Regional Development in Transitional Economies after 1989: Reformation or Deformation?

Sucháček, Jan and Malinovský, Jan

VŠB - TU Ostrava, Faculty of Economics

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Regional Development in Transitional Economies after 1989: Reformation or Deformation[1]?

Jan Sucháček, Jan Malinovský
VŠB-Technical University of Ostrava,
The Faculty of Economics,
Department of Regional Economics,
Havlíčkovo nábřeží 38a,
701 21 Ostrava 1
Czech Republic
e-mail: jan.suchacek@vsb.cz, jan.malinovsky@vsb.cz

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Abstract: *The article deals with dichotomic character of contemporary regional development in transitional economies. It is shown the main problem of spatial development in transitional economies consists in sharp discordance between inadequately distributed and distorted system macrostructures inherited from socialist period and vogue neo-endogenous paradigm of regional development that is currently widely applied in both developed and transitional countries. The roots of this unfavourable state can be traced back to the history and hence the evolution of regional developmental conceptions that formed wider context of contemporary spatial developments in transitional economies will be discussed too. The case study that focuses on the Czech Republic brings ample evidence about above mentioned tensions.*

Key Words: *transitional economies, advanced economies, system macrostructures, neo-endogenous approach to regional development, regional development*

JEL Codes: *R10, R12, R40, R53, R58*

1 Introduction

The number of theories on regional development has permanently rising tendency. Individual theories differ not only in terms of the delimitation of principal actors and mechanisms of regional development but also in the sphere of recommendations for regional policies formation. The notion of development itself bears also rather different and often almost antagonistic meanings. Not surprisingly, there exists nothing like commonly accepted paradigm on regional development so far.

In the course of last two or three decades the realm of regional development witnessed a distinct move from exogenous approaches to the endogenous ones. However, rather than by old endogenous doctrine, exogenous Keynesian paradigm was replaced by new neo-endogenous doctrine, which accentuates the creation of general conditions for the stimulation of inner endogenous developmental possibilities in individual regions. Neo-endogenous stream of regional development was formed as an intersection of new conceptions, such as learning regions, flexible specialization or industrial disctricts that underline the importance

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of profound spatial differentiation in institutional characteristics. Current neo-endogenous and to a certain extent eclectic stage of regional development is path-dependent upon the history of regional development paradigms.

The objective of this paper is to show that basically all transition countries find themselves under the strong pressure stemming from the endeavour to apply neo-endogenous conceptions on regional development that are currently in vogue. The key cause of this strain consists in the presence of deformed system macrostructures, which embody the heritage of socialist times. The problem of the tension between neo-endogenous practice of regional development and dysfunctional system macrostructures that actually form the wider framework for all spatial processes in transition countries is stated only seldom, nonetheless it becomes increasingly palpable issue in these economies. The case study that concentrates upon the Czech Republic brings ample evidence about afore mentioned unfavourable issues.

2 Basal Approaches to the Regional Development

Regional development should be perceived as the whole complex of processes running inside the region. These processes constitute the basis of the positive changes in region with regards to economic, social, environmental, cultural, psychological and many other characteristics. However, there is general consent that regional development can be only hardly reached without regional economic growth.

The number of conceptions that intend to account for developmental processes in space corresponds to the latitude of the perception of regional development. The quantity and strongly differentiated nature of theories on regional development causes numerous problems with their classification. Hence, it is only hardly surprising that there is no united concept of regional development theories so far. With regard to afore mentioned facts, teleological principle is rather frequently utilized in order to simplify the creation of the typology of these theories.

As it is visible in table 1, regional development approaches are distinguishable as follows:

- Interventionist, i.e. Keynesian and extremely interventionist Marxian-Socialist streams,
- Non-interventionist, i.e. strongly non-interventionist liberal paradigm and rather non-interventionist modern neo-endogenous conceptions of regional development.

In other words it is possible to talk about ‘top-down’ conceptions that rely upon the outer interventions and are inherent to Keynesian and Marxian-Socialist paradigms on the one hand and ‘bottom-up’ approaches, which emphasize the stimulation of inner regional developmental potential and are typical for liberal and modern paradigms of regional development on the other hand.

Table 1: Chronological Development of Regional Developmental Paradigms

General Paradigm	Characteristic Features	Typical Regional Policy
Liberal/non-interventionist/ **endogenous development**	Convergent spatial development, there is no necessity to intervene in market forces. Non-interventionist approach.	'Workers to the work' school, instruments increasing the labour mobility.
Keynesian/interventionist/ **exogenous development**	Divergent spatial development, it is necessary to intervene in market processes. Interventionist approach.	'Work to the workers' school, tools supporting the inflow of investments into problem regions.
Marxist-socialist/ extremely interventionist/**exclusively exogenous development**	Divergent spatial development, necessity of planning and management of spatial development. Extremely interventionist approach.	Central planning and management of spatial development, ignorance of spatial-market signals
Modern/'transformed' **neo-endogenous development**/formation of frame conditions for endogenous initiatives	Divergent spatial development, however, it is necessary to stimulace inner regional potential. Rather non-interventionist approach.	Support of milieu, which facilitates networking, development of small- and middle- sized firms, innovations and learning. Augmentation of institutional thickness, coopetition (co-operation and competition)

Source: authors

3 Regional Development in Transition Economies in the Context of Deformed System Macrostructures

Modern, neo-endogenous approaches toward regional development underline the importance of the stimulation of endogenous potential in the region. At the same time, these conceptions implicitly consider that system macrostructures are distributed in the way, which enables approximately even conditions for the development of individual regions and localities in the framework of the country concerned. In this context, one has to take into account that system macrostructures bear distinct spatial dimension, which principally influences the quality of these macrostructures.

System macrostructures are embodied by public administration (namely the power and manoeuvring space of self-government from financial perspective as well as the organisation of competences) or by both physical and social infrastructure. There should exist the balance between state administration and self-administration on the one hand and the spatial distribution of infrastructure should be at least approximately bound to the settlement system

as well as the overall socio-economic significance of particular territories on the other hand. All of these system macrostructures determine developmental possibilities and limitations of regions. More importantly, all of these macrostructures are formed on the basis of concrete political – economic decisions.

Adequately distributed system macrostructures ensure approximately even developmental conditions for all regions, which is also the prerequisite for efficient accomplishment of modern, neo-endogenous development. However, in reality of transitional economies, the occurrence of qualitatively good and spatially adequately distributed system macrostructures is rather an exception than rule. From this point of view, administrative, infrastructural as well as institutional system macrostructures in contemporary transition economies find themselves in an embryonic stage of their development. Obviously, it brings a great augmentation of transaction costs (see for instance Jurečka, 2002 or Sucháček, 2004a and 2005a).

4 The Case of Czech Republic

In the following paragraphs, the authors will concentrate primarily upon the Czech Republic as a representative of transitional economies (see also Table 2 and Figure 1).

