Discussion Papers 2007.
Social Inequalities in Urban Areas and Globalization.
The Case of Central Europe. 77-104. p.

The Czech case study – Social Inequalities in Urban Areas and Their Relationships with Competitiveness in the Czech Republic

Metropolitan areas, cities and their economic and urban development

Metropolises and metropolitan areas

The settlement structure of the Czech Republic is very fragmented with cities surrounded by a large number of small settlements with administratively independent municipal governments. In 2001, the country consisted of 6,258 municipalities (obec) and 14 regions (kraj) both with elected representations. The capital city of Prague and other so-called statutory towns can be further subdivided into boroughs. 60 per cent of Czech municipalities have less than 500 inhabitants and further 20 per cent population between 500 and 1,000. 90 per cent of municipalities have population below 2,000. There are four major cities with population over 150,000 inhabitants: Prague (1169 thousands inhabitants), Brno (376), Ostrava (317) and Plzeň (165). A cluster of six cities with population between 90–105 thousand inhabitants follows: Olomouc (103), Liberec (99), České Budějovice (97), Hradec Králové (97), Ústí nad Labem (95) and Pardubice (91). All these cities are regional capitals. The remaining regional capitals are smaller: Zlín (81), Karlovy Vary (53) and Jihlava (51). There are other 9 cities with population between 50-90 thousands inhabitants.

Metropolitan regions do not exist as independent administrative units in the Czech Republic. No official list of and spatial delimitation of metropolitan areas exists even for statistical purposes. Usually, Prague is considered to be a metropolis of international significance. In some analyses, the second largest city of Brno is seen as metropolis. These cities have their metropolitan areas. Other cities have their city regions.

Therefore here we consider Prague and Brno as the country's two cities that have their metropolitan areas. With a population of 1.2 million, Prague is the country's largest city and its capital. It is a dominant centre in the Czech settlement and regional systems, not only because of its population size, but also because it accommodates most of the government institutions and economic control and command functions. Prague is the gateway to the country for foreign investors (*Drbohlav–Sýkora,* 1997). It is situated in the middle of Bohemia, the western part of the Czech Republic. Brno is the country's second largest city; it is sometimes considered as the "capital" of Moravia, the eastern part of the country.

With nearly 400,000 inhabitants, as a settlement centre it ranks second in the national urban hierarchy. Brno is the seat of the Supreme Court; the city hosts the most important trade fairs in the country and is a major centre of university education.

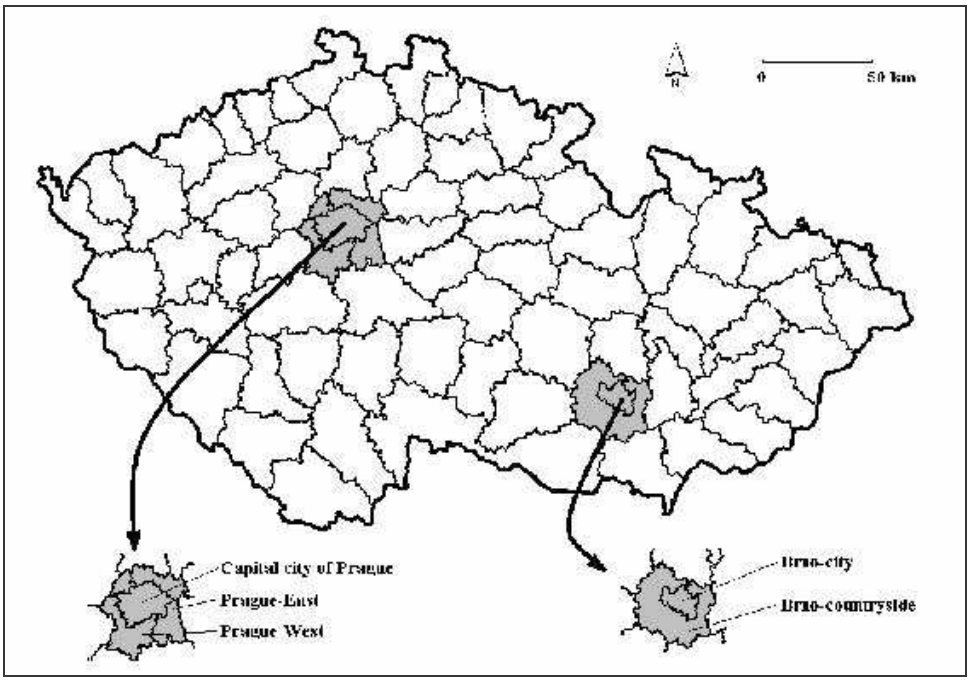
Metropolitan areas consist of core cities (one municipality) and a large number of smaller municipalities ranging from villages of a few hundred inhabitants to small towns with a population in tens of thousands. There is no official or universally accepted method of spatial delimitation of metropolitan areas. The most often used delimitation of metropolitan areas uses amalgamation of core cities and surrounding districts. This approach allows for the utilisation of data available at district level. However, the districts were abolished and they do not exist anymore as administrative spatial units. Furthermore, for some analyses a more detailed delimitation is more useful. Basic data are presented for the delimitation using districts.

The Prague Metropolitan Area (PMA) covers an area of 1666 sq. km and has 1.35 million inhabitants living in the city of Prague and the two surrounding districts of Prague-East and Prague-West. The Brno Metropolitan Area (BMA; 1338 sq. km) consists of the two districts of Brno-City and Brno-Countryside with a total population of 535,000 people (*Figure 34, Table 5*).

The metropolitan areas can be divided into four main zones: (1) centre; (2) inner city; (3) first (inner) suburban zone; (4) second (outer) suburban zone. This subdivision of metropolitan areas respects urban morphology and takes into account the boundaries of local government territorial units. Both Prague and Brno are municipalities. Therefore, from the point of view of local government, their rights and responsibilities are on the same level as those of the small municipalities around them. They are, however, municipalities of a special kind and can be divided (at their own discretion) into boroughs, each with its own elected local government. The spatial delimitation of metropolitan zones uses borough and municipal boundaries. The suburban zone is described as the area outside the compact city and within the metropolitan area. The administrative boundary of a Czech city extends far beyond its compact built-up area and thus the city's administrative territory contains part of the suburban zone. Therefore, the suburban zone in a metropolitan area consists of a zone within the administrative boundary of the core city together with areas outside it. The city administrative boundary is the division line between the first and second or the inner and outer suburban zones. The second (outer) suburban zone is defined as the districts around the core city (or municipalities within these districts). In the case of Prague, there are two districts Prague-West and Prague-East; in the case of Brno, there is the Brno-Countryside district (*Figure 35*).

Figure 34

Location of metropolitan areas of Prague and Brno within the territorial structure of districts



Source: Sýkora, Ouředníček 2007.

Table 5

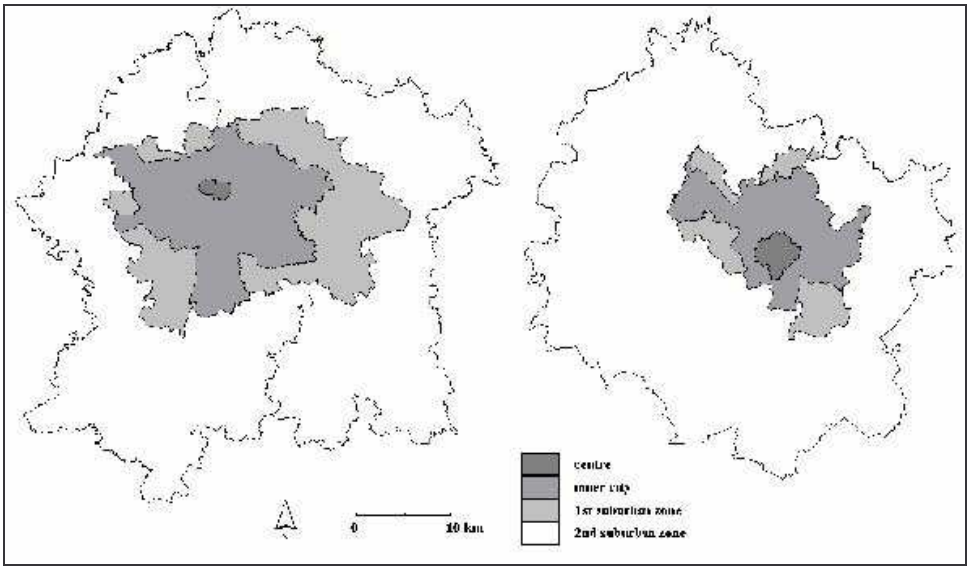
Prague and Brno – basic data from Census 2001 (1.3.2001)

Region	Area (sq. km)	No. of municipalities	Population	Density of population
Prague				
City	496	1 (57)*	1,169,106	2357
Hinterland	1170	171	179,150	153
Total PMA	1666	172 (228)*	1,348,256	810
Brno				
City	230	1 (29)*	376,175	1636
Countryside	1108	137	159,169	144
Total BMA	1338	138 (166)*	535,341	400

*Number of boroughs in the cities of Prague and Brno.
Source: Sýkora–Ouředníček, 2007.

