Metropolitan areas in transformation of regional organisation in the Czech Republic

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Abstract: The structure of analysis and debate of the paper distinguishes three fundamental levels of assessment. First, basic factors of the geographical differentiation in post-1989 transformation processes are indicated and the role of metropolitan areas in these processes is assessed. Second, main tendencies in a hierarchy of relative importance of the leading units of the national settlement system are indicated emphasising relative positions of individual metropolitan areas and the dominance of the capital city of Prague metropolitan area. Third, in the last analytical section of the paper, the current structure and development of metropolitan areas are confronted with the structure of newly introduced regional multipurpose self-governmental units. Basic issues of the current transformation of the Czech territorial self-government and administration are discussed. Finally, some concluding comments are made on possible future tendencies in the hierarchy of metropolitan areas in view of intensifying European integration processes.

Keywords: metropolitan areas, transformation, new regional self-government, Czech Republic

1. Introduction

The fundamental post-1989 political, economic and social changes have resulted during the post-communist period in significant changes in regional organisation of the Czech society. Two basic and mutually interdependent sorts of changes have to be emphasised. First, there have been increasing selective tendencies in regional development that have led to a deepening of territorial differences in the socio-economic level. These tendencies have obviously resulted from selective impacts of newly introduced market mechanisms. In specific circumstances of the post-communist transformation, the selective tendencies have also resulted from necessary reactions on long-lasting equalising tendencies and their territorial consequences from the previous period, i.e. from reactions on ineffective geographical distribution of economic activities and labour resources inherited from the communist regime. Second, there have been significant changes in the organisation of the national settlement system. On the one hand, there has been a tendency towards decreasing importance of the "quantitative size" of urban centres and increasing attractiveness based on their qualitative features. These latter tendencies can also be seen as natural consequences of a more general transformation, i.e. the transition towards a post-industrial economy and society. On the other hand, the interconnectedness of parts of the national settlement system has intensified and this tendency has led to a scale shift in territorial polarities towards higher hierarchical levels. Also this geographical tendency has to be seen as a reaction on the inherited and territorially closed character of societal activities

within too small administrative units (districts) from the communist period. This gradual decreasing insulation of societal activities in districts has taken place despite currently very limited migration of population caused by insufficient liberalisation of housing markets. Both tendencies are also important in view of the formation of a new regional administration and self-government that started to function from January 1, 2000.

It is therefore clear that the large urban centres and their metropolitan areas have played a leading role in the post-1989 regional development and in the formation process of the national settlement hierarchy. A clear dominant position in this respect has been taken by the capital city of Prague and its wider metropolitan area that has been most intensively integrated into supra-national hierarchy of European centres and has played the leading role of the major centre of innovation and international integration in various sorts of supra-national networks (see also Taylor and Hoyler, 2000). The largest urban centre and the capital city are not identical in all countries and, moreover, some national governments do not support the formation of such a dominant combination of functions of a leading city and the centrality of national capital function in order to support development of a more polycentric settlement system (cf. Gottmann, 1990, 64-68). This is, however, not the case in the Czech Republic and also in most of the post-communist countries where the capital cities are usually the largest concentrations of population and particularly of key economic, political and social activities and, thus, the capital cities are dominating monocentric national settlement systems (cf. Dostál and Hampl, 1994, 30-34; Dostál, 2000, 187-189). The more polycentric settlement system in Poland is in the group of Central European post-communist countries an exception, because the urban agglomeration of Katowice is larger than the capital city of Warsaw. It is, therefore, little surprising that the development dynamics in the post-communist countries has been most intensive in the capital cities. Other large centres and their metropolitan hinterlands have shown less intensive development. However, in comparison to other (and hierarchically lower) parts of the national settlement system, the large (regional) centres have usually shown more dynamic development than those in lower hierarchical levels (cf. Tomeš and Hampl, 1999, 131ff). This hierarchical differentiation in the societal importance and attractiveness and economic development has particularly appeared during the period of post-communist transformation. Greater diversification of urban and regional economic base, qualification of labour and better social and physical infrastructure have given large urban centres and their metropolitan areas significant agglomeration advantages for adoption of developmental impulses in the post-1989 transformation stages concerned. In various post-communist countries, and in the Czech Republic in particular, there has also been a clear differentiation in the developmental dynamics among metropolitan areas. Therefore, average characteristics of the entire set of metropolitan areas are not representative, because considerable individual variability is not revealed. It is important to note that in the case of the Czech Republic, the variability in the developmental dynamics between metropolitan areas is greater than between non-metropolitan areas (see the basic division of the country into metropolitan and non-metropolitan areas in Figure 1). In consequence, a deeper assessment of the current development in 11 metropolitan areas is important, because it is concerned with the highest levels of the national settlement system and with the post 1989 differences in development of the centres of the newly established self-governmental and administrative regions.

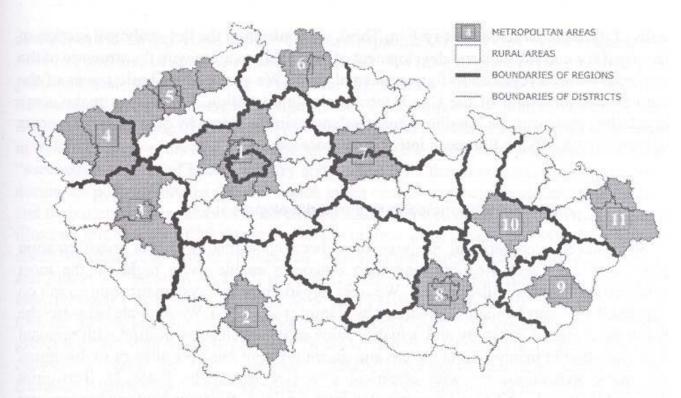


Figure 1. Typological regionalization of the Czech Republic

Notes:

The division largely corresponds to organic socio-geographical regions of a higher level. In the regions there are distinguished metropolitan and rural areas, thus basic types of areas. Because useful statistical data are published in territorial units of administrative districts, typological regionalization can provide only a rough delineation of metropolitan areas. A more detailed territorial division would provide in most cases a more limited delineation, except in the case of Prague and Ostrava metropolitan areas. Individual metropolitan areas represent thus wider centers of regions (provinces), rural areas the other territory of the regions. An exception is Vysočina region (Jihlava) that is classified as rural region (Jihlava is hierarchically a weaker center than the other centers of self-governmental regions).

Metropolitan areas (beween parentheses there are names of districts):

- 1. Prague (Prague, Prague-east, Prague-west, Kladno, Mělník)
- České Budějovice (České Budějovice)
- Plzeň (Plzeň, Plzeň-south, Plzeň-north)
- 4. Karlovy Vary (Karlovy Vary, Sokolov)
- 5. Ústí nad Labem (Chomutov, Most, Teplice, Ústí nad Labem)
- 6. Liberec (Jablonec, Liberec)
- Hradec Králové + Pardubice (Hradec Králové, Pardubice)
- 8. Brno (Brno, Brno-surroundings)
- 9. Zlín (Zlín)
- 10. Olomouc (Olomouc)
- Ostrava (Frýdek-Místek, Karviná, Ostrava)

The above-emphasised tendencies provide the structure of analysis and debate of our paper. We distinguish three fundamental levels of assessment. First, we point out to basic factors of the geographical differentiation in post-1989 transformation processes and indicate the role of metropolitan areas in these processes. Second, we assess more in detail relative positions of individual metropolitan areas, the dominance of Prague metropolitan area and also indicate main tendencies in a hierarchy of relative importance of the leading

units of the national settlement system. Third, we confront in the last analytical section of the paper the current state and development of metropolitan areas with the structure of the newly introduced regional self-governmental units. We also discuss basic issues of the current transformation of the Czech territorial administration. Finally, we make some concluding comments on possible future tendencies in the hierarchy of metropolitan areas in view of intensifying European integration processes.

