## CASE STUDIES: THE SOCIAL STRUCTURE OF URBAN AREAS: KEY FACTORS AND CHARACTERISTIC FEATURES

The social structure of Hungarian urban areas: key factors and characteristic features

## The impacts of globalization on urban areas in Hungary

The socio-economic restructuring of Hungary in the 1990s, its integration into global economy fostered the (regionally differentiated) development of major urban areas only. This has been originated partially from the historic past and partially from the mechanisms of global economy. The spatial structure of the Hungarian economy was historically big city oriented, although in the state socialist regime the development of big cities - by various instruments according to the changing interests of the political system - was restricted by political interventions (administrative regulations, regional policy). Following the political and economic reforms of the 1960s the socio-economic positions and the influential power of major cities and county seats have significantly strengthened. A governmental decree issued in 1970 turned large and medium-sized cities into the driving forces of economic development and in this way the industrial plants with modern technology and requiring highly trained labour were sited in these central places. The decisional centres of industrial companies having strategic importance in economic development were located in urban and metropolitan sites, while their different branches and affiliates were settled in small towns and rural areas (Barta, 2002, 64–65). As a result of these economic development projects large cities after a successful political lobbying process won significant financial funding resources and planning support for their development.

The inflowing foreign direct investments from West-Europe in the 1990s were almost exclusively targeted at joint ventures, stock companies and even small enterprises seated – by regional determinations – in core areas (*Barta*, 1992). These core areas (their management and societies) received them not only with a warm welcome but granted several (including tax) benefits, and provided them with labour culture of historical traditions, good infrastructure and skilled labour force. Global economy initiated quick growth in the Budapest region, on the Budapest-Vienna axis, in the cities of West-Hungary (Győr, Tatabánya, Székesfehérvár and their environment). The development of other big cities of Hungary (Pécs, Szeged, Debrecen) was less spectacular but still continuous (*Enyedi*, 1996).

North-Hungary, the eastern regions, the rural areas of the Hungarian Great Plain and urban regions with strong energetic sector (coal mining, metallurgy) and the settlements of the East Hungarian border zone once prospering from the benefits of Hungarian-East-European economic relations were facing a socio-economic crisis. The crisis was an outcome of the collapse of East-European markets, of the bankruptcy of plants having sold their products on these markets, of the massive redundancy of workers, of high unemployment and of the absence of capital resources standing in the way of economic restructuring. However there were some cities even in the crisis areas that were able to attract and settle down private businesses and industrial plants that albeit were unable to save them from the crisis but at least could stabilize their economy to a certain extent. In some cases this could be achieved by the foreign direct investments of Eastern or West-European firms.

The spatial demands of global economy polarized the interaction between cities and their environment in a specific way. On the one hand – by breaking up the hierarchical structures of the past – they changed and equalized the historically asymmetrical relationship between cities and rural areas and between core and peripheral areas. One of the reasons of changes is that global economy reached not only city centres but urban peripheries as well. During the mid–1990s for example industrial plants having been built as green field investment projects in the urban area of Budapest and in Pest County preferably selected the agglomeration zone or the satellite cities of Budapest such as Budaörs, Gödöllő and Dunharaszti for their site (*Dicházi–Matolcsi*, 1997, 38). The site selection strategies of transnational and multinational firms increased the land value of the urban peripheries of big cities and Budapest as well (*Izsák*, 2003).

The spatial demands of global economy create new dependencies as well in the interaction between cities and their urban peripheries. The competitive, top firms and financial centres with global positions and their regional (including Central European) branches are favouring urban centres, capital cities and major cities in their site selection policies while companies engaged rather in regional or national markets are more inclined to site their headquarters in the urban periphery of big cities or in small towns (*Sassen*, 2000, 26). The site selection policy of foreign companies is determined by their economic importance and this trend can clearly be seen in Hungary as well. The new researches are verifying that corporate management, the organisation of production and decisional functions are rather linked to big cities of central role, while the routine and physical processes of manufacturing are concentrated in their affiliates located in small towns and rural settlements (*Barta*, 2002, 64–69). *This* kind of spatial division regenerates the economic disparities between core areas and peripheries as well.

The spatial impacts of global economy are reflected by the new trends of urban growth in Hungary such as urban sprawl, the dynamic growth of suburbanization,

the decreasing population of city centres and the increasing of suburban population as their consequences. (The population of the urban areas involved in our research decreased by 5% between 1993 and 2003. This ratio of decrease was higher than the national average (1.6%). The greater part of decrease seems to take place in cities. The growth of suburban population was 15.7% within the same period culminating between 1998 and 2003 [Balázsné Varga, 2005]. 66% of the Hungarian population lives in cities. The majority of Hungarian citizens following the major trends of Central-European urban societies - are not living in big cities. For example 16% of the Czech, 14% of the Polish and 31% of the total Hungarian citizens are living in big cities [Stenning, 2004]). The spreading of urban lifestyle raises new issues of social problems that are linked to urban sprawl and suburbanization as well: such as car traffic and its environmental impacts, with their damages for health, the physical and social erosion of central urban quarters, the lessening of green areas, the social exclusion and the segregation of urban societies, the increasing gap of socio-spatial differences. The further parts of this paper are going to discuss these issues.

## The characteristic features of the infrastructural and institutional provision of urban areas in Hungary and their changes in time

Regional development was always heavily influenced by the availability of physical infrastructure and by the characteristics and potentials of regional and local systems and networks of different services. Their major spatial differences always played and and are still playing a major role in increasing and maintaining spatial disparities and in regional and local competitiveness (*Abonyiné Palotás*, 2007). The development and characteristic features of society and economy have vital role in them but they are further influenced by several additional factors.

The networks of infrastructure and services are integrated into major nodes in the vicinity of big cities but some of their elements have major impacts on regional integrations, spatial and regional cohesion. Physical accessibility, the development level of communication networks, higher education and health services all belong to the category of key elements.

In our analysis we tried to assess those further elements and those socio-economic aspects that are mostly responsible for the socio-economic disparities in Hungary's urban areas.

To accomplish this task we investigated how urban areas with their infrastructural and institutional characteristics and with their spatial disparities, as an outcome of certain outstanding socio-economic features, and the differences be-

tween big cities and their background settlements have been changed and what further changes they are facing during the regime change.<sup>3</sup>

## Physical accessibility

Railway services connecting Hungarian urban areas with their peripheries seem to be the most suitable mode of transport. The average travel time between cities and their nearest railway stations is eight minutes. The better than national average travel time is explained by the fact that all Hungarian big cities are intersected by a main railway route connecting them with some of their background settlements as well. The city of Debrecen enjoys the most favourable location from this aspect having good connections with the majority of its neighbour settlements. This is accountable for the fact that the city is positioned at the meeting point of several major railway routes; therefore the network provides connections to all directions.

