

CONFRONTING SUBURBANIZATION

Urban Decentralization in Postsocialist
Central and Eastern Europe

Edited by Kiril Stanilov and Luděk Sýkora



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URBAN **D**ECENTRALIZATION IN
POSTSOCIALIST **C**ENTRAL AND
EASTERN **E**UROPE

Edited by

Kiril Stanilov and Luděk Sýkora

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Glossary

Most of the terms and expressions described in this glossary are commonly used in urban studies literature. Very few of them, however, have officially adopted definitions; and, where such definitions exist, they often vary from country to country. The descriptions provided here clarify the meaning of these key terms in the context of urban development in Central and Eastern Europe and in this particular volume.

Capital Metropolis A *capital metropolis* is a metropolitan area that contains the capital city of a state or nation (see *metropolitan area*).

City Region A *city region* is comprised of a central city and its suburban hinterland composed of small towns and villages that have strong functional ties with the central city. Usually the boundaries of a city region are drawn to include settlements from which a substantial proportion of the residents commute daily to the central city. A city region is rarely adopted as an official administrative unit; and the phrase is often used interchangeably with *metropolitan area*. Not every city region, however, is a metropolitan area. While all cities have their city regions, not all cities are large enough to be considered the center of a metropolitan area.

Compact City A *compact city* is a contiguously built-up area of a city. It is comprised of the historic city center and the high- to medium-density urban quarters that are built around it. The compact city may include areas that originated as towns or villages but were engulfed over time by extensions of the central city's urban fabric (see *urban fabric*). Most of the buildings in a compact city are multi-story structures and most of the open space is in the form of urban squares, parks, or communal green space (courtyards of urban blocks, open space around apartments, small private gardens).

Dacha Zones *Dacha zones* or *areas* are areas in the periphery of cities that are composed of clusters of small properties used for gardening, many of them featuring small structures built for seasonal or weekend habitation. The first communities of this type emerged spontaneously toward the end of the nineteenth century around the largest cities in Central and Eastern Europe – the dachas of Moscow being the most popular example. During the socialist period, dacha areas were formalized and designated as special zones, and new territories were assigned to meet the growing demand for such properties. In Bulgaria these areas are also known as *villa zones*.

Edge City The phrase *edge city* was coined in the early 1990s by Joel Garreau to describe recently emerging suburban nodes where the concentration of office, retail, and entertainment functions, often accompanied by high-density housing, has reached a critical mass comparable to that of city centers (Garreau, 1991). While Garreau's definition is based on the urban experience of several large metropolitan areas in the United States, this phenomenon has spread quickly to many fast-growing cities in Asia and South America. This volume presents evidence of the emergence of such edge cities in CEE as well.

Garden Suburbs/Towns These types of settlements, the majority of which developed in the early decades of the twentieth century, were designed according to the principles of the Garden City movement. The leader of this movement, Ebenezer Howard, envisioned the construction of a necklace of self-contained communities in the periphery of large cities. These new settlements were conceived of as individual but interconnected towns, designed to combine the advantages of urban and rural living in medium-density environments (Howard, 1902). The influence of the Garden City movement was not as strong in CEE as it was in Western Europe, but the design of a number of suburban developments from the interwar period at the edges of Prague, Budapest, and Sofia was inspired by Howard's ideas.

Housing The term *housing* denotes the entire range of residential building types and all forms of residential accommodation, regardless of location (urban, suburban, or rural), ownership (public, communal, or private), and legal status (formal or informal).

Housing Stock The phrase *housing stock* describes all of the housing available in a given area.

Housing Tenure *Housing tenure* describes the legal conditions of use by an occupier of a dwelling. The main distinction among kinds of tenure is created by ownership; and, on the basis of this criterion, a residence

can be classified as a rental unit or as an owner-occupied unit. Other housing tenure classifications are based on owner type (private vs. public) or duration of occupancy (permanent vs. short-term).

Inner Suburbs By *inner suburbs* we mean the collection of suburban areas that lie outside the compact city but are located within the administrative territory of a city.

Metropolis The term *metropolis* denotes the urban area of a large city, which is a significant economic, political, and cultural center for a country or a region and serves as a gateway for its international relations.

