

## URBAN DEVELOPMENT IN SELECTED CZECH AND AUSTRIAN CITY REGIONS

Petr Klusáček<sup>1</sup>, Stanislav Martinát<sup>2</sup>, Walter Matznetter<sup>3</sup>, Alexander Wisbauer<sup>4</sup>

<sup>1</sup> Institute of Geonics, public research institution,  
Drobného 28, 602 00 Brno, klusacek@geonika.cz

<sup>2</sup> Institute of Geonics, public research institution,  
Studentská 1768, 708 00 Ostrava-Poruba, martinat@geonika.cz

<sup>3</sup> Institut für Geographie und Regionalforschung,  
Universitätsstraße 7/5/D510 (NIG), A-1010 Wien, Austria, walter.matznetter@univie.ac.at

<sup>4</sup> Bundesanstalt Statistik Österreich,  
Guglgasse 13, 1110 Wien, Austria, alexander.wisbauer@statistik.gv.at

### Abstract

Conceptually, this paper is based upon the CURB model of city region development set out by Van Den Berg et al. in 1982. Using a very simple and formal typology of population changes within cores and rings of functional urban regions (FURs), it was originally applied to a sample of 189 FURs in 14 countries across Europe, for the years between 1950 and 1975. Empirically, our paper tries to expand the original study in both time and space. In time, we are updating developments to the population register data from 2007, but we also go back in urban history to the first modern census held in the Habsburg Empire (1869). In terms of geographical coverage, we are adding data on the three largest mononuclear city regions in the Czech Republic, i.e. Prague, Brno and Plzeň, to the three largest city regions in Austria, i.e. Vienna, Graz and Linz (these had already been included in the original CURB study). By using a unitary delimitation of urban cores, urban rings and urban regions across the Czech-Austrian border, this paper tries to create a harmonized data basis for interpretation and debate.

**Key words:** Prague, Vienna, CURB model, urban development

### INTRODUCTION

The impetus to compare city regions in Central Europe stems from our experience of the last two decades, when fundamental political change led to a complete overhaul of the regional economy in the area. In the Czech and Slovak Republics, the transformation to pluralistic democracies and market economies took place under the conditions of an increasingly global competition for labour, goods and services. EU membership, in 2004, can be considered a keystone of these developments. The transformation of Austria, from a regulated and protectionist national market into a minor regional player itself, has taken place in parallel, joining the EU at an earlier stage, in 1995.

In all countries considered, regional structures have changed, and large city-regions have become more important, as centres of investment, knowledge and innovation. In both the Czech and the Slovak Republic, as well as in Austria, the capital regions of Prague, Bratislava and Vienna are those with the highest regional income, exceeding by far the national averages. Booming urban labour markets have attracted migrants into the cities and city regions, making urban decline an episode of the past, a phenomenon of the 1970s (and the interwar period) in the case of Vienna, a phenomenon of the 1990s in the three Czech city regions included in this study (with Brno trailing behind).

## THE CONCEPT

As one of the earliest projects of comparative urban research in Europe, the CURB project assembled economists, geographers and planners from 14 countries in what used to be a continent divided into market and planned economies. From the mid-1970s, a small team chaired by Roy Drewett (1936-1994) developed a “theory of urban development” which hypothesized a general sequence of urban growth, then suburban growth, to be followed by urban decline. These stages of urban development were claimed to be found on both sides of the systems divide between capitalism and socialism. The theoretical concept was broader, but empirical testing focused on the few reliable data that have been available for small spatial areas, across nation-states, and for a longer period of time: these were simple population data, but spatially re-assembled in a specific way, by urban cores, surrounded by urban rings, the two basic building blocks of functional urban regions (FURs).

In 1982, concept and findings of several years of research were published in a book named “Urban Europe, vol. 1: A Study of Growth and Decline”. For the period 1950-1975, and with data for 189 FURs, the sequence and direction of change from centralisation to decentralisation, or urbanisation to suburbanisation to disurbanisation, was proved to be true in most cases. Cities under socialism were more stubborn to resist, and tended to remain compact cities, but even here there were early deviants from that rule, such as cities in Poland (Van Den Berg et al. 1982:88).

### Functional urban regions, urban cores and urban rings

As said, the data used are simple population data on the number of inhabitants, but spatial units on urban cores and urban rings are not simple to delimit. Large European cities with at least 200,000 inhabitants in 1970 were chosen as urban cores for the surrounding city region. The functional urban regions around them were delimited by travel-to-work areas. The cut-off point was a commuting rate of at least 15 per cent – a much lower threshold than would be used today. From all 189 FURs, a large number (43) was found in Great

Britain, followed by Western Germany (28) and France (22). Austrian urban regions were also analysed in “Urban Europe”, 7 FURs in total, including those of Vienna, Linz and Graz, but data from Czechoslovakia were missing. To add and refine these data was one of the starting points of this paper.

For the Austrian city regions, an official delimitation has been performed with data for 1971, 1981 and 1991 (Fuchs 1997). It follows the principle of travel-to-work areas, but it deviates from the CURB model in two respects: (a) the core area is not equated with the administrative area of the central city, but it is redefined as the contiguous built up (CBU) area in and around a central city, (b) commuting fields are related to the CBU area, and the thresholds are set at higher levels, climbing up from 20% (for 1971) to 25% (in 1981) and 30% (in 1991). With the census data for 2001, no official recalculation has been performed. As a compromise, all analyses for Austrian FURs will be based upon the 1991 urban regions of Vienna, Graz and Linz, and these will be used as spatial units for all periods backwards and forward in time. In Vienna, the core area comprises the city of Vienna plus 38 municipalities morphologically attached to it, surrounded by a ring of 145 municipalities related by flows of more than 30% of the resident workforce commuting into the core area. In Graz, the core area is made up of the administrative city plus 17 municipalities, and the ring area extends to further 65 municipalities related to the core by commuter flows. In Linz, the core area covers the city itself plus 8 adjacent municipalities next to it, surrounded by a ring of 56 municipalities related by travel-to-work flows. In all these Austrian cities, city boundaries could not be changed in the democratic, afterwar era.

In the Czech Republic, urban regions have not been defined officially for a long time.<sup>1</sup> For this reason, comparable units had to be delimited with census data. Again, the goal is to define core areas surrounded by a commuters’ ring. Due to the wide

<sup>1</sup> In 1921, however, the Statistical Office of the Czechoslovak Republic had defined one of the first residential agglomerations worldwide („sídelní aglomerace“, cf. Kostecký and Čermák 2005:353).

administrative limits of our cities, the core area could be equated with the city area in Prague, Brno, as well as in Plzeň.<sup>2</sup> In each case, a ring of municipalities has been defined on the basis of a commuter flow, in 2001, of more than 30% into the central city. Around Prague, 208 such municipalities are captured by that definition, around Brno, there are 132 such municipalities, and around Plzeň 73 municipalities. The greater number of municipalities within the largest Czech city regions, with a smaller average number of inhabitants than in Austria, gives an impression of the amount of administrative fragmentation in Czech suburbia.

To investigate political divisions in Czech city regions, Kostecký and Čermák (2005) have undertaken a similar analysis for the four largest cities in the Czech Republic, i.e. Prague, Brno, Ostrava and Plzeň, delineating an “inner suburban zone” with a threshold of 40% daily commuters and an “outer suburban zone” with 30% daily commuters. They also stress how easily the communist administration could extend city boundaries whenever a planning need did arise.<sup>3</sup> In Prague, city limits have been pushed outwards in 1960, 1968, and 1974; in Brno, extensions have occurred in 1960, 1971, and 1980; in the 1970s, a number of municipalities were added to the city of Plzeň, and two further municipalities in 2003. In an earlier article, the same observation could be made about Bratislava, where the administrative area had been pushed out into the countryside in 1972, far beyond any medium term need (Matznetter 2004:68). The findings of Kostecký and Čermák come very close to our calculations, with a slightly smaller suburban zone total of 194 municipalities around Prague, an identical suburban zone of an 132 municipalities around Brno, and a slightly greater number of 81 municipalities around Pilsen (2005:363).

<sup>2</sup> Only in Brno, there is a place where the contiguous built-up area stretches across city limits: recent commercial development along the Vienna road has attached the municipality of Modřice to the urban fabric of Brno. To facilitate calculations, the core area of Brno has not been redefined, but equated with the administrative area.

<sup>3</sup> As Šykora and Ouředníček (2007:213) succinctly observe: „Czech cities are overbounded“.

For the purpose of comparative and retrospective analysis, both urban cores and urban rings have been defined with contemporary data and thresholds, for 1991 in the case of the official city regions in Austria, for 2001 in the case of Czech city regions. In the original CURB study, cores and rings have also been defined for one point in time, and not been adjusted from census to census. Due to the time period observed, from 1950-1975, this was not even considered a topic for debate. In our case, with a time span of 138 years, ranging from the boom years of industrialisation and urbanisation across decades of isolationist nation-states to the most recent period of European integration and globalisation, such an erratic definition has to be justified and defended.

We think the basic argument is that any historical analysis of spatial patterns cannot avoid some stable definition of its observation units, either at the beginning of the observation period, or at the end, or somewhere in the middle. Depending on commuting data, as in our case, only more recent delimitations were possible. We took the most recent available, hinging upon contemporary built-up and travel-to-work areas. The effects upon our analyses can be hypothesized as follows: the more historical data will be for an over-sized urban core as well as for an over-sized urban ring. For both units, growth rates would have been higher if we could have redefined the areas according to historical thresholds. Both core and ring values are diluted by data from areas that had not been developed at the time, and/or not within reach of transport facilities of the time. The important observation is that growth differentials between core and ring are adequately mirrored in these historical data. Our working assumption is that this is the case, even for the earliest periods included in the analysis. In the late 19th century, urban core growth clearly dominated, but even then there have been early outposts of suburbanization, mainly along railway lines. For the city region of Vienna, Hassinger (1910) has produced one of the earliest maps on such lines of equal accessibility. He also described patterns of temporary, summertime suburbanisation, as a forerunner of permanent suburbanisation. Fin-de-siècle buildings within today's commuter ring are a testimony to these early beginnings.

### Choice of cities and observation period

Once the spatial units have been defined, data analysis with the CURB model is fairly straightforward. For each functional urban region and its two constituent parts, an urban core and an urban ring, population data have to be assembled for the time period to be investigated. In the original CURB study, the observation period was 1950-1975, or the decades of reconstruction and political division of Europe. Follow-up studies have been performed by Cheshire (1995), with data for 1981 and 1991, or, in different ways, by Reckien and Karecha (2007), with data for 1991 and 2001. In all these studies, Czech and Slovak city regions are missing, and Austrian city regions are not always included.<sup>4</sup>

In an earlier study, the largest Slovak urban region, with the capital city of Bratislava has been analysed with the CURB method, for the time period 1950-2001, and compared with the urban development of the neighbouring urban region of Vienna (Matznetter 2004). Due to its observation period stretching across 1989, its findings contribute to the debate about the specificities of the “socialist city” and its post-socialist transformation. For Van Den Berg et al. (1982), there is a strong drive from urbanisation to suburbanisation and desurbanisation all across Europe, and across political systems, with Eastern Europe lagging behind due to an inherited lag in development. Communism and the planned economy are rarely mentioned as reasons for protracted urbanisation, even if these city regions come out clearly and are mentioned in their empirical findings (e.g. table 7.4., pp.84f.). There is a convergence perspective on urban development; trying to downplay differences and overstate casual evidence pointing to the fact that suburbanisation had finally arrived in some socialist cities. There were still some years to go, until this stage of development became true in the transformation period. In this respect, Bratislava was almost an ideal-typical case of a planned and compact socialist city, switching from full urbanisation to desurbanisation in the 1990s.

In this paper, the authors make an attempt to generalise (or to put into its place) the results of the Vienna-Bratislava case study, by looking into other cities of the former Czechoslovak Republic (1918-1939/1945-1992), and other cities in the Republic of Austria (1918-1938/1945ff.). Not one city was used for comparison in both Austria and the Czech Republic, but three urban regions were chosen in each of the two countries. In principle, these should have been the largest urban regions in each country, Vienna followed by Graz and Linz, and Prague followed by Brno, then Ostrava. For all these urban regions, urban cores and urban rings have been defined, by taking official definitions in Austria, and by analysing commuter flows in the Czech Republic. Due to its polynuclear structure, with overlapping travel-to-work areas, the (industrial) urban region of Ostrava could not be defined in a way that satisfies the intention of the CURB model, i.e. a clear division between a densely populated built-up area surrounded by a low-density commuter belt on all sides. This was the reason to drop Ostrava from the analysis and replace it with the fourth-largest Czech city region, that of Plzeň (Pilsen), much smaller in size.

Once the urban cores and urban rings had been defined, historical data for municipalities, within their current boundaries, could be easily assembled in both countries. Until now, CURB-oriented studies had been carried out with post-war data, but this was probably due to the times when historical data had to be typed into the spreadsheets available. Today, much of this work has been done, and historical data are available in digital form. This paper is making use of such data, originating in the Czechoslovak censuses of 1930 and 1921, the Nazi-German census of 1939 (for Austria after annexation), the Austrian censuses of 1934 and 1923, and five censuses from the Habsburg era, for 1910, 1900, 1890, 1880, and 1869. Such historical data-mining summarizes population development for six cities which had been at the apex of the Austro-Hungarian city hierarchy from early industrial times, and makes them comparable: under Habsburg rule, Vienna and Prague, the largest cities, had the highest growth, at about identical levels, to be followed by Brno, Graz and Linz, in that order; the only exception is Plzeň, growing faster than any other

<sup>4</sup> Only the EU-12 countries of 1991 are included in Cheshire's re-analysis (1995), same as in his earlier book (1989, together with Hay).

**Table 1** Four stages of development in a Functional Urban Region (FUR). Eight sub-stages or “classification types” are named according to whether there is “absolute” (A) or “relative” (R) “Centralisation” (C) or “Decentralisation” (D).

Stage of development	Type	Core	Ring	FUR
I Urbanisation	1 AC	++	–	+
I Urbanisation	2 RC	++	+	+++
II Suburbanisation	3 RD	+	++	+++
II Suburbanisation	4 AD	–	++	+
III Desurbanisation	5 AD	--	+	–
III Desurbanisation	6 RD	--	–	---
IV Reurbanisation	7 RC	–	--	---
IV Reurbanisation	8 AC	+	--	–

Source: Van Den Berg et al. 1982:36.

city in the whole data-set, especially before 1900. In the interwar period, Czech cities were prospering, with Prague ahead of the smaller cities, and early signs of suburbanisation. Austrian cities, by contrast, went through a period of permanent crisis, culminating in a series of population losses of Vienna, due to emigration, genocide, and war. After WWII, modest urbanisation started again, both under Communist rule as well as in Austria’s social market economy.