The 36 minute average travel time from cities to their regional airports also seems to be fairly short. From this aspect the airports of Nyíregyháza, Szeged and Debrecen have the most favourable location as they are falling into their own urban area's territory. Their utilization ratio (except the airport of Debrecen) is low yet but they have bright prospects for economic development. The airports of Kecskemét, Székesfehérvár and Miskolc are situated at unfavourable geographical locations with much longer travel time than the national average. Of them Székesfehérvár can the most easily tackle this problem but due to the financial shortages of its investors the city has been trapped into a handicapped situation during the competition of regional airports. Generally speaking after all the shorter than ninety minutes travel time to regional airports from any points of all urban areas seems to be appropriate.

There are greater differences between urban areas from the point of motorway accessibility. The average travel time to motorways is 34 minutes in Hungary which is much longer than the West-European average values but much better than in East-Europe. The better than East-European results are resulting from the motorway building projects of the past 4–5 years. The travel time values to motorways are much better in the urban areas of Budapest, Győr, Kecskemét and Székesfehérvár, because all these cities are accessible by motorway and several of their background settlements have also direct connections to these motorways. This means that not only big cities but also several of their background settlements are easily accessible by motorway. Recently the physical accessibility of the urban areas of Szeged, Nyíregyháza and Debrecen has significantly improved by cutting down the distance of these cities from motorways. In 2006 both Debrecen and szeged joined the Hungarian motorway network

<sup>&</sup>lt;sup>3</sup>For tracking changes we defined three sampling dates. They were years 1993, 1998 and 2003.

We consider telecommunication services another determinating factor of spatial disparities. The average provision level of urban areas by telecommunication services has tripled between 1993 and 2003 but it is a bit worrying trend that the average provision coverage of urban areas by fixed hone services is lagging behind the national average by 15% (*Figure 1*).

## Figure 1

*The changing provision coverage of urban areas by fixed phone services* (2003/1993, %)



Source: Edited by Szépvölgyi Á. on the basis of KSH data.

The reason behind this is that the provision coverage of urban agglomerations by fixed phone services is still lagging behind the national average (by 30%). However an equalization process seems to shape up in this field as the value of this lag-behind indicator was 120% in 1993. This is explained by the fact that in the late 1990s the leading Hungarian fixed phone service provider (formerly Matáv Rt today Magyar Telekom Távközlési Nyrt a part of Deutche Telekom) could acomplish its concession projects only by connecting a great numer of small settlements into its telecommunication network. Differences between urban areas can be well-demonstrated by the fact that the coverage ratio of Budapest by telecommunication services was by 60% higher than the national average in 2003 but the coverage ratio of big cities by telecommunication services is also exceeding the national average. The reducing differences between Budapest and provincial big cities in the coverage of telecommunication services is an indicator of the quicker growth of telecommunication service in small and medium-sized towns and in rural settlements.

The role of public Internet access points has significantly increased by the recent improvement of e-administration services during the past two years. These services are concentrated in urban areas and are available in all the settlements involved in our research. Therefore they can be eliminated as factors of spatial disparities. However only 53% of Hungary's total settlements have such Internet access facilities and just those settlements are suffring from the inadequate coverage of public Internet services that would need them the most due to their low accessibility of Internet services at home.

## Demography and housing

The 9 urban areas involved in our research are inhabited by 38% of Hungary's total population in 2003 (3.8 million people), but their population concentrating force has significantly weakened between 1993 and 2003. This can be accounted for the quickly dropping population of Budapest as a partial result of the otmigration of residents from the central parts into the agglomaration zone, albeit a minor part of outmigrants settle down in other parts than the agglomeration zone. The population drop rate of provincial urban areas is also exceeding the national average but still moderate, due to the increasing population of their background settlements.

The population changes of urban areas between 1993 and 2003 created a huge downfall in their core cities but a dynamic increase in their background settlements (*Figure 2*).

Kecskemét was the only urban area increasing its population due to its special structure of background settlements consisting of farmsteads<sup>4</sup> and also to the immigration of their residents into the city's central urban quarters. (Living conditions in farmsteads are lagging behind the average level and the faster urban development of the nearby city makes these differences more spectacular between the city and its environment). This was also a partial explanation in case of Nyíregyháza why it could maintain its population decrease on minimal level and the higher than the average natural birth-rate index was another counterbalancing factor against their decreasing population tendencies. On the basis of the radically dropping population in Budapest, Miskolc and Székesfehérvár and of the increasing population in their background settlements we assume that the spatial expansion of such a high number of inhabitants involves a wider circle of

<sup>&</sup>lt;sup>4</sup>They are villages having a significant number of peasant houses with a farm in their peripheral zone but within their administrative boundaries

settlements than their background ones. The population growth in background settlements is highly sporadic, which is an indirect proof of increasing socio-spatial inequalities – both on local level and between core-periphery relations. The highest population growth was seen in the physically most easily accessible settlements that do not necessarily mean the nearest geographical location to the core city.

## Figure 2





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

The spatial distribution of people with university or college degree shows a similar pattern to population changes but the differences in the intensity of these changes between core and background settlements are even greater indicating growing socio-economic inequalities between and within them (*Figure 3*). The overall rate of residents with university or college degree within the group of residents aged over 7 in urban areas was by far below the national average in year 2001 (7,9 – 9,8%).<sup>5</sup> The values by settlements varied between the extreme values

<sup>&</sup>lt;sup>5</sup>It is very important to clear that this does not mean that inhabitants with university or college degree are not concentrated in metropolitan areas. This is true only in the sense of their absolute number values, albeit their ratio within the total number of population not in these areas is the

of 1.5 and 29.5. The settlements with the highest ratio of high-educated inhabitants were located in the agglomeration zone of Budapest (Telki, Nagykovácsi, Budakeszi, Solymár, Szentendre, Leányfalu, Budaörs, Budajenő, Budapest), while the least educated people – except for Nyíregyháza – are living in the background settlements of nearly all provincial big cities (mostly in Debrecen and Pécs).

## Figure 3

The changing ratio of citizens with university or college degree (2001/1990, %)



Source: Edited by Szépvölgyi Á. on the basis of KSH data.

This means that high-educated people are outmigrating from city centres in a higher proportion than other social classes. The heterogenity of changes in agglomeration settlements shows that the intensity of social changes may be much differentiated depending on the local resources and living conditions they can offer to local people. The growth rate of inhabitants with university or college

highest. Their higher than national average ratio in urban areas is the consquence of the higher ratio of high-educated citizens living in provincial medium-sized and small towns and their environment. This is particularly true for provincial university or college cities and their environment (for example Veszprém, Sopron, Keszthely, Mosonmagyaróvár, Gyöngyös, Szombathely, Békéscsaba, Zalaegerszeg, etc.). Another point is that very many jobs that big cities and their peripheries can provide are attractive mostly for low-trained or unskilled labourers only.

degree is the most moderate in the urban areas of Kecskemét, Miskolc, Debrecen and Nyíregyháza, possibly due to the moderate development progress of local institutes of higher education.