Metropolitan Area A *metropolitan area* is comprised of two parts: a large central city; and its surrounding territory composed of towns, suburbs, and villages, which have strong economic ties with the central city. The phrase *metropolitan area* is often used interchangeably with *metropolitan region* or *city region*, but, as we noted above, not all city regions are metropolitan areas or metropolitan regions.

Metropolitan Core In a metropolitan area, the *metropolitan core* usually consists of the central city. As the CEE central cities were often significantly “overbounded” during the socialist period (see *overbounded cities*), we consider the metropolitan core to be synonymous with the “compact city” zone of the metropolitan central city. This definition excludes (a) the suburbs located within the administrative boundaries of the central city and (b) the compact city zones of other towns that are located in the same metropolitan area.

Metropolitan Periphery A *metropolitan periphery* is made up of the parts of a metropolitan area that cover the territories outside of the metropolitan core.

Metropolitan Region In this volume we use the expression *metropolitan region* interchangeably with *metropolitan area*.

Outer Suburbs *Outer suburbs* are suburban areas located outside the administrative territory of a city.

Overbounded Cities *Overbounded cities* are cities whose administrative boundaries stretch far beyond their built-up areas. Thus the administrative territory of such a city includes not just the compact city, but also territories that might cover agricultural fields, green open space, and settlements of low, non-urban densities. Examples of overbounded cities in CEE are Moscow and Warsaw. Tallinn, on the other

hand, is an example of a city with very tightly drawn administrative boundaries, which do not include significant parts of Tallinn's built-up urban fabric.

Urban Fabric *Urban fabric* is a generic concept describing a combination of physical characteristics of an urban environment. These characteristics include the density of development, the mixture of building types and urban activities, the geometry of street networks, and the configuration and distribution of open space. Each city has its unique urban fabric, which is composed, like a mosaic, of the urban fabric of individual urban areas, districts, and neighborhoods. The part that carries the main meaning is *urban* – as the whole phrase is most often used to contrast and distinguish the built-up areas of a city from suburban and rural environments.

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Preface

The title of this book alludes to two principal ways in which suburbanization in the postsocialist countries of Central and Eastern Europe needs to be “confronted.” First, after a turbulent period of suburban explosion – which characterizes the growth of metropolitan areas in the region during the transition years – it is time to pause and assess the scope and impacts of the new patterns of spatial development. The global financial and economic crisis that set in at the end of 2008 offers a good opportunity to do so and to consider a revision of current urban growth policies, which have unreservedly embraced a *laissez-faire* approach. The postsocialist cities of Central and Eastern Europe could utilize much better the advantages offered by their compactly built form, high urban densities, and well-developed networks of public mass transit. Second, postsocialist suburbanization needs to be confronted with a very rigorous analysis, of the kind that has developed in the countries of the West and has persuaded governments to employ an arsenal of tools and strategies to curb sprawl and direct urban development to a path of sustainable growth. In order to develop such policies, postsocialist societies need to expand the knowledge base necessary to grasp the nature of the phenomenon of suburbanization in terms of its forms, conditions, causes, and consequences.

The content of this book should be most relevant to an audience with an interest in contemporary urban development in Central and Eastern Europe, as the book offers valuable material and insights to a broad group of professionals such as urban scholars, public officials, planning practitioners, architects, urban designers, real estate consultants, and other specialists working in the field of urban development. The book can be of interest to a broader audience as well, given the similar experiences shared by many countries around the world where dramatic socioeconomic reforms aimed at deregulation and market liberalization have led to increasing rates of (sub)urbanization

in the absence of a clear understanding of its impacts or of available alternatives. The book also aims to make a more general theoretical and methodological contribution to the field of urban research, as it investigates the linkages between radical socioeconomic reforms and spatial patterns of metropolitan growth. It does so by utilizing structured case studies that serve as a basis for analytical comparison.

