VÍT JANČÁK, TOMÁŠ HAVLÍČEK, PAVEL CHROMÝ, MIROSLAV MARADA

# REGIONAL DIFFERENTIATION OF SELECTED CONDITIONS FOR THE DEVELOPMENT OF HUMAN AND SOCIAL CAPITAL IN CZECHIA

V. Jančák, T. Havlíček, P. Chromý, M. Marada: Regional Differentiation of Selected Conditions for the Development of Human and Social Capitol in Czechia. – Geografie–Sborník ČGS, 113, 3, pp. 269–284 (2008). – This article addresses the analysis of theoretical and methodological concepts of the quality of human and social capital and their relation to the theory of spatial polarisation. Selected conditions for the development of human and social capital and their relation to the theory of spatial polarisation. Selected conditions for the development of human and social capital and their territorial differentiation in Czechia are evaluated. On the basis of an evaluation of component indicators of human capital (the ratio of university educated residents in the population over 15 years of age as well as an the number of candidates divided by the number of offices to be filled in the 2006 municipal elections) problematic areas are identified at a micro-regional level (the network of municipalities having a certified municipal authority).

KEY WORDS: human capital – social capital – potential development – rural areas – periphery – regional differentiation – Czechia.

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## Introduction

In connection with the post-communist transition, which resulted from the fall of the communist regime in Czechoslovakia in 1989 and 1990, and with the initiation and proliferation of integration processes and the gradual intensification of globalization processes during the 1990's, the territories of Czechia experienced significant increases in both vertical (societal) and horizontal (regional) differences. Geographers, who had been examining the development of the system of settlement or regional development for years, were faced with new research questions. These were especially related to identifying key issues and mechanisms that contribute to the growth of differences between regions, both at their various hierarchical levels as well as in light of the structure of conditions. This especially concerns searching for key aspects of differentiation (expressions and processes of socio-economic, socio-cultural and even physical-geographic nature), interpreting their changes over time and the intensity of their influence (separating general from specific / regular from chance processes and qualitatively new processes, etc.; for more information, see, for example, Hampl, Dostál, Drbohlav 2007; Havlíček, Chromý 2001; Jančák 2001; Kostelecký, Patočková, Vobecká 2007; Kuldová 2007b; Kuldová-Kučerová 2008; Marada 2001; Novotná ed. 2005).

On the basis of research projects already conducted on the geographic aspects of the transition of society (e.g. Hampl et al. 1996, 1999, 2001) and the polarisation of space (e.g. Blažek, Csank 2007; Jančák, Havlíček, Chromý, Marada 2006; Havlíček, Chromý, Jančák, Marada 2008), which were primarily carried out at the Department of Social Geography and Regional Development of the Faculty of Science at Charles University in Prague, we can establish that, in terms of a region's successfulness, in addition to the (development of) the region's location in its regional system (outward and inward), the level of concentration of its inhabitants (population density) or its function (for example administrative, or rather directive), that the activity of the subjects themselves, in general terms: the quality of human and social capital in the specified area, can be considered indicative.

We have defined the goals of the article on a number of levels. The main goal of the introductory theoretical, methodological discussion is to classify and define the terms human and social capital, as well as to justify and discuss the selection of possible and appropriate indicators for evaluating regional differentiation in their quality. The goal of the empirical section of the article is to, through the application of the selected indicators, complete an evaluation of regional differentiation of the selected conditions for the development of human and social capital in Czechia, at the beginning of the 21st century, and to identify problematic areas, which deserve further, special attention. We formulate the assumptions, which are verified in the empirical section, in the methods section of the article.

### Theoretical concept and definition of terms

In recent decades, the terms human capital and social capital have become important for a series of studies in sociology, economics, political science and – over the last few years – in geography as well. In spite of the terminological similarity and topical "closeness" of these terms, they should not be confused (Field, Schuller, Baron 2000).

While human capital is defined primarily as an individual factor of qualifications, productivity, skills and capability; social capital is defined through mutual relations, cooperation, social cohesion, trust and the interactivity of individuals (Schuller 2000). The concept of human capital was first identified mainly through the benefits resulting from such investments in people as: education, trainings, health services, vitamin consumption and gathering of information about the economical system (Becker 1962). During recent years, this term has been extended to include such elements as: motivation, moral values and interpersonal attitudes and abilities (Cote 2001). "Human capital is most often determined as the knowledge, skills, competence and other attributes embodied in a human being that enable the establishment of personal, social and economic prosperity" (OECD 2001; Janc 2006, p. 40).

