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ADMINISTRATIVE BOUNDARIES, TRANSPORT ACCESSIBILITY AND FUNCTIONAL RELATIONS: A CRITICAL REVIEW OF ADMINISTRATIVE REGIONS IN THE CZECH REPUBLIC FROM A SPATIAL PERSPECTIVE*

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Abstract

The main purpose of the article is a critical evaluation of current administrative regions in the Czech Republic from a spatial point of view. The post-socialist transformation processes took place very quickly in the Czech Republic and they strongly influenced the spatial organization of the society. The study is focused on the present administrative organization of the Czech Republic in form of the 'districts of municipalities with extended competence'. We evaluate their role in fulfilling the spatial equity principle through the time accessibility of the administrative centers from their administrative regions and through current socio-economic spatial flows (expressed by daily commuting).

The study brings important results of current spatial arrangement of public administration in the Czech Republic. The most problematic administrative regions in the Czech Republic in terms of their accessibility and their role in space are also mentioned. The results could be useful both in research and practice.

Keywords: administrative regions, public administration, accessibility, spatial flows, Czech Republic.

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1. Introduction

The issue of public administration reforms has recently become so significant that it has become an individual branch of study (Torres, 2004). An increasing interest in public administration and administrative sciences can be observed specifically also in countries where modern administration has not developed until the recent years as a result of the past historical trend. Examples of such groups of countries include the former socialist countries of the Central and Eastern Europe; as a result of the Eastern bloc breakdown and their gradual European integration, these countries were newly confronted with the process of creating an effective system of public administration to replace the traditional centrally planned model of that time. The local public administration system, therefore, underwent the processes of decentralization, liberalization, democratization and Europeanization in the past three decades (Rice, 1992; Dostál and Hampl, 2007; Goetz, 2001). These processes of modernization thus initiated a number of changes, the purpose of which was supposed to be a transition to the public administration system close to the public administration system applied in the Western Europe. The transition was also supported by extensive social, economic and political transformation processes. However, we can also state that due to insufficient experience with the public administration system, these countries still face a number of problems related to insufficient experience and little will to respond to new impulses and arrangement of the entire public administration system (Wollmann, 1997). The recently established administrative structure is, therefore, often an object of criticism by both professionals and the general public (e.g. Zhang and Wu, 2006).

The main goal of this study is a critical revision of the current administrative structure in the Czech Republic, from a spatial perspective. We mainly focus on the issue of the present administrative organization of the Czech Republic in form of the 'districts of municipalities with extended competence' (hereinafter referred to as administrative regions or AR). They execute an essential part of the public administration in the regions (including delegated state competence, such as citizen registration, personal document issuing, trade licenses, payment of social benefits, transport and road management, etc.). Their arrangement, selection and specification of catchment regions are, however, often an object of criticism, mainly due to the lack of currency and conceptuality. Regarding the fact that our paper accepts the spatial consideration, we focus on: (a) an evaluation of transport accessibility of AR centers from their territorial districts and (b) a comparison of present ARs with current socio-economic relations expressed mainly by commuting to work and school. We consider this the key region-forming process that is used the most often as the basis for creating and revising administrative units (Andersen, 2002 or Cörvers, Hensen and Bongaerts, 2009). Therefore, we first focus on analyzing the accessibility of the centers in terms of time in the analytical part, which we consider the key demonstration of the AR efficiency. The second part is focused on specification of catchment regions of daily commuting to work and schools in the Czech Republic based on the last population census of 2011. We then confront the specified commuting regions with the present system of

ARs. We also try to identify the most problematic areas of the present administrative organization of the Czech Republic by evaluating both of the above-mentioned characteristics.

The paper is structured as follows: the introductory part is followed by focus on theoretical grappling of the subject issue. We can see this in a brief description of the development of the administrative structure of the Czech Republic after 1989 and in the multiple-phase forming of the present administrative system. Key attention is mainly paid to methodical issues of AR specification in 2001. General resources of changes in the society's spatial organization in post-socialist countries form an integral part of the theoretical sections. Another part introduces the methodical procedure of the study focused on analyzing conformities and non-conformities in the system of districts of the municipalities with extended competence and current commuting relations in the territory of the Czech Republic. The analytical part then provides a comparative analysis of the issue. The final section reflects the whole issue and contains suggestions for further study of administrative reforms and related problems from a spatial perspective.