Table 2: Basic Economic-Territorial Characteristics of the Czech Republic

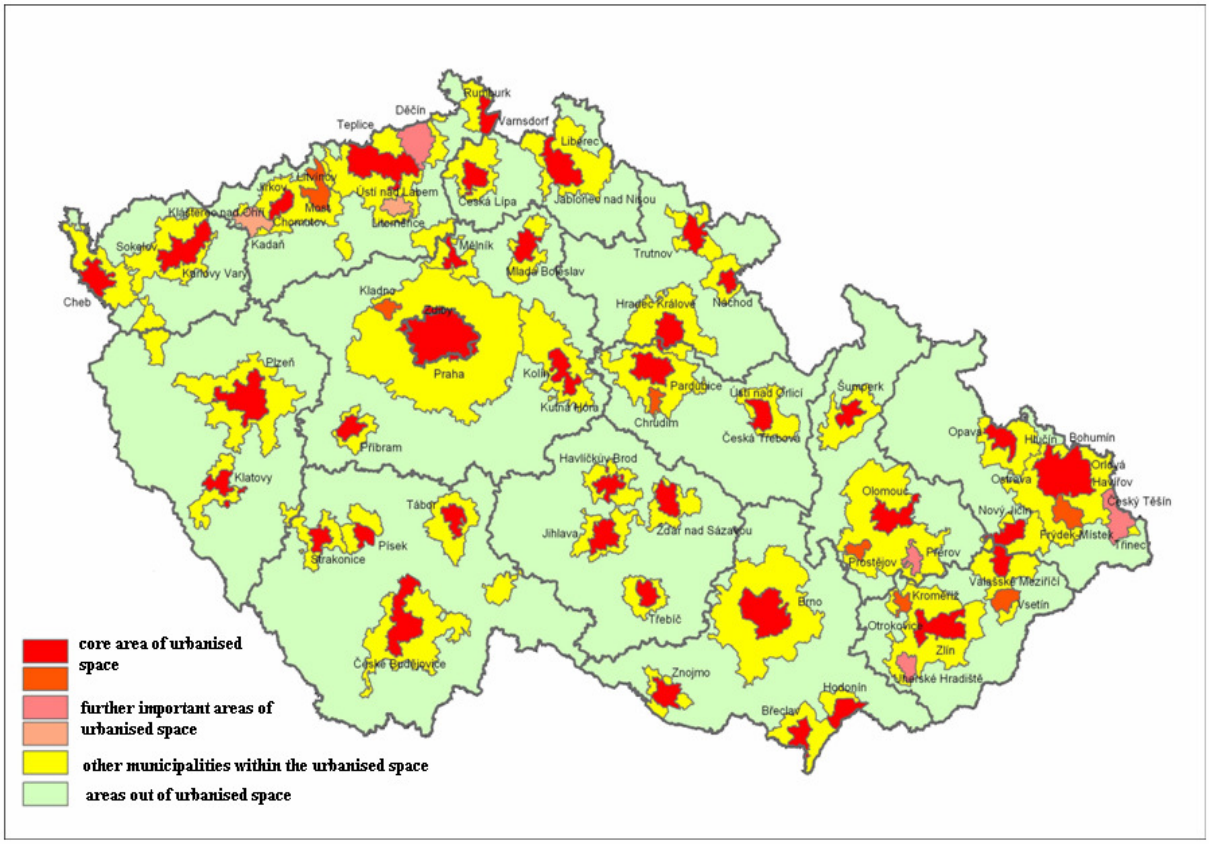
Characteristics	Position of the Country in the World	Numerical Value	Year
Area	114	78 866 km^2	2006
Population	78	10 235 455	July, 2006
GDP per capita	40	19 500 USD	2005
Inflation Rate	38	1.9%	2005
Unemployment Rate	73	8.9%	2005
Corruption Rate	54-56 (together with Brasil and Bulgaria)	3.9 (Corruption Perception Index according to Transparency International)	2003

Source: http://www.zemepis.com

Czech Republic, from which the authors come from, can serve as an excellent example of dysfunctional system macrostructures. At the same time, comparisons show symptomatically great institutional similarity of Central East European economies that underwent totalitarian political regime and centrally planned economy (see Gorzelak, 1998 and 2000 or Mlčoch, Machonin, Sojka, 2000).

Many times, it has been officially claimed that as a result of central planning legacy, the Czech Republic entered the transformation period as a country with relatively small regional inequalities (see for instance Hampl, 1996 et al). It is true that equalization was regarded to be a truly magic notion of policies based primarily on ubiquitous planning, however, at the same time, it has to be mentioned that in reality the practice was very often distant from officially proclaimed policies. Prokop and Kovář (1987) made a comparison of principal Czechoslovak towns and cities in all basic socioeconomic components of their lives and results brought strongly differentiated picture of Czechoslovak towns and cities.

Figure 1: Settlement Structure of the Country



Source: http://www.mmr.cz + author's modifications

Even more importantly, there existed strong administrative-political centralisation of virtually all decisive mechanisms of societal life into the capital city. This can be perceived as a spatial manifestation of totalitarian political system. This constituted the basis for future development of the country, which is nowadays strongly path-dependent (e.g. Mlčoch, 2000).

4.1 General Characteristics of the Country

For the purposes of our paper, it is of crucial importance to notice the essential demographical characteristics of Czech regions. Number of inhabitants in the given territory always constitutes very important factor for the description and explanation of spatial socioeconomic developments. This is mainly due to the fact that various activities are always connected with the population present in the given spatial framework. The number of inhabitants can be thus perceived as an approximate indicator of the volume of activities in the analysed area and various territorial policies should take it into account. Table 3 shows the shares of NUTS III regions on the total Czech population.

It is worth to notice that slightly more than 11% of the Czech population is living in Prague. At the same time, we have to bear in mind, that this city comprises approximately 40%-50% of the total socio-economic potential of the country. This is caused by numerous factors, but heavy administrative centralization of the country plays an important role in this context. As it will be shown, there is sharp discordance between the socioeconomic indicators of the capital city and the rest of the country.

Table 3: Basic Characteristics of Self-Governing Regions NUTS III (as per 1st January, 2003)

Region	Number of Inhabitants	Inhabitants in %	Area
Prague	1 161 938	11.4	496
Central Bohemia	1 128 674	11.1	11 014
South Bohemia	625 097	6.1	10 056
Plzeň	549 374	5.4	7 580
Karlovy Vary	304 220	3	3 315
Ústí	819 712	8	5 335
Liberec	427 321	4.1	3 163
Hradec Králové	548 437	5.4	4 757
Pardubice	506 534	5	4 519
Vysočina	517 630	5.1	6 925
South Moravia	1 121 729	11	7 067
Olomouc	636 750	6.2	5 139
Zlín	593 130	5.8	3 985
Moravian-Silesian	1 262 660	12.4	5 555
The Czech Republic in Total	10 203 269	100	78 866

Source: www.czso.cz

4.2 System of Territorial Administration and its Way of Performance

In spite of the fact that public administration creates the system conditions for the whole country and its structure and the way of performance heavily influences also the regional disparities, the analysis of the effects of public administration is often neglected or ignored. More importantly, the transformation of the structure and the way of performance of public administration in the Czech Republic in the transitional years was accomplished too headlong (see Sucháček, 2004b or Hampl et al, 1996).

The imbalance between the state administration and self-administration worked as a factor that strengthened already existing regional discrepancies and partly suppressed the local initiatives on regional development. The principal problem consisted in the weakness of self-government in relation to state administration mainly in terms of competences and financial resources. Self-government existed only at the municipal level and was curbed or practically oppressed by the excessive power of the state administration (see for example Sucháček, 2004a).

The depicted structure and way of performance of public administration constitute one of the underlying causes of the augmentation of regional inequalities or more precisely, the creation of the socioeconomic polarization between the capital and the rest of the country. One of the outcomes of this administrative situation is the preference of capital's interests to the detriment of the rest of the country, since virtually entire power of the state administration was concentrated into the capital city.

This resulted in the formation of the 'oligopoly with the competitive edge', which represents spatial equivalent of the economic model. Oligopoly is composed of a few powerful players

(both institutions and the firms) concentrated in the capital. Competitive edge on the contrary comprises the actors from the rest of the country that are compelled to struggle in a severe competition (e.g. Sucháček, 2005b).

Even after the establishment of self-governmental regions in 2001, the situation has not improved, since regions are very often forced to cope with operational and technical problems. Ministerial officials are obviously rather unwilling to give up their power[2].

Virtually all important companies are forced to establish their branch in the capital city just for the sake of better communication with central institutions and the proximity of information and networks. The common denominator of above-mentioned problems consists in the concentration of all decisive powers into the capital city. This phenomenon is commonly called 'Pragocentralism'. Transaction costs of this system are undoubtedly great but can be only hardly measured.

As it will be shown in the empirical part of the paper, current Czech Republic is strongly heterogeneous country in social and economic terms. Strong polarization between the capital and the rest of the country evolved and we are currently entitled to talk about a post-communist modification of traditional core-periphery relations.

4.3 Infrastructural Dimension

The role of infrastructure in territorial development is an indispensable one. As already mentioned, spatial distribution of both physical and social infrastructure should be at least approximately bound to the spatial distribution of population as well as socioeconomic importance of territories. Infrastructure is manageable in the sense that it is formed on the basis of particular political-economic decisions.

Social infrastructure has much to do with the provision of widely perceived education or health services, which are increasingly important for the whole societal life and development. The importance of physical – and namely transport – infrastructure for territorial economies is rightly compared to the circulation of blood in human body. Put succinctly, infrastructure delimitates developmental possibilities and limitations of particular regions principally.

In order to draw on the territorial justice, spatial distribution of both social and physical infrastructure should enable approximately even conditions for the development of individual regions, localities as well as particular subjects[3]. However, deeply embedded centralisation in the Czech Republic does not allow to approach this advisable state.

4.3.1 Transport Infrastructure

Road infrastruture that represents an indispensable condition of regional development is distributed rather unevenly in the Czech Republic. As it can be seen in the table 4, the biggest investments took place namely around Prague (i.e. Central Bohemia) and in Plzeň and Ústí

[2] For instance, the budget of Ostrava, which has approximately 320.000 people and is the capital town of Moravian-Silesian region, reached some 5.7 billions of Czech crowns in 2003. At the same time, Moravian-Silesian region with 1.2 million of inhabitants had just 6 billions of Czech crowns at disposal. Incidentally, huge majority of regional budget is assigned to compulsory expenses.