### Stages of urban development

At this point, a precise definition of the four stages of urban development according to the curb model is long overdue. To make city regions comparable, no absolute data are used, but only relative data are ranked between three observation units: urban cores, urban rings and functional urban regions (FURs). Based on the direction and strength of population change during observation periods, four stages of development and eight sub-stages have been defined in the CURB model (table 1).

The basic assumption of the CURB model is that there is a general tendency for population change to develop along this sequence, starting from a stage of urbanisation, continuing into a stage of suburbanisation, later into a stage of desurbanisation, and possibly a return to growth in the urban core, i.e. reurbanisation. For the time period observed, 1950-1975, there was massive empirical

evidence for such developments to take place, at least amongst the 10 capitalist countries observed, with the socialist countries trailing behind (Van Den Berg et al. 1982:91). For the 1980s, Cheshire (1995) confirmed an ongoing trend towards the more advanced stages of urban development in Western Europe. So far, post-socialist cities have not been systematically re-analysed and updated within the CURB framework, with the exception of case studies of Prague and Brno (Sýkora et al. 2000, 2007), or Bratislava (in comparison with Vienna: Matznetter 2004) or Ljubljana (Pichler and Milanovic 2005).

For the 1960s, Van Den Berg et al. (1982:90) have added a map on the regional distribution of Types 1 AC to 6 RD across the 14 countries included in their study, which clearly shows that all city regions in the socialist countries of the time were in the phase of urbanisation (absolute centralisation or relative centralisation). All city regions of Poland, all city regions of Hungary, all city regions of Yugoslavia, all city regions of Bulgaria were in this stage of development. In the market economy countries, suburbanisation dominated as early as in the 1960s, at least in Western Europe, when urbanising city regions could still be found in the capitalist semi-periphery of Southern and Northern Europe. Other socialist countries of the time, such as the former GDR, Czechoslovakia, Romania, Albania and the Soviet Union, have not

**Table 2** Stages of development in the Functional Urban Region (FUR) of Prague, own calculations for population change in percent (%) per 10 years, for typical periods.

Stage of development	Type	Core	Ring	FUR	Typical period
I Urbanisation	1 AC	+3.6	-1.0	+3.0	1970-1980
I Urbanisation	2 RC	+6.5	+4.5	+6.2	1950-1961
I Urbanisation	2 RC	+24.1	+5.6	+19.3	1869-1910
I Urbanisation	2 RC	+33.6	+23.4	+31.8	1921-1930
II Suburbanisation	3 RD	+1.1	+31.2	+5.2	2001-2007
II Suburbanisation	4 AD	-	+	+	
III Desurbanisation	5 AD	-3.7	+8.6	-2.2	1991-2001
III Desurbanisation	6 RD	--	-	---	
IV Reurbanisation	7 RC	-	--	---	
IV Reurbanisation	8 AC	+	--	-	

Source: Van Den Berg et al. 1982:36.

been included in the original CURB study, but there is abundant, but scattered evidence that urbanisation has been an integrative feature of the “socialist city” in Europe. This particular aspect was to remain until the very end of the planned economy, in or after 1989. This paper wants to add evidence on that secular change from centralising to decentralising, and transitionally declining urban regions in today’s Czech Republic and Austria, as two countries that had been separated by the divide between socialism and capitalism from 1948 to 1989 – almost a laboratory situation.

### Urban development since 1869: Prague and Vienna compared

The contrast in urban development under a socialist and a market regime comes out clearly when the largest and capital cities are compared, Prague and Vienna. The system changes of 1989 and after had an immediate effect on city development: in the 1990s, the city of Prague lost 3,7% of its population, a loss that could not be compensated by the immediate onset of suburban growth (+8,6% in the suburban ring), the balance of which made the whole urban region go into decline – i.e. “desurbanisation” within the CURB taxonomy. In Vienna, a similar decade of decline, although for different reasons, had occurred in the 1970s, but in general “suburbanisation” had been

dominant since the 1960s – as classified and depicted by Van Den Berg et al. (1982).

The basis for this classification is the relative population change within the three observation units (cores, rings, FURs) and per observation period, usually the decade between censuses. For Czech and Austrian cities, this was true for the 1880s, 1890s and 1900s, as well as for the 1990s, when census years coincide. For all other censuses, years do not coincide, and the inter-census periods are shorter or longer than a decade. To make data comparable, percentage change has been recalculated per 10 years period. In tables 2 and 3, representative periods have been selected for both Vienna and Prague, and inserted into the classification matrix of table 1.

At a glance, a very long period of shared urban history comes to the fore: from the first modern census in the Habsburg Empire, in 1869, to the last common census in 1910, urban development in Vienna and Prague seems to have been very similar, both regarding growth rates as well as regarding stability. We entered the average population growth per decade for the whole period of 41 years because variation was much smaller than in any period after, not exceeding 3% in the 19th century, and slowing down in both cities in the first decade of the 20th century. Despite of

**Table 3** Stages of development in the Functional Urban Region (FUR) of Vienna, own calculations for population change in percent (%) per 10 years, for typical periods.

Stage of development	Type	Core	Ring	FUR	Typical period
I Urbanisation	1 AC	+0.7	-3.6	+0.2	1951-1961
I Urbanisation	2 RC	+11.8	+9.5	+11.5	2001-2007
I Urbanisation	2 RC	+21.9	+7.5	+19.7	1869-1910
II Suburbanisation	3 RD	+1.6	+10.0	+2.8	1981-2001
II Suburbanisation	3 RD	+0.9	+3.2	+1.2	1961-1971
II Suburbanisation	4 AD	-	+	+	
III Desurbanisation	5 AD	-3.8	+1.5	-3.1	1971-1981
III Desurbanisation	5 AD	-14.6	+2.2	-12.5	1934-1939
III Desurbanisation	6 RD	--	-	---	
IV Reurbanisation	7 RC	-	--	---	
IV Reurbanisation	8 AC	+	--	-	

Source: Van Den Berg et al. 1982:36.

their difference in size, the first and the second city of Cisleithania<sup>5</sup> have been growing in similar ways and at similar speed, with smaller cities lagging behind, such as Brno, Graz, and Linz – with Plzeň being the exceptional boom town of the early stage of urbanisation.

In the 1920s, the fate of the two cities could not have been more different: undoubtedly, Prague, now the capital of Czechoslovakia, was booming, reaching the highest population growth in its history, and an early wave of suburban growth, to be repeated only in the most recent years of the 21st century. Vienna, now the oversized capital of the Republic of Austria, had lost some 5% of its population after the war, many of them Czechs, and was not faring much better in the 1920s and 1930s. The worst exodus was still to come, with 7% of the Vienna population exiled and deported within a year after annexation, in March 1938, when the number of those remaining was meticulously reported by the Nazi-German census of May 1939. During the war, further persecutions, killings and casualties took another 8% of the population. Of course, such exceptional times cannot be handled with an urban development

model, but the data increase the visibility of local specificities that deviate from general patterns. In Prague, the demographic scars of occupation and war are less visible, but this is due to the lack of any census reports between 1930 and 1950.

In the 1950s, both cities seem to be back on the same track, centralised, but modest growth, i.e. urbanisation in the CURB language. There is a difference, however. During the 41 years of Communist rule, the city of Prague has been growing much faster than capitalist Vienna, where much of the growth was diverted to the suburban ring. Around Prague, by contrast, today's suburban ring continued to be depleted of its population since the 1960s, until the velvet revolution turned things upside down, and suburbanisation took over.

The most recent period, including the years 2001 to 2007, is very different again from the decade before, the 1990s, when Prague was transformed into a post-socialist city. The onset of suburbanisation was immediate, but it was accompanied by a sudden drop in the urban core population, pushing the whole urban region into decline. This stage of "desurbanisation" is now over, and both the city of Prague and its urban region are growing again. Surprisingly enough, Vienna has also changed, leaving behind 40 years of predominantly suburban

<sup>5</sup> Explain division of powers due to 1867 Austro-Hungarian „Ausgleich“.

**Table 4** Austrian FURs of Linz, Graz, and Vienna: relative population change between census rounds 1869-2001, and between population register data 2001-2007\*, per cent (%) standardised by 10-year period.

	Linz			Graz			Vienna		
	Core	Ring	FUR	Core	Ring	FUR	Core	Ring	FUR
2007*	5.5	6.3	5.8	15.6	6.1	13.1	11.8	9.5	11.5
2001	-5.6	12.2	0.5	-1.1	8.7	1.4	1.7	10.5	3.0
1991	3.8	12.1	6.5	0.2	9.1	2.3	1.6	9.5	2.6
1981	2.2	10.5	4.7	-0.5	5.0	0.7	-3.8	1.5	-3.1
1971	10.0	16.1	11.8	7.2	7.8	7.3	0.9	3.2	1.2
1961	11.6	4.5	9.4	6.4	0.8	5.1	0.7	-3.6	0.2
1951	38.2	5.6	25.8	8.0	4.5	7.2	-7.1	-5.1	-6.8
1939	22.1	2.3	14.1	-1.9	-3.4	-2.3	-14.6	2.2	-12.5
1934	7.1	2.6	5.2	5.6	2.6	4.8	1.3	0.4	1.2
1923	6.8	-2.1	2.9	2.6	0.6	2.1	-5.6	0.7	-4.8
1910	16.0	2.4	9.6	14.5	3.3	11.5	17.8	9.3	16.8
1900	25.1	0.9	12.3	22.4	-1.0	14.9	23.6	8.7	21.6
1890	15.2	0.2	6.7	15.7	2.3	11.1	23.0	5.7	20.3
1880	11.9	1.9	6.0	15.9	3.2	11.1	25.5	7.0	22.2
1869									

Source: own compilations and calculations.

growth, and embarking upon a period of renewed city growth, at levels that have not been recorded since 100 years. In both Prague and Vienna, these data are derived from the new population registers that are going to replace the traditional census rounds. This implies that absolute figures are not strictly comparable with earlier census data, but comparison between relative growth in both cores and rings – the crucial feature of the CURB model – should be correct.

This is only a first summary of what a long-term analysis of population development in two functional urban regions has to offer. More detailed analysis, on more than two cities, is to follow below. One general remark can be made at this point, however: cities and their city regions are travelling across the stages of the CURB classification, but they are not travelling in the sequence and numbering set out in the original study. Urbanisation is not necessarily followed by suburbanisation, but may be interrupted by desurbanisation and decline during exceptional periods, and there may be (and there is) direct return from suburbanisation to urbanisation, without going through the various stages of decline.

#### STAGES OF URBANISATION IN THE CZECH AND AUSTRIAN LANDS

In Austria, the original CURB study included seven functional urban regions, those of Vienna, Linz, Graz, Salzburg, Innsbruck, Klagenfurt and Bregenz – with the latter two falling below the targeted threshold of 200,000 inhabitants. In the 1950s, five of them were in the stage of suburbanisation, and two in urbanisation; in the 1960s, one more had moved into suburbanisation, leaving one FUR in urbanisation; by the early 1970s, this distribution remained, except for one FUR (Vienna) that had moved into desurbanisation (Van Den Berg et al. 1982:86ff.). For Austria and the time period observed, the sequence suggested by the stage model was followed through in every detail, including the following: “Most capital cities and larger industrial cities are in a later stage of development than lower-order centres within the same national system. For example, ..., Vienna, ... all ‘lead’ in their respective nation states” (ibid:85). For the three largest urban regions in Austria, Vienna (FUR population of 2,314,000 in 2007), Graz (FUR population 424,000 in 2007), and Linz (FUR population 454,000 in 2007), we extended the



**Table 5** Czech FURs of Prague, Brno, and Plzeň: relative population change between census rounds 1869-2001, and between population register data 2001-2007\*, per cent (%) standardised by 10-year period.

	Prague			Brno			Plzeň		
	Core	Ring	FUR	Core	Ring	FUR	Core	Ring	FUR
2007*	<u>1.1</u>	<u>31.1</u>	<u>5.2</u>	-5.7	10.9	-1.2	<u>-3.9</u>	<u>11.3</u>	<u>0.1</u>
2001	-3.7	8.6	-2.2	-3.1	2.4	-1.7	-4.4	2.6	-2.7
1991	2.5	-4.3	1.6	4.1	-4.7	1.6	1.2	-2.8	0.1
1980	3.6	-1.0	3.0	7.9	1.6	6.0	11.8	-1.2	8.1
1970	<u>0.8</u>	<u>-5.0</u>	<u>-0.1</u>	6.9	-1.6	4.2	10.6	-5.5	5.6
1961	6.5	4.5	6.2	7.6	6.3	7.2	9.0	6.7	8.3
1950	5.6	-1.3	4.5	2.7	-1.3	1.3	<u>-2.5</u>	<u>-9.1</u>	<u>-4.8</u>
1930	33.6	23.4	31.8	21.7	10.8	17.8	<u>10.8</u>	<u>13.9</u>	<u>11.9</u>
1921	8.5	0.8	7.0	8.8	3.3	6.8	8.4	3.5	6.7
1910	19.3	6.5	16.7	22.7	9.2	17.4	22.6	10.8	18.1
1900	27.9	4.4	22.3	21.2	5.8	14.7	42.4	6.5	26.2
1890	25.1	5.2	19.7	21.4	6.6	14.6	31.4	10.2	20.9
1880	26.6	6.9	20.5	13.1	5.7	9.6	50.3	10.3	27.2
1869									

Source: own compilations and calculations.

database from 1975 to 2007, and from 1951 back into the 19th century, to find further evidence for this observation and hypothesis.

Czech and Slovak cities were missing from the original CURB study, as well as from related comparative urban studies of the time, such as Hall and Hay (1980), as well as from follow-up studies (Cheshire and Hay 1989, Drewett et al. 1991, Cheshire 1995). It is one of the goals of this paper to include at least some of the largest cities of today's Czech Republic into a CURB-type analysis. Another goal is to extend the observation period forward to the most recent data available and backwards to the most distant, but reliable data available, i.e. the census of 1869. With such data, growth differentials between city regions of different size can be discovered and compared with the original findings. Based on the criterion of 200,000 inhabitants for the FUR, the following cities would have qualified: Prague, Brno, Ostrava, and Plzeň. Due to its polynuclear structure, we did not include Ostrava (FUR population of 399,000 in 2007), but we delineated the functional urban regions of Prague (1,409,000 in 2007), Brno (518,000 in 2007), and Plzeň (or Pilsen, 227,000 in 2007).