The subject issue has great relevance not only in administrative sciences, but also in practice. Dynamic transformation processes after the downfall of socialism induced differing spatial patterns of the society organization in many cases. Processes, such as decentralization, rise of regional disparities, suburban development of metropolitan structures formation, were the concomitant circumstances of this process. Unfortunately, the emerging public administration system responded to such changes only to a limited extent or with delay. This resulted in currently frequent problems with ensuring its efficient operation. The above-mentioned study can, therefore, be also used by the affected institutes of state and public administration, spatial planners, regional economists, geographers, etc.

2. Theoretical background – recent administrative reforms in the Czech Republic

The present administration structure of the Czech Republic is the outcome of long-term historical and political development. The administrative structure of Czechoslovakia before 1989 was the outcome of extensive socialist reforms from the period of 1948-1989. The initiation of these reforms dates back to 1948 when 13 regional territorial units were created, pursuing to approximate the administrative structure of the regional disposition model of USSR (Liebert, Condrey and Goncharov, 2013). This model of people's committees was inspired by the USSR's administrative structure and resulted in factual suppression of self-governments, fulfilling only the function of politicized regional bodies of the state administration (Nunberg, 1999). Other significant changes occurred in 1960; in general, this reform resulted in strong integration of regional, district and municipal territorial units (Hampl, Gardavský and Kühnl, 1987). The performance of public administration continued to be managed by the people's committees. The regions became heterogeneous units in terms of both history and ge-

ography, while some significant centers were discriminated and forcibly integrated under others at the district level (Tonev, 2005). The politicized model of local authority organization of former Czechoslovakia has not noted major changes since 1989.

Radical transformation of the political situation in 1989 generated the need to reorganize the public administration system and the primary task was to fulfil the principle of decentralization and de-concentration of the public administration performance (Dostál, 1998; Farmazand, 1999). Other targets set included making the public administration more efficient, fulfilling the administrative culture, and the principle of subsidiarity. In this context, the public administration reform split into two phases after 1990; the reforms were based on cancellation of the people's committees in 1990. In that year, the municipalities were denationalized and they were returned the public corporation statute. The hybrid public administration model deformed by communism, which included performance of own regional self-government and state administration at the level of delegated competence, was restored at the municipality level. This model was more or less typical for all former socialistic countries (Goetz and Wollman, 2001). At the district level, the people's committees were substituted by district authorities in 1990 which, however, only concentrated on the state administration performance. The regional self-government as such was performed only to a limited extend, and therefore, the function of the above-mentioned hybrid model was not being fulfilled. The system of that time did not respect the principle of decentralization, and the need of a new regional authority was evident; however, it was postponed for a long time for a number of political reasons (Tonev, 2005). Higher-level regional administrative units (regions) were not determined until 1997. There were 14 regions established with effect as of the 1st of January 2000. Analogically to municipalities, the hybrid model was chosen for their public administration performance. The establishment of the higher-level territorial administrative units was the culmination of the public administration reform phase. Determination thereof reflected significant criticism from the professional public (e.g. Řehák, 2000).

The second phase of the public administration reform mainly involves cancellation of district authorities and introduction of new territorial administrative units – the 'municipalities with extended competence' (Figure 1). Following cancellation of district authorities in 2002, the problem concerning assignment of their administrative competence appeared. Territorial determination of their administrative districts was contained in the decree of the Ministry of Internal Affairs. There were 205 municipalities with extended competence determined. The major part of the state administration performance in the competence of the cancelled district authorities was transferred to the newly established ARs. This reform was the last major change. What remains to be a problem is mainly the existing territorial organization of 1960 at interregional (regional) and micro-regional (district) level that has not been legally cancelled, thus causing parallelism of territorial differentiation. Some specialized state organization bodies and courts kept their territorial competence according to the former units at both levels.