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1

The Challenge of Postsocialist Suburbanization

Luděk Sýkora and Kiril Stanilov

Introduction

Since the collapse of the communist regimes in Central and Eastern Europe (CEE), cities in the former socialist countries have entered a period of dramatic transformation. One of the most important processes in the ensuing frenetic rearrangement of urban space has been the dispersal of urban functions beyond the edges of the compact city, into territories that experienced very little development during the socialist years (Sailer-Fliege, 1999; European Academy of the Urban Environment [EAUE], 2003; Hirt and Kovachev, 2006; Borén and Gentile, 2007; Stanilov, 2007a). There is widespread evidence that, since the mid-1990s, suburbanization has become the predominant mode of urban growth in postsocialist metropolitan areas (Kok and Kovács, 1999; Hamilton, Dimitrowska-Andrews, and Pichler-Milanović, 2005; Pichler-Milanović, 2005; Tammaru, 2005; Tosics, 2005; Tsenkova and Nedović-Budić, 2006; Hirt, 2007; Leetmaa and Tammaru, 2007; Novák and Sýkora, 2007; Ouředníček, 2007; Stanilov, 2007a; Sýkora and Ouředníček, 2007; Leetmaa, Tammaru, and Anniste, 2009; Krisjane and Berzins, 2011; Szirmai, 2011) and has a visible presence in medium-sized cities as well (Timár and Váradi, 2001; Parysek, 2004; Kotus, 2006; Matlovič and Sedláková, 2007; Marcińczak, 2012). Furthermore, studies suggest that postsocialist suburbanization is characterized by fragmented spatial patterns broadly associated with urban sprawl and

its controversial environmental, economic, and social consequences (Nuissl and Rink, 2005; Pichler-Milanović, Gutry-Korycka, and Rink, 2007; Stanilov and Sýkora, 2012).

After a tempestuous decade of suburban explosion that lasted roughly from the second half of the decade 1990–2000 to the second half of the next decade – a period during which little concern was given to the impacts of unreservedly embracing urban dispersal as a principal growth strategy – it is time to pause and look back at the effects of such practices. The global financial and economic crisis that set in at the end of 2008 is a perfect opportunity to do so. It has given investors and developers a strong impetus to reassess their intentions and plans. More importantly, the crisis has opened up opportunities to consider alternatives to the neoliberal, free market policies and approaches adopted by postsocialist governments that have contributed to the extensive decentralization of CEE urban areas since the mid-1990s. The massive suburban development that started in the mid-1990 is an entirely new phenomenon for cities in the former socialist countries. Understanding its forms, conditions, causes, and consequences has become a great challenge for the general public and, specifically, for authorities responsible for the management of urban environment.

Our ultimate goal in this book is to explore and understand the processes of suburbanization in the specific context of postsocialist societies that are transitioning from one sociospatial order to another. By casting a light on the swift trajectory of suburbanization in CEE we hope to illuminate the key conditions for the emergence and proliferation of this phenomenon and to highlight the typical forms and features it takes in a dynamically evolving urban context. The explosion of suburban development in the former Eastern Bloc countries offers a rare chance to trace the impact of socioeconomic forces on the logic of (sub)urban space generation in conditions of rapid and radical social transformation. The fact that most CEE countries underwent a second round of complete societal makeover in the course of less than 50 years allows us to look at the region as a unique laboratory, in which the built environment has been molded so as to adjust to profound shifts in the basic principles of social organization.

Urbanization, Suburbanization, and Socioeconomic Order

A starting point for our exploration of postsocialist suburbanization is the juxtaposition of the trajectories, patterns, and underlying forces of urbanization and suburbanization under socialism and capitalism. These two opposing systems produced their own logic of urban space generation,

which was shaped by contrasting approaches to setting the balance between the public and private realms. In this section we bring into focus the underlying bond between (sub)urbanization and socioeconomic order, which constitutes the theoretical foundation of our approach to understanding the phenomenon of postsocialist suburbanization.

Urban growth under socialism

Following the establishment of communist rule in the countries of CEE that fell under the influence of the Soviet Union after World War II, socialist government authorities imposed strict control over private property rights and economic activity, including the right to own, develop, rent, or trade land. The void created in the socialist economy by the imposition of strict constraints on private property rights and economic freedoms was filled by a commensurate expansion of the public sector through massive expropriation of the means of production. The socialist state became the main owner of land, as well as the main provider of goods, housing, and services through a centrally planned system of top-down hierarchical control exercised by the Communist Party. The emphasis was placed on planned production and controlled collective consumption as a more efficient and equitable system of resource utilization than the one based on balancing demand and supply through the actions of independent individual agents on the market.