Since the end of World War II, proponents of neoclassical theories in economic and social sciences have argued that the quality of human capital, connected with increasing levels of education, is a basic element contributing to increases in the standard of living (Becker 1964). Such thinking resulted in an increase in investments into educational systems, which supported the human potential and economic growth of regions (Preston, Dver 2003). Human capital, which is distinctively individual in nature, thus primarily includes education, skills, training and the experiences of individuals or of a defined community, who apply or who are capable of applying this capital in the labour market. Meanwhile, human capital theory argues that direct connections exist between the human capital of the labour force and labour productivity as well as between productivity and profit (Becker 1971). Participants in the labour market with higher human capital – meaning with higher education, greater skills and experience – are more productive and receive higher wages than employees with lower human capital. The accumulation of human capital is therefore a significant determinant of wages and, as a result, a higher standard of living. Human capital theory cannot, of course, be applied in this simplifying form, because other factors (unemployment, discrimination, complications with housing, etc.), which bring further problems to the labour market, enter into the process, as well.

Social capital is based on sources (human capital), which are held by the individual members of a network (Šafr, Sedláčková 2006). So, by creating social networks, individuals accumulate and multiply their individual (human) capital and reshape it into a (collective) social capital. The people, among whom such an exchange takes place, often create a variety of exclusive associations, in which the very contacts made through such associations are further strengthened. These networks can often arise spontaneously and naturally (Boundon, Besnard, Cherkaoui, Lécuyer 2004; Jandourek 2007). Coleman (1988) defines social capital as the ability of people to work together in the framework of groups and organizations in order to realise common purposes.

In geographic sciences, branches interested in the phenomenon of human and social capital include, primarily: theoretical concepts of regional development (e.g. the endogenous growth theory, Romer 1986), institutional directions of regional geography or "new" economic geography (e.g. Krugman 1991, Martin 1999), branches which consider the quality of human and social capital to be an important part of the cumulative capital in a given area (Blažek, Uhlíř 2002). In relation to the development of regions over time, emphasis is placed primarily on the initiative of individuals, thus giving more weight to subjective ("soft") factors. In contrast, deterministic (e.g. structuralist) approaches (Blažek 1999). In this way, the prosperity of an area is primarily the result of high-quality social, cultural and institutional structures with adaptive and innovative human and social capital. The public sector should, therefore, support all efforts to improve living conditions in a given area, in all possible aspects. Increasing opportunities for engaging the largest possible constituency of individual members of society into processes of education and decision-making in public matters (e.g. participation in the administration of public issues in a manner such as active participation in local or regional government administration or referendums) and, by so doing, involving them in improving the quality of local, social capital can be included among institutional activities as well (Kuldová 2007a,b; Mohan, Mohan 2002; Putnam 1993, 2001).

From the above information it is evident that while human capital can be considered to be primarily a source of an individual nature, social capital is a collective source; wherein evaluation of the activities of the specific actors in a given area is always key (Pisseli 1999). It is necessary to view social capital as a dynamic element. It is perceived as an evolving structure, which regulates the varied behaviour of individuals on the one hand, while, on the other hand, it is formed and modified by this structure (Giddens 1984). Analysis of social capital should not, however, be reduced to or confused with research of networks, which is typical of structuralism.

From the above information it is clear that the quality of human and social capital is one of the significant factors determining the process of spatial polarisation, or rather the existence of problematic regions. Exploring the phenomenon of periphery originates primarily from an analysis of relations between core areas and their hinterland in the sense of the polarity model of a centre and periphery. It, however, has a series of specific forms in terms of evolution on the one hand and in terms of rank-size or scale, on the other. In general, however, it always expresses their asymmetrical relation. From the beginning, peripheral areas were described on a macro-structural level, wherein the main aspects that were applied in defining such areas were primarily physical geographic features, even though they were transformed into anthropo-geographic and political geographic effects (Havlíček, Chromý 2001). With the beginning of the 20th century, a shift in perception of peripheral areas to lower territorial orders (nodal regions). This occurred as a result of research of the development of settlement systems and the shaping of connections between settlements and their hierarchisation. In regards to this, Korčák (1973) indicated that a key role was played here by the work of Mackinder and Vidal de la Blache. Christaller (1933), while formulating his central place theory, also implicitly defined core and periphery. This, however, dealt mostly with the simplification of the spatial concentration of territorial organisation and not at all with principles and processes of development underlying its asymmetry. Dynamically conceived theories of regional development did not appear until after World War II. Economists were first to put forth an attempt to resolve regional disparity (Myrdal 1957, Hirschman 1959). Wirth (1963) utilised not only the physical geographic aspect, but also considered the historical and political aspects outlining differences between northern and southern Europe. In addition to this, a socalled inner periphery was also alluded to. An example is Myrdal's, or rather Hirschman's theory of cumulative causation (one of the core-periphery theories), in which the authors differentiate predominantly negative - socalled "polarising" or "backwash" - effects that are caused by more developed regions and affect less-developed regions, but also describe positive forces ("spread" or "trickle-down" effects); for more information see Blažek, Uhlíř (2002).