[3] Some advanced countries, such as Germany, the Netherlands or Japan draw on this desirable state.

regions because of the need for highway connection between Prague and the border with Germany.

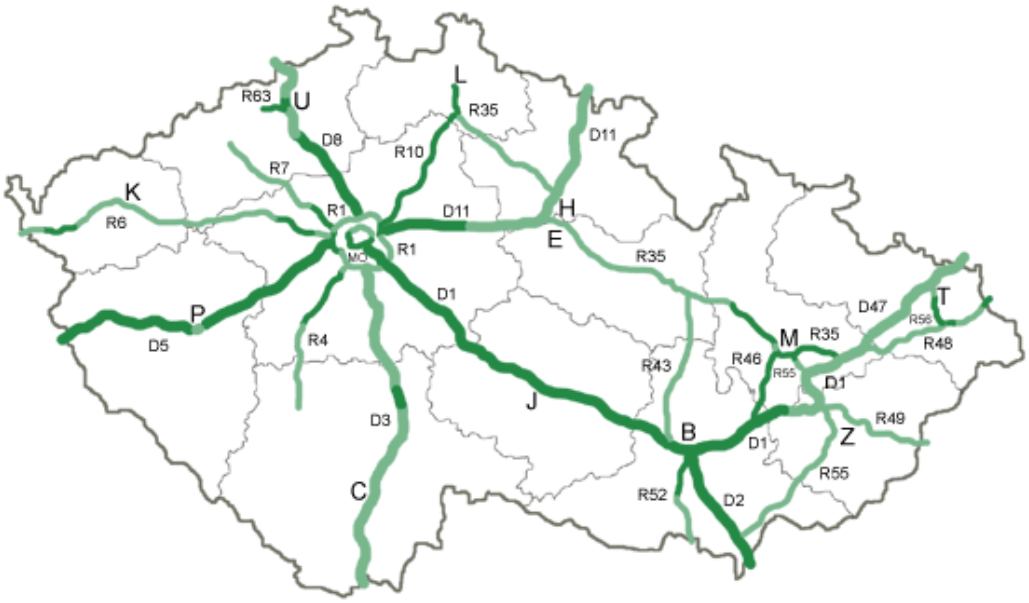
Table 4: Absolute Length of Highways in Operation and Length of Hihgways in Operation per Square Kilometer

Region\Year	1995		2003	
	Length	Length per Sq. km	Length	Length per Sq. km
Prague	10	0.020	11	0.022
Central Bohemia	157	0.014	172	0.016
South Bohemia	0	0	0	0
Plzeň	26	0.003	89	0.012
Karlovy Vary	0	0	0	0
Ústí	4	0.001	29	0.005
Liberec	0	0	0	0
Hradec Králové	0	0	0	0
Pardubice	0	0	0	0
Vysočina	93	0.013	93	0.013
South Moravia	124	0.017	124	0.017
Olomouc	0	0	0	0
Zlín	0	0	0	0
Moravian-Silesian	0	0	0	0
Czech Republic	414	0.005	518	0.006

Source: http://www.rsd.cz

So, in the western part of the country we witnessed quick development of highway infrastructure. In eastern part of the country, on the contrary, the development of highway infrastructure was severely ignored. It is not necessary to stress that spatial distribution of highways in the Czech Republic is in sharp discordance with its settlement system.

Figure 2: Spatial Distribution of Highways and First-Class Roads in the Czech Republic



Source: http://www.rsd.cz

Subsequently, these regions that have no direct highway connection almost disappeared from the maps of investment priorities. Figure 2 shows the map of highways in the Czech Republic (existing highways are marked in strong and wide lines, existing first-class roads are marked in strong and narrows lines, planned highways in feeble and wide lines and at last planned first-class roads in feeble and narrow lines).

Speaking in morphological terms, Prague resembles the sun whose rays emanate into the rest of the country. Network of highways connecting the most imporant agglomerations in advanced countries, reducing the transaction costs principally and supporting territorially more even economic growth somehow avoided the Czech Republic (or more precisely country's governing elites avoided this network structure of highways).

Railway network is not so centralised, which is determined by historical development that lies behind the fact that contemporary Czech Republic has one of the densiest railway networks in Europe. In comparison with the importance of highway transportation, Czech railways witness relative decline. Intense automobilisation rises the relevance of the road infrastructure. However, practically all international railway connections are directed into Prague again.

Table 5: Absolute Length of Railways in and Length of Railways per Square Kilometer

Region\Year	2003	
	Length	Length per Sq. km
Prague	191	0.385
Central Bohemia	1398	0.127
South Bohemia	959	0.095
Plzeň	718	0.095
Karlovy Vary	438	0.132
Ústí	1038	0.195
Liberec	548	0.173
Hradec Králové	588	0.123
Pardubice	531	0.117
Vysočina	629	0.091
South Moravia	786	0.111
Olomouc	749	0.148
Zlín	343	0.086
Moravian-Silesian	677	0.120
Czech Republic	9586	0.121

Source: www.mdcr.cz

In a sensu stricto, air transportation does not belong under infrastructure category but represents rather one of manifestations of existing spatial infrastructural organisation. Regular air lines can be considered as a specific kind of 'soft' infrastructure due to their periodicity.

The dynamic growth of Ruzyně airport in Prague is the most important feature of air traffic in the country. However, it should be mentioned that there are not equal conditions for the development of all airports in the country and moreover, state provider of air connections frequently utilizes monopolistic practices. Passengers from the various parts of the country are largely forced to go to Prague airport if they want to get to major world cities. Karlovy Vary,

Brno and Ostrava have primarily charter flights and virtually no regular flight connections. Prague thus embodies almost exclusive gate for more distanted international visitors or investors. At the same time, passengers from remote Czech regions suffer from higher transaction costs.

Table 6: Number of Passengers at Czech International Airports

International Airport\Year	1991	2004
Prague-Ruzyně	1 500 000	9 696 400
Brno-Tuřany	87 000[4]	171 888
Ostrava-Mošnov	113 300	197 400[5]
Karlovy Vary	1 328	38 704

Source: http://www.prg.aero/cs, http://www.airport-brno.cz, http://www.airport-ostrava.cz, http://www.airport-k-vary.cz

4.3.2 Social Infrastructure

Social infrastructure influences social characteristics of the population on the one hand and co-determines social developments in the given territory on the other hand. Universities play almost indispensable role in life of every region with regards to the wide spectrum of their largely positive socioeconomic impacts. Dominant role of Prague in terms of the number of universities is even stronger than in other categories.

Table 7: Regional Differentiation in the Number of Universities in 2004

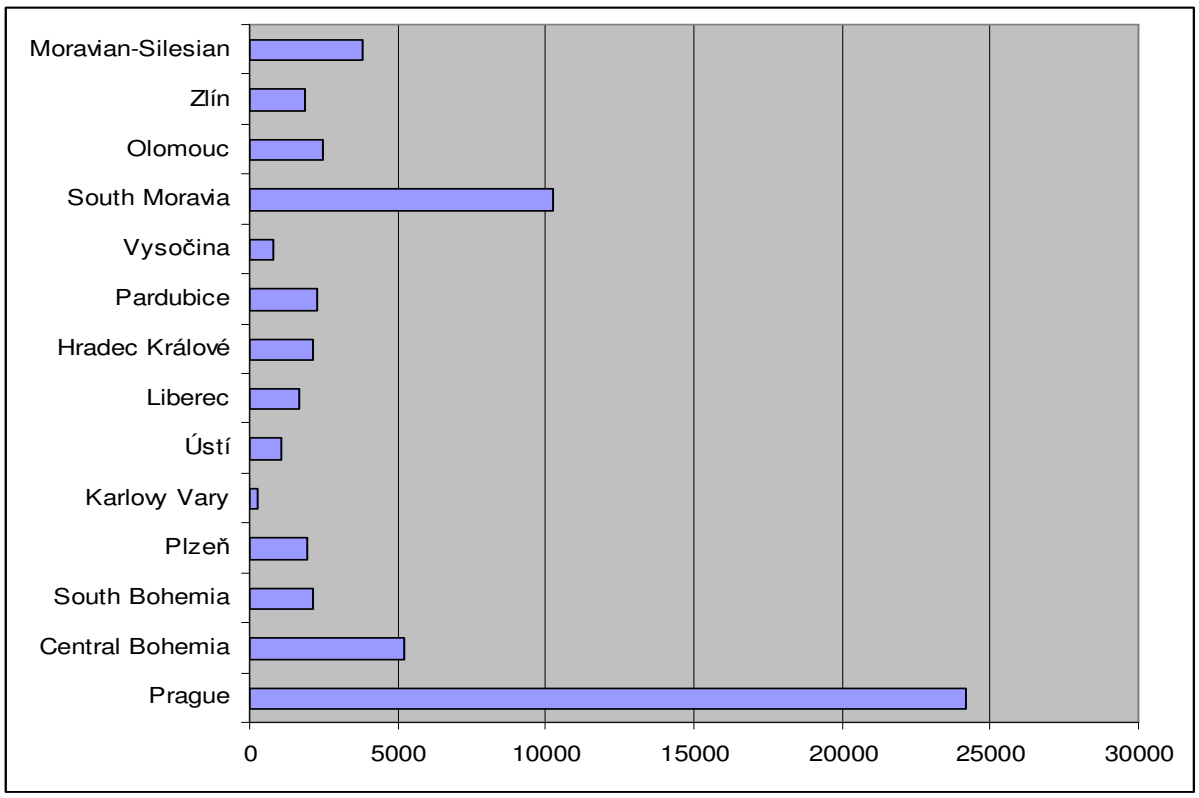
Region	Total Number of Universities	Public and State Universities	Private Universities
Prague	29	9	20
Central Bohemia	3	0	3
South Bohemia	3	1	2
Plzeň	2	1	1
Karlovy Vary	1	0	1
Ústí	2	1	1
Liberec	1	1	0
Hradec Králové	1	1	0
Pardubice	2	1	1
Vysočina	1	0	1
South Moravia	9	6	3
Olomouc	2	1	1
Zlín	2	1	1
Moravian-Silesian	4	3	1
Czech Republic	62	26	36