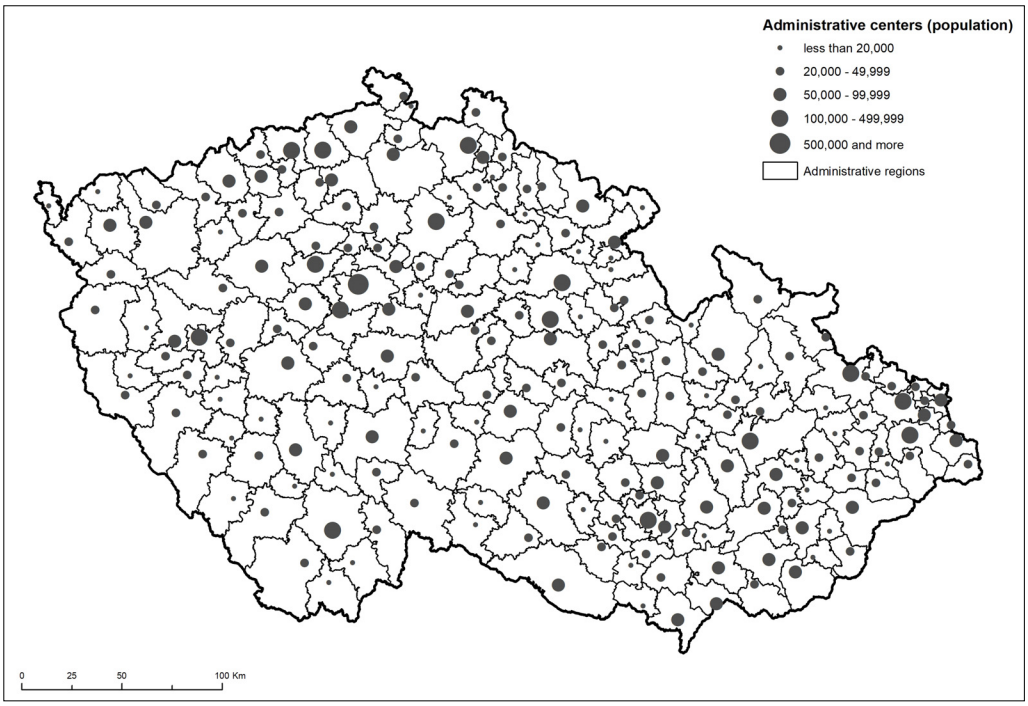

Figure 1: Current administrative regions in the Czech Republic

Source: Authors

However, significant changes in the public administration organization and system have not been implemented. So, the above-mentioned hybrid model of public administration including the divisions of state administration and regional self-government has been established. The main regional self-government units are regions and municipalities, whereas the municipalities represent the basic territorial self-government units; the regions represent the higher-level self-government units. These administration units perform the public administration primarily in the territorial self-government and secondarily in state administration performance, which they conduct based on the delegated competence.

The process of defining and approving ARs was very difficult. These regions were created as a reaction to intensifying pressure on filling the gap in the public administration system at the micro-regional level. In order to ensure efficiency of the public administration performance, it is necessary that the territorial administrative units correspond to the natural geographical regions. The scope of ARs was supposed to reflect the functional nodal regions. Their closed territory is integrated by daily regional processes (Andersen, 2002; Cörvers, Hensen and Bongaerts, 2009; Klapka *et al*., 2016). Representative processes mainly include commuting to work, to schools and services (e.g. Gunko and Nefedova, 2017).

AR formation was determined politically, and this process was split into four phases. The method of specifying the ARs and their catchment districts did not re-

spect natural relations within the territory. A purely mathematical approach to AR delimitation was applied in the first phase. This resulted in specification of ARs and their districts based on the 'circle method'. The proposal contained 179 regions and their administrative districts were pure circles, whereas the crow flies distance of the most distant municipality should not exceed 15 kilometers. This proposal invoked very strong criticism. This mathematical approach was applied to all municipalities of the Czech Republic in the second phase. Each municipality had an opportunity of individual inclusion in a preferred micro-region. Based on these statements of the individual municipalities, the 'wish map' was created; this material was generated solely based on the statements of the individual municipalities. The final material of the second phase was proposing 281 ARs; however, only 173 of them were meeting the minimum size of its district (15,000 citizens).

The geographers' proposals were taken into account in the third phase. However, their task was only to specify the ARs' centers, not the catchment areas. In addition, they had to respect the requirements of the Ministry of Internal Affairs of the Czech Republic (municipalities' statements summarized in the 'wish maps', pre-determined interval of number of centers (179-200), the above-mentioned minimum size of population of the administrative districts, etc.) which were not always relevant (Tonev, 2005). The proposed administrative districts not meeting the minimum size requirement were ordered to be integrated into another AR, whereas a new AR establishment could be accepted in properly justified cases. The Ministry of Internal Affairs accepted the proposal of Maryáš *et al*. (2001). This proposal was probably chosen for its complexity as it was evaluating the proposed centers in terms of their geographical location, commuting to work, commuting to schools, basic types of services provided (Police, Labor Department, Tax Authority, etc.). The final proposal was of 179 mandated municipalities of level III.

The outcome of the fourth and last phase of the ARs approval process was 'Pragmatic Draft of Locations of Municipalities with Extended Competence'. Unfortunately, it was not a proposal identical to the previous expert geographical analysis. The Ministry of Internal Affairs of the Czech Republic accepted the previous expert studies only partly. The stated proposal contained 191 centers during the initial round of negotiations (Tonev, 2005). Twelve ARs were added by directive political intervention, 205 were enacted after the closure of the legislative process. The above-described complicated development of the modern administrative structure of the territory of the Czech Republic can be summarized by stating that it was affected by a number of historical, geographical, territorial and political aspects. The outcome of such development is a highly heterogeneous system of administrative regions that can show signs of lack of conceptuality, non-currency and non-naturalism.

