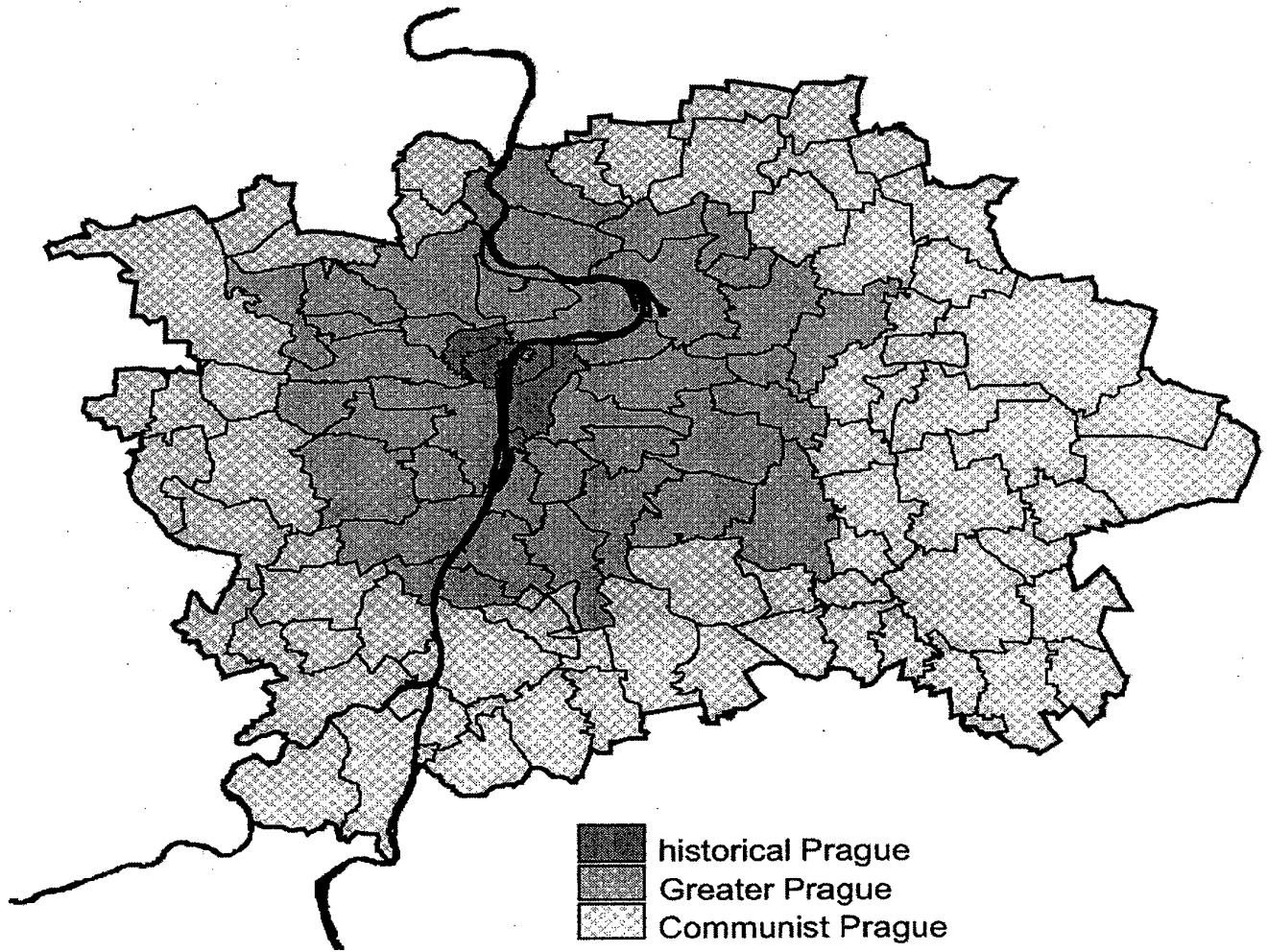


Figure 1. The growth of Prague's territory: historic, Greater and Communist Prague

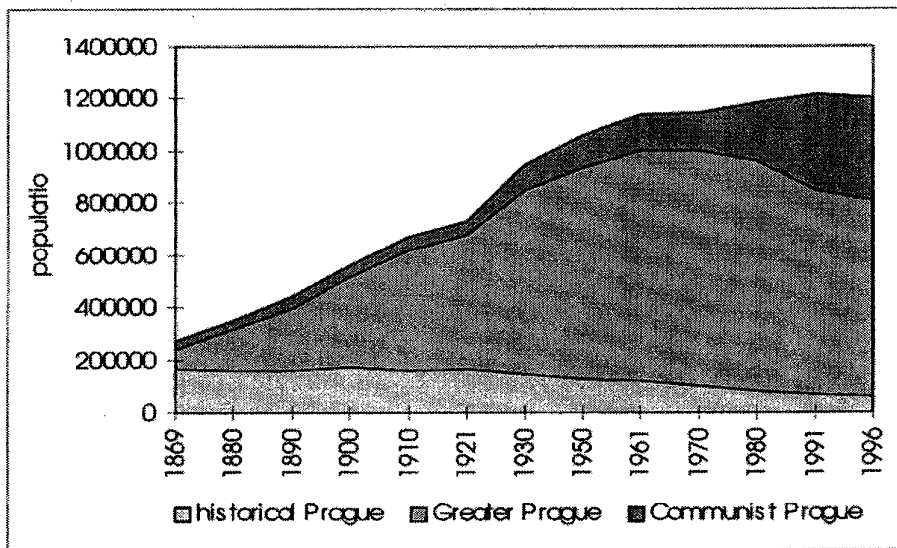


Figure 2. Population growth of Prague (1869-1996)