For each of the 6 city regions, 3 in Austria (AT), and 3 in the Czech Republic (CZ), population data were collected for 3 territorial units: the urban core area (AT: "Kernraum" as defined 1991, administrative city area in CZ), the urban ring (AT: "Aussenzone", CZ: own calculations based upon 2001 census) – and for each of the 13-14 census rounds between 1869 and 2001, plus population register data for the years 2001 to 2007. Table 4 summarizes the results for the Austrian cities; table 5 does the same for the Czech cities.

To improve readability, the stage of urban development according to the CURB typology is indicated in type and colour of writing for each FUR and each census period: normal (and black) for urbanisation, underlined (and black) for suburbanisation, normal (and white) for desurbanisation, and underlined (and white) for re-urbanisation. The broad picture across the urban history of Central Europe is that there has been a century of urbanisation, if not some more, lasting until the 1950s in the Austrian city regions, and continuing until 1989 in the Czech city regions. Urbanisation has been particularly stable and ongoing in the second half of the 19th century, when industrialisation peaked in all Western cities of the Habsburg

Empire. Growth rates of larger cities and their urban regions typically exceed those of smaller cities, but dynamic centres of industry are able to bypass that pattern – with Plzeň (and later Ostrava) being an example from the Czech cities, and the war-industry induced growth of Linz being an Austrian example. Urbanisation is only interrupted under very specific circumstances, when nation-states are re-organised in the 1920s, or as a consequence of Nazi atrocities, war-time destruction and post-war population displacements. Urbanisation ends when incomes allow greater mobility and suburban house building is conceded. This happened in all Austrian cities from the 1960s and in all Czech cities from the 1990s. The planned housing economy of Communist regimes had actually kept cities compact and oriented towards public transport.<sup>6</sup>

Not only in Austria, but in most city regions of capitalist Western Europe suburbanisation dominated urban development since the 1960s. As a minority programme, it had started much earlier, and suburban villas haven been built along railway lines before WWI. In wealthy Czechoslovakia, suburbanisation gained momentum in the 1920s, and garden cities were built around Prague<sup>7</sup>; around Plzeň, population growth was so strong that it qualifies as the very first stage of suburbanisation according to the CURB model in our study, 40 years before the phenomenon returns to capitalist Central Europe. In Southern Europe and Northern Europe suburbanisation arrived at a later stage (cf. Cheshire 1995), partially hidden behind the widespread occurrence of second homes.

As soon as the market economy was introduced in the Czechoslovak, then the Czech and Slovak Republics, a number of demographic processes also changed. The beginnings of suburbanisation were accompanied by a dramatic fall in birth rates, below European average, and a strong surge in emigration, both temporary and permanent. For

<sup>6</sup> Hampl and Kühnl (1993) have called that process „kontrametropolizace“ (according to Ouředníček and Posová 2006:97).

<sup>7</sup> Ouředníček and Posová (2006) and Sýkora and Ouředníček (2007) are quoting Ullrich et al. (1938) and Král (1946) as contemporary reports on Prague's inter-war suburbanisation.

about a decade, the 1990s, all regions of the Czech Republic experienced population decline, including the urban regions, and despite the onset of suburban growth. Within the CURB typology, such a combination of suburbanisation and city region decline is called “desurbanisation”. In the 2000s, the decade of transformation seems to bed over: one by one, Czech cities started to grow again, Prague from 2002, Plzeň from 2005 (?), and Brno from 2007. In table 5, Brno is still classified as desurbanising, due to its late turnaround, but Prague and Plzeň are to be classified as suburbanising.

On the Austrian side, the 2000s have also brought remarkable changes in urban development. For 30 to 40 years, the core population of Vienna, Graz and Linz has been stagnating, sometimes growing, sometimes declining. Over the last couple of years, growth rates have climbed to historical heights in Vienna, but also in Graz, comparable to fin-de-siècle values, and exceeding suburban growth. In the CURB typology, this implies a return to traditional urbanisation. In Linz, core development is more modest, and suburbanisation still dominates.

## THE GEOGRAPHY OF LARGE CITY REGIONS IN AUSTRIA AND THE CZECH REPUBLIC

### Vienna and Prague

Over the last decades under Habsburg's rule, the largest and the third largest city of the empire grew at similar speed, more than doubling in size from 1869 to 1910. Due to urbanisation, core growth was much stronger than suburban growth, six times higher in Greater Prague<sup>8</sup>, and almost four times higher in Vienna. Within the area of today's functional urban region, the population increased from 1.20 million to 2.55 million in and around Vienna, and from 0.39 million to 0.82 million in and around Prague. Concerning their FURs, the proportion in size between Vienna and Prague remained the same, concerning their morphological cores, Prague was even growing faster.

<sup>8</sup> Not Imperial Prague which was not allowed to expand its city limits, in contrast to Vienna, the “Reichshaupt- und Residenzstadt” (formal wording used at the time).

Figure 1 gives an overview of population dynamics within the urban region of Vienna between 1869 and 1910. Growth is concentrated in the “Vororte” (the outer districts incorporated in 1890), and within areas that have been incorporated later, plus several ribbons of municipalities that have remained independent to the present day. All these fingers of faster growth are related to railway lines bringing towns like Baden and Klosterneuburg within reach of the capital. In the inner-most districts I, VI and VII, the early formation of a CBD contributed to population losses as early as the late 19th century.

In smaller Prague, growth was even more concentrated within today’s administrative area (figure 2). Despite urban core growth, the innermost districts of Prague started to lose population after 1870 – similar to Vienna. If some suburban municipalities have been growing faster, development is also related to railway lines.

After WWI and the foundation of nation-states, the Czechoslovak Republic and the Republic of Austria, the fates of the two cities diverged, for almost 70 years. Between the last common census of 1910 and the first censuses after WWII, Vienna FUR lost almost 20% of its population, whilst Prague FUR has been growing by more than 50%, boosted by the most dynamic growth in its history, in the 1920s and early 30s. In 1950/1951, city sizes had come closer, with 2.09 million in the Vienna FUR versus 1.24 million in Prague FUR. Since the Communist take-over in Czechoslovakia, in 1948, however, contacts and even information flows between the two cities were drying up.

In and around Prague, a first wave of suburbanisation accommodated part of the growing population. In 1922, the city limits could finally be expanded, to include cities like Žižkov, Královské Vinohrady, Smíchov, Karlín and others, 37 municipalities in total that had functionally been parts of the urban region of Prague since long. New, often modernist suburbs and garden cities were set up within and beyond the boundaries of Greater Prague (Strahov, Vinohrady, Strašnice, Kobylisy, Košíře, Břevnov) (cf. Láník 1993).

In inter-war, pre-war, war-time and post-war Vienna, population losses were frequent and widespread. Nevertheless, emigration and expulsion had its geography. In figure 3, population changes are accumulated for the time between the censuses of 1910 and 1951, for the functional region of Vienna. The heaviest losses are in some of the inner districts of Vienna, notably the 2nd district Leopoldstadt which had been depleted of its Jewish population, and the 1st district, where CBD formation continued, despite of repeated economic crises. But even in these decades of depletion and decay, some areas of modest increase come out. These include today’s 22nd district where garden cities and colonies had been built by the Vienna settlers’ movement, and some municipalities outside where modest cottages offered some relief from the pressures of the time.

The 1950s have been a period of modest, but centralised growth in both city regions, with more dynamics in Communist Prague than in capitalist, but peripheral Vienna. During this period, Prague’s urban ring grew for the last time, before falling into neglect and depopulation for the remainder of the socialist era. In Vienna’s suburban ring, depletion was a reality in these years, and if there was growth, it took place in the outskirts, but within the city limits of Vienna.

Between the censuses of 1950 and 1961, the number of inhabitants increased both in Prague core and in Prague ring. The spatial differences are shown in fig. 6; in the central parts the number of inhabitants increased in the urban district Praha 1 and on the contrary decreased in the urban district Praha 2.

Between the censuses of 1961 and 1970, the number of inhabitants increased in Prague core but decreased in Prague ring. The spatial differences are shown in fig. 8; in the central parts the number of inhabitants decreased and on the contrary the population increased in the urban districts with construction of the housing estates (especially prefabricated houses). In the smaller municipalities the number of inhabitants was usually decreasing because of state policy (almost no investments to infrastructure, schools etc.).

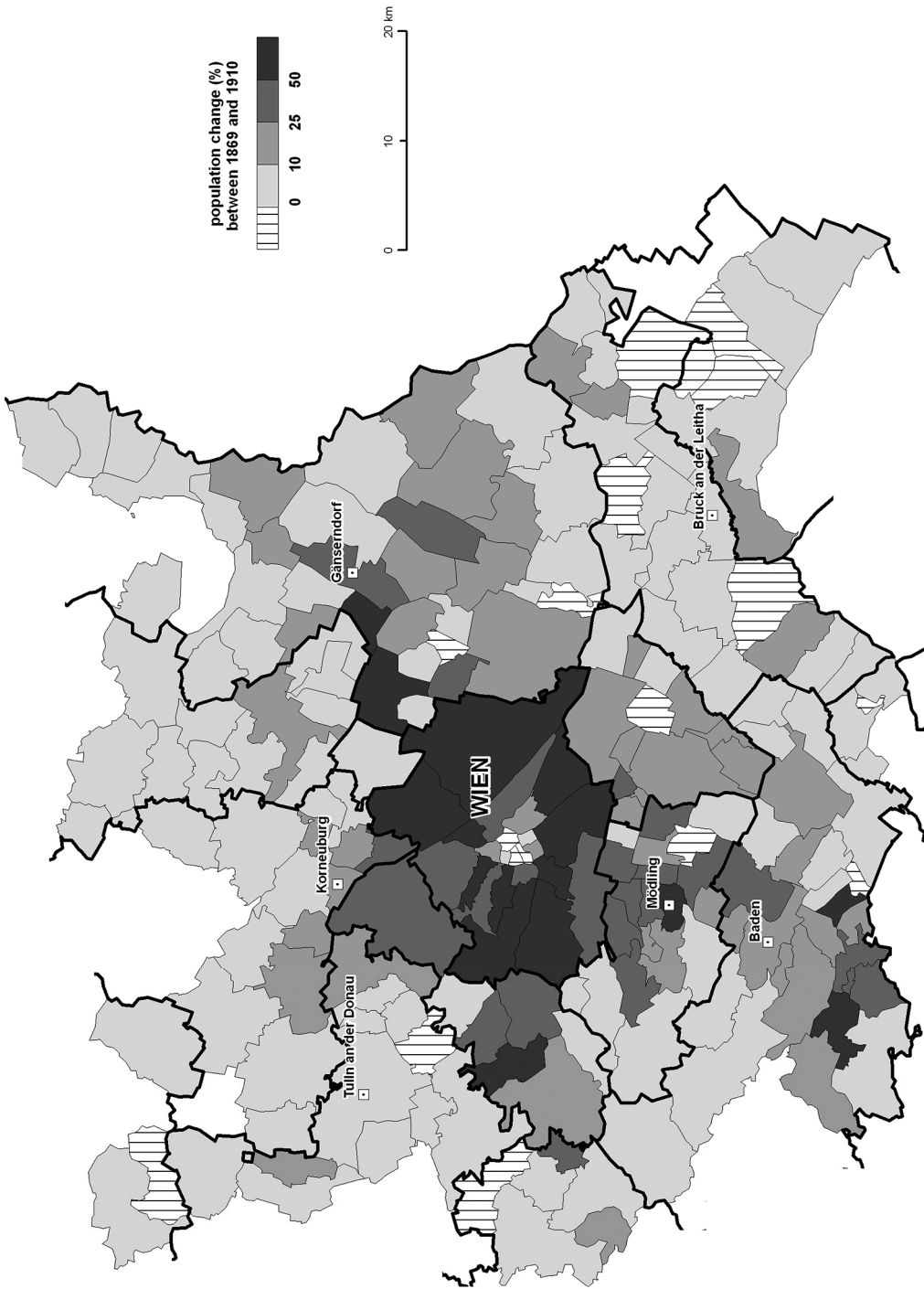


Figure 1 FUR Vienna, population development 1869-1910, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.

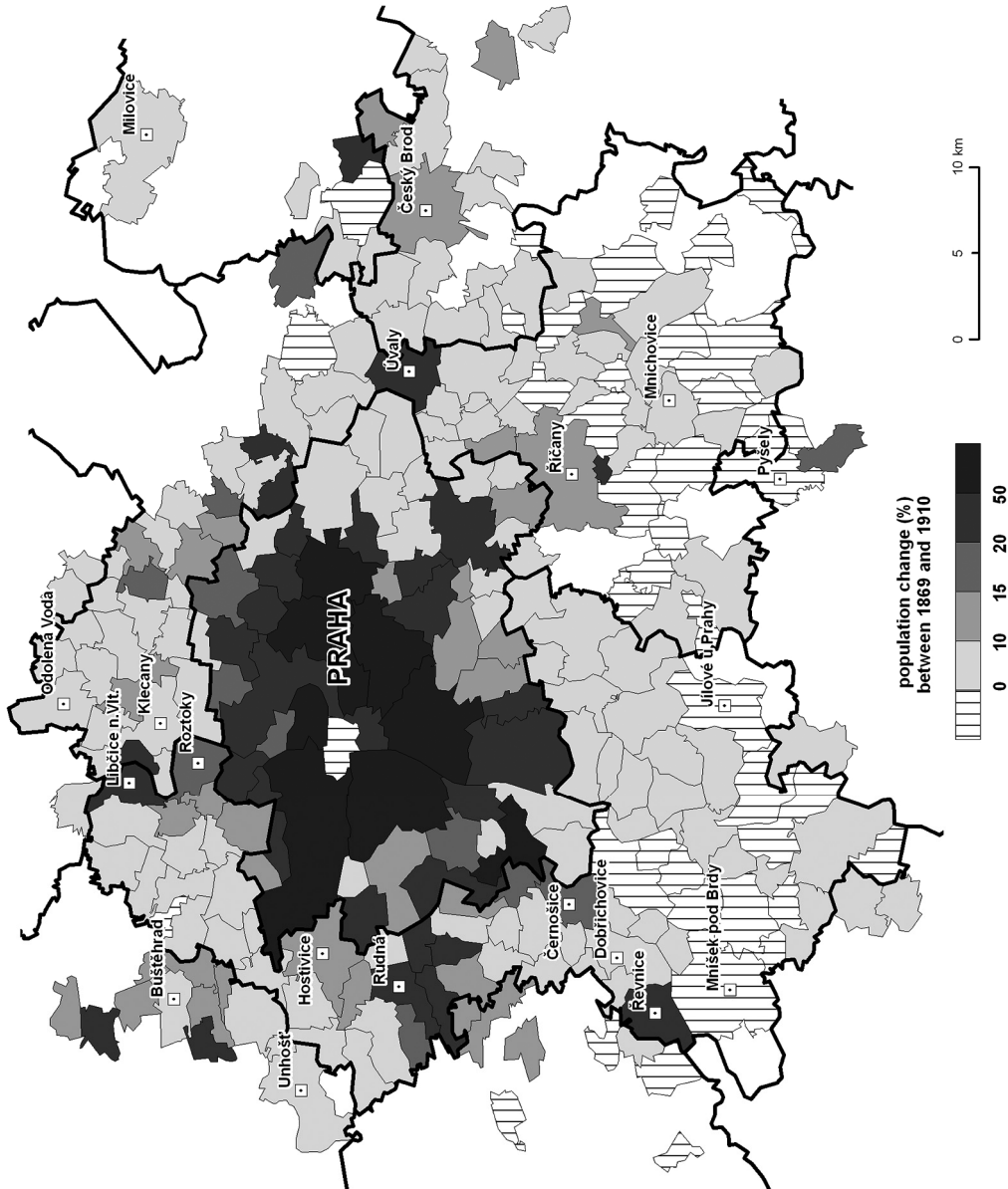


Figure 2 FUR Prague, population development 1869-1910, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