Figure 35

Zones of Prague and Brno Metropolitan Areas



Source: Sýkora, Ouředníček 2007.

The division of city territory into centre, inner city, and inner suburban zone reflects the historical development of the intra-urban spatial structure. Both cities have medieval cores in which government and commercial functions are now concentrated; these cores play the role of a city centre. A historic core/city centre is encircled by an inner city made up of densely-built-up residential neighbourhoods and old industrial zones dating from the industrialization and rural-to-urban migration of the 19th century. In the inter-war period of the 1920s and 1930s, low-rise and low-density residential areas consisting of detached and terraced single-family houses were constructed around the inner city in both cities. During the communist period, zones were constructed consisting of housing estates with high-rise prefabricated apartment blocks and new industrial districts spatially separated from the residential areas. In both cities, these zones form compact built-up areas. Beyond the compact city, but still within the administrative boundaries, is a zone characterized by a rural landscape with small villages and agricultural land. This zone is now the subject of intensive transformation through both residential and non-residential suburbanization. The area is defined as the first (or inner) suburban zone.

More detailed analyses use delimitation of metropolitan areas as functional urban regions (FUR) based on the commuting to work. FUR consists of municipalities with the most intensive commuting to the core city. FUR are delimited as

consisting of municipalities with the share of 30 (alternatively 25) and more percent of commuters from economically active population (EA) in given municipality to the core city. The municipalities fulfilling the criteria usually do not form a spatially contiguous area. Therefore, the principle of territorial coherence is applied adding those municipalities that are inside and leaving those that are outside of the geographically compact area. This method allows for a precise analysis of certain urban and metropolitan processes such as suburbanization and for comparison of metropolitan areas. However, some data, especially about economic development are not available for such territory. As the method involves discretionary decision of a researcher about inclusion or exclusion of some municipalities at the edges of metropolitan area, the actual delimitations for a concrete metropolitan area may differ. In the later analysis of sociospatial inequalities one of such delimitations is used. The total population within this delimitation of Prague Metropolitan Region was 1 357 168 in 2001. It shows that the difference from the rough delimitation using district boundaries in terms of total population size is not significant. The major difference is in larger territory and inclusion of small municipalities which residents are dependent on Prague job market where they commute for work.

Concerning metropolitan management, Prague metropolitan region extends over the territory that includes the City of Prague (that is at the same time Region Prague) and surrounding hinterland that is part of administrative region Central Bohemia, which is in this case also identical with cohesion region Central Bohemia. The territory of Prague metropolitan region thus stretches over whole (Prague) or part (Central Bohemia) of two NUTS 3 administrative as well as over two NUTS 2 cohesion regions and is under jurisdiction of governments responsible for these territories. No institutional arrangement for joined metropolitan government exists at present time. In past 15 years several policy and planning documents have been prepared and some approved or are under preparation or revision. The strategic and physical plans (that were approved and have impact on metropolitan development) deal separately with Prague, Central Bohemia or individual municipalities. Brno metropolitan region extends over the part of territory of NUTS 3 administrative region South Moravia, which is part of NUTS 2 cohesion region South-East. No institutional arrangement for joined metropolitan government exists. However, at present new Master Plan for the City of Brno and Regional Plan are under preparation with attempts to coordinate their mutual aims.

Conditions of urban development[17]

The urban development can be characterized by population data. However, provided we want to explain urban change we have to turn to interpret economic development and its uneven spatial impacts on regions and cities. Concerning demographic change, it has been characterized by the decline in the total population and an ageing population caused by very low fertility and by shifts in the structure of households with a growing share of single member households and a declining share of couples with children. These changes have been especially pronounced in major cities (*Table 6–8*).

Urban change is mainly associated with the geographic redistribution of population. While major cities loose population through migration, small municipalities gain it. A large part of out-migration is towards suburban areas, especially around Prague and Brno (*Čermák,* 2004). There is a remarkable regional differentiation in housing construction with booming suburban areas, namely around the capital city of Prague, where the wealthiest Czech population is now building new homes. However, the transformation in settlement pattern has been rather conditioned by economic change in comparison to demographic change. Therefore, our attention now turns to economic restructuring and its effects on urban development.

Table 6
The development of population in selected major cities and towns (1970–2001)

	Number of inhabitants (Census)						
	Population				Change in percent		
	1970	1980	1991	2001*	1980/ 1970	1991/ 1980	2001/ 1991
Czech Republic	9,807,696	10,291,927	10,302,215	10,230,060	4.9	0.1	-0.7
Prague	1,140,654	1,182,186	1,214,174	1,169,106	3.6	2.7	-3.7
Brno	344,218	371,463	388,296	376,172	7.9	4.5	-3.1
Ostrava	297,171	322,073	327,371	316,744	8.4	1.6	-3.2
Plzeň	152,560	170,701	173,008	165,259	11.9	1.4	-4.5

*including inhabitants with long term residency permit.
Notes: the population is calculated for the territorial delimitation in 2001.
Source: Sýkora, 2005; Census 2001, Czech Statistical Office.

[17]This section is based on Sýkora, L. (2005) The Czech Republic. In: Baan, A., van Kempen, R., Vermeulen, M., eds., Urban Issues and Urban Policies in the New EU Countries. Ashgate. and Sýkora, L. (2006) Urban Development, Policy and Planning in the Czech Republic and Prague. In: Altrock, U., Günter, S., Huning, S., Peters, D., eds., Spatial Planning and Urban Development in the New EU Member States: From Adjustment to Reinvention. Ashgate.

Table 7

The age structure of population, share in percent (1991–2001)

Age	0–14		16–64		65+	
	1991	2001	1991	2001	1991	2001
Czech Republic	21.0	16.2	66.3	70.0	12.7	13.8
Prague	18.5	13.4	66.2	70.4	15.4	16.2
Brno	19.7	14.4	66.1	70.0	14.2	15.7
Ostrava	20.8	16.4	67.8	71.0	11.3	12.7
Plzeň	19.8	14.1	67.9	70.8	12.4	15.1

Source: Sýkora 2005, Census 2001, Czech Statistical Office.

Table 8

The structure of households in 2001 (share in percent)

	couples without children	couples with children	family of single adults	single-parent with children	singles	multimember non-family households
Czech Republic	29.1	25.5	5.5	8.0	29.9	2.0
Prague	24.9	18.3	6.8	9.5	36.8	3.6
Brno	26.7	21.3	6.2	9.5	33.3	2.9
Ostrava	26.2	23.2	5.6	9.3	33.9	1.9
Plzeň	29.0	20.6	5.5	8.9	34.2	1.8