2. Current tendencies in regional development

Some recent geographical analyses have been concerned with the transformation process in the Czech Republic and their outcomes enable us to highlight the most synthesising features of the process. We refer in particular to a systematic monograph on "geography of transformation" produced by Hampl et al. (1999). We reiterate here only the major outcomes of the study and actualise some of its conclusions dealing with regional differentiation in income development and unemployment rate. We attempt to document our major generalisations with empirical data (see especially Table 1). Territorial differentiation is described in an aggregated form, i.e. by distinctions between western and eastern parts of the national territory, and between metropolitan and non-metropolitan areas. We use these two basic distinctions in order to indicate the importance of major geographical factors that tend to condition current territorial differences at socio-economic level as well as current differences in the developmental dynamics of regions.

The most general characteristic feature of the regional development in the 1990s is its selective nature and thus the significant deepening of interregional socio-economic differences. This is little surprising, because as we already have mentioned above, it is an aggregate outcome of the nature of market mechanisms as well as a result of an inevitable change of the communist heritage. During the initial stages of the post-communist transformation in particular, a deepening of territorial differences "must" occur. In consequence, a selection of economically strong and dynamic regions has taken place and these regions have to fulfil during the transformation their role of major "triggers" of the national economy. We give some data in Table 1 that sufficiently illustrate the significant territorial differences (i) in the post-1989 economic growth (in this respect, we are using so-called economic aggregate defined as the product of number of job opportunities and average wages of gainfully employed) and (ii) in the growth of average wages. These indicators are supplemented by data on increasing wage differentiation at the micro-regional level (i.e. across 77 administrative districts). In 1989, the maximum average wage (district Karviná) was at 122.4 percent of the national average and the minimum (district Jičín) at 89.2 percent. In 1999, the maximum was at 135.6 percent (Prague) and the minimum at 80.8 percent (district Bruntál). In other words, the difference between the maximum and minimum values increased significantly from 1.37 to 1.68.

Obviously, these general data must be examined in a deeper analysis of qualitative changes that have been taking place since 1989. Of the key importance is the indication of selective processes that are interlinked, in the first place, with economic restructuring processes. Therefore, in terms of regional differentiation, one can speak of geographical restructuring. In particular, post-1989 changes in the regional structure have involved

changes in the attractiveness and development capacities of individual types of economic activities and thus of specific regional economies. We have to point to the importance of post-industrial tendencies, the expansion of tertiary and particularly quaternary transactional activities, increasing significance of the quality of human resources, etc. Besides the deepening of terri- torial differences there has taken place a significant change in relative socio-economic positions of regions: the dominant positions of former "successful" regions of heavy industry and mining from the communist period have been during the post-communist transformation taken over by the major regional urban centres and their metropolitan areas with the expanding tertiary and quaternary activities. We can illustrate this in a set of 10 districts with the highest wage levels. In 1989, there were 8 districts in this group from the mining and heavy industry areas. Prague was at 7th position and Zlín at 10th position. In 1998, there were only 3 districts from the mining and heavy industry areas (Ostrava on 4th, Most on 5th and Frýdek-Místek on 10th position). Prague took the leading position and other four districts from Prague's hinterland rose to this select group together with districts of České Budějovice and Plzeň that are attractive regional centres in terms of their westward macro-geographical positions close to the Bavarian-Austrian borders and their stronger diversified economic base. These changes in the rank-order that were taking place during the post-1989 period clearly document the increasing importance of "qualitative" factors, and also indicate the long-term and unfinished character of the processes that have been changing the hierarchy of urban centres and regions since the fundamental change of the political and economic regime.

In view of the changing geographical organisation there is also a fundamental scale shift of selective processes upwards to higher regional scales. This shift simultaneously reverses the results of the long-term dampening of inter-regional (inter-district) differences by the equalising policies in the four decades long communist period. The post-1989 general introduction of market relations, and thus the diffusion of competitive mechanisms, has appeared to have important impacts of weakening micro-regional barriers of districts and simultaneously strengthening the role of "natural" factors behind the current geographical differentiation in socio-economic development. We can emphasise three factors and also indicate their different causal importance:

- (i) Primary importance must be given to positions in the settlement hierarchy, especially to its higher levels. In a simplified way, the primary hierarchical distinctions are as follows: a) Prague metropolitan area, b) other metropolitan areas, and c) non-metropolitan (rural) areas. Obviously, the cores of metropolitan areas (i.e. the major regional centres) are of key importance. We have again to emphasise the significance of considerable differentiation in development between individual metropolitan areas and also between their cores. This differentiation is an aggregate outcome of the combined conditioning of other factors of regional differentiation.
- (ii) The classical factor of geographical location appears to be the second important factor. However, its impact is differentiated along the hierarchical dimension of rank/scale. The most significant impact is the attractiveness of macro-geographical positions of regions decreasing from the south-west-south to the east-north-east. This gradient is combined with the similar impact of the centre periphery gradient along which the attractiveness of regions decreases with distance from Prague agglomeration.

(iii) An "unfavourable" economic specialisation of regions is the third important factor. This negative condition of the current regional development applies only to a limited number of areas, but its impacts are very significant. The mining and heavy industry areas of Ostrava, Ústí nad Labem and in part also the western metropolitan area of Karlovy Vary/Sokolov form this specific group of regions with unfavourable economic base. Socio-economic situation of this group of regions is further complicated by low qualification levels and insufficient flexibility of labour and lower social stability of regional populations in general. A second group form less-populated regions with more important shares of agricultural activity and less-developed infrastructure. It must be noted, however, that in most of these rural regions the handicap of the inherited weak economic base tend in part to be compensated by their favourable geographical positions in South Bohemia and South Moravia that are close to Bavarian- Austrian borders of the EU. Really serious development problems of rural regions appear to be in North Moravia and in West Silesia.

The impacts of the three factors are obviously combined. In consequence, it is not possible to make a typological distinction between successful and unsuccessful that is based on the impacts of one single factor. In spite of this, the general data in Table 1 sufficiently document the key importance of the settlement hierarchy factor that has significant differentiating impacts not only on the socio-economic level, but also on the development dynamics: there are the significant differences between the metropolitan and non-metropolitan (largely rural) areas, and there also are the high scores of Prague metropolitan area above the national average. There are also clear differences between Bohemia, on the one hand, and Moravia and Silesia, on the other, documenting the importance of the west-east distinction, in particular as regards the development dynamics that tends to decrease towards the east. Similar gradients do not only emerge from these comparisons between the historical lands, but also from the analyses of existing differences within their territories.

The distinctions between the three categories of metropolitan areas (i) Prague metropolitan area, (ii) two areas of mining and heavy industries, and (iii) the other areas illustrate the existing basic differentiation in the socio-economic development that is specified by the current polarisation between, on the one hand, the Prague metropolitan area and, on the other hand, the mining and heavy industries areas. The combined impacts of the three factors on the differentiation in the current regional development are most clear in the set of metropolitan areas. Therefore, we will examine this differentiation in the following section.