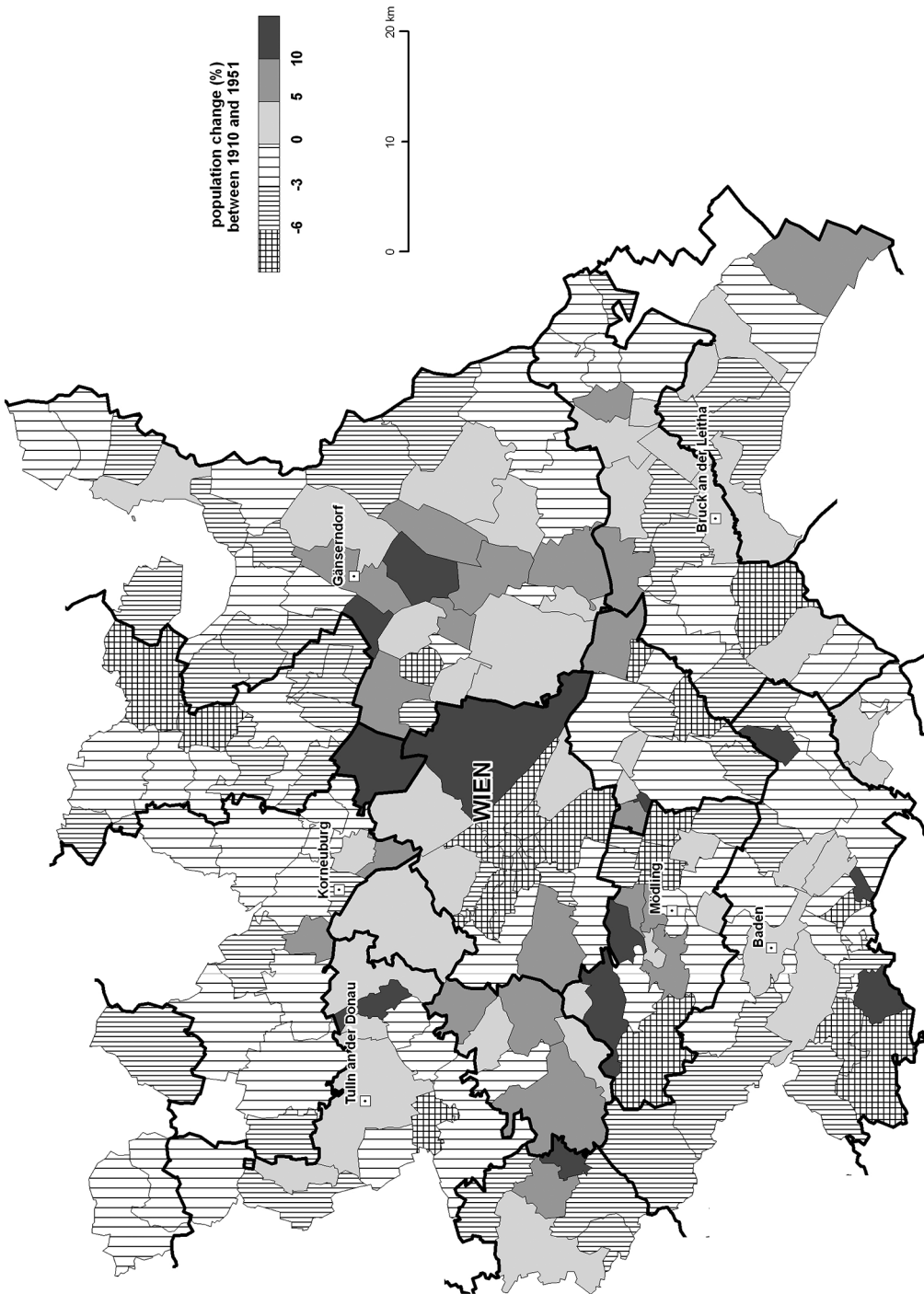


Figure 3 FUR Vienna, population development 1910-1951, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.

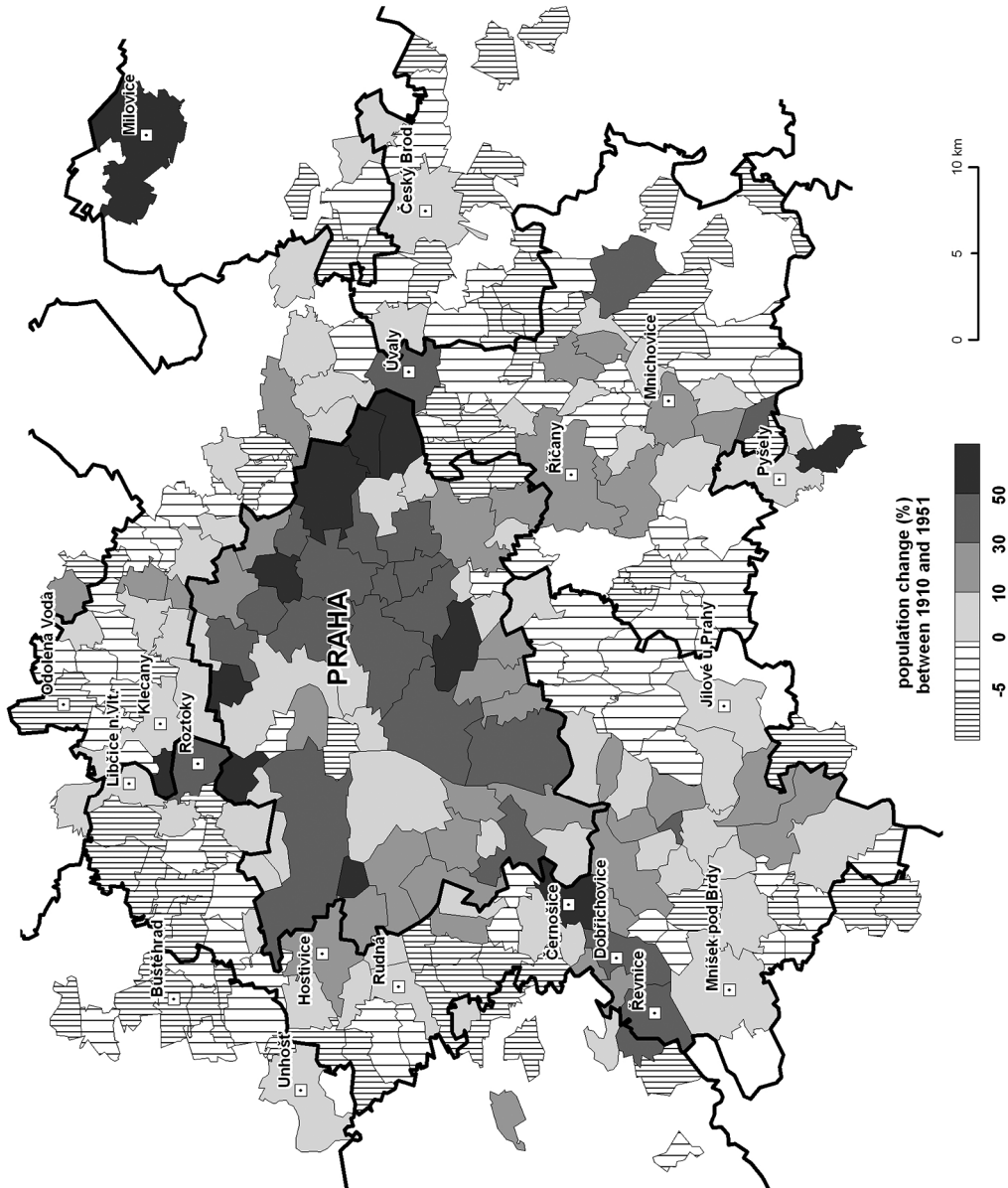


Figure 4 FUR Prague, population development 1910-1950, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

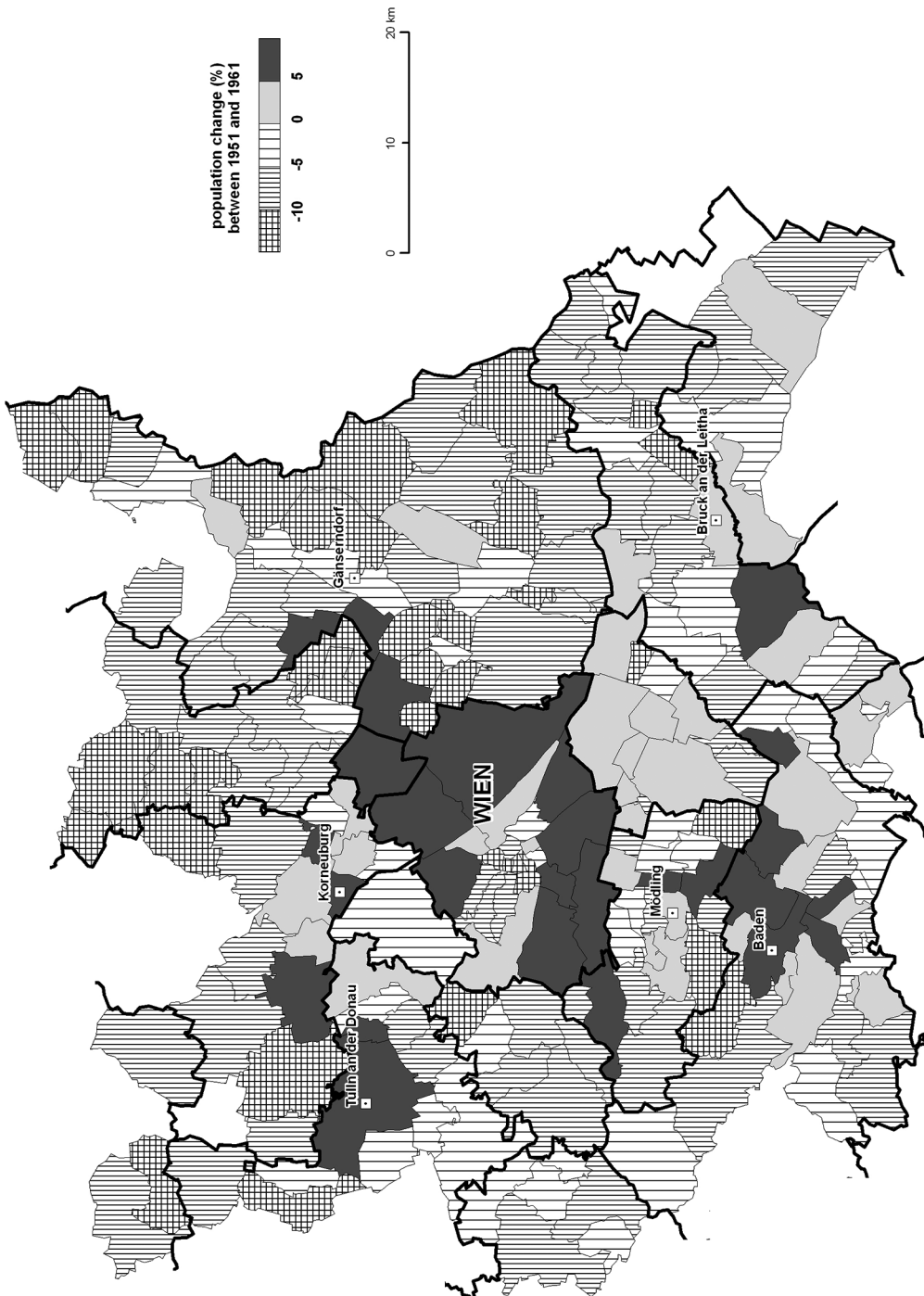
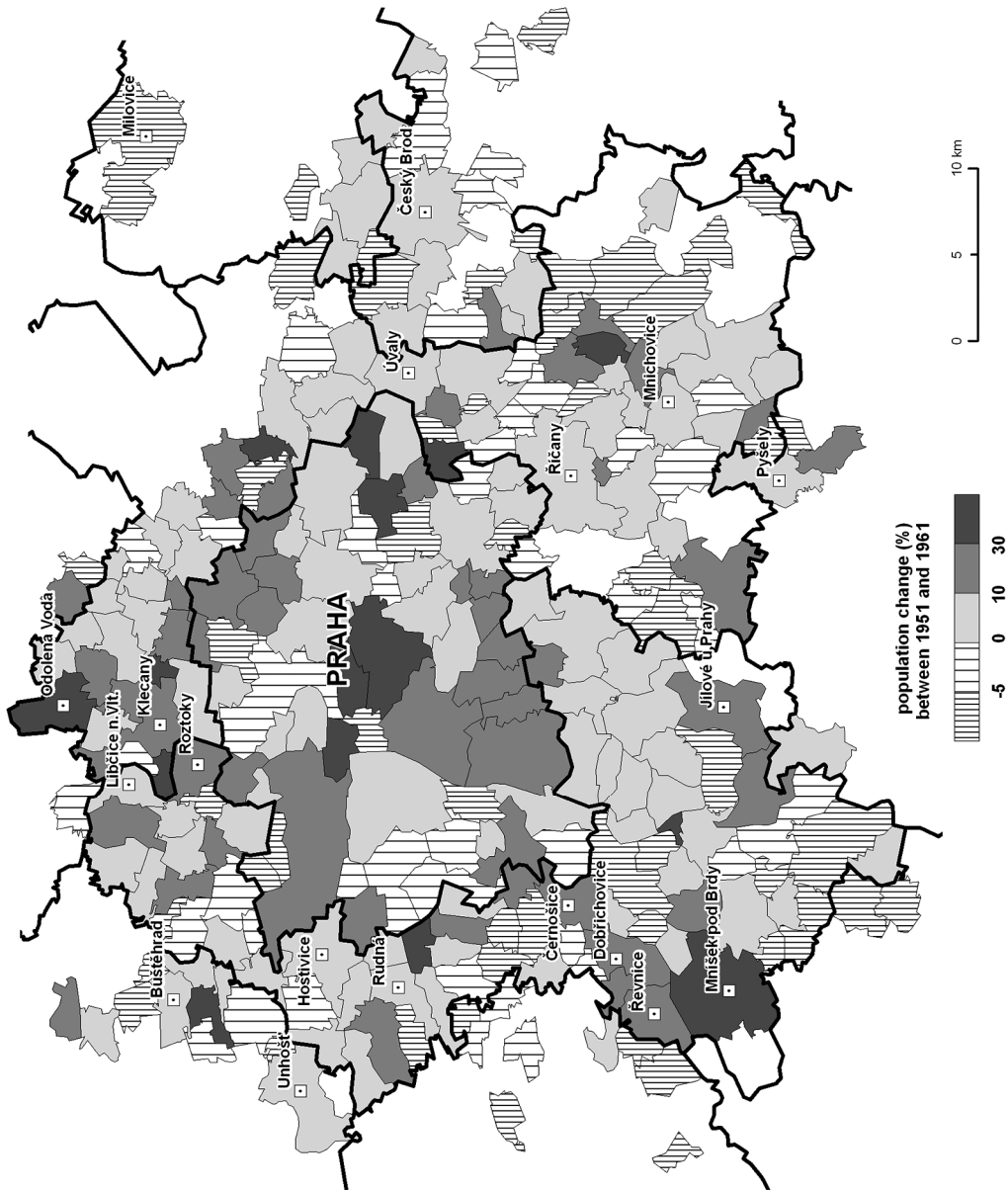