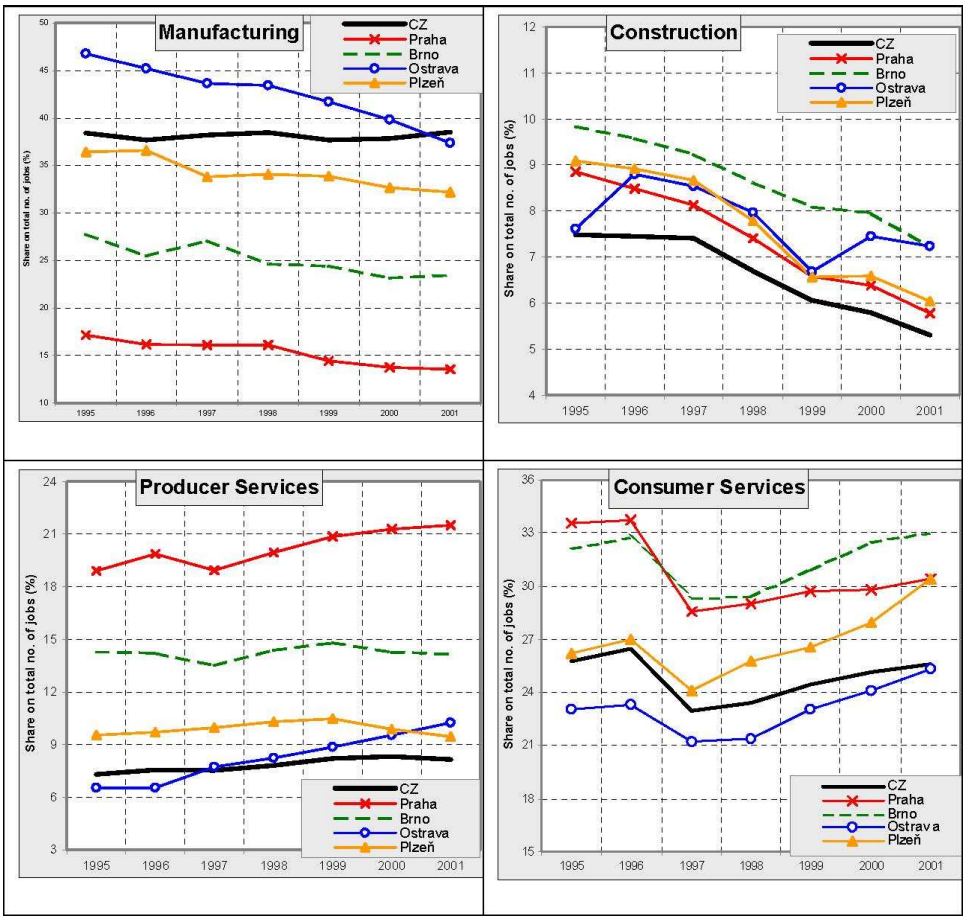
Note: Children are dependent children. A family of single adults can be mother with a child aged over 26.
Source: Sýkora 2005, Census 2001, Czech Statistical Office.

There has been a remarkable difference in the dynamics of urban development and urban restructuring between major Czech cities and their regions. The urban growth and decline has been influenced by economic restructuring on the national level and strongly conditioned by the position within the international economy. The variability was especially influenced by the position of individual cities in the hierarchical divisions of labour within the Czech economy being integrated into the international economic system. The potential of cities was given by their inherited economic base, geographic position and attractiveness for new investments. The urban economic restructuring has been characterized by deindustrialization and tertiarization and strongly affected by local urban labour markets. While employment in manufacturing and construction declined, the number of employees in services increased. Despite the universal decline in manufacturing, there are still major differences between cities with Prague having less than 15 per

cent of jobs in manufacturing while the 3rd largest city Ostrava has 37 per cent (*Figure 36*). In Prague, and to certain extend in Brno and some other towns, the decline in manufacturing was balanced by the increase in the service sector. There are, however, also towns and cities that have been severely hit by the economic decline with very limited options for alternative growth.

Figure 36

The share of jobs in selected economic sectors in cities of Prague, Brno, Ostrava and Plzen and compared with the Czech Republic (1995–2001)



Note: Data before 1995 are not comparable; there was change in method between 1996 and 1997.
Source: Czech Statistical Office.

The capital city of Prague has strengthened its position as a prime national centre and has assumed the role of a gateway, linking the national with international economy (*Drbohlav–Sýkora,* 1997; *Dostál–Hampl,* 2002). The inflow of foreign direct investment and the growth in advanced services confirmed Prague as the country command and control centre. The city is also a major national logistic hub with a huge pool of relatively wealthy consumers. The growth in advanced producer services greatly influenced the structure of jobs, as well as salary levels (*Table 9*), and the booming property development, which makes the capital city quite different from the rest of country. The capital city of Prague is the only city where a sufficient number of new jobs were generated to replace the losses from deindustrialization. There are even structural shortages of labour and low paid jobs, and in a number of instances these jobs are taken by labour migrants from Eastern Europe.

Table 9

Comparison of an average wage in cities with the average wage in the Czech Republic (100)

Year	Praha	Brno	Ostrava	Plzeň
1991	108	99	112	103
1993	123	99	112	102
1995	129	103	112	110
1997	132	103	109	108
1999	138	103	105	107
2001	142	103	104	106

Source: Czech Statistical Office.

In the Czech Republic, there is no other city that would assume the role of gateway between the international and the local economy. This affects especially the second largest city Brno and its metropolitan area, where employment in traditional manufacturing quickly declined. Brno aspired to play a more important role than merely being a manufacturing centre. The city, for instance, initiated the establishment of a Czech Technology Park and intended to develop a huge development project of so-called South Centre. Masaryk University in Brno accepts the highest number of new students from all Czech universities. However, in reality the major growth in Brno has been in retail, i.e. the sector that offers only lower level salaries. The city government finally started to attract production capacities to the newly established industrial zone and the city also succeeded to develop as an important logistic/distribution/warehousing hub.

New labour opportunities in other cities were associated mainly with the growth of individual entrepreneurship, growth in retail sector and state admini-

stration. This however, has not been sufficient to cover the decline in industrial jobs. Therefore, all cities, except Prague attempted to attract new foreign investments to supply jobs in manufacturing. In some other cities, there has been strong reindustrialization. Consequently the establishment of new production capacities supplied new jobs that were substituting for decline of employment in traditional manufacturing production. As these cities could not compete for service jobs they attempted to attract foreign direct investments (FDI) into manufacturing by offering cheap land equipped with necessary technical and transport infrastructure for construction of enterprises, and a cheap and skilled labour force. Despite increasing overall unemployment, the rates in these cities and towns are below national average (*Table 10*).

Table 10

The unemployment rate, %

Year	Czech Republic	Prague	Brno	Ostrava	Plzeň
1998	7.5	2.3	6.0	12.0	6.7
1999	9.4	3.5	8.1	15.9	8.3
2000	8.8	3.4	7.9	16.6	7.3
2001	8.9	3.4	8.6	16.2	7.2
2002	9.8	3.7	10.0	17.2	7.4

Source: Czech Statistical Office.

Some cities have not succeeded in the competition for new investments and now exhibit decline and unemployment. Their situation is usually a combination of severe decline of industries inherited from Communism and a low current desirability for new investors due to the bad quality of the physical and social environment, and geographic distance from the western frontier (in the case of Ostrava this is further strengthened by the non-existing highway connection to North Moravia). Cities and towns in old industrial regions in North Bohemia and North Moravia formerly associated with mining, metallurgy and chemical production are those that have been most severely hit by de-industrialization and have not succeeded to attract new major investments. Their current situation is shaped by economic problems that produce unemployment as high as 20 per cent and more. The economic decline in these cities is not only the question of cities itself but whole regions with a high concentration of heavy industries. The support for economic growth in these areas remains an important task for national economic and regional policy.

Each city and each local labour market has been impacted by a combination of several forces including inherited economic structure, contemporary attractive-

ness for foreign investors and activity of local governments in attracting them. While all cities have been affected by deindustrialization, only some benefited from the new developments. In general, Prague quickly adapted as the centre of advanced services, some other cities benefited from reindustrialization and growth in consumer services. However, there are also cites that were exposed to the severe consequences of deindustrialization that have not been balanced by growth in other sectors of the local economy. The differentiated external conditions have been decisive for urban development in particular cities.

Urban spatial reorganization and associated urban social problems

Major urban changes occurred within the internal space of cities. On the supply side the urban restructuring has been conditioned by the government directed reforms, especially privatization and price and rent deregulation, which have created conditions for the establishment of urban property markets. The demand side has been largely differentiated between cities. In Prague, the newly emerged actors in private sector, mainly foreign firms, fuelled the operation of land markets and started to reorganize land use and reshape the historically developed urban structure. This has also happened in other towns and cities, but these developments have been smaller in the extent of changes and have taken other forms. For instance, new office buildings of international standard have been developed nearly exclusively in Prague (*Sýkora,* 2007), while shopping centres have mushroomed over the whole country.