3. Data and methods

Regarding the fact that the paper focuses on criticism of the present ARs in the Czech Republic, we use various indicators of AR efficiency. In the first part, we focus on the evaluation of transport accessibility of AR centers from their administrative

districts. The key factor to us is the time accessibility of the AR centers by car transport. It is the time accessibility that is one of the key factors affecting the citizens' satisfaction with the administrative structure (Karlsson and Olsson, 2006; Michniak, 2010). Therefore, efforts should be made to achieve the best possible satisfaction of the citizens with accessibility of administrative services on the basis of the spatial justice (equity) principle. The spatial justice principle pursues the best possible balance of accessibility of services (mainly medical services) for all citizens of the given region (see e.g. Halás *et al*., 2017). Thus, we evaluate the time accessibility from all municipalities of the ARs to their respective center in the analytical part. Therefore, we analyze the accessibility of all 205 centers from all municipalities of the Czech Republic which are not AR centers (6,046 municipalities). Here we apply the time accessibility model in the environment of Geographical Information Systems (GIS). The model was created in the ArcGIS Network Analyst extension. The model is based on the distance of the starting point (individual municipalities of the Czech Republic) and the final destination (respective AR center) along the road network. Based on the existence of the road connection type (motorway, class 1 roads, etc.), the average speed is applied to the individual sections to generate the final value of time required to reach the final destination from the starting point. The model respects all barriers given by the environment (road sections with reduced maximum speed limit, etc.), always taking into account the journey that is the least favorable in terms of time. The final accessibility figures have a high predictive value and can be used for further analyses.

Another valuable characteristic was conformity of the functional socio-economic relations within the territory to the administrative structure. Functional relations were identified by analyzing the commuting to work and schools flows. They represent the most significant spatial interactions generated by daily movements of citizens, in particular, between the municipality and commuting center. This is, therefore, a unique detail with very high predictive value, taking into account the most significant inter-settlement relations. The commuting regions were defined based on the details of commuting to work and to schools based on the results of the last Population and Housing Census of 2011 conducted by the Czech Statistical Office. The database contains information about how many people commute from a municipality to another municipality to work and schools. The aggregated data were provided by the Czech Statistical Office. Details of commuting to work and schools are, therefore, often used for defining natural socio-economic units which are integrated by intensity of socio-economic relations. They also have a high potential in creating and revising the administrative structure. With respect to the required micro-regional character of the study, it works only with the data related to daily commuting to work and schools. The code of practice reflects results and procedures used in numerous studies concerning commuting to work and schools in the Czech Republic (e.g. Hampl, 2005; Halás *et al*., 2010; Sýkora and Mulíček, 2009) and abroad. The method of defining the commuting regions was primarily subordinated to the purpose of the study: delimitation of commuting regions for purposes of revising the administrative struc-

ture of the Czech Republic. The code of practice consists of several consecutive steps:

- Step 1: determination of the final destination of daily commuting to work and to school based on the strongest commuting flow. For each monitored municipality (6,251), the potential center of commuting was determined based on the strongest commuting flow. A potential center was determined for each municipality based on the sum of citizens daily commuting to work and to schools. The municipality to which the most citizens commute to work and school was determined as the potential center of commuting. There were 594 of them defined in this phase.
- Step 2: selection of centers from a set of potential commuting centers. To determine municipalities with a real potential to become the commuting region centers, this set was reduced based on another criterion. Those municipalities which were the potential commuting centers for at least four municipalities became the centers of the commuting region. This means that if the municipality had at least four municipalities in its hinterland, it automatically became the commuting center. Finally, regions consisting of at least 5 municipalities (1 center and 4 other municipalities) were determined in the territory of the Czech Republic.
- Step 3: allocation of the other municipalities. In the last phase, other municipalities which had had the strongest commuting flows to municipalities which did not become the commuting region centers were allocated to the commuting regions already established. These municipalities were then allocated to the individual commuting regions based on the catchment of the original potential center (hierarchical method).
- Step 4: final delimitation of commuting regions. Based on the chosen method, the boundaries of the individual commuting regions were then finally defined. There were 277 of them defined in the territory of the Czech Republic.