We must extend our assessment of the major regional development tendencies and their conditioning factors with two remarks. Our first remark relates to different importance of macro-differentiation and micro-differentiation. This distinction is difficult to make in empirical terms, because available suitable territorial data only allow specifications of the regional differentiation at inter-district or higher scale levels. Accordingly, we can only emphasise macro-regional and mezzo-regional differences. However, these differentiations are not only the most important ones with respect to their quantitative scale, but also as regards the inter-district equalisation inherited from the communist period. Micro-regional differentiation basically describes differences in the intensity of

Table 1. Basic characteristics of regional differentiation in the Czech Republic

| Territorial | Territory | Populati | ion | Eco | nomic aggre | gate |
|--------------------------|--------------------|-------------------------|------------|----------------|------------------------|---------------------|
| unit | in km ² | in thousands 1. 1. 1998 | per km² | share in CR | per capita (CR=100) | change 1996/1989 |
| metropolitan areas | di mazana | Indiana (III) | 22/11QV | 1000 | Te line a | W.C. Sell |
| Prague | 3,070 | 1,613.9 | 526 | 23.44 | 149.6 | 129.1 |
| Ostrava and Ustí n. L. | 4,110 | 1,329.0 | 323 | 12.79 | 99.1 | 85.6 |
| other metropolitan areas | 13,447 | 2,243.2 | 167 | 23.41 | 107.5 | 102.3 |
| total | 20,627 | 5,186.1 | 251 | 59.64 | 118.4 | 106.5 |
| non-metropolitan areas | Sallie S. | | <u> </u> | | | |
| total | 58,239 | 5,113.1 | 88 | 40.36 | 81.3 | 91.7 |
| in Bohemia | 37,798 | 2,895.9 | 77 | 24.36 | 86.7 | 94.3 |
| in Moravia and Silesia | 20,441 | 2,217.9 | 109 | 16.00 | 74.3 | 88.0 |
| Bohemia | 52,770 | 6,278.50 | 119 | 65.39 | 107.3 | 105.4 |
| Moravia-Silesia | 26,096 | 4,020,60 | 154 | 34.61 | 88.6 | 91.2 |

| Territorial unit | average 1998 | wages (CR = 100 percent) index 1998/1989 | unemployment rate 30 th June 1999 |
|--------------------------|-----------------|---|---|
| metropolitan areas | | allegille, the particular | |
| Prague | 130.1 | 122.7 | 3.87 |
| Ostrava and Ustí n. L. | 102.9 | 92.8 | 14.93 |
| other metropolitan areas | 98.2 | 99.3 | 8.17 |
| total | 109.6 | 105.1 | 8.13 |
| non-metropolitan areas | | | |
| total | 88.8 | 92.4 | 8.66 |
| in Bohemia | 89.4 | 94.0 | 7.64 |
| in Moravia and Silesia | 88.0 | 90.3 | 10.01 |
| Bohemia | 103.7 | 104.3 | 7.09 |
| Moravia-Silesia | 94.0 | 93.1 | 10.477 |

Note: for exact meaning of indicators see text.

Sources: Hampl et al., (1999); Pracovníci a mzdové fondy za r. 1989. Czech Statistical Office. Prague. 1990; Zaměstanost v civilním sektoru za r. 1996. Czech Statistical Office. Prague. 1997; Evidenční počet zaměstanců a jejich mzdy za r. 1996. Czech Statistical Office. Prague. 1998; Okresy České republiky v r. 1998. Czech Statistical Office. Prague. 1999; Statistický bulletin za 1. pololetí Hlavního města Prahy. Czech Statistical Office. Prague. 1998.

settlement and economic activities. Quality of living of population and socio-economic situation within micro-regions are largely homogeneous and sustained by commuting towards working opportunities and service provision in the micro-regional centres. In consequence, the micro-regional (intra-district) differences are usually changing in short term. Our second remark relates to the deepening in the macro-regional differentiation and its increasing importance. Intensive metropolitan processes were suppressed in the communist period in a "planned" way. Since 1989, however, the regional centres have

become the main territorial units in the regional development and their attractiveness has had some positive influences within their respective direct hinterlands. This is documented by increasing average wages, usually lower unemployment rate (for example, the lowest rates were in 1999 in both rural districts of the capital city of Prague) and in some cases also by beginning increase in job opportunities in locations close to the main regional centres. Suburbanisation tendencies have begun in the metropolitan areas of Prague, Plzeň and Brno, but the intensity of migration processes has been generally low due to regulated housing rates and also due to low intensity of housing construction. These trends show the beginning of the scale shift of the development dynamics from individual urban centres to urban regions and thus indicate an initial stage of the transformation of the settlement hierarchy from a nodal form to a supra-nodal form. Accordingly, one can expect in the future a development of a settlement organisation in which the key role will be fulfilled by the macro-hierarchy of metropolitan areas and the traditional role of nodal centres at the micro level will be decreasing in importance.

3. Differences in socio-economic development of metropolitan areas: increasing dominance of Prague

The results of our analysis of the differentiation in the socio-economic development of metropolitan areas allow us to point out to the importance of two tendencies. First, there is the key role of these territorial units in the regional organisation. Second, there is also their clear differentiation in terms of the current development. Examining the variability in the development and the state of socio-economic affairs in 11 metropolitan areas, we can specify in more detail the combined impacts of conditioning factors and, on the other hand, we can indicate individual "discrepancies" between the developmental potential of metropolitan areas and its realisation. Generalising these two assessments, we can postulate main tendencies in current development of the settlement system or the regional hierarchy. Of key importance are the questions concerned with relations between the size differences and the "qualitative" hierarchy of the metropolitan areas.

The empirical base for these two assessments provides data on size, relative socio-economic level and dynamics of development of individual metropolitan areas as summarised in Table 2. These characteristics together with the data given in Table 1 enable us to establish the most important levels in the settlement hierarchy. From the viewpoint of development, the data also allow to distinguish "similar" categories of territorial units. In the framework a simplified hierarchical order, we can indicate three most important levels of regional (i.e. supra-local) units:

- 1. Metropolitan area of Prague that clearly dominates in respect to both its size and its qualitative features as well as in regards to its development dynamics; the share of Prague metropolitan area in total economic aggregate of the Czech Republic increased in 1989–1996 from 18.16 percent to 23.44 percent and the relative economic level (economic aggregate per capita) reached in 1996 1.5 of the national average.
- 2. Other metropolitan areas have also shown significant dominance at the mezzo-regional level in terms of their size, level and development dynamics. Their share in the national total of economic aggregate has decreased in 1989–1996 from 37.82 to 36.20