**Table 1. Population growth (in thousands) for three spatial delimitation of Prague and share of Prague (in present boundaries) on the population of the Czech Republic 1869-1996**

year	historical Prague	Greater Prague	Communist Prague	share on Czech Rep.
1869	161	240	270	3.58
1880	160	314	349	4.25
1890	160	397	437	5.04
1900	171	514	559	5.97
1910	157	616	668	6.62
1921	166	677	730	7.29
1930	148	849	949	8.89
1950	123	933	1 057	11.89
1961	118	998	1 133	11.84
1970	100	999	1 141	11.63
1980	80	959	1 182	11.49
1991	64	849	1 214	11.77
1996	57	810	1 205	11.68

was not regained until 1957 (Sýkora and Štěpánek 1992). During communism, the central planning was used to influence trends in urban and regional development. Investments into small and middle size cities were preferred, while Prague suffered by lower rate of capital inputs. This has changed only in the 1970s. However, in this time both the demographic revolution and the urbanisation process were far behind their peaks. The rate of population growth as well as the rate of concentration of population to cities was declining. Consequently, the rate of growth of Prague's population during communism was moderate in comparison with the period between 1850-1940. Since 1993, Prague's population has been decreasing.

The city grew through concentric additions each of them concentrating population growth in particular time periods. Looking at the territorially differentiated population growth, we use a three territorial delimitation of Prague which respects the development of city administrative boundaries. The first is historical Prague (8 km<sup>2</sup>), second is Greater Prague formed in 1922 as the capital city of Czechoslovakia (198 km<sup>2</sup>), and third is Communist Prague (496 km<sup>2</sup>), which was created in 1974 and has not changed until present (Figure 1). The population development within the three cities of Prague is shown in Table 1 and Figure 1.

Until the beginning of the 19<sup>th</sup> century, the growth of Prague concentrated within the fortification of the historical Prague. The population of historical Prague reached its population peak in the mid-19<sup>th</sup> century and has declined since the beginning of 20<sup>th</sup> century. From the mid-19<sup>th</sup> century the population growth concentrated behind the boundaries of historical Prague into the newly established settlements, most of which became the part of Prague administrative area only in 1922. In this period, contemporary inner city consisting of blocks of apartment houses was formed. In the 1920s and 1930s a new belt of villa neighbourhoods and garden towns emerged in outer areas of Greater Prague. Furthermore, the growth also affected some settlements outside Greater Prague territory. Greater Prague accommodated most of urban growth until the 1960s, when plans for the construction of new residential districts required further expansion of the city administrative territory. Since the 1960s, new areas of Communist Prague grew while the population within Greater Prague declined. The communist period from the 1960s to the 1980s was characterised by a massive construction of housing estates consisting of prefabricated high rise buildings, which formed a new ring in Prague's built-up environment. The administrative territory of Communist Prague also contains a large zone of rural landscape with

small towns and villages. This area was originally intended to be filled by new communist residential and industrial areas, however, due to the economic crisis after 1975 planning targets from the early 1970s have never been accomplished. This zone behind the compact city is now becoming a growth area transformed by suburbanisation processes.

During communism, population growth was exclusively concentrated into the ring of new housing estates. Three largest housing complexes, each for approximately 100,000 people, were constructed in north, south and south-western sectors of the city. Housing estates became the most important target of internal as well as external migration. The other important factor influencing the pattern of internal urban growth and decline of population was the neglect of the maintenance of inner city housing stock, where heavy losses of dwellings were concentrated and population decreased. The development of Prague's hinterland was negatively influenced by governmental settlement policy

which declared municipalities around Prague as non-centres. Consequently, they have received virtually no investments for their development and as Lichtenberger (1984) wrote there was no suburbanisation in the western sense in Communist countries.

The 1990s are characterised by a general decline of Prague's population. The intra-urban pattern of population change is characterised by decline over the vast territory of central and inner city and in older communist housing estates. Population is increasing only in a small number of areas with new housing construction which are located in the zone of communist housing estates and around small settlements behind the compact city. While Prague's population is declining, the population of villages behind city administrative boundary is increasing. Population growth in Prague's hinterland is associated with suburbanisation, process which developed around Prague in the inter-war period, was retarded during communism and now is emerging again.

## THE ROLE OF MIGRATION IN THE POPULATION GROWTH OF THE CITY

The population growth/decline is an outcome of two basic processes: natural change and migration. The natural growth, in part fostered by changes in the age structure of Prague's population influenced by the immigration of young rural population, contributed to the overall population growth of Prague between 1880s and 1950s. The increase of Prague's population has especially been determined by in-migration of population. Due to the city size, its political, economic and cultural status, and its central geographical position in Bohemian Basin, Prague became a dominant centre of immigration for the entire Bohemia, partly for Moravia and also for Slovakia during the existence of Czechoslovakia.