4. Results

In the first part, we focused on the evaluation of transport accessibility of AR centers from their territorial districts. As stated above, one of the key intentions of establishing these administrative units was the effort to achieve maximum fulfilment of the spatial justice principle. The key aspect of the spatial justice principle is good transport accessibility. Acting within the space, transport also covers the everyday needs of the citizens. Therefore, it is logical that the ARs' centers should be well accessible from their respective territorial districts. However, the present territorial organization of the ARs faces rather big differences in accessibility of their centers (Figure 2). The AR center time accessibility is highly dependent on the presence of high-quality transport infrastructure, the size of AR districts or the geographical location of the centers. It appears in some regions that the secondarily significant limit of time accessibility also includes physically geographical barriers (mainly relief, water courses, etc.).

In general, we can state that better conditions of transport accessibility are evident mainly in the eastern part of the Czech Republic. This is mainly given by bigger popu-

lation size of the municipalities in this region, which also positively affected historical genesis of the road network. More problematic areas are concentrated mainly in the southern and south-western part of the Czech Republic with a dispersed character of settlement, bigger distances between centers and relatively sporadic road network. Citizens of the AR centers and the nearest municipalities with accessibility within 14 minutes of a car drive have the best conditions of accessibility. This excellent accessibility of AR centers can be utilized by a significant portion of the Czech population (almost 73%, see Table 1).

In the zone with good time accessibility (15 to 29 minutes), there are more than 2,500 municipalities where almost 2 million citizens live at the present time. These can be considered key categories with respect to the monitored hierarchical level, because we monitor satisfaction of citizens with public services at the elementary level. Municipalities which are more distant from centers have worse accessibility, which has a negative impact on the time accessibility values. There are more than 1,000 municipalities with more than 650,000 citizens in the interval between 30 and 45 minutes. These are mainly smaller municipalities situated in distant regions, outside of the main transport axes. We will specifically find these rather in frontier areas of the western part of the Czech Republic where the relict influence of the Iron Curtain is still evident. These areas sustained forcible displacement of citizens to inland during the communist era, construction bans, etc. This had negative impact on the existence of natural relations within the territory and deformation of the settlement structure. These areas are also concentrated mainly in regions with dispersed settlements where the citizens are often forced to own a car due to low quality of public transport (Kraft and Prener, 2014).

Table 1: Time accessibility of administrative centers from their regions

	Municipalities	Population	Population relative	Population cumulative
0 to 14 minutes	1,897	7,634,305	72.7	72.7
15 to 29 minutes	2,555	1,916,955	18.2	90.9
30 to 45 minutes	1,112	651,772	6.2	97.2
46 and more	687	302,413	2.9	100.0

Source: Authors

The worst situation is evident in municipalities with accessibility over 45 minutes. This concerns almost 700 municipalities with population over 300,000 people. They are again concentrated mainly in state borders, in remote mountain regions outside of the main transport axes. Bigger concentration is noted also in inland. Musil and Müller (2008) call these areas the 'inner peripheries'. According to these authors, the inner peripheries are such territories which are situated close to the administrative boundaries of the higher-level self-government units, showing adverse indicators of regional development (depopulation, population ageing, economic stagnation, higher unemployment rate, lower socio-economic level, lower quality of technical and

social infrastructure, etc.). It is evident that it is the reduced time accessibility of job opportunities and services (including administrative services) that is one of the other relevant characteristics of inner peripheries in the Czech Republic (see e.g. Kubeš and Kraft, 2011). Other significant conditioning factors of worse transport accessibility of some AR centers include the improper configuration of the road network. Some AR centers did not gain administrative significance until recently, whereas the road network was forming much earlier.

Another significant concentration of adverse values of time accessibility includes wider metropolitan hinterlands of large centers. One of the examples includes ARs close to large cities. An ideal example is Plzeň (Pilsen). This is the fourth biggest city of the Czech Republic with a population of about 170,000. Applying the spatial justice principle, smaller centers which, however, did not play a major role in the settlement system (e.g. Nýřany, Stod, Blovice) were chosen as the AR centers within the Pilsen hinterland. These are towns with 3 to 7 thousand citizens which are difficult to access from their respective territorial districts in a number of cases. Accessibility of elementary administrative services is thus rather complicated for citizens of these regions, as they have the respective administrative services localized in other centers, with worse access, while most of the citizens commute from these municipalities to work or to schools to Pilsen. A similar situation occurs in the grounds of Prague or other big cities.