Source: www.czso.cz

Quantity of private universities in Prague is remarkable and conditions for university education in Prague metropolitan area create entirely specific island within the Czech Republic.

[4] In 1995.
[5] In 2003.

Figure 3: Employees in Research and Development in 2004 according to NUTS 3 Regions



Source: www.czso.cz

Table 8: Number of Establishments of Czech Academy of Sciences and Research Institutes in 2004

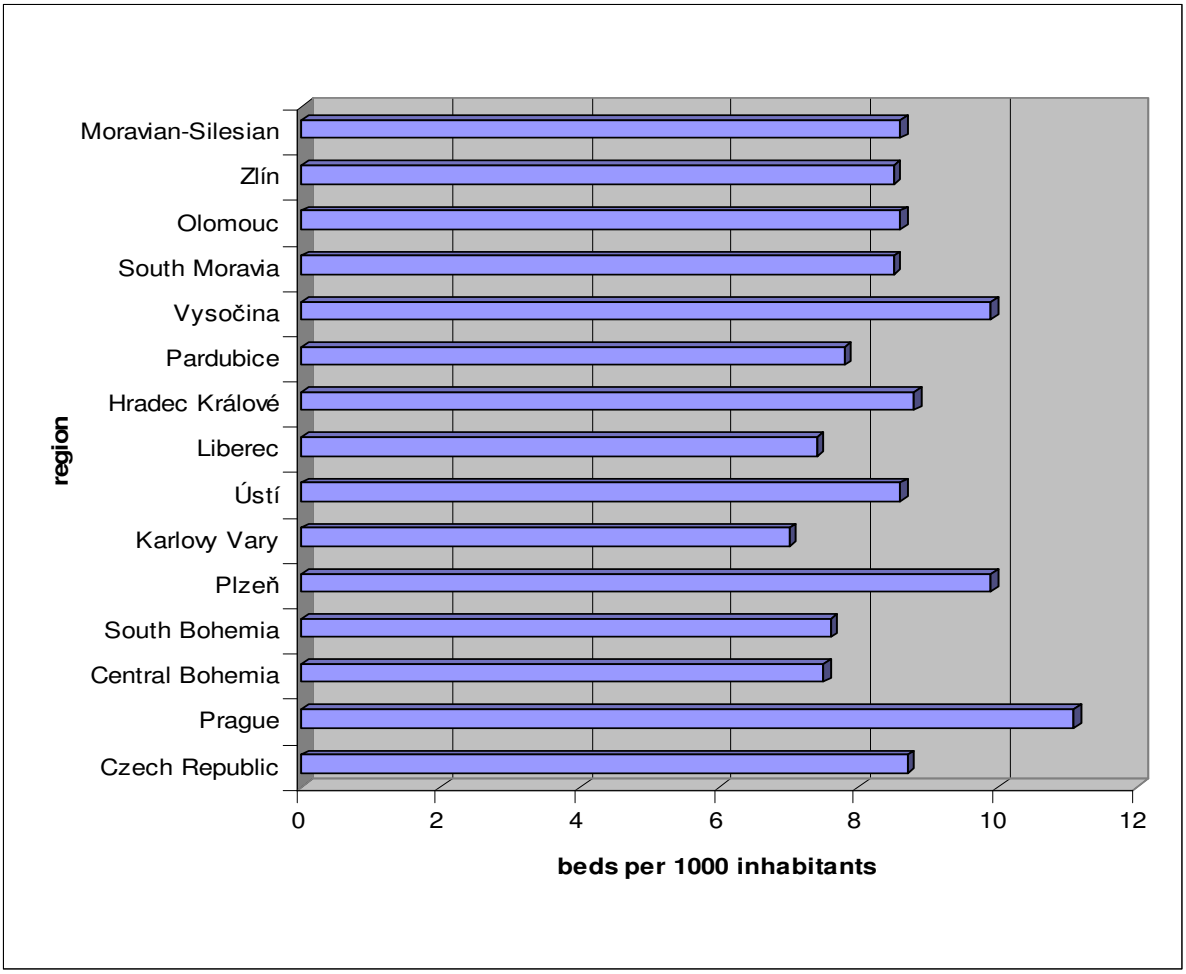
Region	Research Institutes	Establishments of Czech Academy of Sciences
Prague	19	44
Central Bohemia	5	5
South Bohemia	1	7
Plzeň	1	0
Karlovy Vary	1	0
Ústí	3	0
Liberec	1	1
Hradec Králové	2	0
Pardubice	3	0
Vysočina	1	0
South Moravia	6	7
Zlín	1	0
Olomouc	2	0
Moravian-Silesian	2	1
Czech Republic	48	65

Source: www.czso.cz

Majority of establishments of state Czech Academy of Science can be found in the capital city too. This again confirms the overall socioeconomic polarization of the country, heavily supported by governing administration. What is even worse, this unfavourable situation is further deepened by investment preferences in research and development (see also subchapter on investment).

Almost one half of employees in research and development works in Prague. Naturally, high portion of national research and development activities is accomplished in Prague. In some cases, it is substantiated and is based on the spatial proximity of other research and development entities; however, it is hardly conceivable that for instance research institutes on heavy industries, coal mining or agriculture are also headquartered in the capital city since their connections with practical life and activities in these spheres are pretty limited.

Figure 4: Regional Differentiation in Beds in Health Establishments per 1000 Inhabitants in 2004