Under these conditions, urbanization under socialism took on a strikingly different form by comparison to urban development in capitalist countries in terms of the allocation of human activities in space (French and Hamilton, 1979; Andrusz, Harloe, and Szelenyi, 1996; Enyedi, 1996; Gentile and Sjöberg, 2006; Sýkora, 2009). In contrast with the patterns of urbanization shaped by forces operating within a market economy that characterized development in capitalist countries, including those in CEE during the period up to World War II, the new socialist regimes promoted planned or “managed” urbanization (Musil, 1980; Smith, 1996) as the key instrument in the rational distribution and efficient utilization of economic and social resources.

A paramount development priority of the communist governments was the industrialization of the socialist economy. This goal absorbed the lion share of public resources, channeling them toward the formation of urban industrial hubs. The demand for labor in these growing industrial centers attracted waves of rural migrants pushed away from their villages by the collectivization of agricultural land and the mechanization of agricultural production (French and Hamilton, 1979; Musil, 1980). As a result, the socialist CEE countries experienced a dramatic boost in their urbanization rates. Between 1950 and 1990,

the urban population of the region almost doubled, increasing its share from 38.3 to 66.5 percent, in contrast to an increase from 61.7 to 72.8 percent registered in the Western European countries over the same period (UN, 2011).

While the socialist system of central planning concentrated investments in selected cities and towns, which acted as regional and local growth poles, other areas and settlements were largely neglected. As a result, socialist urbanization was characterized by a sharp contrast between the growing, densely developed cities and towns, and the disproportionately smaller villages found within their surroundings, which featured a very limited range of economic activities. Despite the clear spatial separation of cities from their rural hinterlands, these two elements of the city regions were functionally related. Due to the decline in agricultural employment that resulted on the one hand from collectivization and modernization, on the other from the growth of industrial jobs in urban areas, an increasing share of rural residents started to commute to cities, using mass public transit systems – which consist of busses, trains, underground and trams – as a main form of transportation. The rural to urban commuting was further impacted by the discrepancy between jobs and housing availability. As the growth of urban jobs was not paralleled by a corresponding supply of new housing, a significant portion of the rural population employed in nearby cities retained its rural residence – a phenomenon described as under-urbanization (Murray and Szelenyi, 1984; Szelenyi, I., 1996).

As the highest priorities were placed on public ownership of resources, centralized delivery of goods and services, and collective consumption, the socialist system generated compact urban environments characterized by high-density residential districts, extensive industrial zones, fairly well-developed networks of public transit and infrastructure, and hierarchically organized provision of space for retail and service facilities. Once land development was completely under the control of state authorities, government policies concentrated the spatial allocation of public investments in three target areas within cities: (1) the expansion of industrial capacity through the development of new and the extension of existing industrial zones; (2) the development of massive housing estates at the urban edges; and (3) the redevelopment of city centers as monuments of the social and economic prosperity achieved under the leadership of the communist regime.

Most of the investments and new construction were concentrated in vacant areas found within the existing urban fabric and on the edges of the built-up urban cores. Most of the new residential development during the socialist period was in the form of large housing estates planned as urban extensions at the urban edge, side by side with newly established industrial zones (Figure 1.1).

(a)

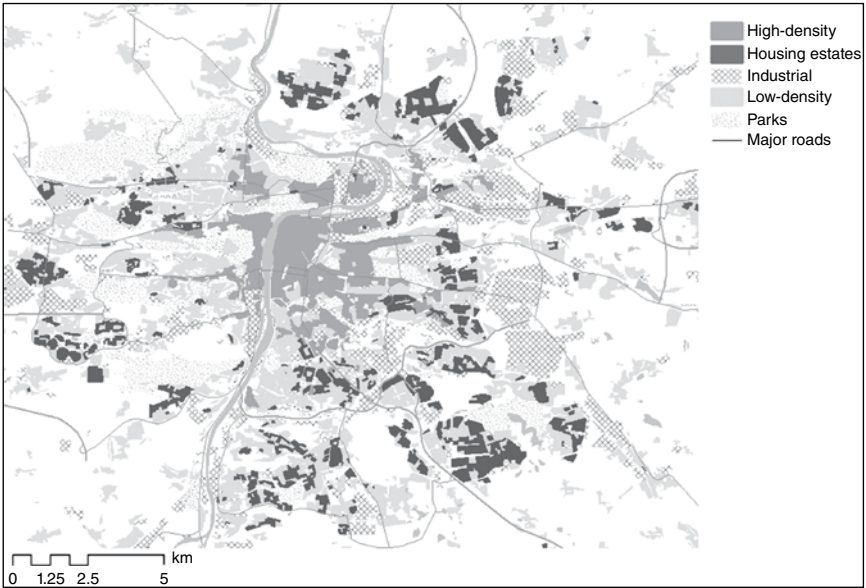


Figure 1.1a Location of socialist housing estates and industrial zones in Prague.
Source: the authors.