Table 2. Basic characteristics of metropolitan areas

| | SI | hare in CR (in percenta | age) |
|----------------------|----------------------------|-------------------------------|-------------------------------------|
| Metropolitan area | population (1. 1. 1998) | economic aggregate in 1996 | jobs in financial sector in 1996 |
| Prague | 15.67 | 23.44 | 37.89 |
| České Budějovice | 1.73 | 2.00 | 2.31 |
| Plzeň | 3.00 | 3.46 | 4.26 |
| Karlovy Vary | 2.11 | 1.99 | 1.44 |
| Ústí n. L. | 4.78 | 4.51 | 3.83 |
| Liberec | 2.41 | 2.10 | 2.30 |
| H. Králové/Pardubice | 3.15 | 3.53 | 4.02 |
| Brno | 5.28 | 6.24 | 5.62 |
| Olomouc | 2.19 | 1.93 | 1.67 |
| Zlín | 1.91 | 2.16 | 1.78 |
| Ostrava | 8.12 | 8.28 | 6.02 |

| | index of | change (CR | = 100) | | | |
|----------------------|----------------------------------|------------------------------|-----------------------|---|---------------------------------------|---------------------------------------|
| metropolitan | economic aggregate 1989–96 | average wage 1996–1998 | population 1989–98 | economic agregate p.c. 1996 (CR = 100) | average wage 1998 (CR = 100) | rate 30 th June 1999 |
| Prague | 129.1 | 122.7 | 99.3 | 146.6 | 130.1 | 3.87 |
| České Budějovice | 113.1 | 105.0 | 102.6 | 116.3 | 104.9 | 4.69 |
| Plzeň | 111.6 | 102.0 | 98.6 | 115.0 | 101.5 | 7.15 |
| Karlovy Vary | 92.1 | 92.7 | 101.2 | 94.8 | 92.2 | 8.54 |
| Ústí n. L. | 86.3 | 95.1 | 100.4 | 94.6 | 99.5 | 15.10 |
| Liberec | 86.5 | 97.7 | 100.3 | 87.2 | 92.0 | 7.87 |
| H. Králové/Pardubice | 104.7 | 98.4 | 99.6 | 112.1 | 96.2 | 6.66 |
| Brno | 107.5 | 100.1 | 99.8 | 118.0 | 100.5 | 7.08 |
| Olomouc | 90.7 | 94.9 | 101.1 | 87.9 | 92.5 | 11.05 |
| Zlín | 101.8 | 98.0 | 99.9 | 113.0 | 100.1 | 6.82 |
| Ostrava | 85.1 | 91.5 | 99.7 | 101.8 | 104.8 | 14.82 |

Source: see Table 1.

percent, but the decrease has been significantly smaller than the one of non-metropolitan areas. This decrease has been caused by a big decrease in economic importance of the two mining and heavy industry areas (other metropolitan areas in this set increased slightly their share). Relative economic importance of these areas is still above the national average (economic aggregate per capita was in 1996 at 104.4 percent of the national level), whereby all metropolitan areas reached higher level that the set of non-metropolitan areas.

3. Non-metropolitan territories have shown in 1989–1996 a significant decrease in their economic importance (a decrease in the share in economic aggregate from 44.02 to 40.36 percent) as well as in terms of their clearly lower relative economic level in 1996 (81.3 of the national average).

These facts indicate a tendency to strengthen the importance of higher levels of the regional and settlement hierarchy and in particular the dominance of Prague and its

metropolitan area in this hierarchy. We must note however that if the relationship between the population size and the development hierarchy would be assessed in greater detail than the outcomes would be different. We can show this if we examine the differentiation in the set of the metropolitan areas. Already the differences according to the size and those in development dynamics of individual metropolitan areas shown in Table 2, illustrate a very significant degree of differentiation. Data shown in Tables 3 and 4 are even more illustrative in this respect and enable us to draw more specific conclusions.

Table 3. Hierarchy of 11 metropolitan areas (rank order according to some synthetic indicators)

| Metropolitan area | population size | development potential | socio-economic level | development dynamics |
|----------------------|-----------------|--------------------------|-------------------------|-------------------------|
| Prague | 1 | 1 | 1 | 1 |
| České Budějovice | 11 | 2–4 | 2 | 2 |
| Plzeň | 6 | 2–4 | 4 | 3 |
| Karlovy Vary | 9 | 6 | 8 | 8 |
| Ústí n. L. | 4 | 9 | 9 | 10 |
| Liberec | 7 | 8 | 11 | 7 |
| H. Králové/Pardubice | 5 | 5 | 6 | 4 |
| Brno | 3 | 2–4 | 3 | 5 |
| Olomouc | 8 | 7 | 10 | 9 |
| Zlín | 10 | 10 | 5 | 5 |
| Ostrava | 2 | 11 | 7 | 11 |

Note: definitions of synthetic indicators are in the text.

First of all, there is in Table 3 a rank-order of the metropolitan areas following differentiations in four aggregate characteristics:

- (i) Size indicates (a) population size in 1991 and 1998 and also (b) size of economic aggregate. This size indicator shows the "quantitative" hierarchy of metropolitan areas and we must note that there occurred no rank-order changes in the period 1989–1998.
- (ii) Developmental potential indicates average rank according to three qualitative aspects: (a) educational level in 1991 (share of population with secondary education + 3 x share of population with university level), (b) economic potential in 1996 (the share of tertiary sectors in total jobs and jobs in financial sector per capita indicating the localisation of quaternary sector), 3) macro-geographical location (location attractiveness is defined by the leading position of Prague and further in terms of distance to and transport connections with Bavaria and secondarily with Austria). This rank-order can also be understood as a qualitative hierarchy of the territorial units concerned. Among other things, because the specific factor of geographical location is positively correlated with social and economic quality of metropolitan areas.

- (iii) Socio-economic level indicates the average of rank orders according to three economic indices: (a) economic aggregate per capita (1996), (b) average wage of gainfully employed (1998), and (c) reversed rank order according to unemployment rate (30th June 1999). But, this aggregate measure is less representative than the measure of "development potential", because the indicator of average wage is still influenced by the "socialistic heritage": there are still relatively high wages in the declining heavy industries in the main depressed regions. Moreover, administrative districts are too large and do not allow a more precise territorial delineation of metropolitan areas that would divide core agglomerations from their wider hinterlands of commuting.
- (iv) The development dynamics measure also specifies a qualitative differentiation of metropolitan areas. The measure of development dynamics is indicating average of three indices: (a) change of economic aggregate in 1989–1996, (b) change of average wages of gainfully employed in 1989–1998, and (c) difference in unemployment rate in 1996–1999. This measure can be understood to indicate the rank-order in "success in the transformation" of the metropolitan areas concerned.

Table 3 gives more detailed information on the aggregate measures of the rank-order differentiation. Rank-order correlations (Spearman correlation coefficients) between the four measures are shown in Table 4. There are given correlations for the entire set of 11 metropolitan areas, but also for the set of the areas excluding the Prague metropolitan area. The correlations indicating relations between the measures in the set of 10 areas are more appropriate. Because, the Prague area represents an other and higher hierarchical category, a category that distinguishes itself from the lower levels in terms of the size and in particular in terms of qualitative features. Both correlation analyses show similar outcomes: (a) there is no systematic relationship between the size and the other features of the metropolitan areas, and (b) the development dynamics and gradually also the attained development level appear to be significantly conditioned by the qualitative level and the macro-geographical position of the metropolitan areas. These outcomes of the correlation analyses indicate again that the current development of the regional and settlement hierarchy is a process transforming the size hierarchy into a hierarchy that is largely based on qualitative features.