Figure 5 FUR Vienna, population development 1951-1961, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.





**Figure 6** FUR Prague, population development 1950-1961, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

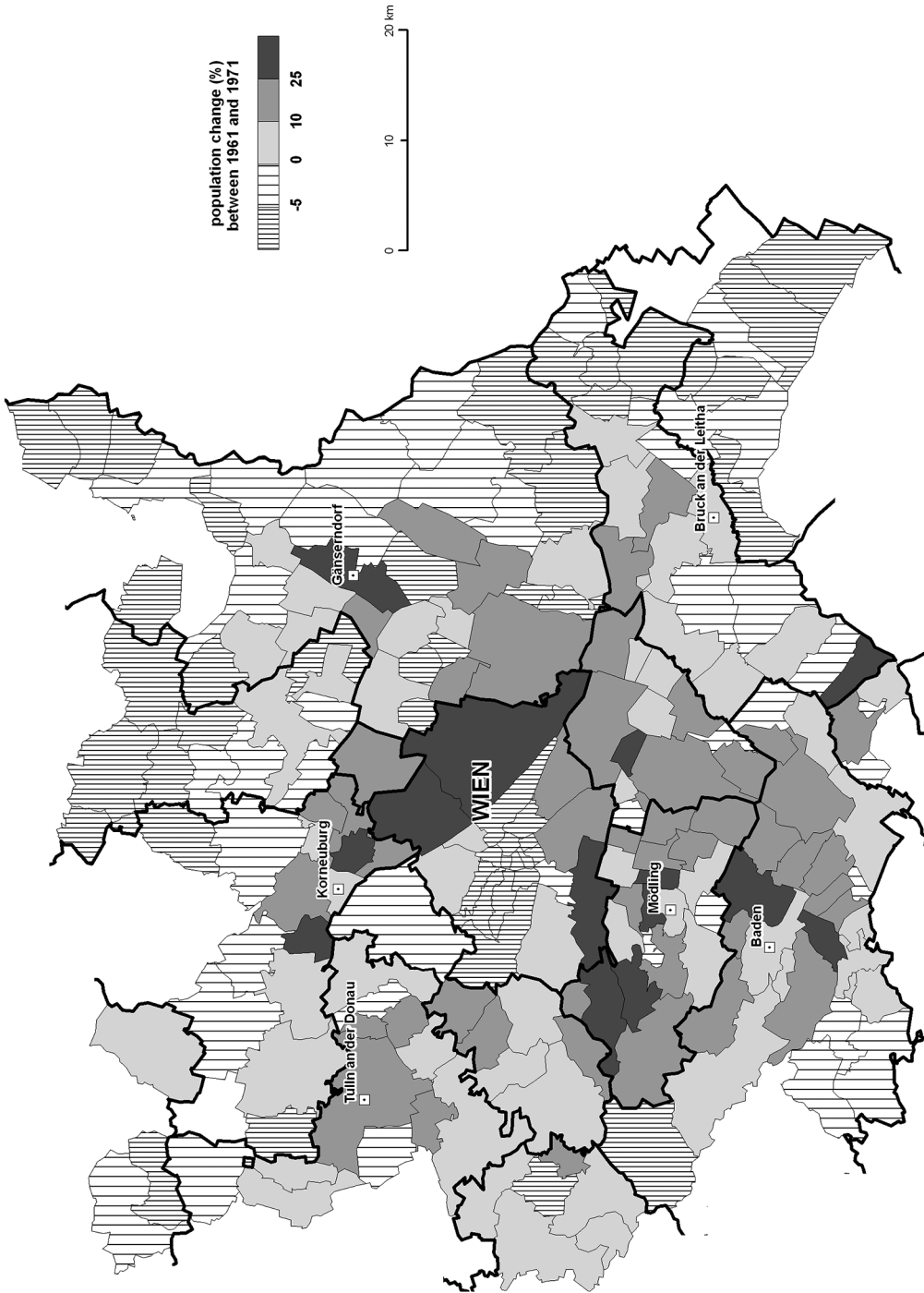
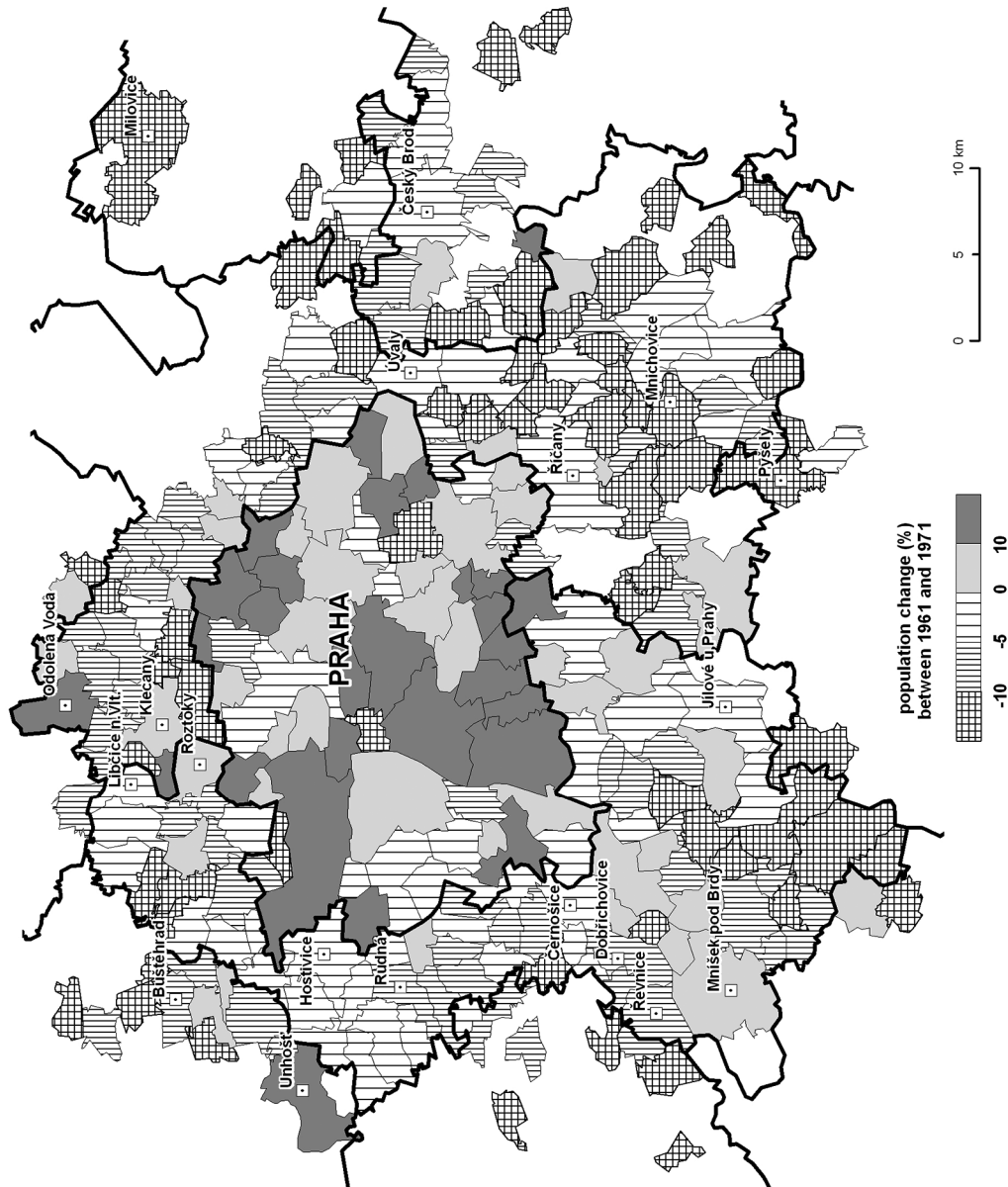


Figure 7 FUR Vienna, population development 1961-1971, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.