In this century, the natural reproduction of Prague's population was conditioned by the general reduction in the natural population growth in the Czech lands. In the 1920s and the 1930s, the natural increase per 1000 inhabitants declined from 3.3 in 1920-24 to -0.8 in 1935-39. The natural growth of Prague's population was only 11,200 peo-

ple and contributed only marginally to the total population growth (cf. with Table 1). After the Second World War natality temporarily increased and the natural growth per 1000 inhabitants reached level 6.3 in 1945-49. Nevertheless, it slowed during the 1950s, and since the beginning of 1960s Prague has witnessed natural population decrease. The only exception emerged in the mid-1970s, when the implementation of pro-reproduction policy measures caused a temporary increase in natality mirrored in the natural growth of population. In the 1980s, Prague's population naturally declined by 3,100 to 4,800 people annually. This situation was determined by a relatively old age structure and low natality. In the 1990s, the natural decline of population escalated with an annual decrease reaching five to six thousand in 1995-97. The influence of demographic structure on the natural decline has been accompanied by the impact of economic factors, such as the decline in real incomes and housing shortages, and changing personal values with preferences given

**Table 2. Migration balance of Prague (1950-1997)**

time period	average	annual	data	per 1000	inhabitants	
	in-migration	out-migration	net-migration	net-migration	migration turnover	natural increase
1950-1954	26,723	23,239	3,484	3.6	52.4	4.8
1955-1959	16,541	12,761	3,781	3.9	29.9	0.2
1960-1964	14,221	9,349	4,872	4.8	23.4	- 1.4
1965-1969	14,563	9,275	5,288	5.0	22.6	- 2.2
1970-1974	16,036	11,444	4,592	4.2	25.0	- 0.5
1975-1979	16,296	11,845	4,451	3.7	23.9	1.5
1980-1984	16,321	11,158	5,163	4.4	23.2	- 3.1
1985-1989	18,938	10,086	8,852	7.4	24.1	- 3.1
1990-1994	15,798	12,034	3,764	3.1	22.9	- 3.1
1995-1997	12,223	11,429	794	0.1	19.5	- 4.5

Note: data are given for Prague in its administrative boundaries in particular years

to professional career, travelling and individual rather than family life. These changing attitudes toward life and family influenced the demographic behaviour of young generation. Today, young people postpone marriages to higher age and prefer smaller number of children than the generation of their parents.

The decisive factor for the population growth of Prague has been migration. The highest migration gains were reached during the inter-war period. In the 1920s and the 1930s, migration contributed more than 300,000 people, a figure three times higher than for the 1970s and the 1980s. The Second World War brought a decline in population caused by out-migration to rural areas. After the Second World War, migration gains of Prague were negatively influenced by the stagnation in new housing construction. The annual net-migration has slowly increased since the 1960s, when the construction of large-scale housing projects started. It reached the highest figures in the second half of the 1980s with the annual net-migration about nine thousand people (Table 2). At the beginning of the 1990s migration gains rapidly declined and since 1994 Prague is losing population with respect to the rest of the Czech Republic (Table 3). Table 3 shows migration gains with Slovakia and other foreign countries but the figures are distorted because the compulsory registration of moves to foreign countries was abolished. Prague is now annually

losing about two to three thousand people if we take into account only the internal migration within the Czech Republic.

Table 5 does not include foreigners which have received a long term residence permit in Prague. In 1996 there were 53 thousand foreigners registered for long term residence in Prague. According to estimates of Drbohlav and Čermák (1998), there are further 50-100 foreigners living in Prague without official registration. Therefore, while Prague has negative net migration with the rest of the Czech Republic it is now gaining population through foreign immigration.

During communism, Prague had continually gained the dominant position of an immigration centre within Bohemia. While in the 1960s the city was the destination of the strongest migration flows from 12 of 42 Bohemian districts, in the 1980s there were already 28 districts showing the dominant destination to Prague. At this period, the share of Prague on the intra-district migration in the Czech Republic (75 districts in Bohemia, Moravia and Upper Silesia) increased from 14.7 percent to 23.1 percent. During the second half of the 1980s, Prague had positive net-migration with all 75 districts of the Czech Republic. This situation rapidly changed in the beginning of the 1990s. Prague is now losing population with the surrounding districts of Central Bohemia and from 1995 with the rest of Bohemia as well. The only migration gains are with Moravia. There are two major factors

**Table 3. Migration balance and development of population in Prague (1989-1997).**

	Czech Republic			Slovakia		
	in-migration	out-migration	net-migration	in-migration	out-migration	net-migration
1989	16,240	9,194	7,046	1,150	411	739
1990	15,962	10,765	5,197	1,236	546	690
1991	14,076	10,218	3,858	1,130	538	592
1992	11,537	10,837	700	1,640	570	1,070
1993	12,534	11,275	1,259	1,003	883	120
1994	10,281	10,631	- 350	446	4***	442
1995	9,615	11,414	- 1,799	566	12***	554
1996	8,950	10,939	- 1,989	546	11***	535
1997	8,608	11,689	- 3,081	558	19***	539
	foreign migration			total net-migration	natural change	increase of population
	in-migration	out-migration	net-migration			
1989	80	614*	- 534	7,251	- 3,573	3,678
1990	707	2,470	- 1,763	4,124	- 3,792	332
1991	2,298	2,337	- 39	4,411	- 2,849	1,562
1992	2,244	201**	2,043	3,817	- 3,387	430
1993	1,941	40**	1,901	3,280	- 3,595	- 315
1994	2,050	29**	2,021	2,113	- 4,585	- 2,472
1995	2,305	66**	2,239	994	- 5,723	- 4,729
1996	2,285	60**	2,225	771	- 5,648	- 4,877
1997	3,237	77**	3,160	618	- 5,116	- 4,498

Notes:

\* excluding illegal emigration of about 1,000 people

\*\* the compulsory registration of emigration has been relaxed since 1992, estimates of annual emigration are 2,000 people

\*\*\* the compulsory registration of emigration to Slovakia has been relaxed since 1994

behind this development. First is the decline in housing construction which restricts in-migration of young people to Prague and second is suburbanisation around the city which influences out-migration to Prague's hinterland.