Czech cities are characterized by small urban cores of medieval origin, large inner cities originating with the industrial revolution of the second half of 19th century, further developing through the first half of the 20th century, and vast areas of new industrial and residential estates from Communist times. The urban growth after 1989 concentrated in the most attractive locations of the city centre, some adjacent nodes and zones in inner city, and in numerous suburban locations. The main transformations in the spatial pattern of former communist cities and their metropolitan areas included (1) the reinvention, commercialization and expansion of city centres, (2) the dynamic revitalization of some areas within the overall stagnation in inner cities, and (3) the radical transformation of outer cities and urban hinterland through commercial and residential suburbanization (*Sýkora,* 1999a; *Sýkora* et al. 2000). The city centres and suburban areas have been territories with the most radical urban change. Most of the 1990s were characterized by huge investment inflow to city centres causing their commercialization and decline in residential function, albeit substantial physical upgrading. Since the late 1990s, decentralization occurred with investments flowing to both out-of-centre and suburban locations. Central and inner city urban restructuring involved the

replacement of existing activities with new and economically more efficient uses and took the form of commercialization, gentrification, construction of new condominiums, brownfield regeneration, the establishment of new secondary commercial centres and out-of-centre office clusters (*Sýkora,* 2005, 2007; *Temelová,* 2004). Since the late 1990s, suburbanization has become the most dynamic process changing the landscapes of metropolitan regions. It brings a complete reformulation of metropolitan morphology, land use patterns and socio-spatial structure (*Sýkora–Ouředníček,* 2007).

Post-communist transformations brought uneven spatial development within cities, redifferentiation of land use patterns and an increase in socio-spatial segregation (*Sýkora,* 1999b) thus changing the formerly rather homogeneous space of socialist cities. The uneven character of post–1989 urban restructuring was caused not only by decline of some urban zones and areas, but also by the investment flowing only to some parts of the built environment, while many areas were omitted. Both decline and growth are causing a number of urban problems.

Since the beginning of the 1990s, the central parts of cities have been experiencing the strong pressure of new investments. While these investments contributed to physical upgrading and brought more economically efficient land use, they also contributed to the densification in central city morphology. The higher density and intensity of use contributed mainly to increased use of the central parts of cities including rapid growth in car traffic and consequent congestion (especially critical has been the situation in Prague). The disappearance of green spaces in inner yards is another effect of this process. Furthermore, as Czech cities have medieval cores there were numerous conflicts between investors and the protection of historic buildings and urban landscapes. Commercialization, i.e. the increase in the share of commercially used floor-space led to the rapid decline of residential land use in inner cities and the out-migration of residents. Consequently, there are now blocks of central city properties without any residential function – a problem known from western cities.

There are two particular zones within Czech cities that are currently threatened by downgrading. These are old industrial districts and post Second World War housing estates. Inner urban industrial areas are affected by economic restructuring and are becoming obsolete. Old buildings, contaminated land, and complex ownership patterns complicate the regeneration of these areas. Furthermore, in many cities and locations there is virtually no interest in their redevelopment. Brownfields left by deindustrialization, and in some cities such as Olomouc by demilitarization, are becoming one of the major problems areas for many Czech towns and cities. Up to now there have been rather scarce examples of the reuse of former industrial areas, namely associated with the redevelopment driven by commercial functions in locations near city centres, such as Smíchov in Prague (Temelová 2004), or specific functions, such as the construction of new multipur-

pose sport and cultural hall Sazka Arena in Prague Vysočany associated with the World Hockey Championship 2004.

Another problem area are housing estates of large multifamily houses constructed with the use of prefabricated technology during the 1960s–1980s for tens of thousands of inhabitants. Their life span and technical conditions call for regeneration; otherwise this will lead to physical and social decline. Due to the extent of housing estates and current out-migration of more wealthy people from them, their areas may present one of the largest concentrations of physical and social problems in coming decades. This may concern in particular those cities whose labour markets are strongly affected by economic decline. The population affected by unemployment usually concentrates in housing estates. Rent arrears and limited financial resources of the owners contribute to low level of maintenance, disrepair and physical dilapidation. Even in booming cities, there is an ongoing remarkable differentiation between housing estates. The residential areas that are well located on public transportation and near green areas are perceived as good living addresses and attract new investments into apartment houses, offices and retail facilities. However there are also residential districts with a higher concentration of manual workers and with worse accessibility by public transport, and they show significant signs of decline.

The major growth in postcommunist metropolitan areas is concentrated in the suburban zone. The future of brownfields, housing estates and suburbs is interlinked together. If brownfields and housing estates are omitted and get on the spiral of ongoing decline, firms and wealthier people are more likely to leave for suburbs, while inner cities will be characterized by dilapidation and decline.

Suburbanisation itself can become a major problem. The compact character of the former socialist city is being changed through rapid commercial and residential suburbanisation that takes the form of unregulated sprawl. New construction of suburban residential districts is fragmented into numerous locations in metropolitan areas around central cities. Noncontiguous, leap-frog suburban sprawl has more negative economic, social and environmental consequences than more concentrated forms of suburbanisation. The societal costs of sprawl are well-known from North America and Western Europe and now threaten sustainable metropolitan development in the Czech Republic. This concerns not only residences but also new commercial facilities. For instance, suburbanization of retail facilities has completely reshaped the pattern of commuting for shopping. While in 1990s, most retail was concentrated in central city shopping areas and in secondary centres within cities, at present a large share of shopping is realised in suburban hypermarkets and shopping malls, where people travel by car from the inner city. A very specific example is the city of Brno, where most new shopping facilities were built south of town while most of new suburban residential districts are in naturally valuable areas north of town. Consequently, people commute to shop

through the inner city contributing to traffic congestion. Another major impact of suburbanization is in the field of spatial mismatch in the distribution of jobs in metropolitan areas. Suburban jobs are namely in retail, warehousing and distribution with low paid employees taken by people from inner city and surrounding region. On the other hand suburban areas are now becoming home of wealthy population that commute to their office jobs in central and inner cities. Therefore, there is developing spatial mismatch between the location of jobs and residences, contributing to increased travel in metropolitan areas and consequent effects on the quality of environment and life. The outcomes of rapidly developing suburbanisation in terms of spatial distribution of people and their activities in metropolitan areas form conditions that will influence the life of society for several generations. Therefore, patterns of urbanisation in metropolitan areas shall become important targets of urban and metropolitan planning and policies that intend to keep a more compact urban form.

The postcommunist cities are also being impacted by increasing segregation. With growing income inequalities and established housing property markets, local housing markets are divided into segments that are expressed spatially (*Sýkora,* 1999). Wealthy households usually concentrate in city centres, high status inner city neighbourhoods (both apartment housing and villa neighbourhoods and garden towns) and increasingly move to new clusters of inner city condominiums and especially to newly built districts of suburban housing. Less wealthy households concentrate in inner city zones of dilapidation usually associated with declining industries and brownfield formation, and in some post Second World War housing estates especially those originally built and allocated as enterprise housing where larger share of blue collar workers concentrate. A specific urban social problem is the segregation of parts of the Roma population in some cities, where they are intentionally allocated to local government housing in poor condition. Some local government purposefully built shelters for municipal tenants that do not pay rent and move them into this type of very simple housing that is usually segregated on the edge of urban areas. The processes of the separation of the wealthy citizens and the segregation of poor populations contribute to a changing spatial distribution of population according to social status, growing socio-spatial disparities, and can contribute to the weakening of social cohesion in our cities. The segregation processes are relatively slow; however, once started it will be difficult to later solve its undesirable consequences. Cities with high social disparities and social conflicts are not desirable places to locate new investments and thus social problems can threaten their economic viability and further add to the vicious circle of socio-economic decline.

Ludek Sýkora :
The Czech case study – Social Inequalities in Urban Areas and Their Relationships with Competitiveness in the Czech Republic.
In: Social Inequalities in Urban Areas and Globalization. The Case of Central Europe.
Pécs: Centre for Regional Studies, 2007. 77-104. p. Discussion Papers, Special

Socio-spatial inequalities in metropolises

This part first touches on the issue of the level of socio-spatial inequality as it is the key aspect to understand post-socialist urban change. Secondly it provides the information about the distribution of social groups in urban space and especially those changes that are crucial for the understanding of the current situation in the level of socio-spatial inequality.