Table 4. Rank order correlation coefficients between synthetic indicators on metropolitan areas

| indicator | population size | development potential | socio-economic level | development dynamics |
|-----------------------|-----------------|-----------------------|-------------------------|-------------------------|
| population size | 1.000 | 0.136 | 0.127 | -0.136 |
| development potential | -0.136 | 1.000 | 0.700 | 0.855 |
| socio-economic leve | -0.164 | 0.582 | 1.000 | 0.800 |
| development dynamics | -0.394 | 0.806 | 0.733 | 1.000 |

Note: see definitions of indicators in text; Spearman correlation coefficients above the diagonal refer to the set of all metropolitan areas including Prague, those below the diagonal refer to the set of 10 areas without Prague.

framework of one category of areas will show no regularities in the differentiation of geographical units. In the set of the 10 metropolitan areas, the quantitative (population size) differentiation is secondary and also differs from the qualitative categorisation. Following the size differentiation, there are three large areas (Ostrava, Brno and Ústí nad Labem) and the other 7 relatively small areas. In terms of the qualitative differentiation there are thee categories: (i) four more developed areas (České Budějovice, Plzeň, Brno and Hradec Králové), (ii) three or four "average" areas (Olomouc, Liberec, Karlovy Vary), and (if one pays no attention to the peripheral location also Zlín) and, (iii) two main mining and heavy industry areas (Ostrava and Ústí nad Labem). A very similar categorisation can be made in terms of the developmental dynamic. Only the position of Zlín area is not in accordance with the "theoretical position" in accordance with development potential due to the largely favourable development in that area. This area can belong to the group of areas above the national average, but it also can be classified as belonging to the metropolitan areas that score close to the national average. However, in the case of Olomouc area (due to better social composition) and Karlovy Vary (due to favourable location close to the southern Germany) the development dynamics would have to be higher. The number and magnitude of individual "deviations" of the type would understandably increase if the assessments in terms of "local" socio-economic composition and "location attractiveness" of metropolitan areas would be separated from each other. In such a case, we can establish differences in importance of impacts of the macro-differentiation and the micro-differentiation that we discussed above. From the perspective of macro-differentiation, the factor of macro--location is more important. However, in the differentiation among metropolitan areas the importance of "local" socio-economic quality is considerable. This is indicated by the rank-order correlations of the measure of developmental dynamics with the socio--economic quality measure (r = 0.8) and the macro-location measure (r = 0.6). The correlation between the latter two measures is r = 0.5.

It is thus possible that a more detailed analysis of the hierarchical organisation in the

Table 5. Hierarchy of metropolitan areas according to their basic functions (relative size in 1996, Prague area = 100)

| Category of areas (rank-order) | Population | Job opportunities | Economic aggregate | Jobs in financial sector |
|------------------------------------|------------|----------------------|--------------------|--------------------------|
| 1 st | 100 | 100 | 100 | 100 |
| $2nd-4^{th}$ | 116 | 98 | 81 | 42 |
| 5 th – 11 th | 105 | 93 | 73 | 46 |
| Share in the CR % | 50.4 | 54.8 | 59.6 | 71.2 |

Note: metropolitan areas are divided into three categories in accordance with the rank-order following the "rank size rule" in order to have roughly same categories; see also Table 1 and Figure 1.

The qualitative transformation of the hierarchy of metropolitan areas is in reality a general development process of regional and settlement organisation in the post-industrial era. Such development causes qualitative changes in the process of concentration, i.e. the

concentration of population (or residential function) is substituted by the concentration of contacts of population, firms and institutions; in short, the concentration of "organisational power" (see also Dostál and Hampl, 1994a, 197-202; 1994b, 30ff). In a simplified way, we can point out, on the one hand, to a relative stagnation of the population growth of the major urban centres but, on the other hand, also to a continuing increasing importance of the influence of urban centres. This increasing influence is carried on the strengthening of the role of progressive functions, in particular the role of the quaternary transactional functions, the commanding functions of economic and political affairs that cover the entire national economy and society and are concentrated in the capital city and the largest urban centres. It is necessary to note that increasing interconnectedness of the settlement system is a crucial condition of the effectiveness of the progressive functions that are sustained by increasing mobility of population, goods and in particular of information. Therefore, we see in the set of metropolitan areas only a low level of population dynamics, but a considerable dynamics in the development of economy. In other words, the dominance of the major urban centres is primarily strengthened through a deepening of functional different tiation sustained by different progressive capacities (functions). Data given in Table 5 show that the current concentration of individual functions in the metropolitan areas varies considerably. The concentration increases with increasing progressive character of the functions. This "qualitative weighting" of the size, respectively of the importance of metropolitan areas, tends to increase the dominance in respect to other parts of the national system and enhance the differentiation in the importance in the set of the metropolitan areas. The latter differentiation primarily involves the increasing differences in dominance between the Prague metropolitan area and the other areas.

4. The system of metropolitan areas and the formation of regional self-government

The system of metropolitan areas provides a basic framework for the formation of "natural" regional organisation of the national territory, but it also conditions the formation of administrative units at regional level. The need for relative geographical correspondence between administrative division and real organic territorial units is obvious. It is particularly important in the case of self-governmental regions that the "self-regulation" is concerned with actors and territory that belong together in a natural way. Forming well-delineated areas in which activities are interconnected in such a way that they are relatively closed and directed as main functional relationships between the core and its hinterland (in a nodal or supra-nodal form). In the framework of such relatively closed regions there develops corresponding territorial division of labour and there usually also takes place socio-cultural identity of regional community.

Our assessment of new system of self-governmental regions is concerned with:

(i) "Geographical form" of new regional division, i.e. number and size order of units, selection of their centres, and delineation of regions; these questions clearly are of geographical nature, but they are also solved politically (the new regional division was accepted by the both chambers of the Czech parliament in 1997).

- (ii) Fundamental issues concerning competencies, and property and ways of financing of the new self-governmental regions; these issues are still open and are subject matter of discussions of political parties that are dealing, in a simplified way, with different ideas concerning measures of centralisation and decentralisation of the state structure, fragmentation of multipurpose self-government by single-purpose solutions, division of tasks between self-government and administration, etc.; there is obvious need in discussions for expert argumentation, including insights gained in geographical analyses and assessments;
- (iii) Assessment of the new regional division in the context of the whole system of territorial administration and self-government; a number of issues resulting from current solution of the transformation of public administration and self-government that lacks a systemic approach.

Basic characteristics of the new geographical form of the regional division are given in Tables 6 and 7.

4.1. New multipurpose regional administration

From the viewpoint of a comprehensive assessment and comparison of the new regional division with the system of natural/organic socio-geographical regions we may to emphasise the considerable geographical correspondence and, therefore, also suitable character of the accepted territorial solution. There are 12 main centres in the national settlement system - if the Hradec Králové/Pardubice area is divided in two units - and, in consequence, there are their 12 metropolitan areas. These major centres clearly differ from the centre on the 13th rank in the system. There are only two cases not fitting into the system. First, there is the capital city of Prague that is defined as "region". This delineation has been largely made for political, economic and organisational reasons. On the one hand, this reduces variability in population size of the regions. In terms of population size, the largest region is roughly four times larger than the smallest one while if the integral character of the territory of Central Bohemia would be maintained than the difference would be eight times. On the other hand, the separation of "rich" Prague from the region of Central Bohemia will enlarge anticipated support from EU structural funds, because without Prague, the region has (with Olomouc and Vysočina regions) the lowest GDP per capita level in the set of 13 new regions. Second, there are important differences in the socio-geographical regionalisation in the case of Vysočina (Jihlava) region. The region was created in order to eliminate a "vacuum" of a large, but sparsely populated territory between Prague and Brno and to establish a regional centre that can improve accessibility of regional administration and also give a development impulse in an economically weak territory. However, there are serious questions concerned with the delineation of the region. There is in general the weaker role of Jihlava as a central place and the dominant influence of Brno in districts Třebíč and Žďár nad Sázavou that belong to the new Vysočina region. It would be more appropriate to include these districts in the region of Brno. The smaller Vysočina region would be in terms of size comparable with the smallest region of the new division: the region of Karlovy Vary and, moreover, such territorial correction would also respect historical division between Bohemia and Moravia that still is perceived by the public as important. The historical boundary divides the town