Leimgruber (2001, 2004) considers the polarisation theory of coreperiphery, which points out increasing differences between the rich and the poor, to be a better model for understanding the current state of affairs in the world than the theoretical concepts of neoclassicism, which assume that the normal operation of market mechanisms leads to a levelling out of differences between social and even spatial aspects. In these processes, key significance is attributed to human decisions, based in subjective interests and values (Leimgruber 1994, 1998). Again, this points to the significance of the activity of the subjects/actors in a given area, especially their ability (and their quickness) to accept new stimuli, information and innovations.

The dichotomous terms core and periphery are often anchored in the

thinking and perceptions of interested subjects (Heintel 1998). The role of the distance/spatial factor (the horizontal element) is weakening, while, in contrast, the significance of the hierarchy of the political, social, economic and cultural organisation of geographic activity (the vertical element) is increasing.

The development of a wide variety of complicated political, economic, social and ecological relationships in an area, which is inherent to the process of spatial polarisation, can be abstractly expressed in four phases – growth, stagnation, decline and levelling out (Havlíček, Chromý 2001; Halás 2008). It is no less important to point out that core-periphery theories perceive merely a simplified dichotomy of core and periphery, even though the relationship often expresses itself as a continuum. Consequently, core areas are often described as "winners" and peripheral areas as "losers". This undermines opportunities for their mutual cooperation. The quality of social and human capital also is valuable in explaining the quality of life in a territory (for more about this see, for example Mourek 1998; Hurbánek 2005; Ira, Pašiak, Falťan, Gajdoš eds. 2005; Baxa 2008).

### **Methods**

Based on the preceding observations and conclusions from thematically similar studies, the following, general assumptions can be formulated:

- 1. Key individuals and social networks are subject to regional/local development in a significant way. As a consequence of low population density and the overall population of municipalities/settlements in peripheral and rural areas, the quality of human and social capital can be considered a key element in their development and even plays a much greater role here than in core areas (Havlíček, Chromý, Jančák, Marada 2008).
- 2. Even though peripheral areas exhibit low human capital (primarily in terms of education), social capital is, in contrast, relatively high in rural areas. Due to the unique evolution of settlement in Czechia, however, significant differentiation of human and social capital can be expected in rural and peripheral areas. We assume that higher levels of their quality will be found in areas of continuous settlement (the inner periphery) and the main centres of settlement (the core areas). In contrast, lower capital quality can be expected in border regions that were settled after World War II, after the displacement of the Czech Germans (Chromý 2000; Kuldová 2005).

We evaluate the quality of the environment for developing human capital through the following indicators:

- 1. The ratio of people older than 15 with a university education, as a characteristic of the quality of human capital that, of course, has more of a "potential" significance, without more specifically enumerating the actual utilisation of said capital and the reflexive action of the dynamic (growth) of education and of changes in its regional distribution (expressed as of 1.3.2001 from the results of the census).
- 2. An economic burden index, defined as the number of individuals of preproductive age (0-14 years) plus the number of individuals of postproductive age (65+) divided by the number of individuals of productive age (15-64 years). This indicator "all-inclusively" characterises a population's structure in terms of a modified definition of its economically active component. Higher index values indicate a larger economic burden on the

population in productive age, although, without accounting for mutual relations between the non-productive (categories residents of the recently settled border regions are demographically younger). The index was calculated from data from the 2001 census.

The quality of the environment for the development of social capital is characterised in this study by indicators that express the social atmosphere in the municipalities, exhibiting themselves as certain, collective, "customary" behaviour, the motivation of the local community, the "mood" and similar expressions, the activity of residents, or rather the interest and involvement of people in resolving public issues. We used the following indicators in our analysis:

- 1. Voter participation in 2006 municipal elections (as a %), which to a certain degree expresses the general interest of residents in public issues, specifically in the management of their municipality. This indicator can also illustrate the residents' efforts to resolve social, economic, political or other (mainly local) problems.
- 2. Ratio of candidates to the number of offices to be filled in the local council in the 2006 municipal elections, which can be considered an expression of the willingness to involve themselves in the management of their municipality (city-country dichotomy). This indicator can also be a sign of problems in the local society.

The evaluation of conditions for the development of human and social capital is carried out at the territorial administrative level of municipalities having a certified municipal authority (CMA). These can be considered to be relatively natural, regional units, enabling one to appropriately identify problematic areas within Czechia. The regional level of territorial units with a certified municipal authority, of which there are – with the exception of military training bases – a total of 389, was chosen for its good explanatory ability in terms of territorial unit similarity as well as the relatively simple accessibility of secondary data. Information for the individual municipalities or, in contrast, for larger units (e.g. districts or the territories of municipalities with extended powers) documenting territorial differences is too generalised.