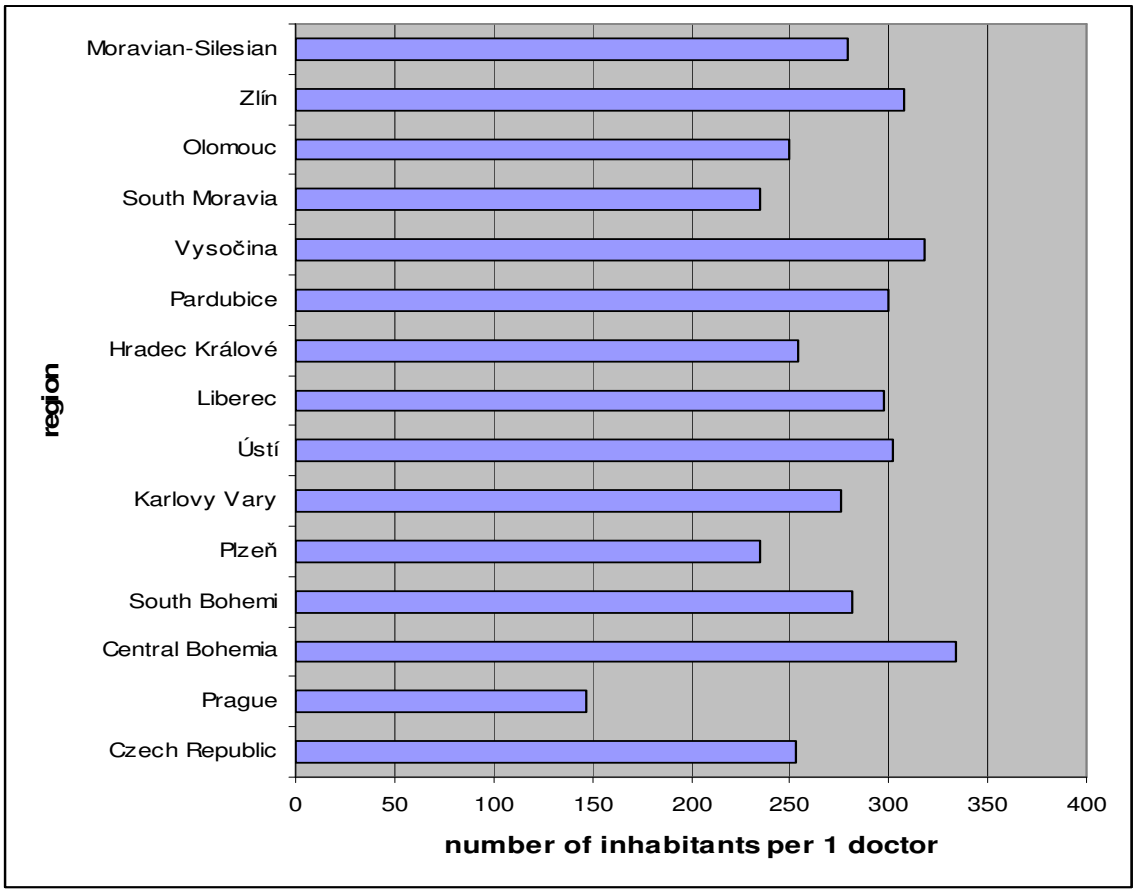
Source: www.czso.cz

Public health establishments constitute one of the most relevant components of social infrastructure. Health as one of the most important domains of human life (if not the most important one) is the target of great attention not only in the Czech Republic.

Centralisation in the Czech Republic finds its spatial manifestation also in terms of the public health. Generally, hospitals in the capital city are characterised by much better equipment than

their regional counterparts. This can be accounted for by advantages stemming form the specialisation as well as by the proximity of governing and socioeconomic elites.

Figure 5: Regional Differentiation in the Number of Inhabitants per 1 Doctor in 2004



Source: www.czso.cz

As it can be seen, Prague has again the outstanding position in terms of beds in health establishments per 1000 inhabitants and the same applies also to the number of inhabitants per 1 doctor. Not surprisingly, inhabitants of the capital city have one of the best indicators of life expectancy in the whole country.

4.3.3 Other Types of Infrastructure (Information-Technical Infrastructure)

Information and technical infrastructure creates last but not least part of infrastructural empirical analysis. Table 9 shows that Prague occupies leading position as for the percentage of fixed telephone lines, personal computers and internet access. On the contrary, cable television that can serve as an example of entertaining and so far also less practical medium is much more evenly distributed across the country. Generally, households in the capital city are best equiped with information and communication technologies.

As to the regional differentiation in public sewerage systems, the differences are not so great. There is certain qualitative start of Prague, which is explainable by its urban character. Bigger regional differences can be observed in the percentage of the population connected to public sewerage system. Nonetheless (and taking into account country's economic level), there is only a moderate degree of spatial differentiation in public sewerage system.

Table 9: Information and Communication Technologies in Households in 2004

Region	Fixed Telephone Lines	Cable TV	Personal Computer	Internet Access
Prague	85.7	22.1	41.5	34.7
Central Bohemia	68.4	25.0	28.8	22.3
South Bohemia	62.3	17.3	31.5	18.6
Plzeň	67.4	24.2	28.2	16.0
Karlovy Vary	56.1	35.4	27.4	17.1
Ústí	49.6	30.7	22.1	15.4
Liberec	57.5	16.8	26.8	17.0
Hradec Králové	61.7	11.0	30.6	21.9
Pardubice	58.8	18.3	27.5	14.1
Vysočina	62.3	16.8	30.6	16.7
South Moravia	64.9	28.7	33.3	18.7
Olomouc	48.8	15.0	18.2	12.8
Zlín	64.9	26.7	27.2	13.7
Moravian-Silesian	45.9	18.6	27.8	16.0
Czech Republic	61.9	22.2	29.5	19.4

Source: www.czso.cz

Table 10: Regional Differentiation in Public Sewerage Systems in 2004

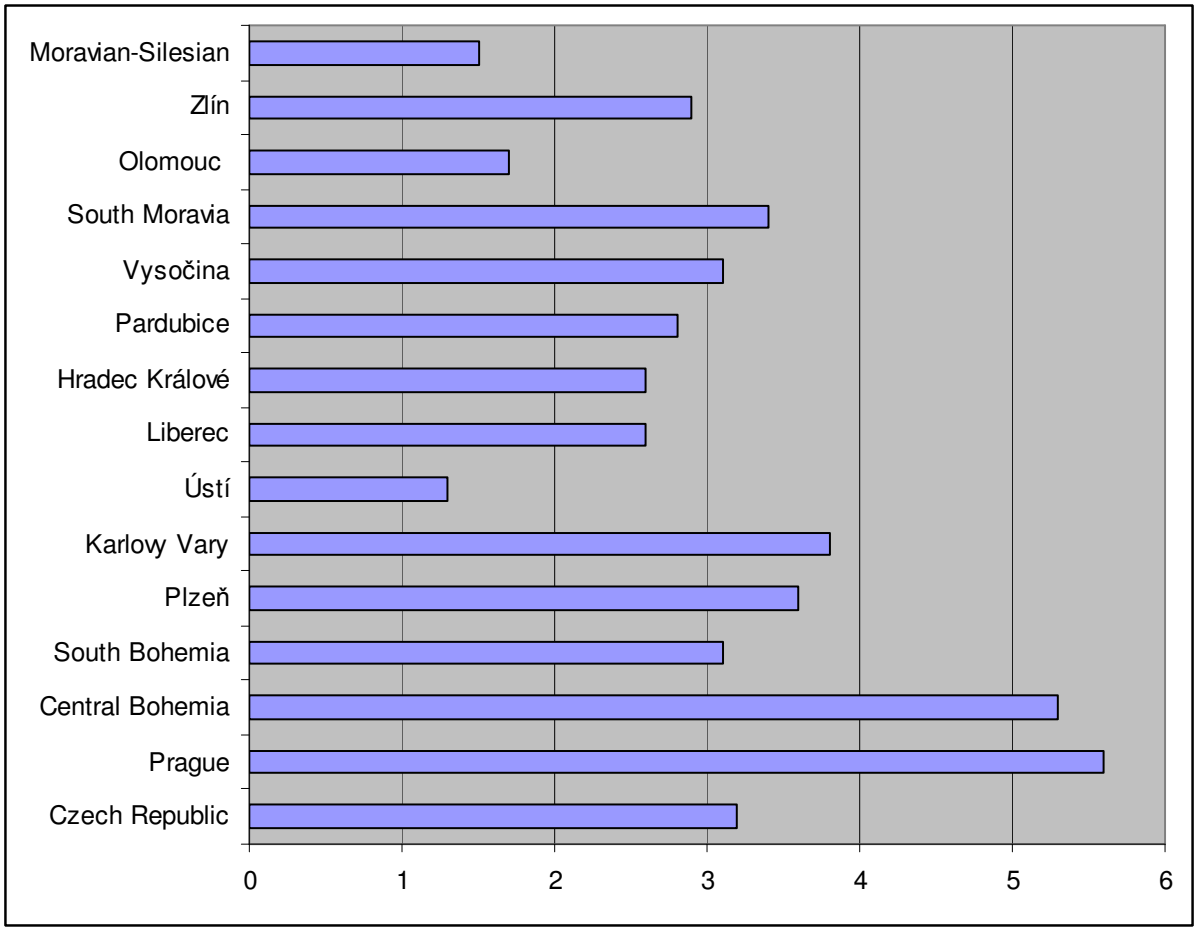
Region	Share of Population Supplied from Public Water-Supply Systems (in %)	Share of Population Connected to Public Sewerage Systems (in %)	Share of Cleaned Waste Water (in %)
Prague	99.9	99.5	100.0
Central Bohemia	82.0	61.0	98.3
South Bohemia	91.5	87.3	86.7
Plzeň	80.8	75.1	91.1
Karlovy Vary	97.8	91.4	99.6
Ústí	96.1	81.0	91.2
Liberec	88.4	68.1	97.8
Hradec Králové	90.8	73.8	93.4
Pardubice	96.3	66.2	95.5
Vysočina	88.3	80.3	81.5
South Moravia	93.9	79.7	95.6
Olomouc	87.2	72.6	96.0
Zlín	87.6	78.5	96.0
Moravian-Silesian	95.6	73.7	94.9
Czech Republic	91.6	77.9	93.1

Source: www.czso.cz

Indicator showing dwellings completed per 1000 inhabitants provides us with further useful information. Distinctiveness of Prague and Central Bohemia in the framework of the Czech

Republic is apparent. Completed dwellings reflect the economic situation of households on the one hand as well as their positive expectations on the other hand. And most positive expectations in this sphere are undoubtedly bound to Prague metropolitan area.