Housing differences, especially differences in the quantitative and qualitative features of the newly built homes are very important indicators of social inequalities. In *urban areas* the average – in relation to the total number of inhabitants – number of newly built homes exceeded the national average in all the three sampling years of our research. These development tendencies indicate that the above-described differences also increased as in 1993 as 1.9 times more new homes were built in urban areas than on national level while in year 2003 the value of this multiplier was 2.1. This difference value in some urban areas is positive with more than double values of the national average such as in the urban areas of Budapest, Győr and Pécs in 2003 but even in the urban areas of Székes-fehérvár, Debrecen and Nyíregyháza they are still exceeding the national average. The lowest figures of housing provision (showing a falling tendency during the past ten years) have been registered in Miskolc, as a consequence of the city's lagging – and still ongoing – economic restructuring process.

In big cities housing indicators were below the national average in 1993 but since 1998 they have been exceeding it. The most spectacular growth in housing took place during the past five years which probably may have resulted from building new gated residential communities. This increased the 10% housing advantage of big cities to 50%. Of the big cities we registered significant below average values only in Székesfehérvár and Miskolc. In Miskolc as well a sin its urban area low residential incomes are the most responsible for low housing values. In Székesfehérvár the late start of building gated residential communities and the delay of social housing programme are the main reasons of low housing indicators (in 2004 and 2005 the local government built new homes in high number).

In background settlements the ratio of new homes exceeded the national average in all the three sampling years. Of the background settlements of urban areas the values registered int he urban areas of Budapest, Győr and Pécs are exceeding the national average by 250–300% indicating an increasing tendency of suburbanization processes (our researches are indicating significant differences among background settlements and some settlements have outstanding importance in each urban area). But the housing values in the background settlements of the urban area of Miskolc and Kecskemét, with the ratio of newly built homes are below the national average.

Due to the above-described processes the changes in the number of new homes were varying between urban areas and inside their territory as well between 1993 and 2003 (*Figure 4*). With the intensification of suburbanization, with the growth of construction industry and with the increasing territory of local homebuilding sites a significant overall growth has been registered in the number of new homes

in the urban areas of Győr, Pécs, Szeged and Debrecen (over 300% in their total territory), while this growth was moderate (150%) in the urban area and urban environment of Kecskemét. Pécs is the only urban area with a lower growth rate of new homes in the core city than in its environment. At the same time in the urban areas of Budapest, Miskolc, Nyíregyháza and Székesfehérvár new home buildings are more spectacular and more concentrated into agglomeration zones. The impact of new home buildings on the growth of socio-spatial inequalities is rather indirect as it is influenced by several other factors, such as incomes, infrastructure, transport services and the changes and outcomes of other socio-economic factors.

## Figure 4





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

## Employment and businesses

Unemployment, after the full employment system of the socialist era, was a new phenomenon in Hungary emerging after the regime change. It was in the deepest crisis – amidst the economic transition – affecting settlements in varying scale and size between 1992 and 1993. Since that time the employment indicators of

Hungarian urban areas and their environment have significantly improved. Between 1993 and 2003 this was well illustrated by the positively changing figures of unemployment and persistent unemployment data among active wage earners (*Figure 5*; *Csabina* et al. 2005), and by the increasing ratio of active wage earners in the age group of 15–74. (*Figure 6*). Since the late 1990s the unemployment /employment ratio has positively shifted in favour of employment among active wage earners and within the same age group the ratio of inactive population dropped, while that of the active wage earners increased. By all means these tendencies are equalising socio-economic differences in macroregions and in urban areas but on the other hand as a result of some special social circumstances sociospatial differences between core areas and peripheries may further increase.

At present Budapest with its agglomeration zone, Győr, Székesfehérvár and their peripheries are in the most advantageous situation regarding employment prospects as it is seen from the majority of absolute employment indicators as a consequence of the high inflow of foreign direct investments. Miskolc, Szeged and Nyíregyháza are in less favourable regarding employment due to the slow progress of their economic restructuring process.

Figure 5

## *The changing unemploymen rate (2003/1993, %)*



Source: Edited by Szépvölgyi Á. on the basis of KSH data.

## Figure 6





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

The changing unemployment rates are indicating the relative positions of urban areas between 1993 and 2003. As it can be seen only one background settlement in the urban area of Miskolc and Pécs show negative unemployment tendencies (*Figure 5*).

Unemployment indicators have been improved the most spectacularly in the core cities of urban areas particularly in Budapest, Kecskemét, Debrecen and Nyíregyháza (with decreasing to one-forth, one-fifth of their initial values) as the earlier very high unemployment dropped thanks to several businesses immigrating since the late 1990s with an increasing speed. In background settlements unemployment situation is showing a rather heterogenous picture as it has improved only in places with good transport connections. In the urban areas of Győr, Székesfehérvár, Pécs and Szeged having very good unemployment indicators since the beginning of economic restructuring the improvement progress was less spectacular but in their background settlements the drop rate of unemployment depended on the degree of their physical accessibility. However Miskolc and its background settlements are still facing heavy unemployment.

*Figure 6* is showing the changing relative positions of high-educated people among the unemployed in urban areas between 1990 and 2001. The spatial patterns of these changes are directly correlating with the progress of suburbanization process.

This is also true for the majority of settlements in the Budapest agglomeration zone. However in the urban agglomeration areas of Kecskemét, Székesfehérvár and Pécs this situation has greatly improved due to the increasing ratio of new jobs requiring high professional skills and qualifications.

*Figure 7* is showing three totally differing tendencies in the changing ratio of active wage earners. There are positive changes in the urban zones of Győr, Székesfehérvár and Budapest (with higher than 33% increase ratio). In the peripheral zones of the first two cities a moderate growth can be observed but in Budapest and its agglomeration zone the growth rate of active wage earners is very high with a similarly high drop rate of active wage earners in the core cities. Also negative tendencies can be observed in the urban environment of Nyíregyháza, Debrecen and Miskolc while the situation in their core cities has changed positively (with 20% growth rate during eleven years). The urban areas of Kecskemét, Szeged and Pécs have almost the same growth rate as their peripheries and from spatial aspects the intensity of these changes can be described as homogenous.