**Figure 8** FUR Prague, population development 1961-1970, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

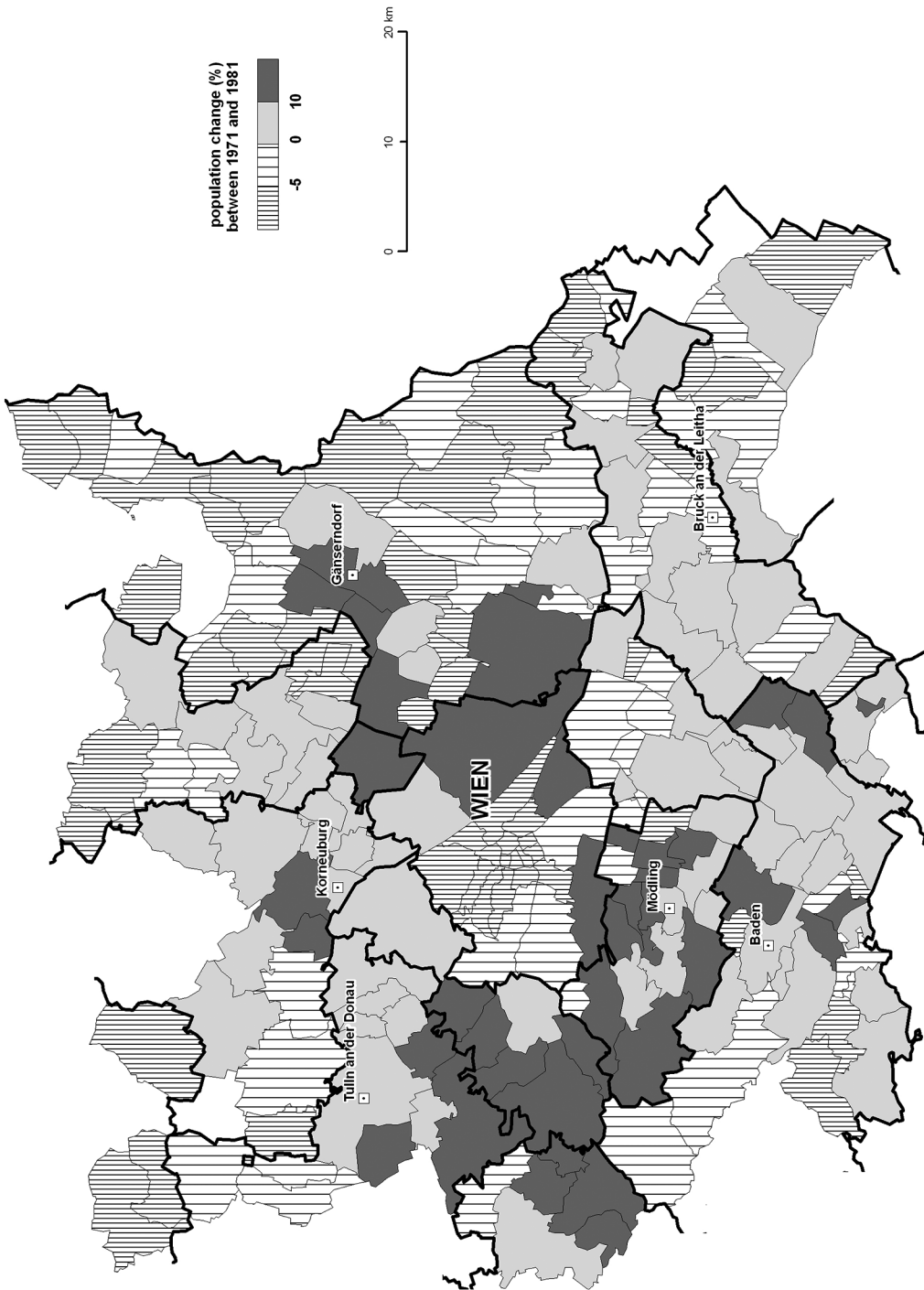
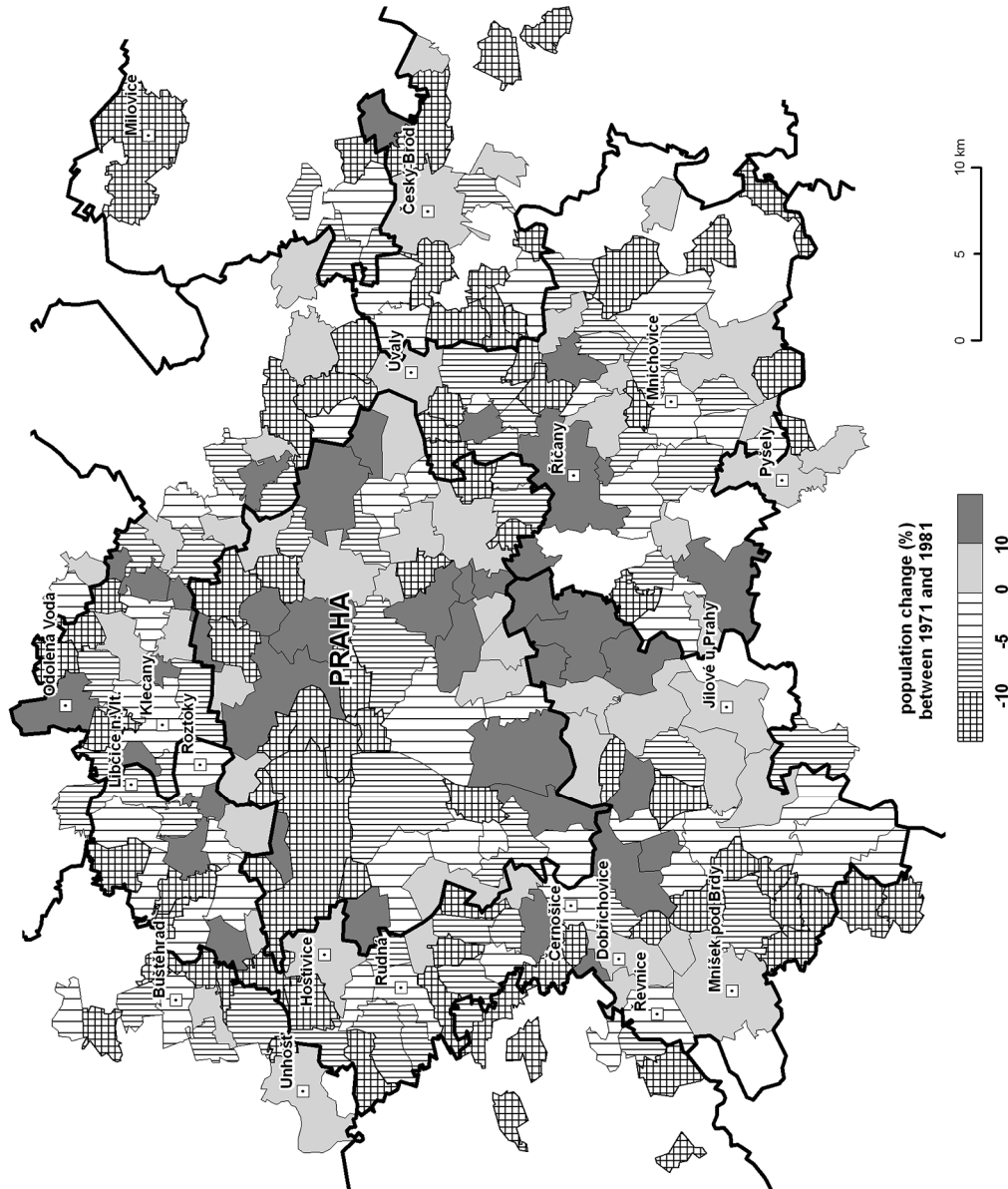
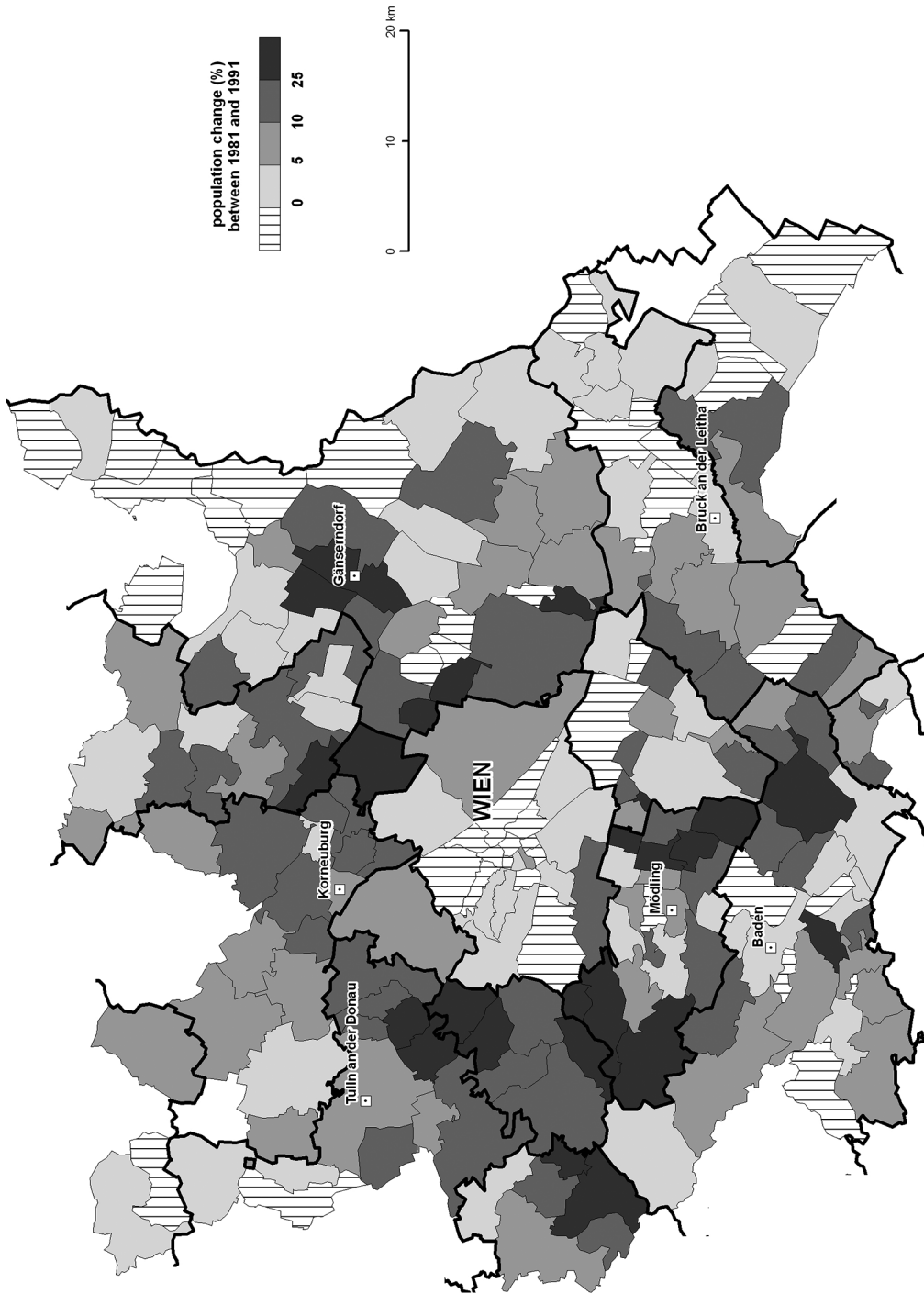


Figure 9 FUR Vienna, population development 1971-1981, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.



**Figure 10** FUR Prague, population development 1970–1980, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.



**Figure 11** FUR Vienna, population development 1981-1991, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.

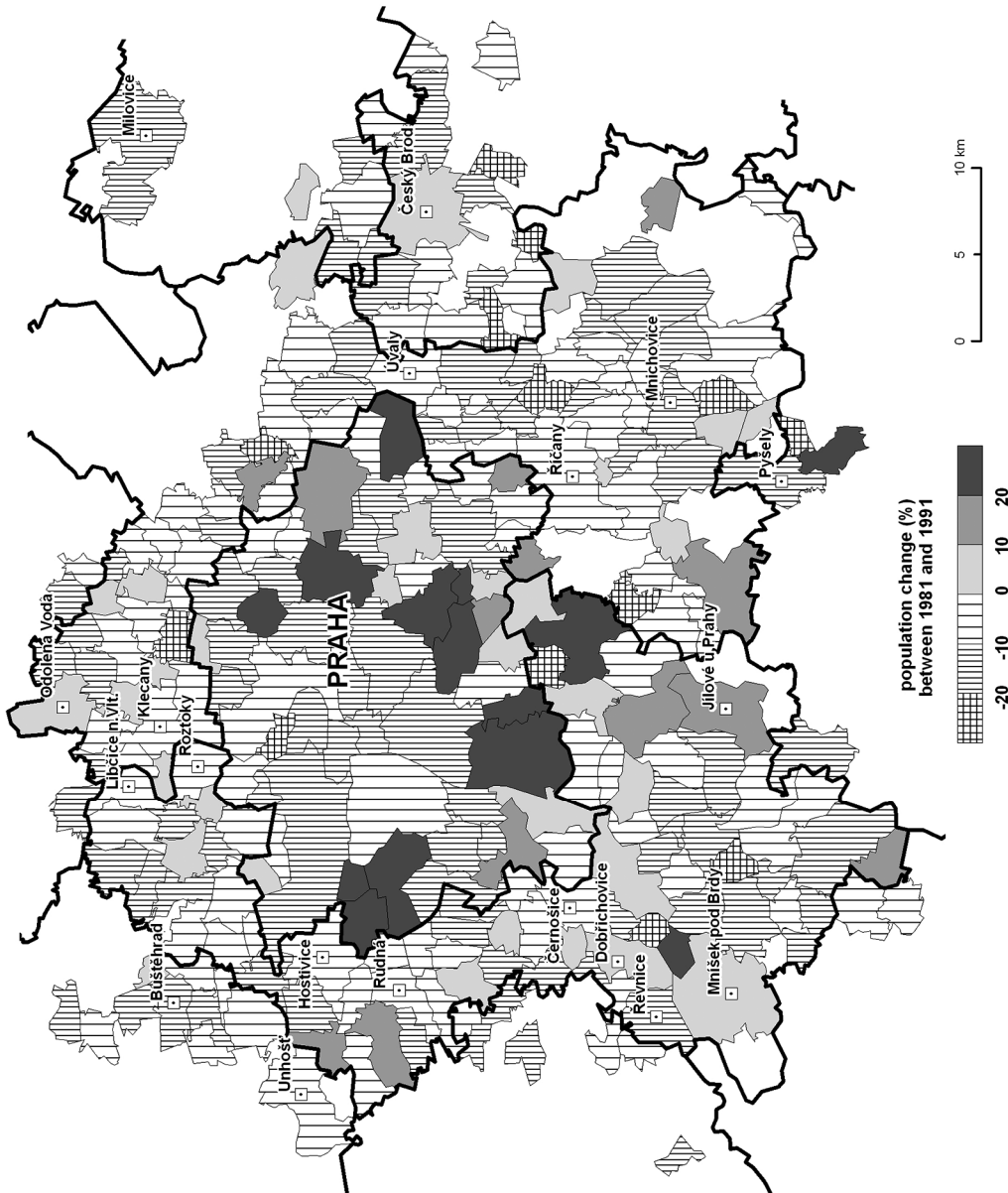


Figure 12 FUR Prague, population development 1980–1991, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