Figure 6: Dwelings Completed per 1000 Inhabitants



Source: www.czso.cz

Moreover, as it seems, the capital city has also the best future prospects; if we compare the number of building permits issued per 1000 inhabitants in 2004, we find that this indicator reaches the value 12 in Prague, while in other regions it generally ranges from 3 to 7. There are just two exceptions: Central Bohemia had approximately 8 issued building permits per 1000 inhabitants for the sake of its proximity to Prague and South Moravia reached almost 9 issued building permits per 1000 inhabitants primarily due to Brno as the second biggest city in the Czech Republic.

4.4 Regional Differentiation of Investments as Determinants of Future Spatial Development

Investments can be generally perceived as activities, which raise both physical and human capital in the future. Not surprisingly, their spatial distribution draws future economic map considerably. Research and development as well as spatial diffusion of innovations represent the key-stones of these processes as they contribute to the positive qualitative transformation of individual subjects as well as whole territories.

In contrast to the depiction of instrastructure that focused on current state of territorial structures, investments delimitate the future shape of these structures. As it will be seen in this subchapter, core-periphery in model in the Czech Republic probably will survive in the longer run, since current investment preferences promote mainly the capital city as a reflection of stiff centralistic mechanisms as well as unfavourable state of informal institutions in the country.

4.4.1 Regional Differentiation of Investments from General Perspective

Aggregate view on investments serves as further confirmation of already depicted tendencies in country's spatial profile.

Table 11: Investment Subsidies from Public Budgets into the Municipal Budgets in 2004

Value	Territory/Region	Entire Bulk of Subsidies (in thousands CZK)
Maximum	Prague	13 375 224
Minimum	Karlovy Vary	2 660 324
Total	Czech Republic	97 778 587

Source: http://www.mmr.cz

Table 12: Investment Purchases per 1000 Inhabitants from Public Budgets in 2004

Value	Territory/Region	Investment Purchases per 1000 Inhabitants (in CZK)
Maximum	Prague	10 639
Minimum	Karlovy Vary	4 576
Average	Czech Republic	6 816

Source: http://www.mmr.cz

Table 13: Regional Dimension of the Total Investments in the Czech Republic (in %)

Region\Year	1995	2001
Prague	22.0	49.5
Central Bohemia	9.6	8.3
South Bohemia	10.1	3.2
Plzeň	5.2	2.8
Karlovy Vary	2.4	4.6
Ústí	8.7	5.5
Liberec	3.1	1.9
Hradec Králové	4.3	2.8
Pardubice	3.9	2.3
Vysočina	3.4	3.7
South Moravia	9.5	5.2
Olomouc	4.2	2.3
Zlín	3.8	2.6
Moravian-Silesian	9.7	5.1
Czech Republic	100	100

Source: http://www.risy.cz

Capital city is clear leader both in terms of investment subsidies from public budgets into the municipal budgets and investment purchases per capita from public budgets. Public support is thus devoted primarily to the economically strongest region. As for total investments it is no big discovery that Prague constitutes the very summit of the country. However, in spite of already presented empirical data, the steep increase in the share of Prague on total investments in the Czech Republic forms a truly impressive point[6].

Apart from Prague, in 1995, there existed one region – South Bohemia - that slightly exceeded 10% border in the share of investments on the country's total investments. In 2001, the region, comprising the second biggest amount of investment in the Czech Republic – Central Bohemia or Prague's surroundings – reached mere 8.3% share on the total investments in the country.

4.4.2 Composition of Investments into Research and Development

As already indicated, research and development activities to certain extent shape the future economic map. Research and development functions concentrate again mostly into the capital city. Moreover, there exist strong trends towards further centralization of research and development to Prague. 43.2% of all employees in R&D from the whole country work in the capital city.

Table 14: Investment Supports Awarded between 4/2001– 2/2005 for Technological and Service Centers

Region	Number of Supported Projects	Amounts (in Millions CZK)	Created Working Places
Prague	8	6 174	4 070
South Bohemia	1	142	50
South Moravia	7	593	1 421
Karlovy Vary	0	0	0
Hradec Králové	2	68	63
Liberec	1	47	60
Moravian-Silesian	4	181	941
Olomouc	3	161	97
Pardubice	3	252	355
Plzeň	3	474	285
Central Bohemia	3	87	72
Ústí	0	0	0
Vysočina	0	0	0
Zlín	2	180	39
Czech Republic	37	8 359	7 453

Source: http://www.czechinvest.cz

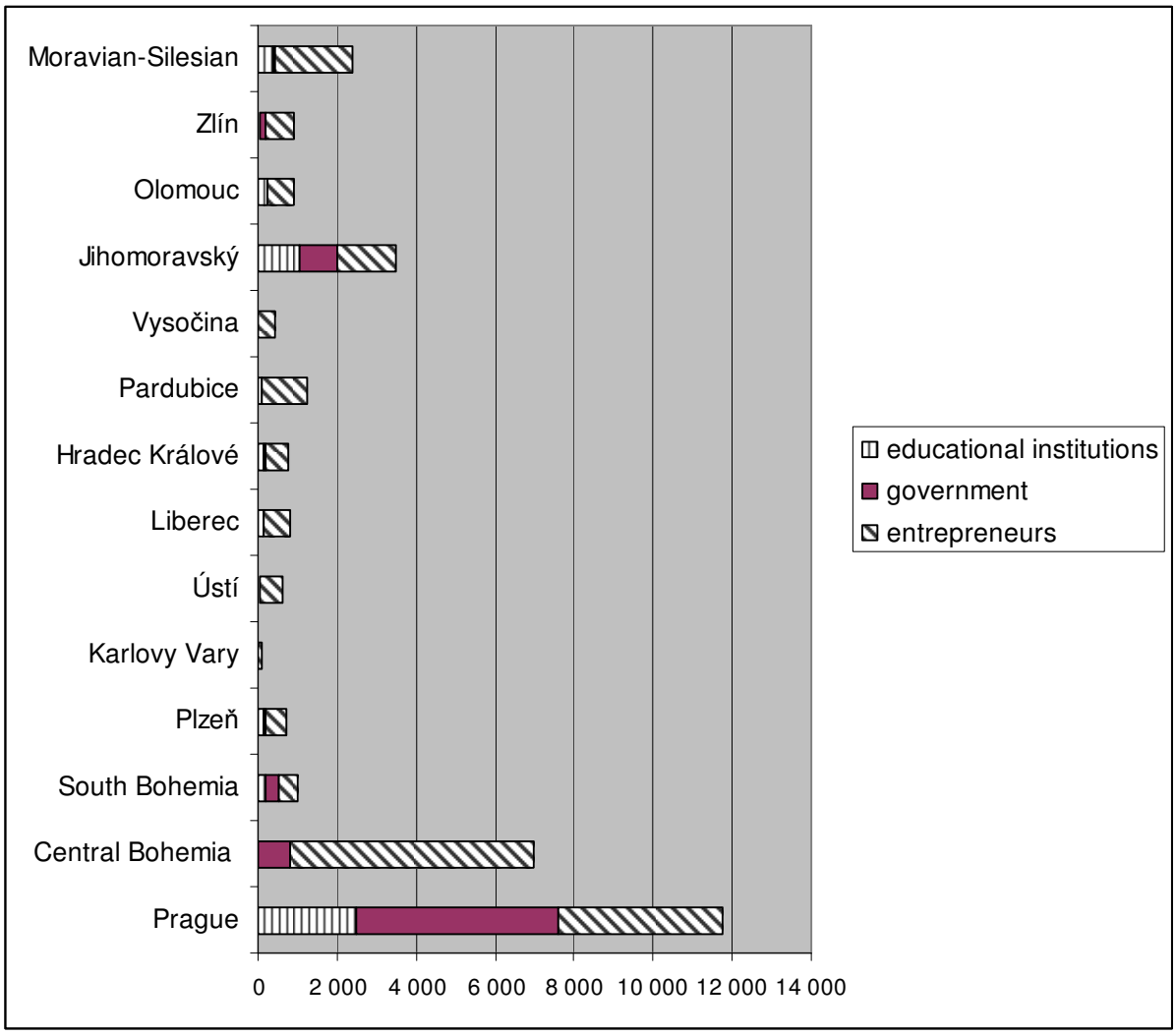
Table 14 shows that roughly three fourth of investment supports for technological and service centres have been allocated into the capital city and almost the same applies to the number of

[6] Unfortunately, data for other years are not available. After all, this holds true also for many other indicators.

newly created working places. Some regions, such as Karlovy Vary, Ústí or Vysočina have not gotten any investment support at all.