#### Figure 7





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

Figure 8 is presenting the changing ratio of brain workers of the total employment data between the last two censuses. As it can be seen the situation has much more improved in background settlements than in core cities. This is explained by the over-representation of brain workers among the outmigrants of city centres during the suburbanization process. The data are also indicating this social group's changing attitudes to the job system and job issues of its residential environment (e.g mobility, transport and other socio-economic impacts). This group's better adaptation to changing circumstances can be explained by the brain workers' traditionally higher qualifications and earnings. In city centres the drop rates are dramatic, only Székesfehérvár seems to be the only exception from this trend where brain workers had an opportunity for changing their place of residence within the city centre with improving employment circumstances (e.g. a new college was built). The improvement of the employment indicators in background settlements is very spectacular indicating their definite preference during the residential site selection of high-educatted people. Although their selection criteria are varying by urban areas but the settlements they select have similar geographical and socio-economic features.

Figure 8





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

People permanently living on regular social benefit are a specific group within inactive social classes. Their number drastically increased between 1993 and 2003 (*Figure 9*) even despite that the ratio of inactive groups has decreased during the past few years (although the reactivization rate of other inactive groups was higher). However there are plenty of tasks left in the field of reactivating this group in Hungary and its urban areas (in comparison with Western democracies Hungary is lagging behind them by 10% in employment rate). A further improvement in this field would be one of the most desirable ways of easing socio-economic differences.

## Figure 9





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

The number of people (partially) living on regular social benefit is showing an increasing trend chiefly in city centres (except in Győr, Székesfehérvár and Nyíregyháza). In the cities of Miskolc, Debrecen, Pécs and Szeged the number of people living on benefits has significantly increased due to the restructuring or other problems of local economy. The slightest growth in the number of socially handicapped people can be observed in the agglomerational settlements of Győr, Kecskemét and Budapest. The highest increase has been registered in the back-

ground settlements of Miskolc, Szeged and Debrecen, which can be explained by the higher than average representation of active wage earners among outmigrants from city centres to urban peripheries and partially by the improvement of employment chances.

Employment chances are chiefly determined by the number of active businesses and their demands for labour, therefore they are primary factors of socioeconomic inequalities. Between 1996 and 2003 the number of active businesses increased dynamically in the background settlements of West-Hungarian urban areas and in the Budapest agglomeration zone (*Figure 10*). In the core cities of all urban areas a moderate growth can be observed by taking a glance at the number of active businesses. Due to their different dynamism all these are reducing sociospatial differences between city centres and their urban peripheries but at the same time they are increasing differences in employment on macroregional level. The increase in the number of active businesses in bakground settlements was rather differentiated, showing strong correlation with the outmigration destinations of brain workers and high-educated professionals which seemed largely determined by the physical accessibility and the socio-economic characteristics of settlements.

Figure 10





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

#### Health services

Our research data show significant differences in the institutional supply of health, education and cultural services between urban areas. These differences are strongly increasing socio-spatial differences. Concentration is the most dominant feature of the changes in the institutional supply of these services i.e. the increasing role of big cities in public services which is just contradicting to the new trends of residential functions weakening in city centres and getting stronger in background settlements.

The number of general practitioners in settlements is a quantitative indicator of primary health services. It shows how crowded the general practitioners' waiting rooms are and how wide is the selection palette of local practitioners.

On the scale of urban areas there are no great differences in the quantitative indicators of primary health services. The urban areas of Nyíregyháza and Budapest have the worst indicators in this field, due to their relative shortages of general practitioners. Here the average patient/doctor ratio was 2400 in year 2003 (the average patient/doctor ratio in urban areas is 2080) while in the urban area of Pécs it is 1500 only (the national level of patient/doctor ratio is 1980). Pécs is in a unique position, as the health service indicators of its background settlements are better than of the core city due to their lower number of inhabitants. (Although, regarding this field, a strong equalization process has been going on since 1993 and some minor settlements in the urban areas of Pécs, Győr and Székesfehérvár have been left without any general practitioner services. Their number sorted in descending order is 13, 8 and 3. The inhabitants of these settlements have no other choice than visiting the neighbour city's or village's general practitioner as they neither have doctor on duty services) (*Figure 11*).

*Figure 11* is showing the changing 'utilization ratio' of general practitioners between 1993 and 2003. The tendency of changes is varying by urban areas between 1993 and 2003: on national level the quantitative health service indicators have improved. A higher than national average improvement was registered in the urban area of Miskolc only. The quantitative indicators of health service also improved in the background settlements of Kecskemét and Miskolc but in all the other urban areas they have deteriorated (mostly in Budapest and Pécs and in their urban agglomeration). Thus, national level improvement is mainly the consequence of increasing quantitative health service indicators in small towns and villages excluded from urban areas and a dual tendency may be observed in urban areas: worsening indicators in background settlements falling behind and improving indicators in core cities exceeding the national average.

Deteriorating indicators are explained by the changing situation of background settlements. In urban areas core cities are in a better position than their peripheries but this dichotomy can be eliminated by the assumption that a great part of citizens living in urban peripheries – on the basis of free choice of general practitio-

ners – uses their services in the nearby cities. This hypothesis can be verified by the fact that quantitative health service indicators worsened mostly in background settlements (especially in the agglomeration zone of Budapest, Szeged, Székesfehérvár and Pécs), which can be interpreted as a kind of rationalization, cooperation creating a balanced spatial division of health services in urban areas as in all core cities without exception the situation has sgnificantly improved.

## Figure 11





Source: Edited by Szépvölgyi Á. on the basis of KSH data.

There are wide differences among patient/doctor ratios among background settlements (the two extremes are Orfű and Győrújbarát with 770 and 5053 patient/doctor ratio. This is greater than a sevenfold difference) and even within urban areas (the largest 6.5 fold difference has been registered in Győr agglomeration zone between Kisbajcs and Győrújbarát and the smallest 1.8 fold difference between Nyírtura and Nyírpazony in the Nyíregyháza agglomeration zone). The results have verified our assumption that although differences in the institutional supply of public services (especially the health segment) – are not primary but they – do facilitate the increase of social differences in urban areas and they do have some role in sustaining them as well.

In-patient services are an important part of health services where the availability (and utilization ratio) of hospital beds is an important statistical indicator. The value of hospital bed supply per 1,000 inhabitants informs us about the possibilities and limits of health services and the differences of this value are one of the major indicators of social differences. All these data are relevant to cities only but some city hospitals – the majority of hospitals involved in our research are operating in big cities are performing county level services as well (their service territory is inhabited by 150–200 thousand people). Of Hungarian urban areas Szeged, Budapest and Nyíregyháza had the highest value of hospital bed supply per 1,000 inhabitants indicators (between 6 and 3.6), while the lowest values have been registered in the urban areas of Pécs and Székesfehérvár (between 0.7 and 1.1, the national average is 2.6). Thus, the difference between hospital bed supplies is almost ninefold among the different urban areas.

Between 1993 and 2003 the number of hospital beds increased in Debrecen only (113%) while higher than the national average reduction of hospital beds was carried out in the urban areas of Győr and Kecskemét (76–83%). There were almost no hospital bed reductions in the urban areas of Székesfehérvár and Budapest.