(b)



Figure 1.1b Location of socialist housing estates and industrial zones in Sofia.
Source: the authors.

Besides housing, these estates provided a selection of local services in carefully planned retail, educational, medical, and recreational facilities. We should note that this model of urban expansion through high-density extensions in the form of housing estates was not a unique invention of the socialist states. It was embraced by many governments in postwar Europe (Power, 1998; Rowlands, Musterd, and van Kempen, 2009) and spread to other parts of the world. In the Eastern Bloc countries, however, it was adopted extensively and universally, as the key housing policy of the socialist states. A main reason for this was the fact that the modernist concept of urban growth through high-density extensions suited perfectly the communist ideology of centralized control over the production, supply, and allocation of housing and urban services.

The new socialist housing estates were only rarely located at a distance from the compactly built-up urban areas. They were planned as an integral part of the socialist city, functionally integrated with industrial zones and service nodes through public mass transit infrastructure. Under these circumstances, the socialist cities developed as fairly compact urban environments with sharply delineated physical boundaries (Ioffe and Nefedova, 1998). Thus, while most western cities began to deconcentrate in the postwar decades, the socialist countries in CEE experienced accelerated urbanization in conditions of urban centralization (van den Berg, Drewett, Klaassens, Rossi, and Vijverberg, 1982).

Outside of the well-defined boundaries of the compactly built-up area of the socialist city, new developments were limited to the growth of some settlements in the metropolitan periphery; this process was spurred by the influx, from the rural interior, of migrants in search for jobs in the emerging large industrial centers. Compared to the expansion of socialist housing estates, however, the growth of these peripheral communities was relatively minor and had very limited influence on the prevailing dynamics of metropolitan growth, which was characterized by the increasing dominance of the urban core. The tight control exerted by the state over land development prevented the growth of middle-class suburbs of the type that characterized the evolution of metropolitan peripheries in the western world. Experiments with the relaxation of constraints on the private ownership of land and the development of such properties in Yugoslavia and Hungary during the 1970s and 1980s were a key factor in the emergence of elements of low-density suburbs in the periphery of Budapest and Ljubljana, but on the whole these instances remained exceptions in the socialist Eastern Bloc countries.

The only evidence for tendencies toward suburban living that might have been latent in urban residents during socialist times was in the clusters of small landholdings that abutted many of the peripheral villages surrounding urban cores. These properties were designated for use as recreational and garden plots; they were adorned with simple cottages and used as weekend and holiday retreats. Similar dacha zones could be found also in relatively isolated areas in the urban hinterland – areas characterized by more attractive natural settings. While a few of these zones had already emerged as cottage settlements in the pre-socialist era, their popularity increased greatly during the socialist years, through the conversion of village houses into second homes (Vágner, Muller, and Fialová, 2011). At weekends, flows of urban residents commuted from their flats to these recreational properties to enjoy the countryside. While the vast majority of such properties were not suitable for permanent residence, their existence signaled people's dreams for alternative living environments – a desire that could not be fulfilled in that context, given the investment priorities and constraints imposed by the system of centrally planned allocation of resources.

In a dramatic contrast to the metropolitan landscapes beyond the Iron Curtain, the socialist cities developed without suburban communities and ribbon developments of the type that became the quintessential mode of western – and especially North American – urbanization in the post-World War II decades. The key reason for this was to be found in the severe constraints exercised by the state over property rights, within a rigid system of top-down, centralized control over territorial development. Metropolitan areas in the socialist countries were managed as a unified and hierarchically organized system, significantly different from the urban regions in the western capitalist societies, where suburbs grew as politically autonomous entities, governed independently from the core city authorities (Teaford, 2008).