Prague attracts especially young, well educated population in productive age. The majority of immigrants are 18-35 years old. Concerning net-migration, Prague is now gaining only the young population between 18-30 years old (Figure 3). On the other hand, families with children and older people are leaving Prague for healthier environment and cheaper living conditions. While in the 1980s, the net-migration was negative for the age groups over 55 years, at present, the city is already losing people in their thirties with the highest losses of people between the age of 60 and 64.

In spite of political goals and administrative measures used during communism, such as recruitment benefits including the allocation of enterprise dwellings, aimed to stimulate the in-migration of working class people into the capital city, the most of immigrants belonged to the middle and higher education, professional and income groups. The white-collar workers accounted for 80 percent of net-migration during the 1985-1989 period. In 1992-96, net-migration was positive only for people with the secondary and university education. In 1997, the city was losing population in all education groups except for people with a university degree. However, it should be noted that there is a reverse situation in the migration flows between Prague and its immediate hinterland. There are more people with the secondary and university education who are now leav-



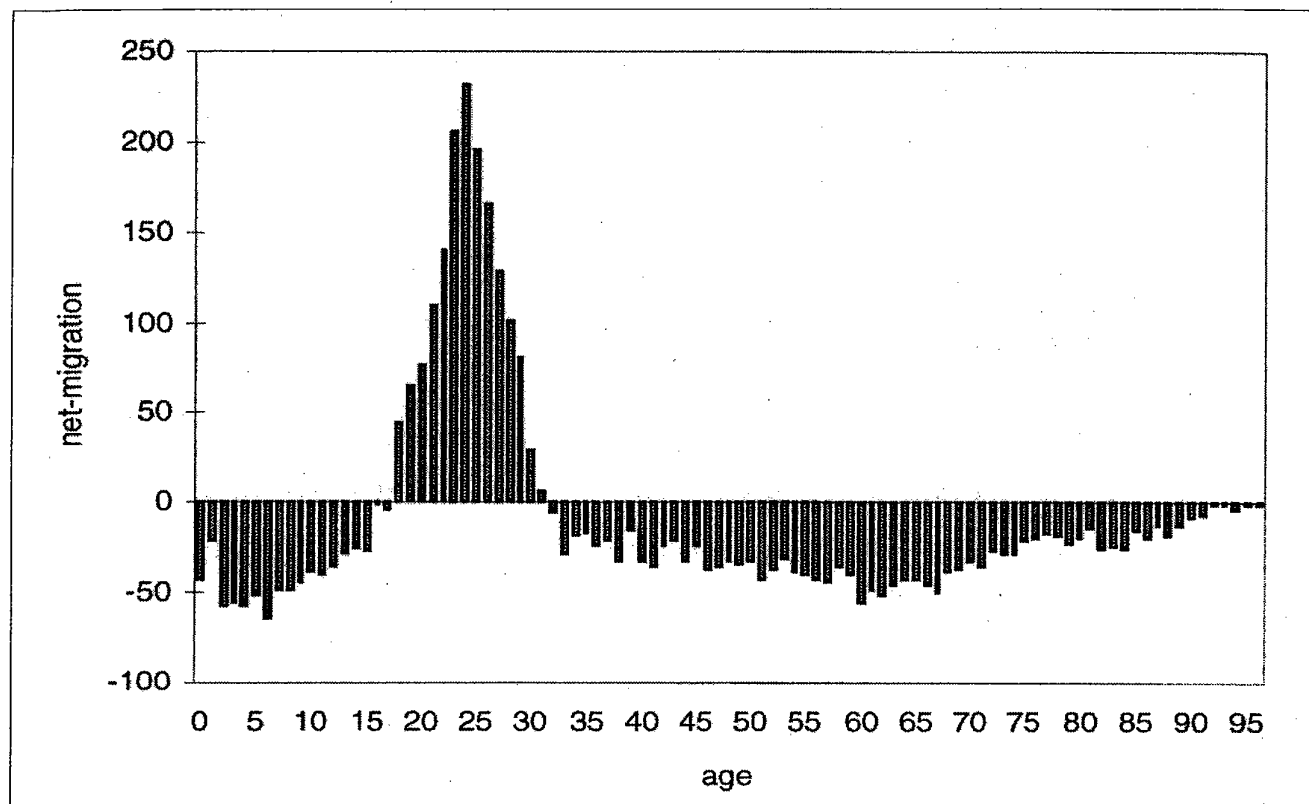


Figure 3. Age composition of Prague's net-migration (annual average for 1992-97)

ing Prague for new suburban residential districts.

Tables 4 and 5 show the structure of migration motivation for in-migration and out-migration to/from Prague in 1970-1997 (there are two tables because a new reason was added from 1985). One third of Prague's in-migrants were pulled by the promise of housing during the 1970-85. Housing has also been important motivation for in-migration in the second half of the 1980s and between 1992 and 1997. On the other hand, even higher share of housing given as a crucial motivation of out-migration indicates housing problems in Prague. According to a selective survey of Prague's immigrants made in 1983, the

housing status of immigrants declined with the migration to the capital city in 27 percent of cases (Čermák 1989). Prague is losing population mainly due to housing and health reasons.