Outside the territory of urban areas only the background settlements of Szeged and Budapest (Deszk, Pomáz, Kistarcsa, Vác, Visegrád, Dunaharaszti and Törökbálint) have available hospital beds. The cutdown ratio of hospital beds was below the average in the urban area of Szeged and exceeded the national average in the urban area of Budapest. Cities with the highest hospital bed supply per 1,000 inhabitant indicator (18–20) are located in East-Hungary: (Miskolc, Nyíregyháza and Debrecen), while Szeged, Győr and Budapest have the lowest indicators (12– 13). The national level hospital bed supply per 1,000 inhabitants indicator is 2.5, while this average figure is 1.5 for big cities. The reduction ratio of hospital beds was the lowest in Debrecen, Székesfehérvár and Nyíregyháza and the highest was in the cities of Kecskemét and Győr (*Figure 12*).

## Education

The differences between the institutional supply and the use of education services were investigated in the public and higher education system. These services are also dominated by high urban concentration and their importance is continuously increasing.

The average value of full-time secondary pupils per 1,000 inhabitants informs us about the present utilization ratio of secondary schools and its future tendencies. *On the scale of urban areas* the average 8.5 secondary pupil per 1,000 inhabitants value is nearly one-fifth of the national average (43; but this figure has resulted from the non-existence of students in non-existent background settlements). The two extreme values of these data are 3 secondary pupils per 1,000

inhabitants in Győr and 18 in Nyíregyháza (this figure is 13 in the Budapest agglomeration zone. The 40% average change in urban areas is more or less correlating with the 35% of average growth between years 1993 and 2003.

## Figure 12

The changing values of total hospital bed supply per 1,000 inhabitants between 1993 and 2003 (%)



Source: edited by Szépvölgyi Á. on the basis of KSH data.

The values on the scale of urban areas can practically be replaced by the average of cities everywhere except in Budapest. *Within urban areas* the average of cities (85 secondary pupils per 1,000 inhabitants) is the double of the national average clearly expressing the high urban concentration of secondary education services. Differences on the scale of cities can be well illustrated by the fact that compared to the value of 63 secondary pupils per 1,000 inhabitants value in Budapest this figure increases to 110 in Székesfehérvár. Besides Székesfehérvár, Miskolc, Győr and Nyíregyháza are traditional 'high-scool cities', while Budapest, Szeged, Pécs and Kecskemét are the least high-school oriented. The 35% national growth rate is relevant for big cities as well: the growth rate was the smallest in Győr and Szeged (125%) and was the highest in Nyíregyháza and Pécs (145%, Figure 13).

Figure 13 The changing figures of full-time secondary pupils between 1993 and 2003 (%)



Source: Edited by Szépvölgyi Á. on the basis of KSH data.

The ratio of the students of higher education of the broader sense (accredited master trainings, university and college education, post-graduate professional training, PhD, DLA training) in different sections (full-time courses, evening classes, correspondence courses) is providing a more clear picture on the situation of the whole higher education sector than data limited to the ratio of full-time students only. Of all the background settlements only those in the Budapest agglomeration zone have institutes of higher education, therefore making difference between background settlements would be useless in this case.

On the scale of urban areas the student per 1,000 inhabitants indicators are exceeding the national average in several urban areas (Nyíregyháza, Debrecen, Szeged) (10 students per 1,000 inhabitants) indicating that in these urban areas (cities) the full-time forms of higher education, extended by evening and correspondence courses or other supplementary forms of university or college education such as accredited master trainings, special training classes etc. are more available than in any other parts of Hungary. These forms of education are the least available in the cities of Győr, Székesfehérvár and Budapest. The urban area of Miskolc was the only one with decreasing number of students between 1993 and 2003 but the growth rate of students was also below the national

average of 16 students per 1,000 inhabitants (108%). However the growth rate of other urban areas fairly exceeded it (144% in the urban area of Győr, 137% in the urban area of Pécs) (*Figure 14*).

On the scale of big cities the values of these figures are lower, due to filtering out the data of background settlements. In this way the relative higher educational capacities and the utilization ratio of big cities can directly be compared. Both in case of full-time higher education services and in case of comprehensive higher education services Szeged and Pécs can be regarded as 'classic university cities' with the values of 102, 89 and 172, 170 students per 1,000 inhabitants (these figures are four times higher than the values of the national average [20 and 40]). These cities are followed by Debrecen and Győr with their dynamically increasing values. However, the educational indicators of all the big cities are exceeding the national average, even the values of Székesfehérvár and Kecskemét by 1.5 times having colleges only. The differences in higher education supply among big cities are threefold regarding both major forms of their training system.

#### Figure 14

## *The changing number of university and college students between* 1993 and 2003 (%)



Source: Edited by Szépvölgyi Á. on the basis of KSH data.

# The social structure of metropolitan areas: the changing core-periphery model<sup>6</sup>

The social structure of Hungarian metropolitan spaces has historically been formulated by the high-ranked core and low ranked periphery model. (In the period following the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries until the 1950s high social classes with high incomes lived in the inner city quarters of Budapest while suburban zones, industrial districts and peripheral settlements were inhabited by low social classes).<sup>7</sup>

The state socialist regime significantly changed the social inequalities of the historical core-periphery model. *These changes were initiated by the functional and social transformation of city centres and by the suburbanization process of that time.* 

Since the 1970s Hungary has been struggling with the problems of inner cities: the physically eroding houses and flats, the increasing number of slums and the damages of the environment. Deterioriating cities became more perceivable in the 1980s. The concentration of the poor, the old-aged and the Roma population in large cities was significant even in the periods mentioned above (*Ladányi-Szelé-nyi*, 1988, 83; *Musil*, 2002). but the massive outmigration of middle classes from urban peripheries did not start at that time, though the distribution mechanisms of state housing provision, the building of new housing estates created some opportunity for some 'quasi-suburbanisation'. In several cases the society of housing estates was originating from the outmigration of the wealthy, socially high-positioned classes from city centres with better political chances for the enforcement of their interests. Within the framework of a redistributive state housing provision system<sup>8</sup> the modern, new housing estates built in the outer belt of city centres or

<sup>&</sup>lt;sup>6</sup>I used core-periphery model in socio-geographic and sociological sense. In socio-geographic sense the core should be interpreted as the spatial centre of a certain geographic unit while periphery means the outer space of the geographic unit. Between core and outer space there may exist economic, infrastructural, functional and social differences or disparities. These disparities are marking out the spatial centre of the geographic unit and the periphery's ecological and social positions. In sociological sense core and periphery are marking out the social rank of the geographical unit's population in the social hierarchy and the social position of population living in core and peripheral areas. In my 'traditional' core-periphery model the inhabitants living in core areas have the highest social rank gradually lowering as moving out of the city centre.