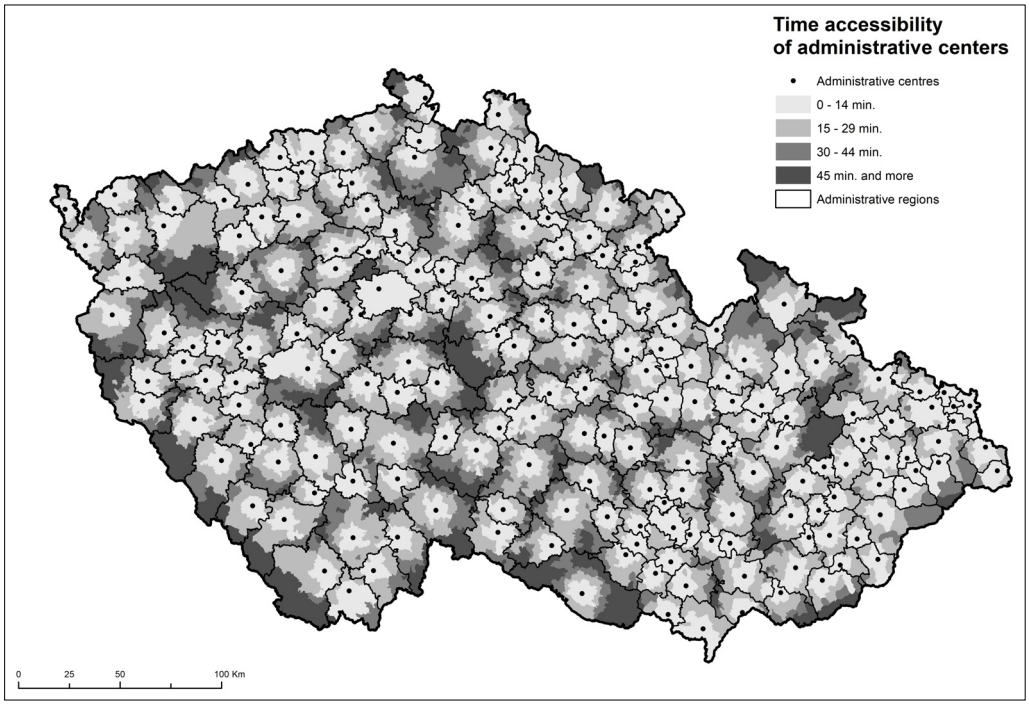

Figure 2: Time accessibility of administrative centers from their regions

Source: Authors

Another significant point of criticism of the present definition of administrative regions in the Czech Republic is their relevance to the existence of natural relations within the territory. These relations of a social and economic character can be identified with daily mobility related to the commuting to work or schools. It is evident that the AR centers should ideally be corresponding to the destinations of the daily mobility of citizens. It should be the rule that the specification of the catchment regions of ARs should be in maximum association with regions from which the citizens depart to work centers. In fact, the administrative regions as such were primarily defined based on the citizens' commuting to work in the initiation phase of 1991. Nevertheless, this may be a major problem because the details of citizens' commuting to work in 1991 reflect the socio-economic relations and spatial patterns of the socialist era according to many authors (e.g. Hampl, 2005). The above-mentioned transformation processes (suburban development, metropolization processes, and increasing regional disparities) significantly affected some spatial patterns of commuting to work and schools. Therefore, we can reasonably assume that these facts had very negative impacts on the conceptualization and functioning of administrative regions in the Czech Republic in the course of the last two decades; Andersen (2002) presents advantages and disadvantages of this approach using the example of Denmark.

Based on the above-described methodology, the strongest flows of people departing for work and schools from the individual municipalities of the Czech Republic to the centers of commuting were monitored; 227 municipalities became the centers of commuting. Their numbers were higher than the number of administrative regions (205). The study results indicate that identification of commuting centers and AR centers do not correspond either. Although the number of commuting region centers is higher, it is the fact that not all of the commuting centers are AR centers and not all of the AR centers are the commuting centers. This usually concerns centers with smaller population or centers with specific position within the settlement and regional system of the Czech Republic. In the first case, the commuting centers become centers with less population which are, however, currently established as more significant commuting centers as a result of historical, social and mainly economic conditions; they are usually located in less populated regions. This mostly concerns situations when lower population density and larger AR cause these centers to 'fill' the space, thus becoming critical places of local concentration of job opportunities. Their action within the space thus takes on the nearest municipalities, from which the people commute to such centers to work or services. Their population size usually ranges between 3 to 7 thousand citizens. Such non-conformity logically also occurs in regions where such centers were established historically, thus contributing to fragmentation of the settlement structure (mainly in the frontier regions of northern and north-eastern Bohemia). The commuting centers are still situated here which typically increased their significance during the industrialization phase in the 19th and 20th centuries.