Quantity and composition of expenditures on research and development is in consonance with unfavourable situation in many other spheres described before. Somehow, one gets the feeling that state support concerns only economically strongest territories.

Figure 7: Quantity and Composition of the Expenditures on Research and Development in 2003 (in millions CZK)



Source: http://www.mmr.cz

Governmental expenditures create the biggest portion of expenditures on research and development in Prague. Entrepreneurs are on the contrary the most important source of finance on research and development in Central Bohemia or Moravian-Silesian region.

In any case, dissimilarity of Prague and partly also Central Bohemia in relation to the rest of the country is the most important feature of the quantity of expenditures on research and development. This implies also future qualitative distinctness of these territories (at least in coming years) in relation to the remaining regions in the country.

4.4.3 Foreign Direct Investments

Foreign direct investments should be perceived as long term investments by a foreign direct investor in an enterprise residing in an economy other than that in which the foreign direct investor is based[7].

Table 15: Foreign Direct Investments in Czech Regions between 1993-2000

Region	Investment (in millions CZK)	Share on Investments in National Economy (in %)	Investment per 1 Employee (in thousands CZK)
Prague	389 363.8	47.6	509.4
Central Bohemia	97 035.1	11.9	212.8
South Bohemia	31 074.6	3.8	109.1
Plzeň	33 262.6	4.1	122.2
Karlovy Vary	10 507.6	1.3	74.5
Ústí	60 947.1	7.4	174.7
Liberec	15 774.9	1.9	75.8
Hradec Králové	17 100.5	2.1	64.5
Pardubice	22 410.8	2.7	98.3
Vysočina	14 482.4	1.8	65.7
South Moravia	51 409.5	6.3	99.6
Olomouc	17 866.3	2.2	65.9
Zlíns	20 328.3	2.5	77.9
Moravian-Silesian	36 848.2	4.5	69.4
Czech Republic	818 411.7	100	171.6

Source: Tonev, Toušek (2002)

Naturally, in an increasingly globalised economy, foreign direct investments represent important element more and more and the Czech Republic, which offers numerous locational advantages is no exception. However, Czech locational advantages are being utilised rather selectively.

As for regional differentiation in foreign direct investments, there are virtually no dramatic facts. Prague's and Central Bohemia's shares on foreign direct investments are the decisive ones. In the area of foreign direct investment, we can expect growing participation of regions outside Prague for the sake of limited absorption capacity of the capital city as well as the tendency of manufacturing enterprises to locate in peripheral territories.

[7] The FDI relationship generally consists of a parent enterprise and a foreign affiliate. In order to qualify as FDI the investment must afford the parent enterprise control over its foreign affiliate. The United Nations define control in this case as owning 10% or more of the ordinary shares or voting power of an incorporated firm or its equivalent for an unincorporated firm.

5 Discrepancy between Modern Paradigm on Regional Development and System Macrostructures in Transition Countries

As it could be seen, the function of system macrostructures in contemporary Czech Republic is rather braked and to certain extent deformed by centralising approach of state administration that does not want to give up its financial resources and competences. Subsequently, the self-governance is practically oppressed by an excessive influence of state administration. What appears to be even worse is that administrative centralisation of the country was furthermore fortified in the course of first transitional years, which resulted in the centralisation of other important system macrostructures, such as transport infrastructure (see for instance Sucháček, 2004a or 2005b). In sum, core-periphery pattern of the Czech Republic currently concerns all important components of its life.

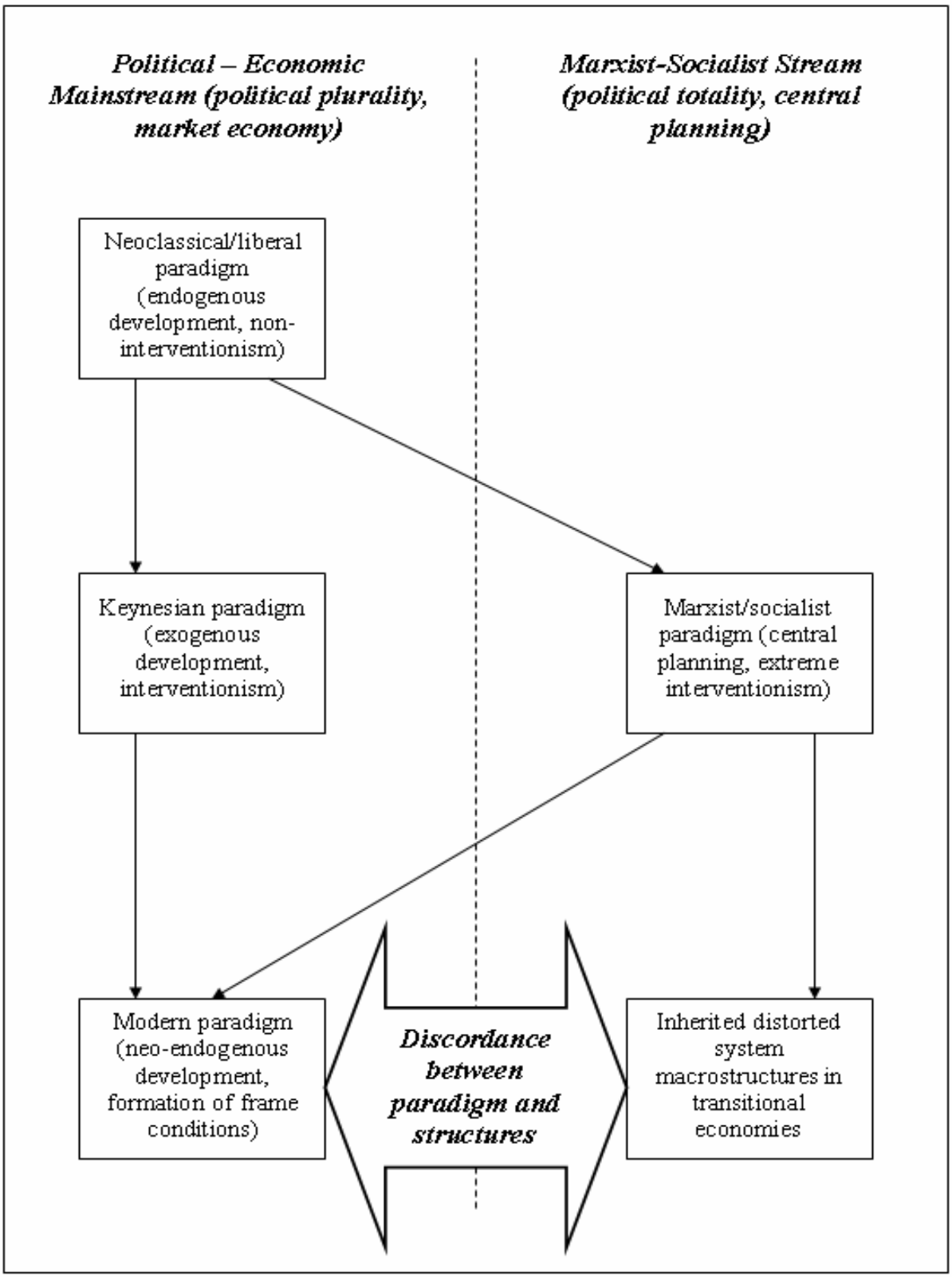
The key problem consists in the fact that the development in both the Czech Republic and other transitional economies 'jumped over' or more precisely avoided the Keynesian stage of regional development. Deformed system macrostructures that represent the heritage of socialist era disallow an adequate application of modern approaches towards regional development, which are well-known and well-tested in western economies. In comparison with Czech regions and localities, their western counterparts go from approximately equal technical, competential as well as financial categories that evolved in the framework of market economy and political democracy mainly during Keynesian era (see for instance Preswitch and Taylor, 1990).

Relative consent between the transformation of system macrostructures and the paradigm of regional policy in individual countries can be perceived as probably the most important element of the whole Keynesian period. In spite of interventionist character of Keynesian doctrine, the market mechanism was not replaced in any advanced country. Concurrently existing central planning in combination with political totality in Central East Europe brought the deformation and namely the centralization of practically all basic components of life.

On the contrary, the countries that applied Keynesian direction of development were able to create adequately distributed system macrostructures that facilitate the development of particular regions and localities principally. Succinctly, advanced countries realized that they cannot afford socioeconomic 'black holes' within their own territories and that more or less evenly distributed system macrostructures ensure the socioeconomic development of the whole country. Not surprisingly, a great decentralization combined with the support of local and regional self-governments took place during the Keynesian and Post-Keynesian period in practically all advanced countries (see also table 16).