<sup>&</sup>lt;sup>7</sup>In Hungarian big cities the core-periphery model has never followed directly this pure analogy. City centres had always residents from the lower classes as well. This goes back to architectural reasons on the one hand and to the traditional structure of urban societies resulting from the low percentage of upper and middle classes.

<sup>&</sup>lt;sup>8</sup>The redistributive housing provision system was an organic component of the housing policy of the socialist regime until the late 1980s. It was characterized by the state's dominance in the provision of flats. The system was originally targeted at reducing social differences in the state's welfare services. However in most cases the provision of flats – by eliminating the rules of market and social aspects – was driven by different political motivations and by certain elite groups in power.

in urban outskirts equipped with all comfort and amenities were considered as an acknowledgement of social and political position and a bonus for the loyalty to the state. The less preferential middle-class and lower middle classes, positioned at a lower level of the social and political ranking system, had no chances for leaving their homes located in urban centres within the framework of the state housing provision system (*Cséfalvay 1995*, 41).

The above-described processes changed the linear downward tendency of physical environment and social position indicators as moving out from the city centre towards the peripheral zone. The ecological position of city centres has deteriorated, the social reputation of transitional urban zones has increased as a result of building new housing estates and the social classes settled down there. At the same time the social reputation of urban peripheries remained low.

The 1990s was a period of fundamental changes. These changes took place in a very contradictory way with a rapid and spectacular development at certain spots of urban centres while other parts were lagging and gradually perishing. The advantages of urban restructuring are originating from 'big city life'-styled development processes, from the domination of business and commercial functions. This assigns characteristic features for metropolitan centres: the building of financial centres, banks, office quarters the building of new or the rehabilitation of urban economic and commercial centres, the construction of their servicing infrastructure, building or renewing hotels, shopping centres and business or market oriented real estate developments. The elegant shops, the new restaurants, bars and cafeterias, pedestrian streets, tourist spots create a modern urban environment in city centres. *The above-described changes have partially improved and partially spoiled the city centres' ecological positions in the traditional core-periphery model.* 

Since the 1980s an increasing number of people have outmigrated from city centres into urban peripheries. The years of the 1990s further increased the dynamics of suburbanization.<sup>9</sup> Suburbanization processes were further encouraged by the economic demands of spatially expanding residents and by the spatial decentralization of economy. The new housing market positions, the increasing salaries of (mostly high class) citizens, the widening selection alternatives and demands for suburban residential areas are further catalysators of suburbanization. These new demands were correlating with urban environmental problems too, such as air pollution, noise and the missing rehabilitation of central urban quar-

<sup>&</sup>lt;sup>9</sup>The above described socio-statistical analyses have also verified the dynamically growing intensity of suburbanization. The population of big cities and their urban areas has dropped by 5% between 1993 and 2003. This drop rate exceeded the national average. One of the largest population drop rates (nearly 7%) was revealed in the Budapest agglomeration zone. The greater part of population drop took place in cities. It was 14.6% in Budapest and the average drop rate of the remaining cities was 4.8%. The average population growth rate of suburbs was 15.7%.

ters. The local development policy of suburban municipalities is further increasing the dynamism of suburbanisation by encouraging outmigrants for settling down by different means of land use policy, such as infrastructure development and big supply of building sites.

The findings of the representative survey in 9 urban areas in 2004 have revealed that suburbanization process may be interpreted as a spatial restructuring of high classes in the city pursuant to their gradual outmigration from the city centre into external urban zones and finally to suburban zone. The outmigrants first selected well-advanced urban peripheries, then good quality urban outskirts and finally less-advanced urban peripheries.<sup>10</sup> On the other hand we also followed the spatial migration of low classes within urban zones. For example in Székesfehérvár only a low ratio of high and upper-middle classes are involved in suburbanization but middle and low classes were more mobile. (A representative survey for the suburban population of Székesfehérvár indicates that 8.4% of the outmigrants from city centre are top or medium-level managers, 7% are private entrepreneurs, 13% are high-educated employees and 48% are skilled or semi-skilled workers (*Szirmai* et al. 2003a).

Several urban researches have revealed that the majority of citizens including high classes have no intentions to move out from the city centre. In a representative sociological survey carried out in 2003 only 5% of people interviewed had definite plans for outmigrating and another 3% are also intended to leave the city centre but had no chances for doing it. Another 4% are going to leave the city centre within the next few years<sup>11</sup> (*Szirmai* et al 2003b). A public poll made in Tatabánya in 2000 also confirmed this tendency as 78% of the interviewed residents claimed they would remain in the city and only 7% claimed expressed their wish to outmigrate the city (*Kiss–Dénes*, 2000, 36).

<sup>&</sup>lt;sup>10</sup>The zoning of the 9 urban areas of our investigation was partially made on the basis of the traditional (human and ecological) classification categories of urban sociology and partially by local experiences and on-site inspection walks. The following major urban zones were delimited: central urban zone or the historic city centre in other words. It is the old town and the first employment zone with the city's employment organisations of outstanding importance (administrative bodies, banks and credit institutes, educational and cultural organisations, offices etc.), business, commercial and entertainment facilities. This area is characterized by multi-storey office blocks and high built-in density. The transitional zone comprises industrial plants and commercial centres with their surrounding residential quarters. The suburban zone consists of satellite cities standing in close functional relationship with the city. These satellite cities used to function in administrative sense as independent settlements in the past. Today this zone has residential functions primarily. It is generally built in with private houses, housing estates or nowadays more and more gated residential communities are emerging here

<sup>&</sup>lt;sup>11</sup>In an NKFP survey made in 2005 already 6.4% of the inhabitants of Székesfehérvár stated they had a definite plan to leave the city and another 9.7% claimed they would like to leave the city centre but had no chances for doing it.

The results of the representative survey of urban areas in 2005 have also revealed that the majority of urban area residents -79.6% – are not intending (or having no chances) to change their place of residence. Only 13% of city dwellers stated they definitely would move out of the city and another 7.3% claimed they intended to leave the city but had no chances for doing it. Of the suburban citizens 4.2% would move but had no chances for doing it. Of those being sure of moving the percentage of city centre and transitional zone inhabitants is high. In inner city quarters people with secondary and high education and brain workers while in transitional zones and city outskirts people with secondary education and private entrepreneurs are over-represented among those claiming to be definite of changing their residential location. In advanced and less advanced suburban zones again the ratio of people with secondary and high-education, private entrepreneurs and brain workers is the highest within the same question item. Thus, it is an interesting phenomenon that on the two endpoints of urban hierarchy – in the core city and in the periphery – the percentage of the highest social classes while in transitional urban zones the percentage of middle classes is the highest in the group wishing to change residential place.