All indicators were expressed for the territorial units of municipalities with a certified municipal authority (hereafter "CMA's"), naturally, as averages of the aggregate data for the municipalities belonging to these units (Table 1). For each indicator (for human capital HP, the ratio of university educated and the economic burden index and for social capital SP, voter participation and the number of candidates per number of offices to be filled) the CMA units were placed in a sequence according to the corresponding values and subsequently given points according to their position (1-389). The lowest values, therefore, represent areas with the lowest potential for the development of human or social capital. In the next step, the sequential order values of the various indicators for each CMA were added together with their corresponding indicator to create aggregate HC and SC indicators and the CMA's were placed in sequential order (1-389). The territorial differentiation of the resultant summary sequence of the various CMA's in Czechia is evident in Figures 1 through 3 (Fig. 1 – Territorial differentiation of the potential for HC development, Fig. 2 - Territorial differentiation of the potential for SC development and Fig. 3 - CMA's with the lowest potential for the development of HC and SC).

Tab. 1- Overview of indicators for evaluating the territorial differentiation of potential for the development of human capital and social capital

Indicator	Procedure during analysis
Ratio of university educated individuals in the population older than 15	CMA's were arranged in ascending order by the ratio of university educated residents in the population older than 15. Those CMA's that have a low ratio of university educated residents have a low sequential rank. A direct proportion applies, meaning the higher the ratio of university educated, the greater the potential for the development of human capital (thereby an even better position of the CMA).
Economic burden index	CMA's were arranged in descending order according to the economic burden index, which is the number of individuals of pre-productive age (0-14 years) plus the number of individuals of post-productive age (65+) divided by the number of individuals of productive age (15-64 years). Those CMA's that have a low economic burden index, have a high sequential rank. An indirect proportion applies: the lower the economic burden index, the greater the potential for the development of human capital in the sense of an available labour force (and thereby, the better position of the CMA). We end up with high index values, when there is a high number in the numerator, that means either a large number of residents in the age category 0-14 or a large number of residents in the 65+ category. In the absence of further demographic indicators, it is impossible to definitively say which component of the population is determinative for the index. The index can show the same values, whether the CMA population is older or younger then average. A definitive dependence of greater development potential upon lower economic burden does not hold true, because a higher portion of children can, in the future, represent greater potential. It is, however, definitely true that if a high economic burden index is caused be a large number of residents in the 65+ category, development potential is lower as is the potential for the development of human capital.
Voter participation in 2006 municipal elections	CMA's were arranged in ascending order according to voter participation in elections for the local councils of the municipalities in 2006. Those CMA's that have low voter participation have a low sequential rank. A direct proportion applies: the higher the voter participation, the better the conditions for the development of social capital (thereby, the better position of the CMA).
Number of candidates per offices to be filled in 2006 municipal elections	CMA's were arranged in ascending order according to the number of candidates divided by the number of offices to be filled in the 2006 municipal elections. Those CMA's that have a low number of candidates per office to be filled, have a low sequential rank. A direct proportion applies: the greater the number of candidates per office to be filled, the better the conditions for the development of social capital (thereby, the better position of the CMA).

# Regional differentiation of the indicators and their relation to the core-periphery theory

The regional differentiation of the potential for the development of human capital (Fig. 1), based on territorial units with a certified municipal authority,

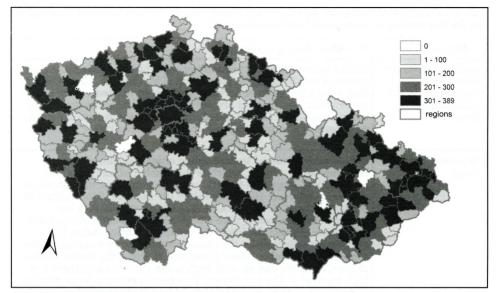


Fig. 1 – Potential for the development of human capital (resultant comprehensive rankings of CMA's according to the ratio of university educated residents and the economic burden index for 2001). Note: CMA's are arranged in ascending order according to values of potential for the development of human capital. Those CMA's that have low values of potential for the development of human capital have a low sequential rank.

is, as indicated in the methods section, evaluated with the help of two indicators: the ratio of university educated residents in the population older than 15 and the economic burden index. The regional differentiation of the first of these indicators, basically corresponds with the core-periphery theory. The core areas, as holders of innovation and centres concentrating tertiary functions of the highest orders, also concentrate the population with the highest levels of education. A weakening of this education level is shown with increasing distance from core areas, especially from regional centres. At the same time, specific regional conditions express themselves here, which also influence the specialisation of regional economies as well as connected professional and general school facilities and thereby influence the education of the local population, in return. It is necessary to recognise a significant momentum in the focus of schools (for lack of human capital, among other reasons), which changed only slightly – in contrast to economic specialisations - in peripheral areas during the transformation period. For these reasons, the Hradec Králové Region, for example, attains more favourable values than the Pilsen Region or "basin" regions.