Presently, we can hear almost every day about declining role of state, which is objectively perceptible in many economies. However, system macrostructures, which were created at the central state level played in reality the key role during the transitional period in the Czech Republic. The destiny of individual regions in the Czech Republic is still shaped by state administration that does not want to give up its competences and financial resources. Subsequently, specific, neo-core-periphery pattern of the country has evolved (e.g. Sucháček, 2005a or 2005b).

Figure 8: Discrepancy between Modern Paradigm on Regional Development and System Macrostructures in Transition Countries



Source: authors

Table 16: Self-Governing Regions in European Countries according to the Date of Origin

State	Number of Regions	Date of Origin
Belgium	3	1970
Denmark	15	1970
Germany	16	1949/90
Finland	12	1919/86
France	26	1982
Great Britain	78	1972/73
Greece	13	1986
Ireland	31	1889
Italy	20	1948/70
Luxembourg	3	1868
Netherlands	12	1850
Portugal	7	1978
Austria	9	1918/45
Spain	17	1979/83
Sweden	25	1634/1862

Source: Evropská unie od A do Z, Bonn, 1995, Institut pro Evropu

While in advanced countries both formal and informal institutions crystallized out naturally, in an evolutionary way, in transitional economies, for which numerous developmental discontinuities are characteristic, the informal institutions played a relevant role in transitional years. The significance of networking, lobbying or embeddedness is much higher in transitional economies than in their western counterparts. We are talking namely about hierarchical connexions among regional and national actors, which are caused just by insufficient manoeuvring space of self-governments.

Development, which is based on inner regional potential, is both effective and efficient, since it changes the quality of social and economic structures of individual territories[8]. However, in the Czech Republic, markedly heterogeneous character of system macrostructures very often distorted or even eliminated the endogenous activites of local and regional actors (Jurečka, 2002 or Sucháček, 2005c). The developmental conditions of individual Czech regions turned out to be rather differentiated and very often, one of the most important criteria of success or unsuccess is the distance from the capital city (e.g. Varadzin, 2004). In the Czech regions, the problem of discrepancy between relatively inertial and non-adequately distributed system macrostructures and neo-endogenous approaches towards regional development appeared.[9]

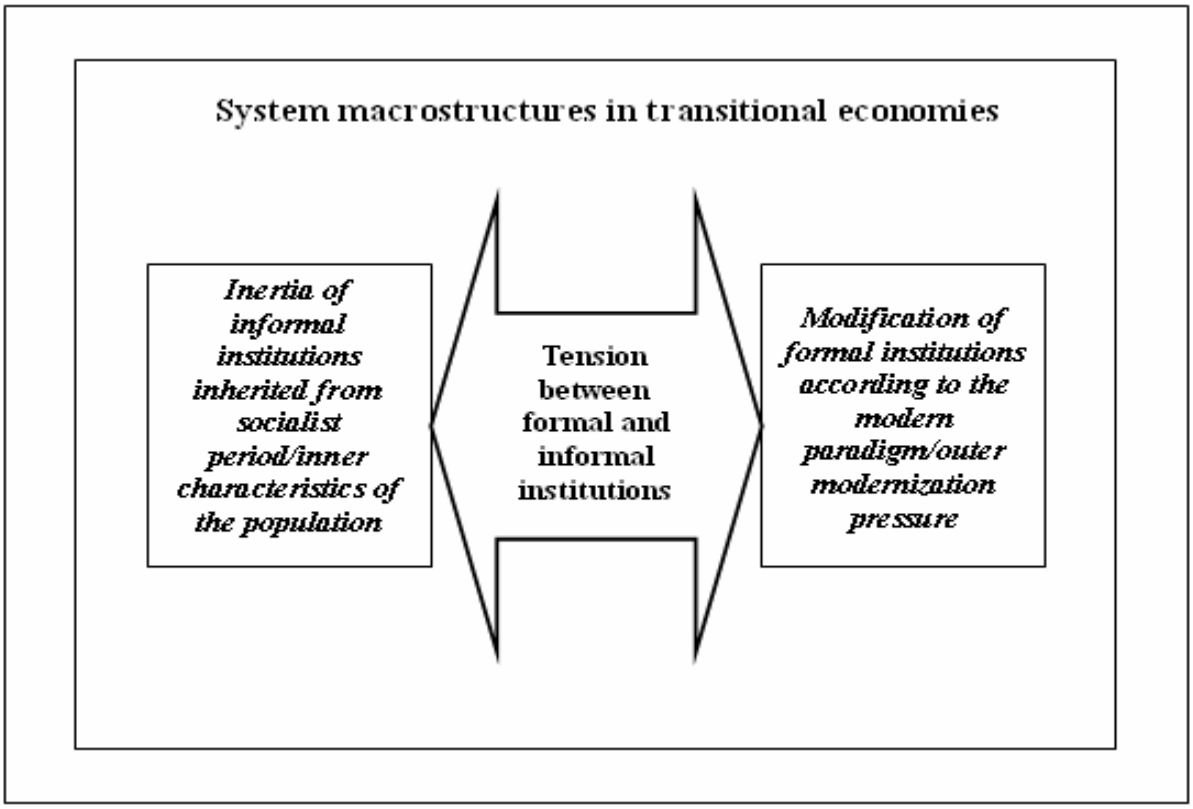
[8] Genuine regional development can be reached only via the stimulation of inner endogenous potential of localities and regions. Exogenous interventions cannot be entirely eliminated but they should act just as a complement to the endogenous activities of localities and regions. It is obvious, that only the change of afore-mentioned existing socio-economic territorial structures can initiate the real regional development. However, the process of the change of the quality of these structures does not necessarily come after the external interventions. Excessive exogenous interventions always involve the threat of the ossification of old, inertial social, economic and institutional structures in the given region.

[9] The problem can be examined also from the different perspective: apart from 'common' physical geographical distance it is possible to distinguish next three types of distances:

- Psychological distance that corresponds to the perception of particular places. Less developed regions are usually perceived as more remote than they really are. It leads to the creation of mental maps that reflect the image and the reputation of places.

Naturally, above mentioned problems represent a symptomatic feature of many other post-communist countries.

Figure 9: Inner Institutional Tension of System Macrostructures in Transitional Economies



Source: authors

Formal institutions were not defined well namely at the beginning of 1990-ies (see for example Mlčoch, 1997). Corrective processes that concern informal institutions exposed to fifty years long incidence of Marxist-socialist paradigm of regional development, will probably last two or three generations. Nijkamp and van Geenhuizen (2002) stress that openness and trust constitute pivotal conditions for learning and modern approach to regional development in general; however, it is in sharp discordance with informal institutions in transition countries. Obviously, these unfavourable facts afflict the applicability of modern conceptions of regional development in Central East Europe.

It is thus possible to state, that location attractiveness and developmental conditions of particular localities are not given, but formed by concrete regional-political decisions and measures mainly by central institutions. Constitution of qualitatively good system

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- Economic distance, which expresses the costs necessary for surmounting the certain distance and is dependent on the physical infrastructure.
- Hierarchical distance that reflects the position of the municipality within the system of public administration, but also the socio-economic importance of the municipality. Big centre is hierarchically much closer with another big centre that lies far away than with the village in the vicinity.

These distances should be relatively (i.e. with regard to the settlement system) as small as possible, mainly if we are talking about the distance between main centres and 'common' municipalities. Apparently, built-in mechanisms of spatial development in the Czech Republic tend to prolong the above-mentioned distances.

macrostructures represents the first step in the process of the return to the natural developmental track. However, it is only requisite, but not sufficient condition, since history does matter and the redress of informal institutions is undoubtedly the question of longer time.

Put succinctly, one has to consider the influence of system macrostructures, which do not ensure standard developmental conditions for all regions and localities. This fact is detrimental for the application of modern, neo-endogenous stream of regional development in the form known from western economies. Qualitatively well organized and distributed system macrostructures represent one of implicit presumptions of contemporary conceptions of regional development in advanced economies.

6 Conclusion

The article showed that the evolution of regional development conceptions is considerably dependent on institutional rule expressible as 'history does matter'. Neo-endogenous concepts that are currently in fashion are applicable namely in advanced western economies that underwent continuous socioeconomic development. However, this does not apply to Central East European economies suffering from developmental discontinuities and deformed system macrostructures. Unfortunately, regional as well as other policies in transition economies typically omit these facts. Hence, transition economies stay vis-à-vis the great challenge concerning the formation of non-copied, tailored approaches to the regional development. Creation of adequate system macrostructures represents the first step on this enormously complex and long road.

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