Table 6. Basic features of new self-governmental regions

| region | area in km² | population in thousands 1. 3. 2001 | population density | number of municipalities and districts 1. 3. 2001 | | GDP in PPP per capita in 2000 CR = 100 | increase in GDP p.c. in 1989–2000 (1989=100%) CR = 100 |
|-------------------------|-------------|---|-----------------------|--|----|--|--|
| Prague | 496 | 1 178.6 | 2 376 | 1 | 1 | 211.2 | 164.6 |
| Středočeský | 11 014 | 1 129.6 | 103 | 1 148 | 12 | 83.9 | 96.8 |
| Jihočeský | 10 056 | 638.2 | 63 | 623 | 7 | 89.9 | 100.9 |
| Plzeňský | 7 560 | 553.7 | 73 | 506 | 7 | 96.9 | 101.7 |
| Karlovarský | 3 215 | 306.8 | 93 | 132 | 3 | 82.4 | 85.1 |
| Ústecký | 5 335 | 826.4 | 155 | 354 | 7 | 81.4 | 72.2 |
| Liberecký | 3 163 | 430.8 | 136 | 216 | 4 | 84.6 | 94.1 |
| Královéhradecký | 4 757 | 554.3 | 117 | 448 | 5 | 88.8 | 103.7 |
| Pardubický | 4 519 | 510.1 | 113 | 453 | 4 | 84.9 | 93.7 |
| Vysočina | 6 925 | 521.2 | 75 | 730 | 5 | 80.8 | 91.8 |
| Jihomoravský | 7 067 | 1 133.9 | 160 | 647 | 7 | 90.7 | 96.3 |
| Olomoucký | 5 139 | 642.5 | 125 | 394 | 5 | 78.5 | 82.6 |
| Moravskoslezský | 5 555 | 1 277.1 | 230 | 304 | 4 | 84.2 | 73.2 |
| Zlínský | 3 965 | 597.8 | 151 | 302 | 6 | 83.4 | 90.9 |
| Czech Republic | 78 866 | 10 292.9 | 131 | 6 258 | 77 | 100.0 | 100.0 |
| Prague + Středočeský | 11 5101 | 2 308.2 | 201 | 1 149 | 13 | 149.1 | 136.3 |

Note: GDP data are nor available for 1989. Data for 1989 are estimated using the index of change of economic aggregate measure in 1989–1996 (economic aggregate is defined as the product of number of jobs and average wages; see for more details: Hampl et al., 1999)

Sources: Statistical Yearbook of the Czech Republic 2000. Prague, Czech Statistical Office. 2001.

Preliminary results of the census of population, dwellings and houses on 1. 3. 2001. Prague. Czech Statistical Office. 2001.

Hampl et al. (1999).

Regional estimations of the GDP. Czech Statistical Office. 2001

of Jihlava itself that is perceived as a Moravian town, but which currently intensifies its socio-economic relations with Prague. From the viewpoint of an overall assessment of the geographical form of the new regional division, it is further necessary to make the critical note that there are numerous "unnatural" differences in the delineation of regional boundaries compared to the basic territorial framework of the regional organisation of the country. They resulted from the political demand to maintain the integrity of 77 districts as basic units of administration and territorial aggregation in the new self-governmental regions. The districts were established by the communist regime in 1960 in a totalitarian manner and they still are forming in many instances non-organic territories (especially

districts Jindřichův Hradec, Děčín and Svitavy). It is characteristic and paradoxical of the transformation of territorial administration that some years after the establishment of the self-governmental regions, the "untouchable" 77 administrative districts have to be abolished (on January 1st, 2003).

Third, there is the complex and politically sensitive problematic of competencies of self-governmental regions and an economic base (tax base, subsidies, etc.) of their functioning. There are contradictory interests and associated respective needs and demands. On the one hand, there are claims stressing the small size of the national territory and the ethnic and socio-cultural homogeneity of the nation and, thus, the need for a centralised administration. On the other hand, however, there is obviously the need for a sensitive and integral management of territorial development that can counterbalance the central and sectororientated decision-making (see also Dostál and Hampl, 1993; 1999). In consequence, the key in the debate on instituting of competencies for the new regional self-governments has to be the creation of effective capacity of integrative multipurpose self-government and administration harmonizing and co-ordinating solutions of social, economic and ecological problems within the regional units concerned. This key demand is particularly important, because the next lower self-governmental level is that of municipalities. There are 6,250 municipalities in the Czech Republic and they are on average very small and thus in respect to tasks of territorial management they appear to be very often ineffective. Therefore, the range of competencies of the new self-governmental regions can be wide and demanding sufficient economic base (incomes in form of tax shares, fees, and also subsidies from the central government). Simultaneously, it does not seem appropriate to enhance the importance of political power of the new regional self-governments in respect to the central government.

A special issue is the relationship between the system of administration and the system of self-government at the regional level. The 77 administrative districts of the country (see Table 6) are to be abolished on January 1st, 2003, and their administrative tasks and competencies are to be taken over by the new regional self-governments, on the one hand, and by 205 selected towns (self-governmental municipalities), on the other. There is great need for a balanced geographical correspondence between the systems of administration and self-government. The administrative tasks from the districts have been largely shifted to the new regional self-governments in the form of co-governmental tasks supervised by the central government. Various regional offices of ministries have also been accommodated in similar ways (regional offices were fulfilling tasks that were often activities inherited from former communist regional "national committees" abolished in 1990; see Dostál and Kára, 1992). The allocation of numerous administrative tasks to the regional self-government in the form of co-government (delegated tasks of the central government) can be assessed as a right solution of the issue in particular from the perspectives of economic costs (avoiding two track administrative system).

Effectiveness of the basic function of the new regional self-governments – the task of integral management of territory and support for regional policy-making – will obviously depend on rules and regulations of its financing. A strengthening of economic autonomy of the self-governmental regions will necessitate in the first place a reduction of importance of redistributive mechanisms commanded by the central government (subsidies). Thus, it will be needed to establish a direct link between economic results of the regions (especially in

Table 7. Dominance of 12 major regional centres

| Rank order | Regional centre | Maximum region of centres (thousands of inhabitants in 1991) | Rand order | Regional centre | CFS agglomeration |
|------------------|-----------------------|---|----------------|-----------------|----------------------|
| 1 | Prague | 10 302.3 | 1 | Prague | 1 736.3 |
| 2 | Brno | 2 724.9 | 2 | Ostrava | 863.9 |
| 3 | Ostrava | 1 359.5 | 3 | Brno | 521.5 |
| 4 | Ústí n. L. | 730.1 | 4 | Ústí n. L. | 516.5 |
| 5 | Olomouc | 644.1 | 5 | Plzeň | 228.9 |
| 6 | Zlín | 563.9 | 6 | Olomouc | 203.0 |
| 7 | Plzeň | 554.5 | 7 | Liberec | 174.1 |
| 8 | H. Králové | 516.6 | 8 | Pardubice | 138.7 |
| 9 | Pardubice | 423.4 | 9 | K. Vary | 137.3 |
| 10 | Č. Budějovice | 367.9 | 10 | Č. Budějovice | 125.2 |
| 11 | K. Vary | 302.6 | 11 | Zlín | 124.8 |
| 12 | Liberec | 299.3 | 12 | H. Králové | 123.8 |
| Discontinuity in | n size defferentiatio | n | into the first | e, radial silve | |
| 13 | U. Hradiště | 190.6 | 13 | N. Jičín | 83.8 |
| 14 | Šumperk | 169.5 | 14 | Kolín | 77.5 |
| 15 | Kolín | 166.1 | 15 | Ml. Boleslav | 60.9 |
| 16 (29) | Ústí n. O. Jihlava | 163.8 110.4 | 16 | Jihlava1 | 60.2 |