The postsocialist suburban revolution

After nearly half a century of communist rule, CEE societies made a desperate leap straight into the world of free market capitalism (Enyedi, 1998; Herrschel, 2007). As a result, the underlying logic of urban growth patterns changed dramatically in the course of only a few years. Following the sudden collapse of the communist regimes in Europe at the end of 1989, the main rules of social organization in the former Eastern Bloc countries were abruptly reversed: from authoritarian centralized control to minimal government intervention; from

public to private ownership of resources and means of production and provision of goods and services; and from collective to individual forms of consumption.

This swing of the pendulum of history in CEE from systems of totalitarian control to decentralized market societies triggered profound changes in the logic of urban space generation. The adoption and institutionalization of capitalist principles of political, economic, and social organization was followed by an evolutionary adaptation of social practices at the level of firms, individuals, and households, which in turn led to a profound sociospatial reorganization of the postsocialist urban landscapes (Sýkora, 2008; Sýkora and Bouzarowski, 2012). The former system of centralized planning, which concentrated all investments in core cities and controlled tightly any land development within city regions, was replaced by a new, capitalist system of market-based allocation of investments and resources; this system was characterized by the presence of a multiplicity of agents in the market place and by the decentralization of regulatory powers over land development from state authorities to individual municipalities. Under these circumstances, suburbanization became the most visible process of postsocialist metropolitan change.

The transition to capitalism The main goal and the first political priority of the postsocialist transition governments was the radical restructuring of the balance between the public and private realms. This imperative to reform was in complete accord with neoliberal ideology, which had established itself as the dominant political philosophy toward the end of the twentieth century and called for a maximization of the role of the market and a corresponding reduction of the role of the state (Walton and Seddon, 1994; Govan, 1995). In the early years of transition, the market was viewed as the major (and, quite frequently, the only) agent of positive change, while the role of postsocialist governments was confined to curtailing their influence, attracting investments, and making sure that capital flowed freely within the elements of the newly established capitalist socioeconomic system, facilitating its integration into the networks of the global economy.

An integral feature of the transition to capitalism in postsocialist CEE has been the enthusiasm with which the former Eastern Bloc countries embraced the instructions of world capitalist powers – instructions mediated through international institutions in the early years of the transition period (Govan, 1995; Smith and Swain, 1998). The particular set of programs and policies associated with the so-called Washington consensus and recommended by foreign experts from revered transnational organizations such as the World Bank, the International Monetary

Fund, and the European Bank for Reconstruction and Development charted a reform path with a strong neoliberal bent, centered on liberalization, privatization, and deregulation. In the aftermath of a half-century of totalitarian rule and with anti-communist sentiments riding high, these concepts were embraced as the most potent recipe for socioeconomic restructuring and revival.

The postsocialist CEE governments were hardly alone in their widespread acceptance of neoliberal ideology. By the 1990s neoliberalism had established itself as the leading economic doctrine on a planetary scale (Walton and Seddon, 1994; Haque, 1999; Harvey, 2005). The collapse of socialism in CEE, coupled with the acceleration of globalization processes, signaled the establishment of a global capitalist system, which became increasingly neoliberalized (Overbeek, 1993; Brenner and Theodore, 2002). In this new global order the former communist countries of Europe became a testing ground for neoliberal policies and practices (Pickles and Smith, 1998; Smith and Rochovska, 2007), which had a profound effect on the logic of urban space generation and on the patterns of urban growth.

The process of liberalization was the first instrument of those reforms that intended to establish a new, market-based economy. The liberalization of prices and rents was an essential component in the development of proper urban real estate markets, while the liberalization of foreign trade linked those markets with the global investment circles. The rapid development of property markets was driven by privatization and led to a profound restructuring of the metropolitan space. The massive transfer of state assets into private hands – expressed in the urban context through the processes of restitution of properties and privatization of public housing (Struyk, 1996) and other real estate – shaped the development of cities and their neighborhoods (Eskinasi, 1995; Kährlik, 2000; Bodnár, 2001; Dawidson, 2004; Brade, Herfert, and Wiest, 2009). Housing privatization changed dramatically the role (and mentality) of households, transforming significant portions of the urban population from recipients of state-supplied services into free agents on the housing property market, who quickly began to expand their interest to include newly constructed residential developments in the suburban territories.