In terms of the administrative organization, the latter case is more critical, i.e. when the AR centers are not the commuting centers. Although commuting to work may not be the only criterion for justness of the AR center existence, it is evident that their realistic role within the space is limited and strongly supported by administrative functions. There are 26 AR centers of this kind currently registered in the Czech Republic. These are again less significant centers of social and economic activities (their population usually ranges between 3 to 6 thousand citizens). However, their spatial concentration in the hinterlands of large metropolitan centers (Prague, Brno, Ostrava and Pilsen) is striking. It is evident that these regions were affected the most by the suburbanization processes in the transformation period (Temelová *et al*., 2011). It is the change in the residential preferences of the citizens while preserving their original jobs in cities which currently probably causes the most striking non-conformities of the administrative structure and functional socio-economic relations. Such non-conformities become the most evident around Prague (Lysá nad Labem, Neratovice, Říčany, Černošice) and Brno (Šlapanice, Rosice, Ivančice, Slavkov, Židlochovice, Pohořelice). The centers of these ARs have a severely weakened position in favor of strong relations of these municipalities to Prague and Brno. Some authorities, at least partly, responded by establishing their authorities with branches in Prague, however, this situation is disadvantageous for most of the citizens of these regions. Similar non-conformities occur also when considering the daily flows of commuting to work and school.

It has been mentioned above that it is the hinterland of the large metropolitan centers where frequent non-conformities in the administrative structure and the existence of natural functional relations occur. The Prague grounds can be considered an ideal example of such non-conformities. It is the influence of strong metropolization and suburbanization processes which resulted in fast growth of non-conformities of administrative and functional relations in the Prague grounds. The analysis of the functional spatial relations clearly indicates that, although a number of municipalities within the Prague grounds have clear (often dominant) orientation of commuting relations towards Prague, their administrative regions are absolutely different. This concerns both the municipalities close to the Prague hinterland and the municipalities which are more distant. Therefore, such non-conformities of administrative and functional relations can be generally identified also in distant regions, approximately 40 to 50 km away from Prague. This also proves the extraordinary attraction of Prague in terms of absorbing the labor market (Sýkora, 1999).

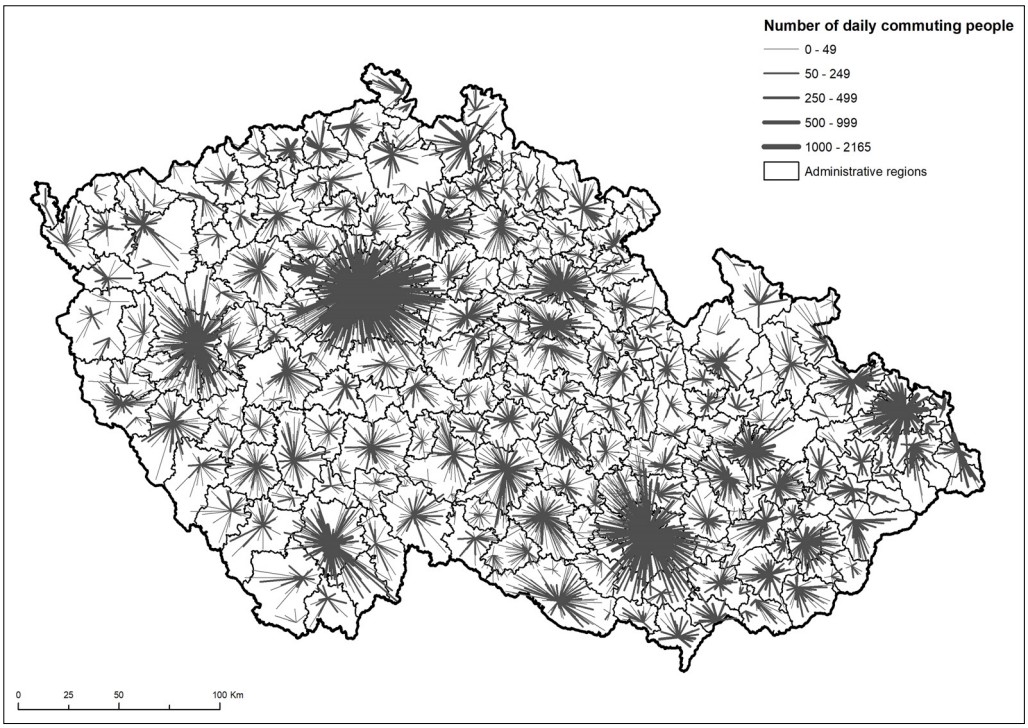

Figure 3: Daily commuting flows in the Czech Republic, 2011

Source: Population Census (2011) and the authors.