A somewhat different regional pattern is shown by the second indicator, the economic burden index, whose highest values are concentrated in the socalled inner periphery (Musil 1988; Musil, Müller 2008), generally, with highly fragmented settlement patterns. Some of the border peripheral areas, for example Broumovsko, Osoblažsko, Jablunkovsko and the White Carpathians, also exhibit unfavourable results. After their post-war resettlement, the border areas as a whole have rather a younger population than the continuously inhabited interior, where peripheral areas have evolved in the classical sense.

The resulting potential for the development of human capital in a regional

view (Fig. 1) verifies that potential for the development of human capital cannot be evaluated in the traditional dichotomy of interior vs. resettled border areas, but rather in a dichotomy of core vs. long-term economically weak areas. As expected, the Prague metropolitan area and regional capital cities show the greatest potential for the development of human capital; however, CMA's with a dominant position as regional centres (e.g. the Mladá Boleslav, Tábor and Třebíč regions) also showed the greatest potential. In contrast, CMA units along the regional borders (e.g. the divide between the Pardubice and Vysočina Regions, as well as between the Central Bohemian, Pilsen and South Bohemian Regions or between the South Bohemian, South Moravian and Vysočina Regions) can be considered problematic areas. In such areas larger clusters of CMA's, which can be labelled as more extensive, problematic regions, are evident.

The regional differentiation of potential for the development of social capital (Fig. 2), based on territorial units with a certified municipal authority, was analysed through the application of two indicators: voter participation in 2006 municipal elections and the number of candidates per offices to be filled in the local councils of the municipalities in the 2006 municipal elections. In terms of the first indicator used, the residents of the so-called inner periphery, the traditional rural regions, often with a higher portion of religious adherents, appeared to be more involved. In contrast, border regions showed weaker voter participation. This indicator also differs the "candidate-active" Sudeten area from south Moravia, when the latter region also exhibits higher voter involvement.

The somewhat contrasting picture shown by the second of the indicators used is interesting. In terms of the number of candidates for local/municipal

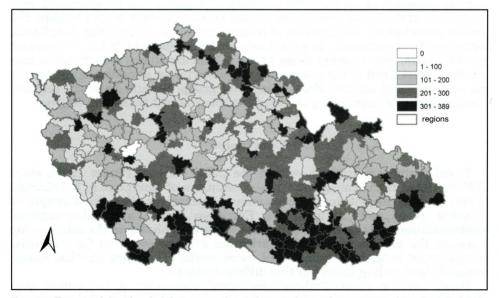


Fig. 2 – Potential for the development of social capital (resultant comprehensive rankings of CMA's according to voter participation and the number of candidates per offices to be filled in 2006 municipal elections). Note: CMA's are arranged in ascending order according to values of potential for the development of social capital. Those CMA's that have low values of potential for the development of social capital have a low sequential rank.

councils divided by the number of offices to be filled, the recently settled border regions, in particular the Sudeten area and then the south Moravia border areas, expressed themselves as the more active, with a higher level of involvement in public administration. Both of the regions named also rank among the traditional supporters ("bastions") of KSCM (the Communist Party of Bohemia and Moravia), or KDU-ČSL (the Christian Democratic Union – Czechoslovak People's Party), which could play a key role. The ideological and party influence on this indicator is, of course, speculative and would require a noticeably deeper analysis of the situation, for example, through qualitatively focused, field research. Further it is necessary to take into consideration the fact that when interpreting voter participation, the size of the municipality also expresses itself as an important factor (the smaller the municipality, the greater the voter participation). In terms of the number of candidates divided by the number of offices to be filled, it is necessary to proceed with caution, when formulating conclusions and interpretations, because, in the smallest municipalities, nominating potential candidates for the local council is a problem (Perlín 2006).

The resulting potential for the development of social capital in a regional view (Fig. 2) verifies the polarisation of the territory of Czechia into a dichotomy of Bohemia – Moravia and partially shows a west-east gradient in terms of industrialised ("more modern") and traditional areas. The greatest potential for development of social capital is shown by CMA's in Moravian regions (mostly in the South Moravian Region), but also in the South Bohemian Region. The lowest values are found in CMA's in Bohemian regions (including a large portion of Vysočina Region).