A key aspect of the process of privatization, impacting directly the patterns of metropolitan growth, was the restitution of land. Under the socialist regime, the bulk of non-urbanized land surrounding cities was owned by the state and by agricultural cooperatives, most of it being designated for agricultural use. Private landownership outside the urban edge was limited to small residential parcels in towns and villages and in clusters of small garden plots with cottages. The restitution of agricultural lands situated outside compact urban areas established

active suburban land markets, on which former agricultural properties could be traded and converted for urban uses through the activities of independent agents, who operated within a much looser system of land development controls.

The process of deregulation involved the transfer of responsibilities from state and local agencies to market actors. It included a sharp reduction in the redistributive functions of the government through dramatic cuts in subsidies for public goods and services such as the provision of housing, which triggered the rise of new forms and patterns of real estate development. The withdrawal of the state from its role as a major provider of housing created a void that was filled by the emergence of numerous private construction firms. This process of deregulation of housing construction encouraged a much more flexible system of housing delivery, centered on market-based demand-and-supply principles. New private developers responded immediately to the opportunity by capitalizing on the demand for housing that had accumulated during the socialist years; they particularly cherished the prospects of developing the suburban housing market for middle- and upper-income households.

The process of deregulation, however, was stretched a lot further than the arena of housing construction, with a view to establishing the market as a primary regulator of socioeconomic relations. Following this policy directive, state and local governments underwent a complete makeover, turning from enforcers of centrally planned decisions into facilitators of the development of bottom-up market forces, and from defenders of the public good into protectors of private interests. In this new role, governments had little justification for curbing the pursuit of development opportunities beyond urban boundaries. On the contrary, they were expected to promote and secure such opportunities by relaxing regulations and by adopting market-driven investor-friendly policies, programs, and plans (see Chapter 10 in this volume; also Altrock, Günter, Huning, and Peters, 2006).

Driving forces: Globalization, legacies, and decentralization A significant impetus for the proliferation of suburbs during the postsocialist years was provided by the forces of globalization, which entered the region in the early years of the transition period and were in full swing by the turn of the millennium. The profound changes in the political and economic systems of the former socialist countries unlocked the doors for the integration of their states into the global financial and economic networks. The arrival of foreign capital to the Eastern European markets coincided with the tidal wave of globalization, which swept countries around the world in the 1990s (Turnock, 1997). Toward the end of the

decade, the initial uncertainty and apprehension about transformation in postsocialist Europe quickly dissipated, and international developers ventured without reservations into the CEE real estate sector (Sailer-Fliege, 1999). The flow of international companies to the emerging markets of CEE provided a vital push for the development of new residential, industrial, retail, and office premises, a substantial share of these new developments being backed by international investments (Adair et al., 1999; Ghanbari-Parsa and Moatazed-Keivani, 1999; Tasan-Kok, 2004; Hamilton and Carter, 2005; Tsenkova, 2008). A vast portion of this growth was concentrated in the major metropolitan areas, an increasing share being directed to the urban outskirts.

Producer and consumer services were initially accommodated within the expanding city cores (Gritsai, 1997; Sýkora, 1998; Lisowski and Wilk, 2002), but the urban fabric inherited from the socialist city could not absorb all of this new commercial demand. As development opportunities in the center were quickly reaching the point of saturation, new large-scale developments spilled out to the main roads, intersecting the metropolitan fabric and reaching out to previously undeveloped territories at the outskirts (Pommois, 2004; Garb and Dybicz, 2006; Rebernik and Jakovčić, 2006; Sýkora, 2007). And, as the supply of large tracts of developable land was quickly diminishing in the compact city, firms turned their attention to opportunities in the urban hinterlands, where they could gain access to ample land with good transport connections. The increasing preference of foreign developers and investors for edge-of-city and suburban locations was also determined by the application of ready-to-use commercial schemes, which had proven their profitability in the global marketplace and could be most easily accommodated on greenfield sites, where developers did not have to consider the factor of sensitivity to local urban contexts (Robinson, 1996). The development of these sites, located in small suburban municipalities eager to attract investors at any cost, could be accomplished more quickly and with less friction than that of sites located in the more complex urban environments of inner cities. This was an important comparative advantage, fostering the decentralization of urban activities still further.