The crucial reasons which positively influence the migration balance of Prague include the change of job and moving closer to the place of job. Therefore, Prague's migration attractiveness is based on economic reasons. The advantage of getting a well paid job in Prague is for young people more important than unfavourable conditions such as the housing shortage or polluted environment. The city also attracts migrants because of the existence of good training and education opportunities.

## PATTERNS OF INTRA-URBAN MIGRATION

The dominant role within the overall migration balance of Prague is played by migration within the city territory. In the first half of the 1980s more than half of all migration was realised by moves within 10 Prague's districts (Mášková 1987). Drbohlav (1993) analysed intra-urban migration for 110

Prague's cadastral units and gives even higher share of intra-urban migration in the overall migration activity in the city. According to his analysis of the 1986-1990 period, moving to or outside of Prague had no principal significance for the migration balance in the overwhelming majority of

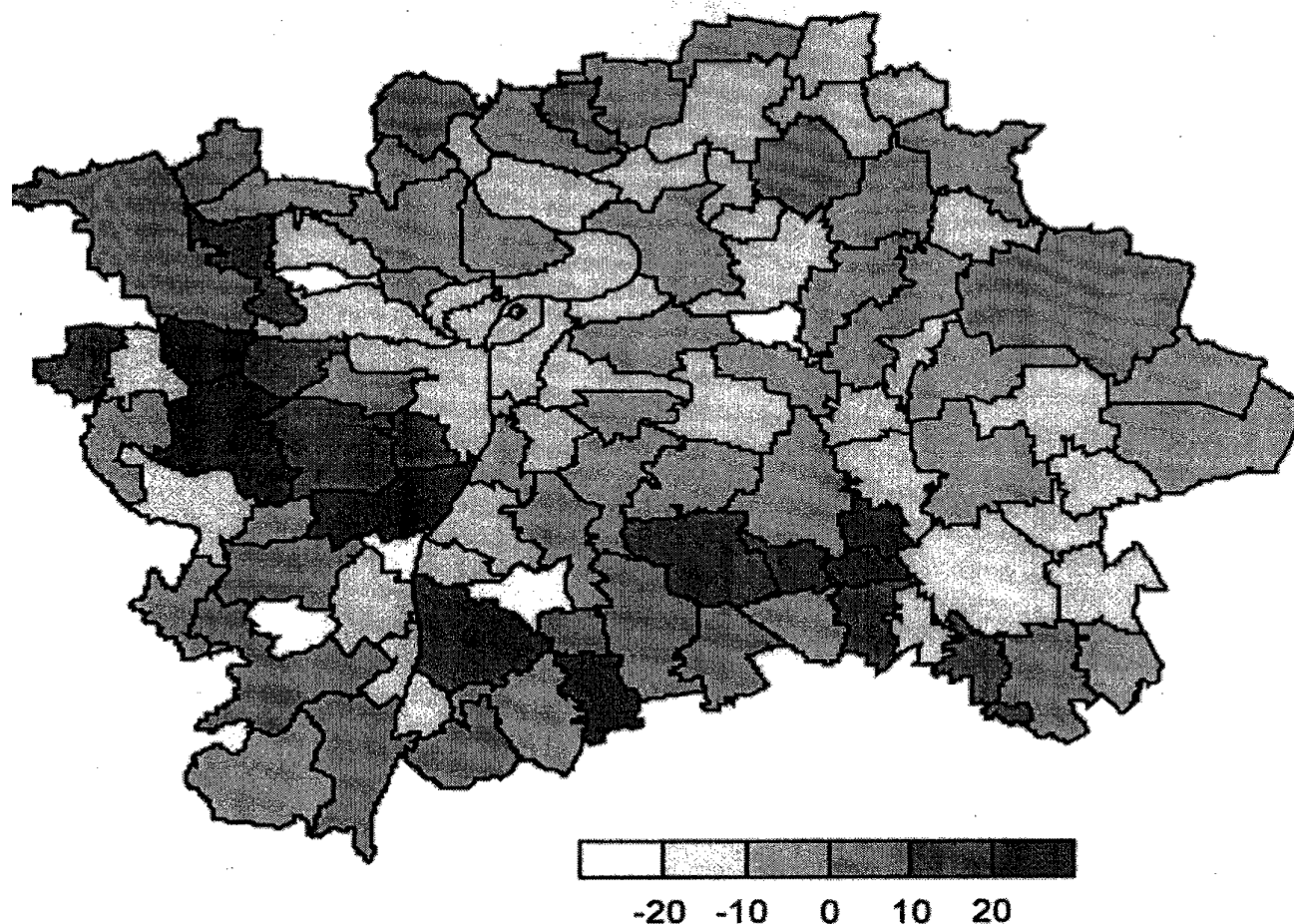


Figure 4. Annual net migration rate (per 1000 inhabitants) in 1986-90

Table 4. The structure of migration motivation 1971-85 (in percent)

	1	2	3	4	5	6	7	8
<b>in-migration</b>								
1971 - 75	20.7	11.7	3.3	5.7	16.2	2.6	35.4	4.4
1976 - 80	16.5	11.7	3.0	4.2	14.2	2.4	31.5	16.5
1981 - 85	13.8	12.7	2.6	4.1	12.0	2.1	32.0	20.7
<b>out-migration</b>								
1971 - 75	13.0	3.6	0.9	8.5	14.4	2.9	50.5	6.2
1976 - 80	10.8	3.4	0.7	7.7	13.1	2.8	43.9	17.6
1981 - 85	9.7	3.4	0.8	8.4	11.5	3.0	39.5	23.7