More than half of the citizens intending to move would like to find their new residence within the same city and 22% would remain in the neighbourhood of their present home. (This figure is 13% in urban peripheries). Of the urban residents we have interviewed 27% would like to find their new home outside the city. Our data are indicating a higher than average ratio of low social classes selecting socially low-ranked urban districts, such as urban-style residential areas in the proximity of the city centre or garden city areas or rural style suburban zones to live in. Middle classes prefer to settle down in elite residential areas, garden cities or gated residential communities. The highest social classes and professionals intending to leave the city centre follow two patterns during the selection of their new homesite: they either move out to elite central urban districts of their cities, the historic old town part or escape out of the city to suburban garden villa quarters or elite gated residential communities. Brainworkers and professionals prefer rural style urban peripheries for their living environment. Finding correlation between a position of a selected (or desired) residential area in the ecological hierarchy and the social position of the interviewed persons is a very important result of our research: different social classes select ecological-social units harmonising the best with their social position and financial circumstances.

Residence change plans *in Hungarian urban areas* do not provide a sufficient basis for forecasting a significantly accelerating suburbanisation process. Today's residence change plans do not represent a massive trend; they are rather representing the disstisfaction of minority groups with their present place of residence or expressing their new expectations for their residential area. This does not prognostify a radical change in the present social structure of urban zones and in the

core-periphery model having been formed by history and bearing the marks of the regime change. However recent migration processes show a significant restructuring process. The spatial restructuring of high social classes within urban areas, their gradual out-migration from the city centre and settling down in suburban zones changes the content of the traditional core-periphery model, rearranges the social structure of peripheries and although in different ways but improves their ecological and social positions.

## The social structure of metropolitan areas

The analyses in the first part of our case studies have revealed the inequalities of infrastructural and institutional supply between cities and their neighbourhood (background settlements), the advantageous positions of cities and the disadvantageous positions of neighbourhood settlements. The inequalities of infrastructural and institutional supply between cities and their neighbourhood and the geographical units of urban areas are marking such ecological positions (*Figure 15–16*).

## Figure 15

# The spatial location of university and college graduates in the urban areas of Hungary





Figure 16 Tarable value per capita in the urban area

Following the mapping of the infrastructural and institutional supply of urban areas we prepared a comparative analysis on the social structure of cities and their environment. 'From the series of comparative analyses of social statistical data it became evident that cities and their environment have rigid hierarchical social structure: high social classes tend to live in city centres and low social classes are rather located in the outskirts of cities (*Baráth–Molnár–Szépvölgyi*, 2005)

The survey provided a clear analysis of socio-spatial hierarchy. While moving out the city centre towards outer urban districts and outskirts the ratio of high social classes (highly qualified professionals, qualified experts) is gradually decreasing with an increasing spatial concentration of low classes (low educated, unskilled people)<sup>12</sup> (see *Figures 17–18*).

<sup>&</sup>lt;sup>12</sup>The research sample of the residential survey included maximum three settlements from the most advanced and maximum three settlements from the backwarded background settlements of each big city. The background settlements were selected by a non-parametric trial named as ranking number method. The ranking was made by the consideration of the indices as follows: accessibility, housing conditions, public and higher education, health service, the activity intensity of local entrepreneurs, taxation, incomes, employment, unemployment, mobility and social provision. The final development ranking was prepared on the basis of the summarized ranking of indices. In each urban area maximum three settlements from the most advanced and maximum

The research is confirming the segregated socio-spatial structure of urban areas in Hungary.<sup>13</sup> The data of research are showing that the ratio of city centre residents with primary education (18%) and vocational school certificate (14.2%) are lower than their sample ratio (28.8% and 18.9%). Their spatial concentration in transitional areas is correlating with their sample average (27.4% and 19.3%) but higher than the average in urban outskirts (38.2% and 21.1%) and suburban zones. The percentage of people with secondary education in city centres is higher than their sample average (34.2%) and this is correlating with the national average in transitional urban areas and with the lower than average values in urban outskirts and peripheral zones. The spatial concentration of university and college graduates is higher than their sample average in city centres, correlating with the average in transitional zones and it is much lower in suburban zones (differing by the development level of suburban zone).

## Figure 17





Source: Edited by Zoltán Ferencz ont he basis of NKFP data.

three from the most backwarded ones were selected into the sample. These criteria are serving as a basis for the definition of advanced and backwarded suburban settlements.

<sup>&</sup>lt;sup>13</sup>The term segregation means a spatial isolation with a higher than average concentration of a social group within the social structure of a certain urban district.

## Figure 18

The spatial division of population by profession in different urban zones



Source: Edited by Zoltán Ferencz ont he basis of NKFP data

The spatial division of professions by urban zone is showing a similar pattern with that of the education level. Its most spectacular element is the considerably lower concentration of manual workers in city centres than the average (55.1%) and their very high concentration in urban outskirts and suburban zones. The differences of the spatial division of private entrepreneurs are less high between urban zones (except for suburban zones), their distribution ratio is correlating with the sample average (7.6%) with low dispersion coefficients. The higher than the average (30.5%) concentration ratio of brain workers in city centres is also a factor of primary importance from this aspect.

The spatial location of residential incomes is another indicator of segregated socio-spatial structure. The ratio of people falling into the highest income category (above 100 thousand HUF per month) is gradually decreasing as moving out of the city centre towards the peripheral zones (23.7–8.8%). It is exceeding the national average (15.6%) in city centres and in transitional zones. We can see the same tendency in case of the income category between 75 and 100 thousand HUF and of the category below 50 thousand HUF per month. However much less dif-

ferences can be seen between the two extreme values in the category of average incomes (50–75 thousand HUF) and in zero income categories which means they are not fitting into the hierarchical structure model.

Thus, as the above listed indicators are illustrating, the geographical units of urban areas i.e. the core settlement (the city) and the periphery (the suburb) are also differentiated in the context of infrastructural and institutional supply including (and verified by the statistically analysed) socio-spatial and ecological inequalities and of the different spatial concetration of different social classes.

## The dual structured core-periphery model

And now we are analysing the changing core-periphery model by a figure (Figure x), where the starting and at the same time the peak point is representing the core area, i.e. the historic city centre and the endpoint is representing the periphery i.e. the underdeveloped suburb. By the same figure we are demonstrating the spatial division of the urban area's population by education level, profession and income categories. As it can clearly be noticed the social structure of advanced urban peripheries is breaking the monotonous downsliding trend of the traditional spatial, ecological and social hierarchies by turning it back into an upward direction for a while. This can be explained by the fact that new social values have been assigned to the peripheral zones of urban areas. Due to the outcomes of the present socio-economic processes of suburbanization and to the new socio-economic and functional relations of urban peripheries the social appreciation of urban peripheries has been differentiated; the suburban parts of urban zones have been divided into low-ranked and high ranked socio-spatial units. These units – periurban distrits and villages – are populated both by high and low social classes.