Results from this evaluation of the development of human and social capital potential show that the territory of Czechia can be evaluated in a dichotomy of these two aspects (social and human capital). As can be seen, the lowest potential for development of human and social capital (Fig. 3) is found, according to our analysis, in a relatively small number of CMA's. Throughout all of Czechia, only 13 units (from a total of 389) are shown to have low values (in the lowest third of the group) in both potential for development of human as well as social capital. From this small group, 9 units lie along regional borders and 6 of them along the border of the Central Bohemian Region.

### Conclusion

Rural peripheral space is, within the "new" Europe (Pinder 1998), quite differentiated both among the various countries of Europe (e.g. Labrianidis 2006) as well as within these countries themselves. For the example of Czechia as a "new" state of the European Union, a possible regional differentiation of its territory, primarily with an emphasis on the relationship between the process of spatial polarisation and the potential for territorial development in terms of human and social capital. These are, in other words, some of the deciding factors of this differentiation.

Based on the theoretical-methodological discussion it is evident that definitions and approaches to evaluating human and social capital differ both in terms of the approach of the various authors, or rather disciplines as well as from a regional perspective. The majority of authors have a differing approach in their selection of indicators as a result of their motivation to resolve different types of problems. With nearly all of the authors (without

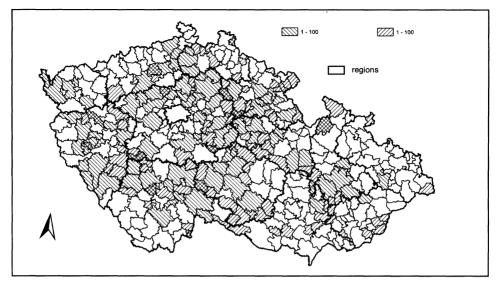


Fig. 3 - CMA's with the lowest potential for development of human and social capital

specialty and regional categorisation), it is possible to note an emphasis on the quality of human capital expressed by distance and by the position of actors in the age structure of the economically active. With social capital, there is a clear emphasis on the willingness of residents to take part in, what could generally be called: activities in networks (including participation in the administration of public issues).

In this sense, both limitations in the possibilities of research, in terms of accessibility of information and especially in terms of the extreme breadth of the observed indicators in sufficient territorial detail; as well as the absolute necessity of comprehending all evaluations carried out, on the basis of quantitative data, as an evaluation of an indicative nature become clearly fundamental elements. It turns out that the results of "hard" data must, in the spirit of critical realism, be combined with examination approaches of a qualitative nature. It is, therefore very difficult to carry out analyses with international comparisons of the quality of human and social capital. For this reason, we selected for our initial analysis an evaluation of indicators, which explain more the potential for development of human and social capital, primarily aimed at identifying problematic areas in the sense of a core-periphery dichotomy. Moreover, we are aware that the indicators were observed in only one of the dimensions of social capital, i.e. civil participation (passive and active voter participation). Social networks, which represent another dimension and are measured more by the frequency of contact with acquaintancesfriends-relatives and the extent of such virtual networks, however, are not available at the selected, administrative level of the regions. It is, therefore, necessary to view the results presented in this article as the output of the initial phase of research, that will be further expanded and specialised.

The completed evaluation of the territorial differentiation of the selected conditions for the development of human and social capital, in Czechia, at the beginning of the 21st century, enables the following conclusions to be formulated:

- The first of the general assumptions that we formulated in the methods

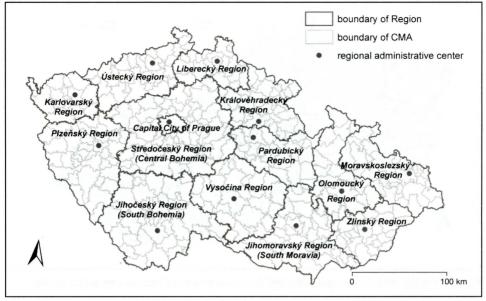


Fig. 4 – Administrative division of the Czech Republic (2008). Regions (kraje), regional centres and territorial units of municipalities with a certified municipal authority (CMA).

section was confirmed. The core-periphery dichotomy, in the Czech environment, can be considered key primarily in the sense of regional centres/long-term economically weak (rural) areas.