Notes:

1) change of job

2) moving closer to the place of job

3) training or education

4) health reasons

5) marriage

6) divorce

7) housing

8) other reasons

**Table 5. The structure of migration motivation 1986-97 (in percent)**

	1	2	3	4	5	6	7	8	9
<b>in-migration</b>									
1986 - 90	9.9	10.0	2.6	3.2	9.6	2.0	17.9	34.3	10.4
1992 - 97	10.0	9.9	3.0	3.3	10.3	2.5	16.8	27.0	17.1
<b>out-migration</b>									
1986 - 90	6.7	2.8	0.8	7.6	8.2	2.5	24.1	28.2	18.9
1992 - 97	4.4	2.2	0.6	7.0	4.9	2.2	24.4	28.9	25.3

Notes:

1) change of job

2) moving closer to the place of job

3) training or education

4) health reasons

5) marriage

6) divorce

7) housing

8) to follow partner

9) other reasons

cadastral units. The external streams accounted approximately for one fifth of the total migration turnover. In 1992-96, the share of internal urban migration on the total migration balance was about 60 percent. Intra-urban migrants target especially on places of new housing construction. In the 1980s, housing reasons accounted for more than 60 percent of intra-urban migration. Other (non-specified) reasons accounted for 20 percent, while the change of job was very rare as the cause of internal migration (less than 1 percent). The economic motivation which is so important for in-migration to Prague is insignificant in intra-urban migration. In 1990, a survey of the intra-urban migration in Prague was organised by the Chief Architect Office of the Capital City of Prague in cooperation with the Institute of Geography of Czechoslovak Academy of Sciences (Francová, 1991). We have selected the structure of migration motivation from the survey results based on 475 questionnaires (Table 6). Seventy three percent of all moves were related to an individual family housing situation and further 16 percent were cases of forced (compulsory) removal. Housing reasons were the cause of 89 percent of intra-urban migration. Migration in Prague is a highly spatially selective process. There is a majority of losing and minority of gaining cadastral units (Figures 4 and 5). The highest out-migration rates have been associated with the entire historical core as well as with the majority of inner city neighbourhoods. The population decline in central and inner city has not been caused only by demographic change, such as ageing of population and

decreasing household size, but also by the decline in residential function. During Communism, old residential properties suffered from under-maintenance (Sýkora 1993, Sýkora and Šimoníková 1994) and some buildings fell into disrepair. Such housing was declared as inhabitable and households were forced to move to apartments in new housing estates. This was an important mechanism which resulted in the outflow of inhabitants from old neighbourhoods to newly constructed housing at the city edge. The newly built housing estates also served as recipient areas for immigrants to Prague (Figure 6).

In the 1990s, most of the Prague's territory has been losing population through migration. The population decline in central city has been strengthened by commercialisation resulting in replacement of residential function by uses which generate higher revenues to landlords, especially by business offices. Tenants of apartments which are converted to offices are often removed to the zone of communist housing estates. Migration gains are now concentrated to a small number of areas (Figure 5). These include the last housing estates started in the late 1980s and completed in the 1990s and small settlements behind the compact city around which new suburban luxury residential districts have been built. Suburban housing is being developed especially behind the city administrative boundary. Suburbanisation has caused the negative migration balance of Prague with its hinterland. The out-migration from both the inner city and the communist housing estates to the suburban belt has been gaining on importance throughout the 1990s (Figure 6).