Notes: Maximum regional influence of centres is defined in socio-geographical regionalisation in 1991 (see Hampl et al., 1996). In maximum regions of the two largest centres there obviously included other regions of selected centres of the regions. If the regions would be excluded, the size of Brno region would decrease to 1 406.5 and of Prague region to 3 023.4 inhabitants. CFS - complex functional size - is defined as average of three shares of concerned units in the Czech Republic in 1991 (number of inhabitants, number of job opportunities, number of job opportunities minus jobs in agriculture, forestry, industry, construction, transport and communication). CFS indicates aggregate size of centres, i.e. average of residential, work and service size. Unit of the CFS is 0.1 per mille share in the total of the Czech Republic. In agglomerations, there are assessed centres that are interconnected in terms of functions (having CFS size 5.0 or more) that have shown "strong" or "medium" strong agglomeration interconnections (see further Hampl et al., 1987). In some cases, the centres of integrated regions have been amalgamated in agglomerations (Ústí n.L., Karlovy Vary, and some other). Hradec Králové and Pardubice are considered as separate agglomerations because of their relative regional autonomy in their regional influence. Their interconnectedness is of medium intensity and, therefore, in accordance of the mentioned criteria the centres form a large agglomeration, or the core of one metropolitan area (the CFS of the agglomeration is 262.5, implying 5th position in the national hierarchy). Accordingly, in our assessment districts Hradec Králové and Pardubice are amalgamated to form one single metropolitan area. The position of Jihlava is also in the table, because this small centre became the capital of the new self-governmental region Vysočina.

regard to business taxes) and their incomes. Such a solution would strengthen meritocratic principles that are particularly crucial in the transformation period: avoiding constraints on advantages in competitiveness of regions (in view of the interest of economic growth of the whole economy) in anticipation of the creation of undistorted economic environment (information on real economic situation in its geographical differentiation). Data in Table 6 show that there are considerable differences in economic performance of the new regions. The differences will probably even increase in short term. However, if there will be increasing interregional differences in a significant way, than there will also be considerable need for regional policies of the centre, i.e. redistributive policies of the central government with a solidarity character. It is advisable to combine meritocratic policies (based on economic performance of regions) and solidarity policies (based on redistribution by the central government) and to create legislative measures enabling shifts toward both types of policy-making.

The system of financing of the new regions necessitates to distinguish between a system of financing of the NUTS II regions and the regions (NUTSIII level). In the first case, it is concerned with the basic statistical units of the EU framework of regional policies. EU regional policy-making demanded to delineate 5 to 6 units. The Czech government proposed the 14 new regional units. Negotiations resulted in a solution with 8 units by aggregation of 13 regions: in 3 instances the regions constitute NUTS III and in other cases aggregation were made (Plzeň and Jihočeský; Karlovy Vary and Ústí; Liberec, Hradec Králové and Pardubice; Brno and Vysočina; and Olomouc and Zlín). Given the above-mentioned reasons, Prague is separate NUTII unit due to its high level of GDP per capita. Its separate status will unavoidably create various problems in regional policy-making and physical planning given many organic interconnections between the capital city and its natural hinterland, i.e. region of Central Bohemia (Středočeský region). It seems that there will be a big need to create a territorial planning institution for the whole Central Bohemia including Prague). There emerged proposals on the Czech political scene to change the number of new self-governmental regions (reduction to 8 or 9) in order to institute them as NUTSII units. However, it seems that the real interest were connected with the wish to preserve the current 77 administrative districts and postpone the establishment of the new self-governmental regions. In general, it is therefore necessary to emphasise the principal political demands (decentralisation of power and deepening of democratisation) and also economic, or societal demands (integral management of territorial development of regions). There is also little doubt that the system of regions is created primarily for the needs of "intra-state" regulation and, therefore, the condition of the natural organic character of the regions is of great importance (see Dostál and Hampl, 1999; Dostál and Saey, 2000). Moreover, EU regional policy support to less developed regions is not automatic, and not direct and also not directly depending on administrative subjectivity of the units.

4.2. Key issues of territorial administration and self-government

There are good reasons to see the new system of self-governmental regions as a first positive step towards entire transformation of the territorial administration (see the general decentralisation of political decision-making and the largely organic character of the new regions). However, it is also necessary to make some critical remarks. It has been noted above that this transformation was not a systemic one and, in consequence, isolated reforms resulted in considerable disorder in the hierarchical proportionality as well as in insufficient mutual correspondence of the systems of administration with the system of self-government. Firstly, there is the hierarchy of (i) the central government, (ii) 77 districts (including 4 self-governmental biggest cities with delegated tasks of state administration), (iii) 394 areas of so-called municipal offices with delegated administrative tasks for surrounding small municipalities (including 5 military areas), and (iv) about 6,250 municipalities. The entire problematic of territorial administration is obviously complex and therefore we can only introduce in this paper the key issues needed to be solved in current situation and some other in the future stage of the transformation (see also more detailed analyses Barlow et al., 1994a; 1994b):

- transformation at the local level the introduction of municipal self-government in 1990. However, the clear democratic character of the changes was accompanied by excessive fragmentation of municipalities (there are more than two thousands new municipalities since 1989). In consequence, traditionally big fragmentation at the muni- cipal level increased significantly. The current median population size of municipalities is only 380 inhabitants. Therefore, the economic base of the majority of municipalities is critical; the same applies to organisational capacities of municipal communities (there are needed annually about one hundred new local elections to be held). A significant change by an intensified process of amalgamation of municipalities is not politically realistic. However, the enormous fragmentation of local administration is of key importance for the creation of the entire hierarchy of territorial whole: given the current big number of municipalities it is therefore necessary to create two regional levels.
- Further important issue is the position of the level of 77 administrative districts. Their number is small in relation to the 14 new regions and their delineation often does not have organic character. On the one hand, the districts represented the most important level of territorial administration that functioned for 40 years and was materially and personally well-established. In a majority of the districts, the public was showing some identity with micro-regional community of districts. The district level will be replaced with 205 smaller areas (smaller districts) of municipalities in which one selected larger municipality will fulfil administrative (thus not self-governmental) tasks for the area. This new administrative level will bring some administration closer to the citizen, but it can certainly be more expensive in its introduction as well as in its further functioning. On the other hand, the small districts could help to reduce some negative effects of the fragmentation at the municipal level.
- iii) It seems that the changes in territorial administration and self-government will be long, expensive and difficult. It is very important to elaborate on a real concept of the final systemic state and find a necessary consensus between the political parties. As regards the current state of affairs, one can expect the existence of small municipalities and regions. There would be at the micro-regional level two options. The first one would be the maintenance of the about 400 areas of municipalities with

regard to business taxes) and their incomes. Such a solution would strengthen meritocratic principles that are particularly crucial in the transformation period: avoiding constraints on advantages in competitiveness of regions (in view of the interest of economic growth of the whole economy) in anticipation of the creation of undistorted economic environment (information on real economic situation in its geographical differentiation). Data in Table 6 show that there are considerable differences in economic performance of the new regions. The differences will probably even increase in short term. However, if there will be increasing interregional differences in a significant way, than there will also be considerable need for regional policies of the centre, i.e. redistributive policies of the central government with a solidarity character. It is advisable to combine meritocratic policies (based on economic performance of regions) and solidarity policies (based on redistribution by the central government) and to create legislative measures enabling shifts toward both types of policy-making.