Inequality in the level of spatial distribution of social groups

We can start the discussion of socio-spatial inequalities with the main issue that characterizes the urban change in post-socialist period. The inequality in the spatial distribution of population (according to its various characteristics) in cities and their metropolitan areas has decreased for most of these characteristics during the 1990s. This could be expected in the case of demographic characteristics such as age or family size. During communism housing construction was usually concentrated in certain areas in which housing was allocated to a narrow cohort. This formed an uneven distribution of demographic groups across urban space. With the sharp decline of housing construction in the 1990s and decentralized market housing supply the concentrated housing provision does not play anymore such important role in the spatial distribution of mostly young households starting their life carrier. More surprising is that the socio-spatial inequality according to characteristics of socio-economic status diminishes as well. And this is a situation that was not expected. Contrary, the expectation was that capitalism will generate growing income and consequently social disparities and these will find its expression in growing socio-spatial inequalities. However this has not happened and the whole issue deserves very close attention and analytical scrutiny. The sociospatial inequalities increased only for social groups defined by their ethnicity or nationality. This is not much associated with ethnic groups that lived in post-socialist cities during Communism, but with immigrants on both ends of socio-economic status: wealthy managers and specialists of origin from developed countries and less wealthy migrants mostly form former socialist countries of Eastern Europe as well as Asia. However, the high spatial inequality in the distribution of population according to ethnic status is insignificant when measuring the level of exposure and isolation. The indexes of isolation are extremely low showing that these groups are not due to their small numbers isolated in urban space.

Not surprisingly, the highest socio-spatial inequality measured by index of segregation concerns the spatial distribution of population according to their ethnicity or nationality. In Prague metropolitan region, the indexes of segregation range from 58% for Romanies (Gypsies) to 31% for Ukrainians (measured for 1307 small territorial units within Prague Metropolitan Region). High socio-spa-

tial inequality also concerns economically active in primary sector (*Table 11, Figure 37*). However, this is largely impacted by the small size of this population and its spatial bonds to particular locations. Furthermore, the inequality in spatial distribution significantly declined between 1991 and 2001.

Table 11

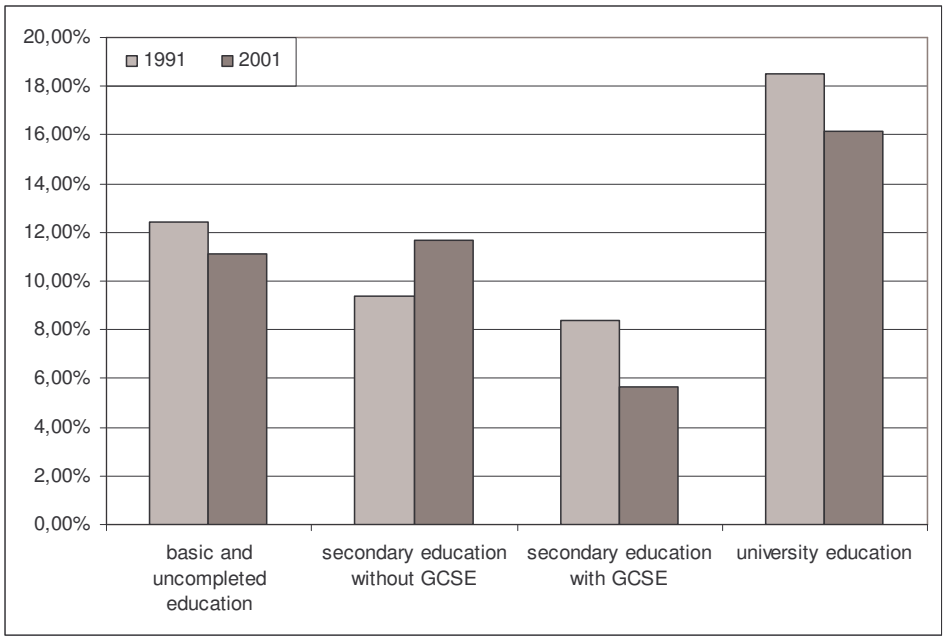
Indexes of segregation for Prague metropolitan area (basic settlement units), %

Status	Indicator	Index of segregation		Index of isolation	
		2001	1991	2001	1991
e	Romany	8,17	3,90	0,32	1,09
se	economically active in primary sector	39,77	44,00	3,84	13,17
f	age 75+	22,90	24,96	8,74	8,70
f	complete family household with dep. children	19,20	22,79	21,89	30,97
f	age 60–74	16,69	19,20	1,68	17,07
se	university education	16,17	18,40	19,78	17,23
e	other than Czech, Moravian and Silesian nat.	14,99	14,74	8,67	4,12
f	single-person housholds (lodger or living alone)	14,44	16,40	37,00	3,86
f	complete family household without dep. children	13,30	13,42	27,00	2,80
se	economically active in tertiary sector	13,34	18,04	7,97	6,63
f	age 0–14	12,90	1,18	1,10	20,4
se	economically active in secondary sector	12,26	14,62	2,27	3,19
se	secondary education without GCSE	11,69	9,39	31,77	31,67
se	basic and uncompleted education	11,10	12,43	1,37	3,83
f	incomplete household without dep. children	9,98	14,80	7,16	11,24
f	age 45–59	9,78	12,19	24,87	19,10
f	age 30–44	9,67	11,69	20,30	24,00
f	incomplete family household with dep. children	9,60	9,24	10,00	11,70
f	age 15–29	7,27	6,38	22,80	19,97
se	secondary education with GCSE	0,68	8,42	30,22	30,02
e	Vietnam nationality	7,19		1,17	
e	EU15 citizenship	42,79		1,94	
e	Russian nationality	32,77		1,71	
e	Ukrainian nationality	31,42		3,13	
e	foreigners (persons without Czech citizenship)	2,46		7,00	
se	unemployed	11,60		6,02	

Source of data: Census 1991, 2001, Czech Statistical Office.

Figure 37

Indexes of segregation for population in Prague according to achieved education (1991 a 2001, basic settlement units)



Source of data: Census 1991, 2001, Czech Statistical Office.

Beside Romanies, the only significant increase in the inequality concerns population without full secondary education (with GCSE – general Certificate of Secondary Education, i.e. literally population with vocational training with consequently restricted opportunities on labour market and lower income level). The least unequal socio-spatial distribution concerns population with full secondary education. This inequality furthermore in 1991–2001 diminished similarly like in the case of university educated population.

Mechanisms of uneven spatial distribution of social groups

Therefore, the question is what has been happening. Which mechanisms contributed to the decline in the socio-spatial inequality of population according to socio-economic status measured by indices of segregation. The major factors behind changes in socio-spatial patterns in metropolitan areas in the 1990s have been (1) the increase in income inequalities and therefore of the housing demand and (2)

the transformation in housing system, especially the growing impact of property market operation on housing in terms of increasing differentiation of housing supply. Increasing social disparities within population and growing differences within the geographical pattern of housing stock should theoretically contribute to the increase in socio-spatial disparities. Differentiated household incomes and differentiated prices and rents in the housing sector have created basic preconditions for the development of processes of socio-spatial (re)differentiation.

The socio-spatial inequalities can increase (or decrease) through the social and/or spatial mobility of population. If there is growing social inequality produced by upward social mobility of high social status population and downgrading of lower social status population, the socio-spatial inequality will increase. The contrast in spatial pattern is strengthened, but the spatial distribution of population groups according to their social status is not changed.

Socio-spatial inequality can also be increased or decreased through migration of population. If relatively wealthy people living in less wealthy areas move to more wealthy neighbourhoods and les wealthy people move to poorer neighbourhoods, the socio-spatial inequality will increase. The mutual combination of social inequality and this type of migration can generate sharp socio-spatial disparities in urban space, but without the change in spatial distribution of wealthy and poor population.

However, migration can also transform spatial patterns in terms of the distribution of various groups of population according to their social status in urban space. This is the case of gentrification of formerly socially weaker neighbourhoods, suburbanization of formerly socially weak urban hinterland by new wealthy population and on the other side and in contrast to this, there is immigration of socially weaker households to communist housing estates, which have had above average social status that is now declining. The mechanisms where migration is changing the former social status of urban areas can temporarily contribute to the decline in social inequalities measured by indexes of segregation as it contributes first to the social mix of population within these areas bringing their average social status closer to city or metropolitan average. However, it is likely that in the course of time, the social profile of such socially transforming neighbourhoods or areas will change to the other end and thus the processes of socio-spatial differentiation will finally contribute to growing socio-spatial inequalities.