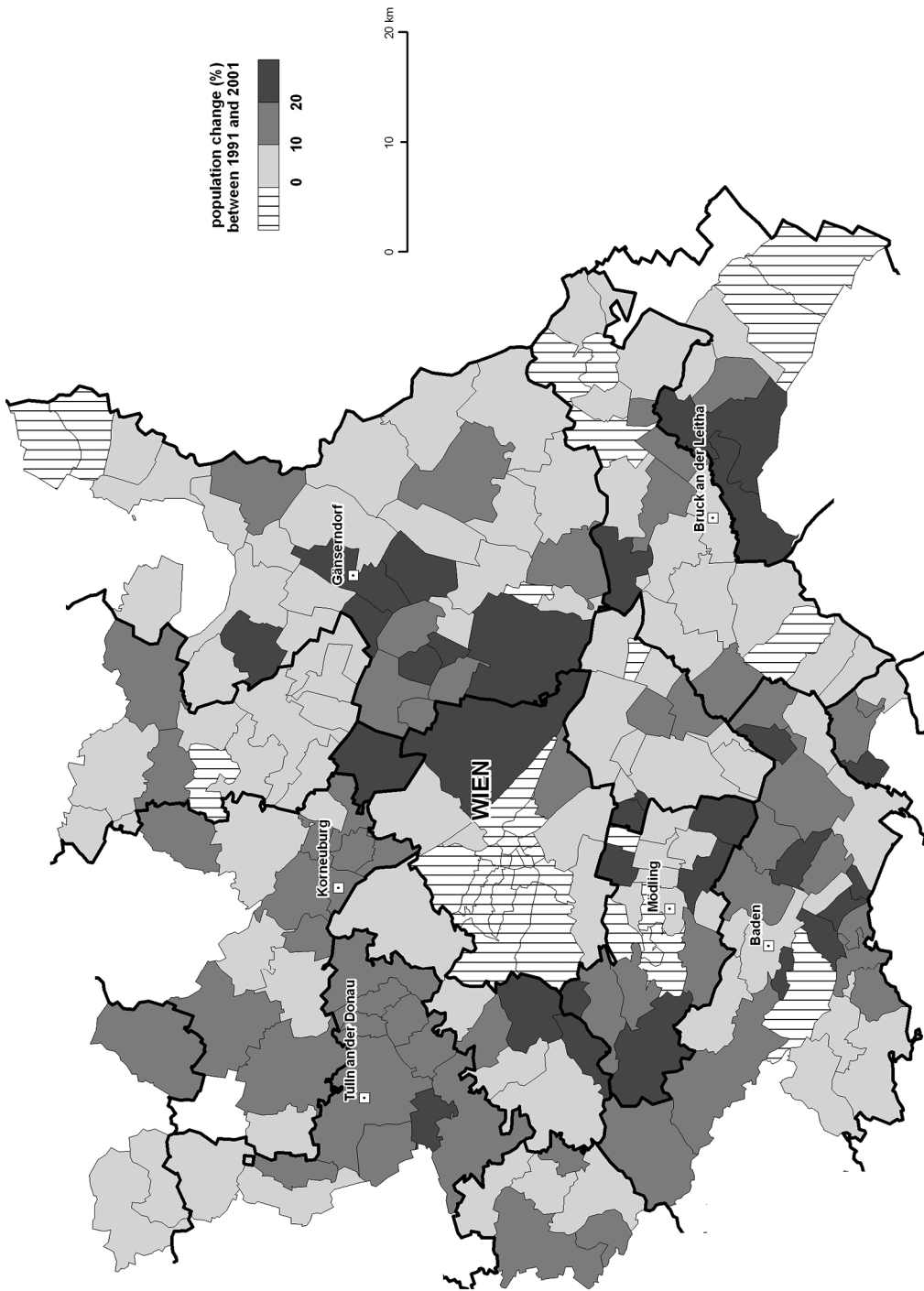
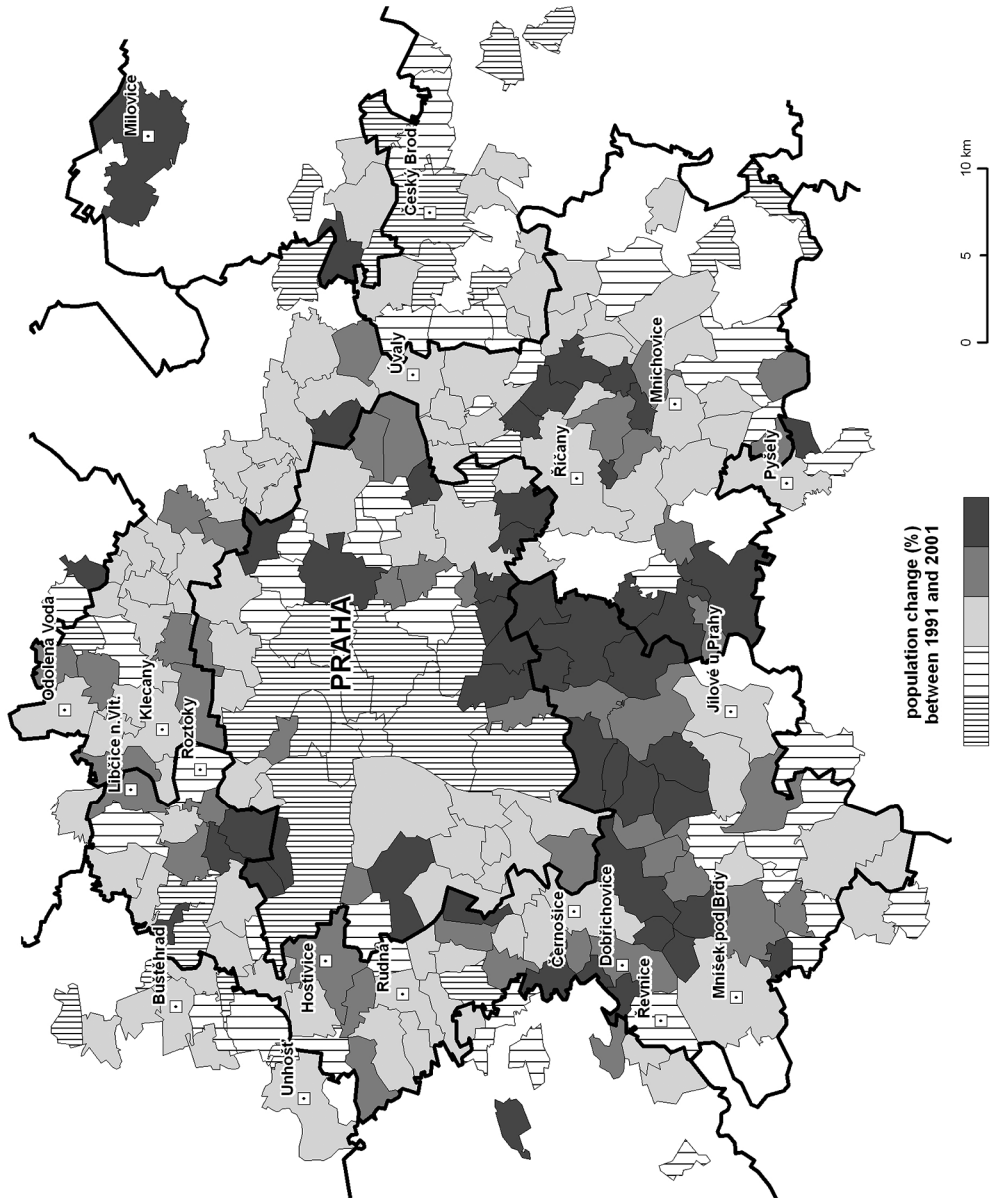


Figure 13 FUR Vienna, population development 1991–2001, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.





**Figure 14** FUR Prague, population development 1991–2001, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

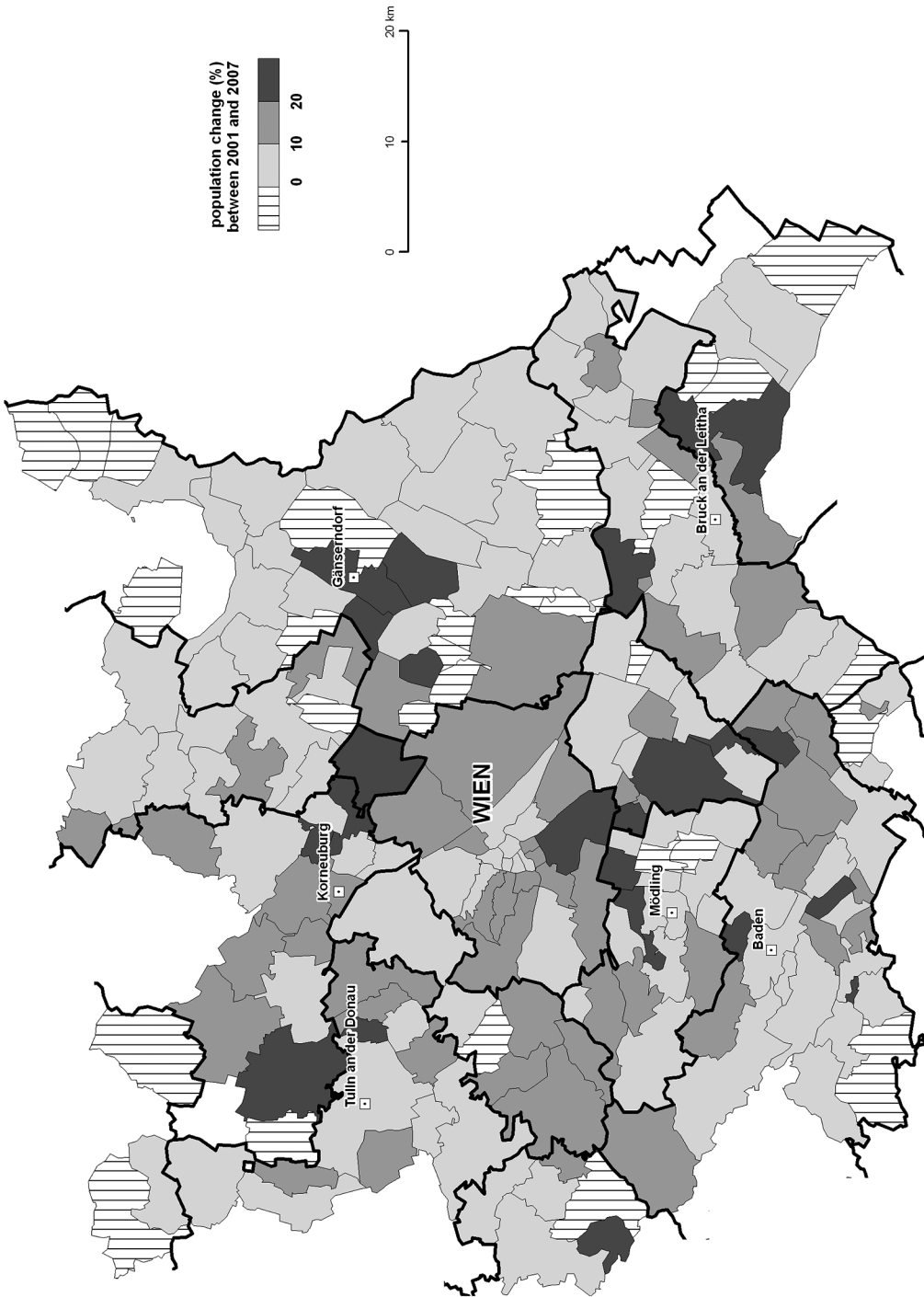


Figure 15 FUR Vienna, population development 2001–2007, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation.

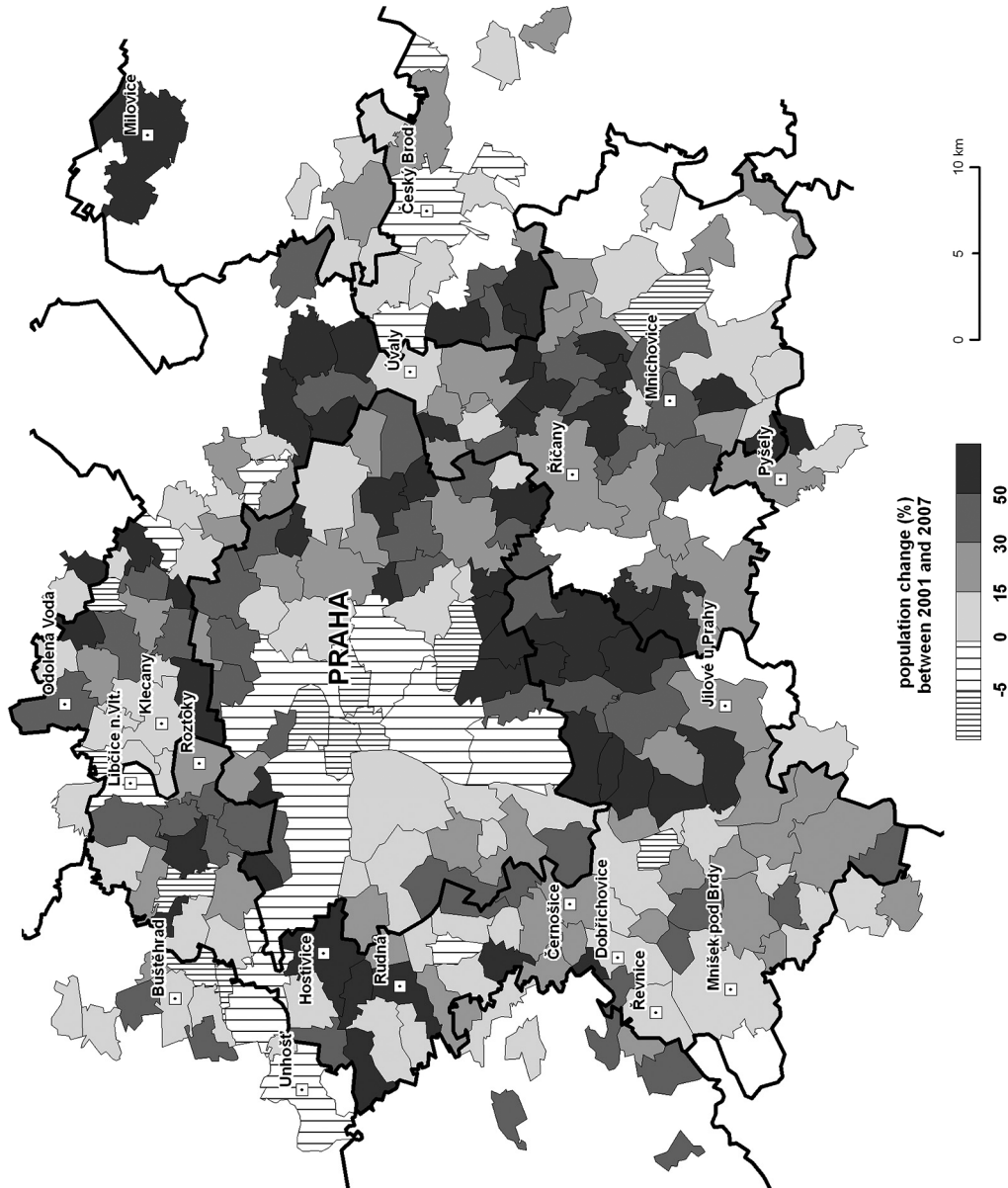


Figure 16 FUR Prague, population development 2001–2007, by municipality or (municipal) district, percent per 10-year average. Source: own compilation and calculation from CZSO 2004.

Between the censuses of 1970 and 1980, the number of inhabitants increased in Prague core but decreased in Prague ring. The spatial differences are shown in figure 10; the population increased in the urban districts with construction of the housing estates (prefabricated houses). In the smaller municipalities the number of inhabitants continued to decrease because of state policy (almost no investments).

Figure 14 shows that the number of inhabitants between the censuses of 1991 and 2001 decreased in the central part of Prague while the population increased in the some peripheral parts of the core (with the new housing construction) and in municipalities in Prague ring. According to Ouředníček and Posová (2006), for the first part of the transition decade (1990-1994) small projects of suburbanisation were typical and also the completion of prefabricated houses that had been started earlier (e.g. Jihozápadní Město and Černý Most). The end of the period (1998-2001) could be described as expansion of the suburbanisation type of housing in the Prague hinterland. The spread of the family houses influenced the rural landscape in Prague ring (see for example Perlín 2002). The suburbanisation was supported by the state by different economic instruments – for example the state policy of support of housing for young people up to the age of 36 years (Sunega 2005). The process of suburbanisation was analysed in many studies – for example Sýkora (2003) or Sýkora and Posová (2007) or Sýkora et al. (2000).

Figure 16 shows that the number of inhabitants between January 1, 2001 and January 1, 2007 increased not only in Prague ring but in Prague core as well. The population of Prague has started to grow again since 2002 due to positive net migration (and in 2007 even thanks to small positive natural increase!). According to Ouředníček and Posová (2006) the population increase was caused by an increase of housing construction in this period both within the administrative area of Prague as well as in the Prague hinterland in particular. This housing boom was naturally influenced by the fact that mortgage credits started to be available for larger groups of the Czech society than in the previous period. The processes are stronger in Prague than in Brno or Plzeň

because the Prague is not only the richest region of the Czech Republic but Prague even belongs to the most prosperous NUTS II regions in Europe.

Suburbanisation was not based on family houses alone, but developers have started to build multi-dwelling houses – especially in the larger municipalities (e.g. Suchdol, Průhonice) in the surroundings of Prague core (Ouředníček and Posová 2006:102). According to Vobecká (2008) the trend of population decrease in the central part of Prague was continuing, while the strongest increase of population was achieved in the peripheral urban districts and in suburbanisation zones because some inhabitants moved to the peripheral parts of Prague or to the municipalities surrounding Prague (suburbanisation) or to the urban districts with new housing construction. The size of newly constructed flats could be influenced by the fact that Prague is the city with highest share of one-person households in the Czech Republic (Andrle 2003).