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- The most important positive changes were introduce in the post-communist transformation at the local level the introduction of municipal self-government in 1990. However, the clear democratic character of the changes was accompanied by excessive fragmentation of municipalities (there are more than two thousands new municipalities since 1989). In consequence, traditionally big fragmentation at the muni- cipal level increased significantly. The current median population size of municipalities is only 380 inhabitants. Therefore, the economic base of the majority of municipalities is critical; the same applies to organisational capacities of municipal communities (there are needed annually about one hundred new local elections to be held). A significant change by an intensified process of amalgamation of municipalities is not politically realistic. However, the enormous fragmentation of local administration is of key importance for the creation of the entire hierarchy of territorial whole: given the current big number of municipalities it is therefore necessary to create two regional levels.
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delegated administrative tasks for small surrounding municipalities. The second solution would be the current creation 205 small districts (excl. Prague) with a similar package of administrative tasks and services. This solution is now presented in the Czech parliament as official one, and it is implemented on January 1st, 2003. The rapidity with which this change is being introduced logically leads to fears about the quality of the state administration at local or micro-regional level. There takes place the introduction of an additional administrative structure besides the existing almost 400 municipalities with delegated administrative tasks. In general, it is better to prefer the solution in which the delegated tasks are given in the form of co-government to the self-governmental units as it is in the case of the new regions. It is also needed to note that at the micro-regional (or extended local) level there will be serious problems of capacities and demands to be solved between larger and small municipalities, between rich and poor ones, etc.

Preconditions of further development of regional and settlement hierarchy: concluding comments

During the 1990s there materialized in the Czech Republic important changes in the hierarchical settlement and regional organisation. There must be emphasised four tendencies:

- (i) The strengthening of organisational role of higher hierarchical levels, i.e. the role of regional centres and their corresponding metropolitan areas with the most important organisational dominance of the capital city.
- (ii) The increasing importance of the qualitative character and the decreasing importance of the size differentiation in the hierarchy of regional centres; there has been a shift from a "quantitative" towards a "quantitative-qualitative" character of the hierarchy;
- (iii) The evolving current metropolitan processes have led to a shift in the key organisational role from the hierarchy of nodal centres to a hierarchy of the centres of supra- nodal type.
- (iv) These three tendencies are taking place in the national settlement system and the resulting tendencies in the regional organisation have had crucial impacts on territorial and institutional structures, especially on the transformation of the administrative and self-governmental system

All these tendencies in their mutual interconnection correspond with the general intensification of selective orientation of the regional development and its current specific forms during the post-communist transformation. From the long-term perspective, there is the key question of whether these tendencies will continue or will be changed. It seems that in near future, i.e. over a time horizon of 10 to 20 years, the tendencies will probably continue due to the following circumstances. From the point of view of "internal" development of the national settlement system there still is the continuation of the transformation of post-communist type and the long-term general transformation of the post-industrial type. One can obviously expect some selective tendencies given the fact that the initial dramatic changes already took place. On the other hand, there will be

intensifying "external" impacts of the integration of the Czech Republic in the EU structures. One can expect the increasing importance of differentiating factors; factors of macro-geographical position, and especially factors related to the "quality" human resources and economic and also political activities of the regional centres. There will be seemingly opposite egalitarian impacts of the EU regional policies; however, one can expect that their compensating effects will be relatively weak. Moreover, one can even expect a "second" turn – but not so dramatic one – towards a regionally selective process.

Gradual strengthening of the importance of conditions at supra-national level will be also decisive in the further organisation of the Czech territory. There will be interactive effects of the external and the internal factors. Two types of factors will have decisive importance: geographical factors and political-economic ones. First, there are some reasons to give emphasis to potentially favourable factors. The position of a neighbour close to economically more strong EU countries, the fast connection to the EU countries in transport macro-infrastructure (motorways, rail way corridors, modernisation of Prague airport) and extraordinary attractive position of Prague between Berlin and Vienna (see potential formation of a secondary geo-economic zone in Central Europe; Dostál and Hampl, 1992) can induce further dynamic development of Prague and sustain intensive development in other centres or parts of the Czech Republic. These circumstances are important for the capital city of Prague that is the single national centre having some chance to be integrated in a continental hierarchy of the large cities (see Taylor, 2000; Taylor and Hoyler, 2000). This prospect is supported by local circumstances in the capital of Prague such as extraordinary cultural and tourism attractiveness. Whether this potential will be realised obviously depends on political and economic development of the whole state. Beside the geographical nearness in respect to the EU, there will also be needed political and economic "nearness" and the creation of an attractive environment for inflow of foreign direct investment and supra-national activities in general. From this perspective any future assessment is uncertain. General logic of the coming EU enlargement suggests optimistic expectations. Uncertainty concerns the time horizon, the dynamics of integration of the Czech Republic and the degree of success of the development of the Czech economy in the large context of European and also global competition.

Finally, we must note that in the long-term perspective one can expect relative stabilisation of largely qualitatively determined settlement and regional hierarchy. Also the clear importance of the selective regional development process can be overcome. National and supra-national regional policy will support this major shift in the long-term development path. The support to weak regions will not be sufficient—despite of measures orientated on increase inactivity— and also not effective in economic terms. Active regional policy will be needed in the poor and lagging regions, both due to ecological and economic conditions (in the Czech Republic especially the mining and heavy industry areas and the peripheral rural areas). However, the general orientation of a wide regional policy-making would have to be orientated to the strengthening of interconnectedness and economic co-operation of regions, i.e. a deeper functional integration of "strong" and "weak" regions and localities. In this sense, the metropolitan areas have to play the role of major motors of the development of whole zones of regions and deepen and sustain their organic integration. The current and—in sort-term—continuing selective processes can be

"exploited" to the advantage of whole regions. In general terms, we can speak of the strengthening of the developmental model "differentiation – diffusion", in brief a gradual spread of the development dynamics of the leading units towards the entire regional system.

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METROPOLITNÍ AREÁLY V TRANSFORMACI REGIONÁLNÍ ORGANIZACE V ČESKÉ REPUBLICE

Résumé

Analýzy a diskuse tohoto sledování jsou rozlišeny podle tří základních úrovní hodnocení. Za prvé jsou specifikovány hlavní faktory podmiňující geografickou diferenciaci transformačních procesů po roce 1989 a je zdůrazněna úloha a význam metropolitních areálů. Za druhé jsou charakterizovány vývojové tendence hierarchie vůdčích jednotek národního systému osídlení včetně stanovení pozic jednotlivých metropolitních areálů a zdůraznění rostoucí dominance hlavního města, respektive pražského metropolitního areálu. Za třetí jsou v poslední analytické části tohoto příspěvku sledovány struktura a vývoj metropolitních areálů ve vztahu k nově zavedené soustavě samosprávných krajů. Diskutována je i celková koncepce transformace územní správy a samosprávy. Konečně v závěrečných poznámkách jsou komentovány možné budoucí tendence vývoje hierarchie metropolitních areálů z pohledu zesilování evropských integračních procesů.