Precisely the mechanism described here is the key for understanding of the contemporary urban socio-spatial change in post-socialist cities. Interestingly and importantly, this decline in socio-spatial inequality is produced by processes that are by their nature segregation processes. And it is a key paradox of post-socialist urban change that segregation processes are contributing to diminishing of socio-spatial inequality. However, this is only a temporary situation as once suburbanization, gentrification or immigration to housing estates moves the social status of

these areas on the city average, the socio-spatial inequality will start to increase and a more "normal or usual" relation between processes of residential segregation and growth of socio-spatial inequality will start to play decisive and more obvious role in reshaping urban social geography of post-socialist metropolises.

Socio-spatial patterns: areas of concentration/overrepresentation of particular social groups

Now we can come to the description of socio-spatial patterns, i.e. distribution of social groups within urban and metropolitan space and changes in this distribution. Let's start with "foreigners" or in other words population with other nationality than Czech, Moravian, Silesian, Slovak o Romany. The most important nationalities, whose proportion has been rapidly growing during the 1990s and at the same time they account for a significant quantity are Russians, Ukrainians, Vietnamies and citizens of EU15 as identified in Census 2001. Their indexes of segregation in Prague metropolitan region are provided above. The Figure below shows their spatial distribution in terms of territorial units with their disproportionate concentration, i.e. units where the location quotient of these groups is at least 3 (i.e. at last 3 times higher concentration in comparison with national average) and at the same time there are living at least 25 people of the given nationality. The map of the Czech Republic shows that Prague is the major (however not exclusive) concentration of foreigners. If we consider citizens of EU15 they concentrate nearly exclusively in Prague and close vicinity – the only exception is an exclusive district of wealthy population in Hluboká nad Vltavou. EU15 citizens live in areas of high social status especially in Prague city centre and the northwest sector that is traditionally high social status area. Russians predominate in Prague and some towns namely Karlovy Vary, their traditional Czech destination. In Prague, they live especially in housing estates, often purchasing newly built apartments in condominiums. Their spatial location often coincides with areas of higher social status. Ukrainians are more evenly dispersed through the territory of the Czech Republic which is associated with their dominant economic involvement as manual workers. In Prague, their higher concentrations are in areas with cheaper rental housing in inner city and some housing estates. Vietnamies concentrate in cities and especially along German border, which is associated with their dominant economic activity as vendors supplying cheap Asian products to their customers from Germany (it is easier to establish small business in the Czech Republic, cost are lower and there has also been until recently lower effort to tackle the sales of "illegal" products. In Prague, Vietnamies concentrate in housing estates closer to major marketplace dominated by Vietnam vendors. In general, Vietnamies are segregated in their economic activities. However, they do not tend to cluster their residences. Their increased concentration in some areas is

given by the availability and affordability of housing rather than by their desire to live close to other Vietnamies.

The localities with high social status were identified using indicators of university education and PC and internet access at home. They include traditional neighbourhoods of high social status population such as villa quarters from 1920s and 1930s in inner cities and some early high status suburbs in urban hinterland. The other major group of these localities consists of places with concentrated new housing construction. These are often completely new residential places including districts of inner city condominiums with apartments for sale and more importantly areas of mostly suburban single-family housing. The majority of these places is located in Prague and its hinterland. There are some in Brno and usually single place in some other mid size towns. Some of the new suburban places have some features of closed or even gated communities including both physical obstacles and/or surveillance systems.

There are two basic types of low social status localities. First are urban usually inner city areas with tenement housing -pre 2nd World War as well as Communist housing estates that usually coincides with concentration of Roma population. Second are small settlements in rural and peripheral areas. While the urban places are the outcome of segregation and represent urban socio-spatial inequalities, peripheral locations are consequences of urbanization and rural depopulation strengthened by regional labour market inequalities and are outcomes of urban-rural and regional inequalities (*Figure 38–41*).

The areas with over-representation of Roma population often coincide with localities with population of lower socio-economic status, described above. However, they also include localities with higher than low socio-economic status. The census data unfortunately do not show the Roma ethnicity but those Roma who determined themselves having Roma nationality in the Census. As most Roma population rather determined Czech, Moravian or Slovak nationality the data show only fragment of actual Roma population. Concerning metropolitan areas of Prague and Brno, localities exist in both of them with the overrepresentation of Roma population – these are zones in inner city neighbourhoods with old tenement housing stock dating back often even to 19th century.

Figure 38

Localities of overrepresentation of foreigners (2001)

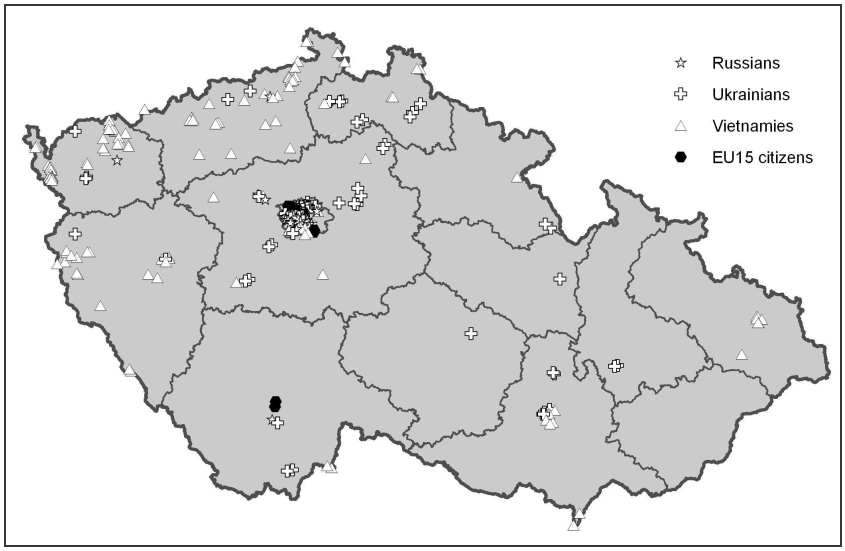


Figure 39

Localities of overrepresentation of foreigners in Prague (2001)

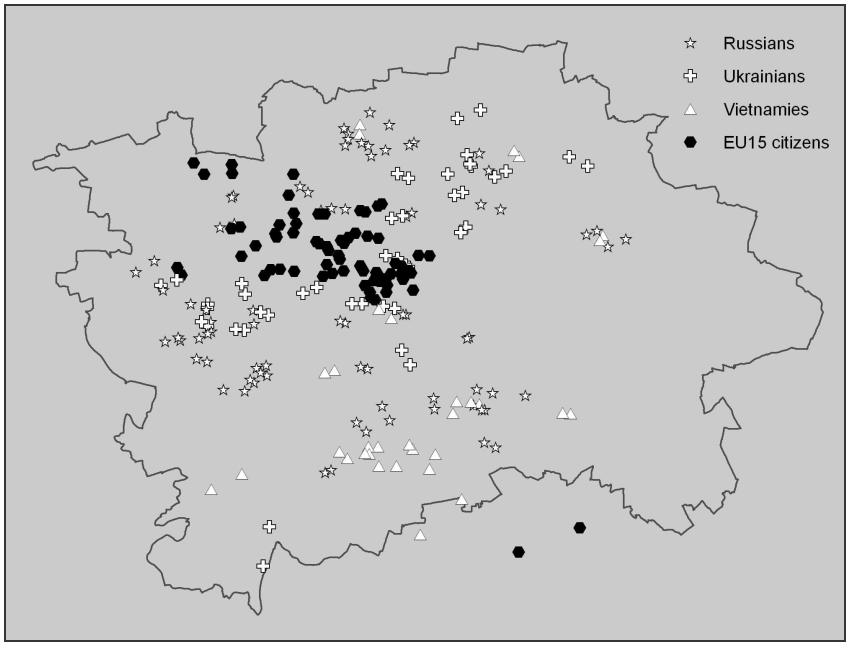


Figure 40

Localities of overrepresentation of social groups (2001)