## CONCLUSIONS

Some 30 years ago, an international team chaired by Roy Drewett has developed a concept of stages of urban development. As one of the first empirically based projects of comparative urban research, they applied it to almost 200 city regions of the time, the 1950s to mid-1970s, in both Northern and Southern, Western and Eastern Europe, in both market economies and planned economies of the time.

Our own comparative project started on the assumption that the old CURB model can still be used and applied to other periods and urban regions than those it was originally applied to. For reasons that should be investigated, Czechoslovak cities had not been included in the CURB study. This had been the starting point of an earlier study by the Austrian contributors on Vienna and Bratislava, for the years 1950 to 2001 (published in English by Matznetter 2004). The results on the effects of the systems divide between a social market economy on the one side, and a planned housing economy on the other side, and their immediate disappearance after the Velvet Revolution, were impressive. The contrasts

between Vienna and Bratislava seemed to be too clear-cut and ideal to be generalised to all city regions of former Czechoslovakia, and all socialist cities beyond.

Prague, now the capital of the Czech Republic, was certainly worth a comparative case study with Vienna, all the more because these cities had rarely been compared before, even in the distant and shared past. It took some years and conferences to find colleagues from the Czech Republic who would have the means and the time for such a project. Two geographers from Brno and Ostrava spontaneously agreed to co-operate, under the condition that their cities would be included. This coincided with the interest of the Austrian partners to bring the CURB model down the own national city hierarchy, to control the idiosyncrasies of Vienna, and get hold of city size effects. This is why and how Brno, Graz and Linz got included. In the process, we decided to replace Ostrava, the multinuclear industrial pole boosted in the Communist era, by the mono-nuclear and oldindustrialised city of Plzeň, the fourth-largest city in the country. Obviously, it is not easy to delimit urban regions in the case of two or more morphological centres, something that should be taken into account in CURB-type analyses.

Consequently, data were assembled on the six cities, starting with the after-war period. On our way, we discovered that both the Czech and the Austrian statistical offices had adapted and standardised historical population data to present municipality boundaries, for all censuses back to 1869. We took up the challenge to explore urbanisation “avant la lettre” (at least in the CURB definition). We think our findings should be of great interest to urban historians who will find a consolidated data basis and cartography to which more scattered evidence can be related.

From the more recent periods, the decades since the original CURB study has been completed, one result emerges that is in conflict with the concept of stages of urban development itself. In the 1960s and early 1970s, evidence for a progressive change from urbanisation to suburbanisation and some desurbanisation was so overwhelming that the sequence was thought of as irreversible and continuing into a stage of re-urbanisation under

decline (although there are caveats in the 1982 book publication). Nowhere in our sample, and possibly nowhere else in Europe, did such a sequence of the 4 stages come true. If there is decline, then the city core is more affected than the suburban ring in most cases. Suburban depletion during core city growth or less depletion than in the ring is a rare phenomenon that occurs under exceptional circumstances.

There is a return to urbanisation recently, in Vienna and in Graz, but it is plain urbanisation according to the CURB typology. The compact city is growing again, under market conditions, and not because it is contained by a planned housing economy from which there was no escape. The reason is international migration, often from within the EU, and the data are from the permanent population registers that have been built up in many countries, in Austria as well as in the Czech Republic.

After the turbulent years of transformation, Czech cities seem to be following the highway towards suburbanisation, at the same time that their city cores have stopped their decline. At least for the largest Czech cities, the decade of shrinkage seems to be over, in Prague and Plzeň, and Brno to follow.

## References

- Andrle, A.** 1999: Populační vývoj města Plzně a jeho tendence. *Statistika* 36 (12), 498.
- Andrle, A.** 2003: Praha má nejvyšší podíl domácností jednotlivců. *Demografie* 45 (3), 209.
- Cheshire, P.** 1995: A New Phase of Urban Development in Western Europe? The Evidence for the 1980s. *Urban Studies* 32 (7), 1045-1063.
- Cheshire, P., Hay, D.** 1989: *Urban Problems in Western Europe. An economic analysis.* Unwin Hyman: London.
- CZSO** 2004: *Historický lexikon obcí České republiky 1869–2005.* (<http://www.czso.cz/csu/2004edicniplan.nsf/p/4128-04>), accessed 2008-09-22.
- Drewett, R., Mason, S., Milanovich, N.** 1991: *Population dynamics of European cities 1970-1990.* Interim Report for the project “The Future of European Cities: The Role of Science and Technology”, funded by DG XII URBINNO/FAST Monitor Programme. European Commission: Brussels.

- Hampl, M., Kühnl, K.** 1993: Migratory Trends in Former Czechoslovakia. *Acta Universitatis Carolinae – Geographica* 28 (1), 53-71.
- Hassinger, H.** 1910: Beiträge zur Siedlungs- und Verkehrsgeographie von Wien. *Mitteilungen der k.k. Geographischen Gesellschaft in Wien* 53, 5-88.
- Kostecký, T., Čermák, D.** 2004: Metropolitan Areas in the Czech Republic – Definitions, Basic Characteristics, Patterns of Suburbanisation and Their Impact on Political Behaviour. *Sociological Studies* 4 (3) (<http://studie.soc.cas.cz/index.php3?lang=cze&shw=247>), accessed 2008-10-10.
- Kostecký, T., Čermák, D.** 2005: Metropolitanization and Political Change in the Czech Republic. In: **Hoffmann-Martinov, V., Sellers, J.** eds. *Metropolitanization and Political Change*. Verlag für Sozialwissenschaften, Wiesbaden, 353-370.
- Král, J.** 1946: *Zeměpisný průvodce Velkou Prahou a její kulturní oblastí*. Melantrich, Praha.
- Láník, J.** 1993: Elitní čtvrti v prostoru města. *Politické elity v Československu 1918–1948. Sešity Ústavu pro sondobé dějiny* 20, 72-79.
- Lehovec, O.** 1944: *Prag. Eine Stadtgeographie und Heimatkunde*. Volk und Reich Verlag, Prag.
- Lichtenberger, E.** 1993: *Wien – Prag. Metropolenforschung*. Böhlau, Wien.
- Matznetter, W.** 2004: The Vienna and Bratislava Urban Regions: Comparing Urban Development under (Welfare) Capitalism and (Post-) Communism. *European Spatial Research and Policy* 11 (1), 61-77.
- Melinz, G., Zimmermann, S.** 1996: Großstadtgeschichte und Modernisierung in der Habsburgermonarchie. In **Melinz, G., Zimmermann, S.** eds. *Wien – Prag – Budapest. Blütezeit der Habsburgermetropolen. Urbanisierung, Kommunalpolitik, gesellschaftliche Konflikte (1867-1918)*. Promedia, Wien, 15-33.
- Musil, J.** 2005: Prague returns to Europe. In **Hamilton, I., Dimitrovska-Andrews, K., Pichler-Milanovic, N.** eds. *Transformation of Cities in Central and Eastern Europe*. United Nations University Press, Tokyo.
- Ott, T.** 2001: From concentration to de-concentration. Migration patterns in the post-socialist city. *Cities* 18 (6), 403-412.
- Ouředníček, M., Posová, D.** 2006: Suburbánní bydlení v Pražském městském regionu: etapy vývoje a prostorové rozmístění. In **Ouředníček, M.** ed. *Sociální geografie pražského městského prostoru*. *Univerzita Karlova*. Katedra sociální geografie a regionálního rozvoje, Centrum pro výzkum měst a regionů. Praha, 96–113.
- Perlin, R.** 2002: Nízkopodlažní výstavba v územních plánech obcí v zázemí Prahy. In **Sýkora, L.** ed. *Suburbanizace a její sociální, ekonomické a ekologické důsledky*. Ústav pro ekopolitiku, o.p.s., Praha, 141–156.
- Reckien, D., Karecha, J.** 2007: Sprawl in European Cities: The Comparative Background. In **Couch, C., Leontidou, L., Perschel-Held, G.** eds. *Urban Sprawl in Europe. Landscapes, Land-Use Change & Policy*. Blackwell, Oxford, 39-67.
- Sunega, P.** 2005: Efektivnost vybraných nástrojů bytové politiky v České republice. *Sociologický časopis* 41 (2), 271–299.
- Sýkora, L.** 2003: Suburbanizace a její společenské důsledky. *Sociologický časopis* 39 (2), 217–233.
- Sýkora, L., Kamenický, J., Hauptmann, P.** 2000: Changes in the spatial structure of Prague and Brno in the 1990s. *Acta Universitatis Carolinae – Geographica* 35 (1), 61–76.
- Sýkora, L., Ouředníček, M.** 2007: Sprawling post-communist metropolis: commercial and residential suburbanisation in Prague and Brno, the Czech Republic. In **Dijst, M., Razin, E., Vazquez, C.** eds. *Employment Deconcentration in European Metropolitan Areas: Market Forces versus Planning Regulations*. Springer, Dordrecht, 209-234. (<http://www.natur.cuni.cz/~slamak/gacr/selma.pdf>), accessed 2008-08-30.
- Sýkora, L., Posová, D.** 2007: Specifika suburbanizace v postsocialistickém kontextu: nová bytová výstavba v metropolitní oblasti Prahy 1997–2005. *Geografie: sborník České geografické společnosti* 112(3), 334–356.
- Turok, I., Mykhnenko, V.** 2007: The trajectories of European cities, 1960-2005. *Cities* 24 (3), 165-182.
- Ullrich, Z., Bočková, A., Dellin A., Hauner, E.S., Král, J., Machotka, O., Mertl, J., Souček, J., Turčín, R., Voráček, J.** 1938: *Soziologische Studien zur Verstädterung der Prager Umgebung*. Revue Sociologie a sociální problémy, Praha, 335.
- Van Den Berg, L., Drewett, R., Klaassen, L.H., Rossi, A., Vijverberg C.H.T.** 1982: *Urban Europe. A Study of Growth and Decline*. Pergamon Press, Oxford.
- Vobecká, J.** 2008: Potenciálně problémové oblasti Prahy z hlediska struktury obyvatelstva. *Socioweb* 2 (<http://www.socioweb.cz/index.php?disp=teorie&shw=312&lst=108>), accessed on 2008-04-19.

## Résumé

### Urbánní rozvoj ve vybraných českých a rakouských městských regionech

V konceptuální rovině je článek založen na aplikaci modelu, jenž byl vytvořen v rámci projektu CURB (*The Costs of Urban Growth*) (Van Den Berg et al. 1982). S využitím velmi jednoduché a formální typologie, zaměřené na zkoumání populačních změn na území městských jader a jejich zázemí v rámci funkčních městských regionů (*Functional Urban Regions*), byla tato metoda původně využita pro 189 funkčních městských regionů ve čtrnácti evropských zemích, a to pro analýzu vývoje pro období mezi léty 1950–1975. Jedno z nejdůležitějších zjištění tehdejšího výzkumu bylo, že stále větší množství městských regionů přechází v průběhu poválečných desetiletí z fáze urbanizace do fáze suburbanizace, případně se v některých případech prosazují i tendence k desurbanizaci. Uvedené změny se projevovaly nejvýrazněji zejména v kapitalistických zemích s tržními ekonomikami, ale nebyly příliš patrné v několika socialistických zemích (Bulharsko, Maďarsko, Polsko, Jugoslávie), které byly do CURB výzkumu rovněž zahrnuty. Většina z jejich městských regionů totiž pokračovala v procesu urbanizace a to často až do konce plánovitého hospodářství.

Na empirické úrovni se článek snaží o rozšíření původní studie, a to jak ve smyslu časovém, tak i prostorovém. Z časového hlediska bylo provedeno rozšíření zkoumání směrem nejen k novějším údajům (populační data Českého statistického úřadu a z rakouské statistiky za rok 2007), ale pozornost se dále zaměřila i na starší údaje, které začínají již prvním moderním censem na území habsburské monarchie (1869). Z hlediska geografického prostoru se pozornost soustředila na hodnocení tří největších monocentrických městských regionů na území České republiky (konkrétně se jedná o městské regiony Prahy, Brna a Plzně) a tří největších městských regionů v Rakousku (regiony Vídně, Štýrského Hradce a Lince).

Předchozí dílčí studie (Matznetter 2004), která byla zaměřená na Bratislavu a Vídeň, ukázala, že

dopady proměny systému v roce 1989 byly velmi významné. V období devadesátých let se suburbanizace v případě Bratislavy stala dominantní fází urbánního rozvoje. Naproti tomu v případě Vídně začala obdobná etapa o třicet let dříve, přičemž tento dlouhodobější trend k suburbanizaci zahrnul i jistý druh intermezza v podobě desurbanizační fáze v období sedmdesátých let 20. století.

Tento výrazný zlom v trendech urbánního rozvoje, který se vztahuje ke konci období socialismu, byl v nedávné době zkoumán na příkladu mnohých městských regionů (podrobněji např. Ott 2001, Sýkora a Ouředníček 2007). S pomocí využití jednotného vymezení městských jader, městských zázemí a celých městských regionů se článek snaží vytvořit vyváženou informační základnu, sloužící jako východisko k dalším interpretacím a diskuzím. Lze ho tedy možné například využít ke srovnání urbánních a suburbánních vzestupů a poklesů v průběhu času, a to i pro období meziválečné, či dokonce pro období před první světovou válkou, kdy proces urbanizace byl dominantní ve všech městských regionech tehdejší monarchie – i když se zde přirozeně odehrával s rozdílnou intenzitou.

V devadesátých letech byla dřívější diference mezi suburbanizačními tendencemi kapitalistických městských regionů na území Rakouska a urbanizací v podmínkách tehdejšího socialistického Československa nahrazena rozdílností mezi jednotlivými rostoucími a klesajícími městskými regiony (viz Turok a Mykhnenko 2007). V období po roce 2000 začala městská jádra na území Rakouska opět růst (podle modelu CURB dochází k obnově fáze urbanizace), zatímco městské regiony v České republice ukončily klesající tendence v nedávné době a to zejména díky růstu v jejich zázemích (model CURB klasifikuje tuto fázi jako suburbanizační).

Príspevek byl vytvořen v rámci projektu „*Populační trendy a rozvoj bydlení v městských regionech České republiky a Rakouska: Srovnávací studie Prahy, Vídně, Brna, Štýrského Hradce, Lince a Plzně*“ (MEB 060907, rozhodnutí č. 4454/2009-32).