The recent changes of inner city quarters (slums, regenerated areas) have also changed the earlier ecological and social structure of cities. The once homogenous high social reputation of inner cities has been eroded by the deteriorating parts of inner city quarters.

The socio-spatial analyses of urban areas suggest that the traditional core-periphery model is relevant for the urban areas in Hungary as well. In cities and their central areas the presence of high classes is dominant while in suburban zones and urban peripheries generally low classes are in majority. Going outward from core areas towards the periphery the social structure shows a hierarchical structure. Going down the ecological-spatial slope indicating the economic, infrastructural and institutional supply level of the different geographical units of urban spaces we can see a gradually decreasing presence of high social classes and a gradually increasing presence of low social classes.

On the basis of the evaluation of research data we can also declare that in Hungarian urban spaces the traditional core-periphery model cannot be identified in its original form any more: the social structure of advanced urban peripheries is firmly breaking up the monotony of the downward line of the ecological-spatial slope of social hierarchy between the 'two endpoints': the core and the periphery.

As a consequence of transition and globalisation the social structure of Hungarian metropolitan spaces and the social content of the core-periphery model have significantly changed. The social processes of the past years through the differentiated – partially high, partially low social contents of the core-periphery model created *a dual socio-spatial hierarchy*. *The first type of socio-spatial hierarchy contains a high-ranked core and a low ranked periphery model. The second type of socio-spatial hierarchy shows a formation of low-ranked core and a highranked periphery model. Both hierarchies are simultaneously present in urban spaces.* 

## Conclusion

On the basis of analysing the spatial disparities of Hungarian urban areas we can draw the following conclusions:

The analysis of the infrastructural, demographic, housing, economic and institutional supply indicators in Hungary's nine urban areas has revealed two major tendencies: On the one hand during the research period the separation of residential and public service functions further increased and also has restructured the relevant spatial disparities. This means that the improving residential functions in background settlements were not followed by an appropriate development of those public services that we have investigated in our research. Institutions and services providing extra facilities beyond the essential public services are concentrated in big cities only, which increases the dependency of background settlements on core cities. On the other hand, however, successful economic restructuring does no necessarily imply a dynamic development of institutional supply because the expansion or retreat of the services we have investigated are influenced by other factors as well, such as residential incomes, the key factors of public consumption or the historical background of institutional supply. In certain areas the provision of public services was abandoned by the state and there were no businesses to fill in the gap of missing public services by the same or similar ones.

 The spatial disparities of economic development are increasing the superiority of the metropolitan area of Budapest in the areas of economic power and efficiency (foreign direct investments, the level of incomes, economic performance, employment structure, purchasing power etc.). The current development disparities of provincial urban areas are showing tendencies having been emerged several decades ago: the urban areas of Győr and Székesfehérvár in Northern Transdanubia besides functioning as regional centres enjoy significant competitive advantages as well and are pretty far ahead of their competitors;: the urban areas of Nyíregyháza, Miskolc and Kecskemét. Within urban areas economic resources are heavily concentrated in core cities. A comparison of the division of economic performance between central cities and non-central settlements points out that the economic performance of non-central settlements is only 10–15% of the urban area's overall economic performance. This figure is only cca 20% even in the metropolitan area of Budapest.

- 2) The changes of demographic and economic indicators within the period between 1993 and 2003 (and 1990–2001) are clearly marking a strong correlation between increasing social inequalities and agglomeration tendencies. As it is seen the spatial disparities between urban areas originating from macroregional development differences have decreased but due to the intensification of suburbanization and to its consequences core-periphery relations and spatial dependencies have increased within urban areas.
- 3) The development chances of background settlements were determined by their geographical location. Settlements with good physical accessibility and having built strong connections with other settlements can easily integrate themselves into their urban area. This can easily be verified by statistical figures. Others with less favourable circumstances seem to be uncertain of their integration into their urban area and they are bouncing between closing up and 'fading out' i.e. falling off to the level of disadvantaged rural areas.
- 4) Spatial disparities are also largely influenced by the processes and impacts of the integration to global economy (the benefits that can be gained from the socio-economic impacts of global networks and foreign direct investments). At the same time these processes and impacts are also warning of the threats of socio-economic inequalities, of the increasing interaction, of their mutual consequences and of their spatial expansion. All these may intensify social conflicts that can already be noticed in Budapest and its environment due to the increasing problems of transport and loads on environment and to their negative social impacts seen day by day.
- 5) The results of the representative research of Hungary's metropolitan areas are providing clear evidences on the socio-structural inequalities of urban areas. The centres of Hungarian urban areas are concentrating high social classes, high-educated and qualified professionals earning high salaries, while low social classes generally live in the peripheral parts and in suburbs of low social prestige. However some groups of handicapped classes do live in the city centre as well and the percentage of high social classes is also significant in suburbs. Today's socio-spatial processes, their historic determinations, the age of transition and global integration have all created

a core-periphery model of dual social structure where the traditional model of socially high-ranked centre with and low-ranked periphery has been extended by another scheme of low-ranked centre and high-ranked periphery. All these processes have created a new type of socio-spatial unit.

## The Austrian case study – Social Inequalities in the Vienna Metropolitan Region

## Preface

A spatial analysis of social inequalities tackles one of the major issues of modern human geography: How equal or unequal is society and its spatial distribution? The answers range from one extreme, a totally equal distribution representing a homogeneous social area, to the other, a distinctly unequal distribution as a characteristic feature of a society that is socially as well as spatially highly diverse. Equal distribution indicates that all spatial units share the same features, which means that all units have the same proportion of affluent and poor residents, the same proportion of qualified and unqualified employed persons and of large and small apartments. Unequal distribution obviously refers to the complete opposite. The highly qualified and well-off groups of population as well as the large apartments concentrate in a very limited number of units, whereas low-income and unskilled residents living in small apartments concentrate in a completely different set of spatial units. What is not intended in this context, however, is an evaluation of socio-spatial inequality, since the question whether an unequal spatial distribution is to be interpreted as fair or unfair will always be a matter of ideology. Therefore the focus of this paper will rather be put on an objective description.

The analysis itself is primarily based on data of the census 2001, which allows a very detailed spatial differentiation. The first step includes the identification of relevant indicators characterizing social inequality, the second step is aimed at depicting their spatial distribution and, thirdly, the individual features are going to be combined in order to establish basic dimensions of inequality. The smallest spatial unit in this analysis is the community or municipality for the suburban region of Vienna or the census tract for the City of Vienna itself. Together the City of Vienna and its suburban region constitute the Vienna Metropolitan Region that has been subject of the analysis.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>In this context Ms D. Schönbichler is to be thanked for the translation into English as well as for reviewing the draft.