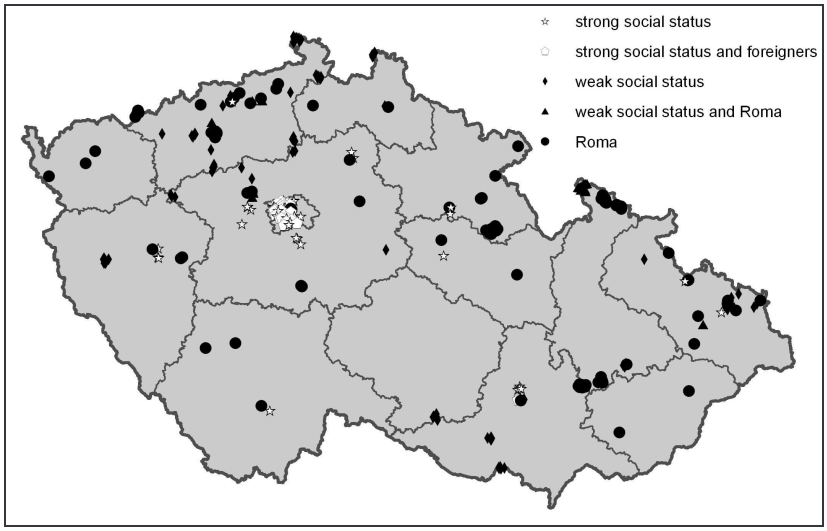
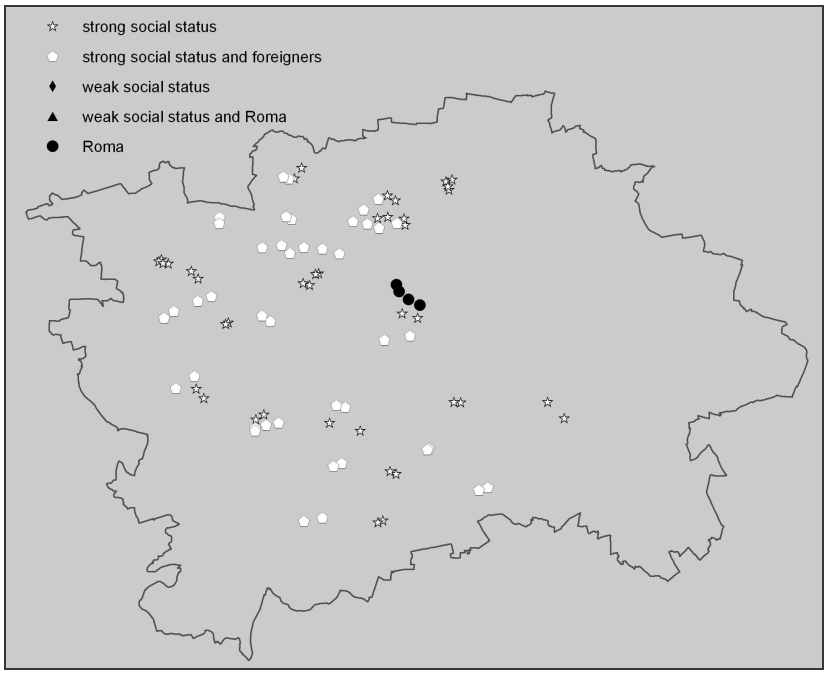


Figure 41

Localities of overrepresentation of social groups in Prague (2001)



Socio-spatial patterns: intra-metropolitan socio-spatial inequality

The internal socio-spatial pattern and socio-spatial inequality within metropolitan area of Prague must be seen in the context of the whole country. Cities have in general older population than country average. However, there are rural and peripheral areas with higher share of old population. Nevertheless as these are smaller numbers than in cities, urban areas concentrate largest absolute numbers of older population. Concerning the socio-economic status of population, data about income are not available. The best information indicating socio-economic status (if we work with aggregate data) is provided by the characteristics of education as there is high correlation between education and income. University educated people are concentrated in large cities, namely in Prague and Brno. Interestingly, if we assume correlation between age and education, and over-representation of elderly and at the same time under-representation of people with only basic education in inner cities, even urban elderly belong to educated population with likely higher incomes as well as capabilities to deal with changing economic, social and cultural context of post-socialist transformation. There is a low rate of unemployment in the cities of Prague and Brno and their metropolitan regions as well as in some other areas in contrast with regions affected by industrial decline and high levels of unemployment. This corresponds with low levels of the social benefits provision especially in Prague and its vicinity. Taking the indicators of socio-economic status into consideration and placing Prague and its metropolitan area into national context, we can say, that Prague region is in socio-economic terms the most-wealthy area in the Czech Republic with concentration of large quantity of population with the highest-socio economic status in comparison with national average.

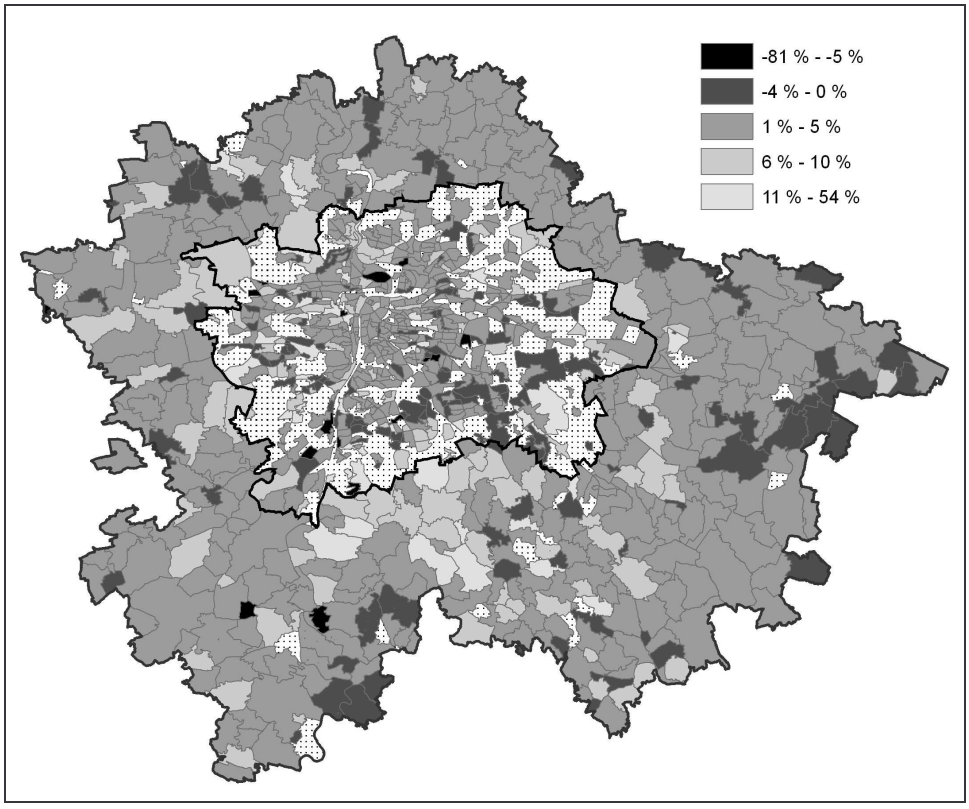
The major process that is changing the intra-metropolitan socio-spatial inequality is migration of high social-status population into suburban areas strengthening the socio-economic status in these areas, while weakening socio-economic status in areas, which this population leaves (*Figure 42*). This process has not changed between 1991 and 2001. However, it did decrease the differences between spatial units within the metropolitan area, as show the segregation indices presented above. In general, it also decreased the difference between socio-economic status of inhabitants in inner city and urban hinterland. At 2001, there still was large over-representation of high-social status population in inner city and under-representation in suburban zone. However, provided that current processes of residential suburbanization and housing estates decline continue, the general pattern of spatial distribution of higher and lower socio-economic status population will change with high socio-economic status population living in suburbs and selected neighbourhoods in city centre and inner city, and low socio-economic status population concentrating in selected less desired inner city neighbourhoods and housing estates. Whether this will happen and the current

pattern of still resembling socialist city will be reversed and whether it will take 10 or 30 years still remains to be seen.

The changes in socio-spatial pattern and spatial inequality were produced by three mechanisms (*Sýkora,* 1999a). First, social mobility of households fixed in their residential locations sharpened disparities within the existing socio-spatial pattern. Second, internal migration within the existing housing stock also strengthened the existing socio-spatial pattern. Third, immigration of affluent people to newly constructed residential areas of suburban homes or urban condominiums formed separated districts of wealthy population in the existing ecological structure of the metropolitan area. While new residents of condominiums usually strengthened existing socio-spatial disparities, suburbanisation contributed to changing social-status relation between traditionally stronger urban core and weaker outer urban districts and hinterland surrounding the city.