5. Conclusions and discussion

Recent political changes and related demonstrations of post-socialist transformation became evident in a significant way in a number of these countries. Formation of the modern public administration system was often rather complicated due to insufficient experience. A number of authors (e.g. Goetz, 2001) agree that the public administration system was affected by the efforts to achieve the fastest possible European integration in the countries of Central and Eastern Europe. The formation of the public administration system was also affected by a number of political, economic, social and cultural aspects (Liebert, Condrey and Goncharov, 2013). The resulting organization thus, unfortunately, still generates frequent problems. This concerns the Czech Republic, as well as the other post-socialist countries (Wollman, 1997; Wollmann and Lankina, 2003; Klobučník and Bačík, 2016). One of the significant aspects of evaluating the present public administration system efficiency is the efficiency evaluation through the spatial perspective. The paper focuses on the critical revision of the present administrative organization of the Czech Republic. The Czech Republic can be stated as a typical example of a post-socialist country where the modern public administration system was formed recently in connection with the post-socialist transformations after 1990.

Based on the spatial perspective, we first evaluated the time accessibility of AR centers from their territorial districts. It is evident that the transport accessibility standards must contain natural differences, given mainly by different levels of transport infrastructure, settlement system, location of AR centers, etc. The differences in time accessibility are still relatively significant. Accessibility of AR centers becomes a major problem mainly in distant rural regions, as the citizens of these regions must often travel rather long distances. This obviously corresponds to the huge amount of time which people must spend travelling to their administrative centers. Essential is the finding that more than 300,000 citizens of the Czech Republic currently live in areas where the time accessibility exceeds 45 minutes. This value can also be considered to be an anthropological constant in daily mobility (Kraft, 2014). Another fact is that these areas usually have adverse socio-economic characteristics (e.g. population ageing, higher unemployment rate). Poor time accessibility of AR centers where a number of civil services are concentrated may potentially become one of the significant differentiation aspects contributing to the social exclusion of the local citizens (Preston and Rajé, 2007).

Changes which occurred in a number of former socialist countries of the Central and Eastern Europe in 1989 currently cause a number of problems, including but not limited to problems in administrative organization. The Czech Republic is a good example of not quite elaborated administrative reform, during which the administrative regions were defined. These were supposed to be a symbol of democratization and decentralization of the public administration system. Nevertheless, a hybrid model of the public administration system, which still has a number of imperfections to date, was created in connection with the preparation of the Czech Republic's accession to the EU.

One of the major spatial imperfections is the inconsistency in the number and definition of the administrative regions' centers and their realistic functional significance within the territory. Having analyzed the present commuting interactions, we declared that the biggest inconsistencies in the spatial definition of administrative and functional regions were typical mainly for the hinterlands of large cities of the Czech Republic. It was in their surroundings where transformation processes occurred, changing the traditional functional relations in the territory. These relations probably had the biggest impact on changing suburbanization processes which keep causing major inconsistencies between the destinations of the daily commuting to work and the declared catchment districts of the administrative regions. These inconsistencies should become the subject of further surveys, whereas mainly the mobility analysis through localization data of mobile telecommunication operators appears to be the perspective for monitoring the realistic mobility of citizens (as compared to commuting to work and school surveyed once in ten years). Advantages of such a procedure, using an example of Estonia, are referred to by Novák *et al*. (2013). The above-mentioned conclusions indicate that the analyses of transport accessibility and functional spatial relations are some of the key elements of formation and revision of administrative regions.

We believe the study has a great potential to start a debate about the efficiency and sense of public administration in former socialist countries. We also hope in real policy implications of these results. The responsible policymakers should embrace argumentations about *ex-post* evaluations of the efficiency of administrative units and their territorial functions. The existing experiences show the discussion about these issues is rather a black-box of public administration in former socialist states. We strongly recommend using all accessible spatial sources for continuous evaluation of correctness of administrative divisions. It is also important in the light of current more and more accented issues of social justice or spatial equity. Data from Population Censuses (especially commuting to work, etc.) can serve as good indicators of socio-economic relations in space. If they do not exist (especially in the Balkan states) they can very well be replaced by location data from mobile phones (see Novák *et al*., 2013). Conversely, an inappropriate administrative division may cause certain problems. Besides the problems with commuting to other centers connected with higher travel costs, we can mention also an interesting issue of regional identity and perception of belonging to the region (see e.g. Paasi, 2009; Chromý and Janů, 2003; Šerý and Šimáček, 2013; Melnychuk and Gnatiuk, 2018).

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