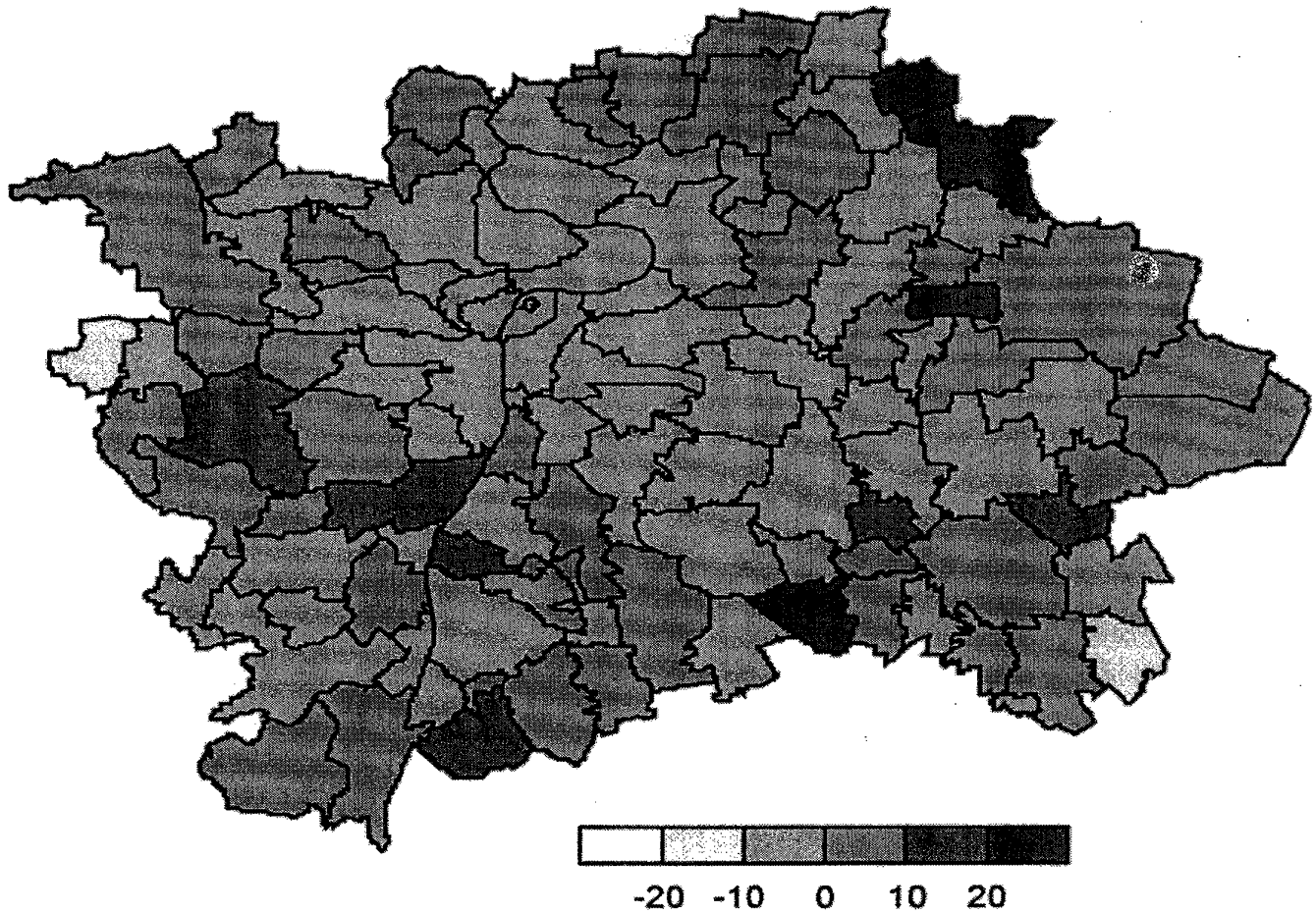


Figure 5. Annual net migration rate (per 1000 inhabitants) in 1992-97

Table 6. Motivation of intra-urban migration

rank	reasons of intra-urban migration	absolute	relative
1.	family reasons	165	34,7
2.	having too small flat	144	30,3
3.	to have an own flat	132	27,8
4.	compulsory (forced) removal	76	16,0
5.	air pollution	36	7,6
6.	flat in disrepair	24	5,1
7-9.	insufficient housing amenities	22	4,6
7-9.	long distance to working place	22	4,6
7-9.	noise from transport	22	4,6
10.	other reasons	19	4,0
11.	high rent	15	3,2
12.	too large flat	14	2,9
13-14.	no green space	8	1,7
13-14.	bad shopping opportunities	8	1,7
15-16.	bad relations with neighbours	6	1,3
15-16.	long distance from friends and relatives	6	1,3
17.	bad services	3	0,6

Source: survey of population in 1990 - 475 questionnaires (Francová, 1991)