- Distance from a settlement centre, especially a regional centre, or rather, proximity to regional borders, is therefore a determining factor in the incidence of areas with lower potential for development of human and social capital.
- From the evaluation of the potential for development of human and social capital it is evident that, on the basis of CMA's within Czechia, a relatively small number of units were identified that can be considered problematic in both aspects. This is significant from a regional differentiation standpoint that these units mostly lie near the border of the Central Bohemian Region (Fig. 4), which in a large measure correlates with the presence of an inner periphery in these areas.
- The anticipated differentiation in the quality of human and social capital in the sense of a dichotomy of continually inhabited interior vs. border areas resettled after World War II was not confirmed (the second general assumption listed in the methods section of this paper). In spite of this, it should be recognised that, for example, in the structurally disadvantaged areas of northern Czechia, there is a high portion of residents of productive age, but these could have lower qualifications (see the ratio of university educated), they are often unemployed, or in similar situations. Their potential is, therefore, not sufficiently utilised.
- With a certain degree of generalisation, it is possible to observe the dichotomy of Bohemia and Moravia with both types of capital.
- In terms of the differentiation of potential for development of human capital, the relatively equal distribution of CMA's with greater potential for development of human capital, or rather the non-existence of this aspect in

large, problematic areas at the regional level (with the exception of the relatively sparsely populated inner periphery) can be assessed positively.

- On the other hand, in terms of the differentiation of potential for development of social capital, it is possible to outline large, territorial areas, in which the willingness of local residents to engage in networks and participate in the administration of public issues is significantly different. The reasons for this differentiation can clearly be sought in the quality of the socio-cultural environment and its long-term evolution (traditions).

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### Shrnutí

### REGIONÁLNÍ DIFERENCIACE VYBRANÝCH PODMÍNEK PRO ROZVOJ LIDSKÉHO A SOCIÁLNÍHO KAPITÁLU V ČESKU

V průběhu postkomunistického období došlo v Česku k prohloubení společenských (vertikálních) i regionálních (horizontálních) rozdílů. Tématem geografického výzkumu je tak mj. identifikace klíčových problémů a mechanizmů, které přispívají k růstu rozdílů mezi regiony, jakož i vymezení problémových oblastí, které si zasluhují zvláštní pozornost z pohledu regionálního, sociálního, ekonomického i socio-kulturního rozvoje. Z hlediska úspěšnosti rozvoje regionů lze za stěžejní považovat, vedle polohy regionu v regionálním systému, míry koncentrace obyvatelstva/funkcí, zejména aktivitu subjektů (iniciativu jednotlivců), resp. kvalitu lidského a sociálního kapitálu (součást celkového kapitálu v území). Předmětem odborných diskuzí se tak stává zejména výběr ukazatelů pro hodnocení regionální diferenciace jejich kvality, jakož i podmínek pro jejich rozvoj (roste váha subjektivních/"měkkých" faktorů). Prosperita území je výsledkem kvalitních sociálních, kulturních a institucionálních struktur s adaptivním a inovativním lidským a sociálním kapitálem. Jeho kvalita je také jedním z faktorů determinujících proces polarizace prostoru (v důsledku nižší hustoty zalidnění a populační velikosti obcí/sídel periferních a venkovských oblastí zde má mnohem větší roli, než v oblastech jádrových).

Lidský kapitál se definuje jako individuální faktor kvalifikace, produktivity, dovedností a akceschopnosti (zahrnuje např. vzdělání, zkušenosti jednotlivců/společenství, které uplatňují či mohou uplatnit na trhu práce). Sociální kapitál je určen vzájemnými vztahy, spoluprací, sociální kohezí, důvěrou a interaktivitou jedinců (založen na zdrojích – lidském kapitálu). Kvalita lidského kapitálu spojená s rostoucím vzděláním je podstatným prvkem růstu životní úrovně (zvýšení investic do vzdělávacích systémů podporuje lidský potenciál a ekonomický růst regionů). Vytvářením sociálních sití jedinci kumulují a násobí svůj individuální (lidský) kapitál a přetváří jej v (kolektivní) kapitál sociální.

Definice a přístupy k hodnocení lidského a sociálního kapitálu se liší jak z hlediska přístupu jednotlivých autorů, resp. disciplín, tak z hlediska regionálního. Většina autorů má odlišný přístup k výběru ukazatelů v důsledku jejich motivace řešit odlišné typy problémů. Téměř u všech autorů (bez oborového a regionálního rozlišení) lze zaznamenat důraz na kvalitu lidského kapi-

tálu vyjádřenou vzdělaností a pozicí aktérů ve věkové struktuře ekonomicky aktivních. V případě sociálního kapitálu je pak patrný důraz na ochotu obyvatel podílet se, obecně řečeno, na činnostech v sítích (včetně participace na správě věcí veřejných).