Figure 42

Prague Metro Area: change in the share of university educated (1991–2001)



Social upgrading has been especially strong in the case of neighbourhoods that have exhibited high social status prior to communist period and declined during communism. Since 1989, the social status of these neighbourhoods has increased through the social mobility of its indigenous population, through gentrification of renovated properties and in-filled new condominiums. From the geographical point of view, this includes the central city, some inner city areas and north-west sector of Prague, whose traditional position within the social geography of Prague has been strengthened. Social upgrading has been very selective and concentrated, affecting only some inner city areas. However, most of inner city population lives in neighbourhoods characterized by stagnation or decline. The communist housing estates, which concentrate about two fifths of Prague's population, have not been subject to major social changes yet. However, their relative position within urban social geography has declined. Furthermore, there are signs of their differentiation. While at some housing estates new apartment houses for relatively affluent population are being constructed, residential districts with higher concentration of manual workers and with worse accessibility by public transport show signs of both social and physical decline.

The outer city and suburban areas have undergone important transformations. Provided that suburbanization of affluent people continues, the socio-economic status of population in the suburban zone will continue to increase relatively to other urban zones in Prague and can move above metropolitan average. In this case, the socio-spatial pattern of former socialist city is being reshaped and can be in some time completely reversed. I anticipate, that in future the most affluent people will live in the city centre, some inner city neighbourhoods especially in the north-west segment of Prague, and in suburban areas, while population with lower-social status will occupy large zones of the inner city and housing estates from communist times. However, the built environment and social geography of Prague is very heterogeneous on the micro-scale, and this will certainly affect the impact of above mentioned macro-trends on the urban socio-spatial restructuring.

Metropolitan inequalities and competitiveness

Major and especially capital cities are characterized by a very dynamic social development. They are places where key decisions are made and where the most progressive human activities are concentrated. Cities are also places where new trends in thinking, technologies and fashion are introduced and materialized. Urban development in important cities, including major post-socialist metropolises such as Prague, has received new impetus with the transition towards market economy and consequently developed linkages with global economy. The global economy is characterized by the concentration of command and control functions

in a small number of metropolitan areas. Not all cities that have flourished in the previous period have the opportunity to keep up the pace in the contemporary super league of the major world centers. The top cities naturally attract transnational corporations, international organizations and important events as well as real estate developers and investors. Many other cities fight for their place at the sunshine. Their natural attractiveness is not sufficient any longer to keep pace with the frontrunners. Public officials and major companies in such cities are joining their forces to support city development and compete for investments in global economic arena. The attractiveness of certain cities for major investors and thus their competitiveness is not only influenced by economic parameters, but by the overall quality of the urban environment. The latter is not a mere matter of the general societal development in a country, but also a matter of a whole range of factors, which can be directly influenced by the politics of the city such as the quality of built environment and infrastructure. Sophisticated strategies of city presentation and promotion, i.e. city marketing can create a positive image of a city as desirable location for investment, business and everyday life. Investors prefer cities that care about their long-term development and present themselves to the outside world.

Where Prague stands in this respect? It has been very success full in terms of economic progress and strengthening its position within country as well as in Europe. The city per capita GDP in 2003 was 156% of the EU per capita average of GDP, unemployment keeps at low rates and there is higher demand than supply of labour. The economy of the city is dominated by services that account ca for 80% of GDP and 75% of employment in Prague. Prague has a highly skilled workforce and educated population (nearly 20 % of population has university education), concentrates major universities and research institutions. Prague has been highly attractive for foreign investors. According to the European Cities Monitor, a survey of business attractiveness in Europe's top 30 cities since the 1990s, the city of Prague has steadily strengthened its position from rank 23 in 1990 to 13 in 2005.

Even cities, which successfully attract investments and where development takes place, like Prague, may not win in the long run. New investments are usually allocated to certain areas, while other places decline. An internally divided city with growing disparities and conflicts can become a place that offers good business opportunities but not a quality residential environment. The objective of cities should be to direct investments in urban area in such a way that would ensure harmonic and balanced development of many city parts so it would contribute positively to a majority of firms and inhabitants. The priority of city political representations should be the protection of the public interest: to create an attractive and friendly environment for both entrepreneurship and life of citizens. Cities in cooperation with the local business community and representatives of citizen

groups can prepare transparent rules of the game for urban development, which express and take into account interests of the government, private and citizens sector. Such partnerships can contribute to the economically, socially and ecologically sustainable development of the city.

What is the reality in post-socialist metropolises and namely n Prague. The post-communist urban development has been characterized by an uneven impact on urban space. Most politicians see this as a natural outcome of market mechanisms that are creating economically efficient land use pattern. However, the spatially uneven development can in the future threaten economic efficiency, social cohesion and environmental sustainability. The question of social justice and social cohesion, issues of environmental impacts and sustainability, and more balanced spatial development have been up to now rather subordinated to the preferences given to economic growth. Urban governments could attempt to stimulate investment activity in less preferred locations to distribute the benefits from the growth and development more evenly across the urban territory. In a number of cases, cities need support from the national government to solve some of the most severe problems. The urban problems, however, currently are not among the issues of political and public debate on the national level. Some attention has been given to the decline in post-war housing estates and to the regeneration of brownfields. Most urban problems are, however, seen as local in their nature and left to local solutions.

In Prague the major achievements of urban policy and planning during the 1990s were:

(1) planning system was kept in operation despite unfavourable conditions;

(2) basic planning documents, i.e. Master Plan and Strategic Plan were approved by the end of the 1990s;

(3) Strategic Plan and Single Programming Documents pay attention to both urban competitiveness and sustainability.

The major weaknesses of contemporary urban policy and planning in Prague however are:

(1) non-existence of city marketing/promotion strategy, city land policy and real estate strategy and policy towards inward, especially foreign direct investments;

(2) very weak consideration of sustainability principles;

(3) virtually no cooperation between the city and private sector and prevailing relations of confrontation between the city officials and environmental NGOs.

The city government took the inflow of foreign capital for granted and up to now there has been a lack of activity in attraction of FDI, city promotion or public private partnership with foreign firms. Despite a number of issues which fall within the range of economic, social and ecological sustainability are present in city planning documents, the explicit declaration of political commitment to pur-

sue the principles of sustainable development are still missing. The voluntary citizens sector has quickly developed, especially in the second half of the 1990s, and a number of NGOs by their activities increased public awareness of some issues and projects in Prague's urban development. While at the beginning there has been hostility between "city bureaucrats" and "radical environmentalists", some limited opportunities were opened for the involvement of NGOs representatives to the decision-making processes.

The main aim of national, regional, and city government should be to promote such development that will result in the increasing quality of life of urban citizens. At present, there are three major challenges to governments seeking to achieve that goal. They are: (1) the increasing global competition between regions, cities, and localities for inward, especially international investments; (2) the growing attention paid to sustainable ecological, social and economic development; (3) the necessity to open up urban policy and planning procedures for the involvement of representatives from the private sector and voluntary citizen organizations (Sýkora 2002). The third of these challenges is procedural in nature; each of the urban policies applied should pay attention to the integration of public, private, and citizens sectors into decision-making, implementation, and evaluation, thereby building new and more complex modes of urban governance. The first of the challenges is very much about the activity of the government concerned itself. A city's competitiveness, however, is also dependent on specific objective local conditions and can be threatened, for instance, by having an obsolete infrastructure or vast derelict or declining areas. In such a case, the national and EU urban policies can support cities in diminishing the negative impacts of such obstacles. Even if cities are successful, new investments do not automatically bring wealth to all parts and all residents of the city and its metropolitan region. The location decisions of investors are highly selective in urban space, with a preference given to urban cores and suburban greenfield sites. Cities should attempt to achieve a more balanced, sustainable development. The second challenge seems to be one where the support of the cities from national and EU urban policies would be the most valuable. Urban policies should provide support to declining areas within cities, stimulate sustainable development, and restrict unsustainable growth patterns. In the context of Czech cities, attention should be paid to the regeneration of post-war housing estates and some inner-city neighbourhoods, to brownfield regeneration, to the application of sustainable metropolitan transportation systems, and to putting limits on sprawling patterns of metropolitan growth. The application of EU programmes in the Czech Republic is capable of helping to consolidate government measures towards these issues and possibly even to establish urban policy as a key tool for the coordinated and complex solution of the most pressing urban problems. However, whether is happens remains to be seen yet.