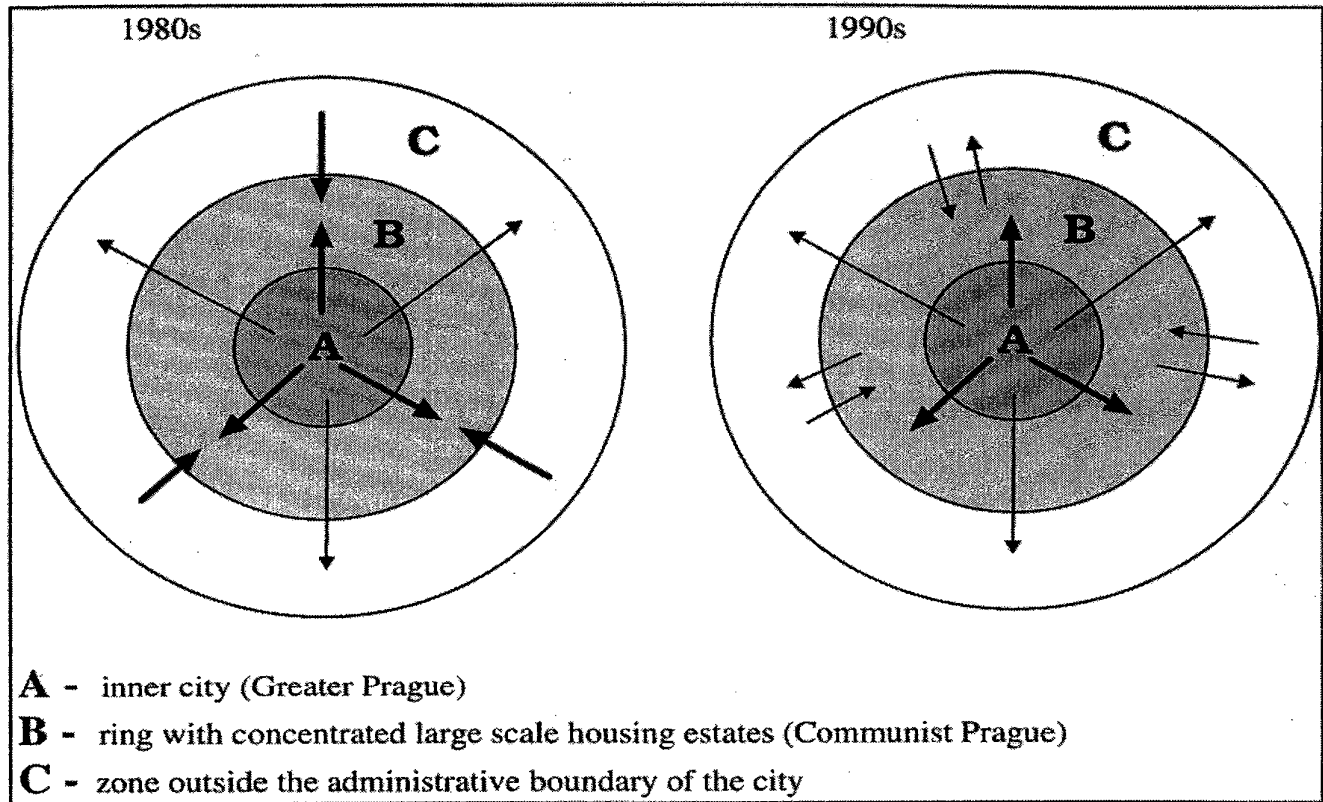


Figure 6. Scheme of migration flows within Prague's metropolitan area

## CONCLUSIONS

In-migration to Prague has been influenced by two major factors: developments in housing and labour markets. While the opportunities on the labour market attracted people to the city, housing conditions constrained in-migration. In the 1990s, Prague was a major growth pole in the Czech settlement system. The city provided a number of well paid jobs which further increased its migration attractiveness. However, a more extensive in-migration was restricted by a continuing housing shortage which was further worsened by a significant decline in the new housing construction (Sýkora 1996).

Since the mid-1990s, Prague has been losing population through migration. This is caused especially by the negative migration balance with the immediate Prague's hinterland and districts in the wider metropolitan area. It is especially the class of new rich people who move to the newly developed suburban districts of luxurious housing. However, the decline of Prague's population has to be confronted with the increasing number of foreigners which received

long term residence permit or stay in the city illegally. Foreigners substantially contribute to the overall growth of population concentrated in the city.

The spatial pattern of intra-urban migration has been primarily determined by the new housing construction. The newly build housing estates have been the exclusive targets of dominant migration flows. As the construction of housing districts was concentrated into particular places and completed in particular years, the housing supply had considerable time-space consequences for the spatial pattern of population growth through migration. The spatial pattern of contemporary housing construction is the crucial determinant of migration flows in the 1990s.

There is one important new feature of intra-urban migration in the transitory period. Migration is gaining a distinctive social dimension. Newly constructed housing is accessible only to the wealthy citizens. Less wealthy people are leaving the central city and higher status inner city neighbourhoods

being pushed out by revitalisation, commercialisation and gentrification. Migration as a socially selective process now contributes

to the restructuring of Prague's urban social geography in terms of its growing socio-spatial differentiation.

## ACKNOWLEDGEMENTS

This paper is a result of research which has been sponsored by Grant Agency of the Czech Republic GA (R No. 403/96/0258, «Teorie

regionální diferenciace společenského vývoje « [Theory of the regional differentiation of societal development].

## REFERENCES

ČERMÁK, Z. (1989), Stěhování do Prahy ve světle výsledků výběrového šetření [Migration to Prague on the basis of selective inquiry]. *Acta Universitatis Carolinae Geographica* XXIV (2), pp. 101-110.

DRBOHLAV, D. (1993), Intra-urban migration and declared migration preference movements in Prague. *Geographia Polonica* 61, pp. 305-316.

DRBOHLAV, D., ČERMÁK, Z. (1998), International migrants in Central European Cities. In: Enyedi, G. (ed.), *Social Change and Urban Restructuring in Central Europe*, pp. 87-107. Budapest, Akadémiai Kiadó.

FRANCOVÁ, P. (1991), Vnitropražská migrace [Prague's intra-urban migration]. Útvar hlavního architekta hlavního města Prahy, Ateliér speciálních oborů, Skupina sociologie a demografie. (manuscript)

LICHTENBERGER, E. (1984), The crisis of the central city. In: Heinritz, G. and Lichtenberger, E., eds., *The Takeoff of Suburbia and the Crisis of the Central City*. Proceedings of the international symposium in Munich and Vienna 1984. Franz Steiner Verlag Wiesbaden GmbH, pp. 157-172.

MÁŠKOVÁ, J. (1987), Analýza vnitřní migrace

[Analysis of internal migration]. Útvar hlavního architekta hlavního města Prahy, Atelier perspektivního rozvoje. (manuscript)

MUSIL, J. and RYŠAVÝ, Z. (1983), Urban and regional processes under capitalism and socialism: a case study from Czechoslovakia. *International Journal of Urban and Regional Research* 7 (4), pp. 495-527.

SÝKORA, L. (1993), City in transition: the role of rent gaps in Prague's revitalization. *Tijdschrift voor Economische en Sociale Geografie* 84 (4), pp. 281-293.

SÝKORA, L. (1996), The Czech Republic. In: Balchin, P., ed., *Housing Policy in Europe*. London, Routledge, pp. 272-288.

SÝKORA, L. and ŠLMONÍČKOVÁ, I. (1994), From totalitarian urban managerialism to a liberalized real estate market: Prague's transformations in the early 1990s. In: Barlow, M., Dostál, P. and Hampl, M., eds., *Development and Administration of Prague*. Amsterdam, Instituut voor Sociale Geografie, Universiteit van Amsterdam, pp. 47-72.

SÝKORA, L. and ŠTĚPÁNEK, V. (1992), Prague. *Cities* 9 (2), pp. 91-100.