Kvalita prostředí pro rozvoj lidského kapitálu byla hodnocena prostřednictvím podílu vysokoškolsky vzdělaných starších 15 let (má spíše "potenciálový" význam) a indexu ekonomického zatížení (charakterizuje strukturu obyvatelstva z hlediska omezení aktivní složky populace). Kvalita prostředí pro rozvoj sociálního kapitálu byla hodnocena ukazateli, které vyjadřují společenskou atmosféru v obcích, resp. zájem a zapojení lidí do řešení věcí veřejných. Tedy volební účastí v komunálních volbách (vyjadřuje obecný zájem obyvatel o věci veřejné, konkrétně o řízení své obce) a podílem kandidátů na počet mandátů v zastupitelstvu obce v komunálních volbách (vyjadřuje míru ochoty angažovat se v řízení své obce). Analýza byla provedena v řádovostní úrovni územních obvodů obcí s pověřeným obecním úřadem (389 jednotek na území Česka s výjimkou vojenských újezdů).

Výsledný potenciál pro rozvoj lidského kapitálu v regionálním pohledu dokládá, že jej nelze hodnotit v tradiční dichotomii vnitrozemí vs. dosídlené pohraničí, ale spíše v dichotomii jádrové vs. hospodářsky dlouhodobě slabé oblasti. Nejvyšší potenciál pro rozvoj lidského kapitálu vykazuje podle očekávání Pražský metropolitní areál a krajská města, dále pak oblasti s dominantním postavením regionálních center. Za problémové oblasti lze pokládat území při krajských hranicích.

Výsledný potenciál pro rozvoj sociálního kapitálu v regionálním pohledu dokládá polarizaci území Česka v dichotomii Čechy – Morava, částečně se ukazuje západo-východní gradient ve smyslu industrializovaných ("modernějších") a tradičních oblastí. Nejvyšší potenciál pro rozvoj sociálního kapitálu vykazují oblasti v moravských krajích, ale také v kraji Jihočeském. Nejniž ších hodnot dosahují oblasti v českých krajích (včetně velké části Vysočiny). Předpokládaná diferenciace kvality lidského a sociálního kapitálu ve smyslu dichotomie kontinuálně osídlené vnitrozemí vs. pohraničí dosídlené po 2. světové válce se nepotvrdila. Za klíčovou lze označit dichotomii jádro-periferie, v českém prostředí zejména ve smyslu regionální centrum-hospodářsky dlouhodobě slabá (venkovská) oblast. Pro výskyt oblastí s horším potenciálem pro rozvoj lidského a sociálního a kapitálu je určující vzdálenost od sídelního (krajského) centra, resp. blízkost krajské hranice. Na území Česka lze identifikovat relativně malý počet jednotek problémových v obou aspektech. Z pohledu regionální diferenciace je signifikantní, že tyto jednotky většinou leží při hranicích Středočeského kraje, což do značné míry koreluje s výskytem vnitřních periferií v těchto oblastech.

Pro naše vstupní analýzy jsme tak vybrali hodnocení ukazatelů, které vypovídají spíše o potenciálu pro rozvoj lidského a sociálního kapitálu, a to zejména s cílem identifikovat problémové oblasti ve smyslu dichotomie jádro-periferie. Z těchto důvodů je třeba na výsledky prezentované v tomto příspěvku nahlížet jako na výstupy první fáze výzkumu, které budou dále doplňovány a precizovány.

- Obr. 1 Potenciál pro rozvoj lidského kapitálu (výsledné souhrnné pořadí obvodů obcí s pověřeným obecním úřadem podle podílu vysokoškolsky vzdělaných obyvatel a indexu ekonomického zatížení 2001). Poznámka: Obvody obcí s pověřeným obecním úřadem jsou vzestupně seřazeny podle hodnot potenciálu pro rozvoj lidského kapitálu. Ty obvody obcí s pověřeným obecním úřadem, které mají nízké hodnoty potenciálu pro rozvoj lidského kapitálu, mají nízké pořadové číslo.
- Obr. 2 Potenciál pro rozvoj sociálního kapitálu (výsledné souhrnné pořadí obvodů obcí s pověřeným obecním úřadem podle volební účasti a počtu kandidátů na počet mandátů v komunálních volbách 2006). Poznámka: Obvody obcí s pověřeným obecním úřadem jsou vzestupně seřazeny podle hodnot potenciálu pro rozvoj sociálního kapitálu. Ty obvody obcí s pověřeným obecním úřadem, které mají nízké hodnoty potenciálu pro rozvoj sociálního kapitálu, mají nízké pořadové číslo.
- Obr. 3 Obvody obcí s pověřeným obecním úřadem s nejnižším potenciálem pro rozvoj lidského a sociálního kapitálu.
- Obr. 4 Administrativní členění České republiky (2008). Kraje, krajská města a obvody obcí s pověřeným obecním úřadem.

Authors are with Charles University in Prague, Faculty of Science, Department of Social Geography and Regional Development, Albertov 6, 128 43, Praha 2, Czechia; e-mail: jancak@natur.cuni.cz, tomhav@natur.cuni.cz, chromy@natur.cuni.cz, marada@natur.cuni.cz.

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