In the residential sector, the initial barrier for suburbanization was the lack of a sufficient quantity of economically prosperous households, which could afford to subscribe to the model of suburban living actively promoted through media channels and real estate agencies. With the recovery of the CEE economies toward the end of the 1990s, effective demand quickly gained ground, pushed by the rise of a new middle class in the booming postsocialist metropolitan areas. These large urban centers became the hubs of the national economy in each country and

a primary target of foreign direct investments, attracting many well-educated young residents from less prosperous urban and rural areas. The emerging urban upper and middle classes spurred the gentrification of inner-city neighborhoods, the construction of new condominiums and gated compounds inserted in the existing urban fabric, and especially the development of new suburban communities. The demand for higher standards in housing was further supported through the establishment of a system of mortgage financing, which was in turn buttressed by national housing policies aimed at strengthening ownership. This growth in affluence and financial security provided a critical impetus for an increasing proportion of the urban population to pursue its dreams of a suburban life – a notion that was unthinkable under the socialist regime. The rapid increase in car ownership improved household mobility, clearing the last barrier to suburbanization and the unprecedented diffusion of urban activities across the postsocialist metropolitan landscapes. The new, market-based supply of housing reacted quickly to the availability of (re)privatized land, taking advantage of the flexible re-zoning – adopted by most suburban municipalities – of agricultural land for construction. The pent-up demand for single-family homes, accumulated during the socialist years, could be more quickly and cheaply addressed on greenfield sites in the urban periphery, dispersing new houses to hundreds of small clusters around the compactly built-up inner cities.

The emerging new form and structure of the postsocialist city have been tightly related to the structural disparities between the housing and commercial stock left behind by the socialist regime as part of its urban legacy and the spatial demands of a rapidly developing capitalist society. The decades of accelerated urbanization and the inability of the socialist system of housing production to keep up with this growth induced a huge demand for urban housing. The socialist system of planning not only failed to provide the necessary number of dwellings, but it also produced a housing stock that did not offer much choice to address residential preferences. With regard to lower density single-family homes, the large gap between supply and demand inherited from the socialist regime began to push many households away from the inner city and the housing estates to the suburban hinterland, where they could seek alternative living environments.

In addition to the huge discrepancy between housing demand and supply, the socialist city left an inadequate stock of commercial space. The socialist urban economy was characterized by a significantly lower share of services by comparison to advanced capitalist societies, while it generated an industrial sector that was excessively high in terms of both employment and land use. While socialist industrial enterprises

employed mass segments of the labor force and accounted for large portions of the urban land, consumer-oriented services constituted only a fragment of their western counterpart, in terms of commercial space per capita. Producer services, a key component of capitalist economies, were limited during the socialist years to a few state-controlled institutions. Not surprisingly, after the fall of the socialist regime, dynamic economic restructuring by way of deindustrialization and development of consumer and producer services quickly followed the establishment of market economies. The rapidly increasing demand for commercial space spurred the construction of new offices and retail facilities. The urban fabric inherited from the socialist era was not, however, fit to absorb all of this new demand. As development opportunities in the city center began to dwindle, new commercial developments spilled over to the main roads (as mentioned above). Within cities, only the vast amounts of industrial land left after the collapse of the socialist state-run enterprises presented a substantial opportunity for development. But these brownfield areas were harder to develop due to high levels of contamination and to complicated property right. This situation prompted many developers to shift their attention to the suburbs, where properties with clear titles were much easier to find.

Postsocialist suburbanization has been strongly impacted by the decentralization of power, which passed from the state to local authorities, and by the radical transformation of governance structures and public policies that followed. After 1989, the postcommunist states first terminated the practice of national economic and spatial planning and then transferred virtually all land planning powers to local institutions. This transfer was mandated via new laws of municipal self-governance, which were adopted in most postsocialist CEE countries by the mid-1990s. The process of diffusing responsibilities from the top to the bottom of the governance structures was not, however, paralleled by a comparable transfer of institutional capacity and financial means. Lacking the expertise to address the challenge of managing the spatial needs of a radically changing society, most local governments, and particularly those of small suburban municipalities, resorted to handling urban development on an ad hoc basis, rubber-stamping initiatives as they were put on the table by prospective developers. The decentralization of power and the imperative to create opportunities for economic development turned many local officials into ardent promoters of growth (Horák, 2007). Given the highly fragmented geography of local governments and the unwillingness of national and regional authorities to intervene in local affairs, the decentralization of power inevitably began to produce highly fragmented and decentralized patterns of metropolitan growth.

Postsocialist urban restructuring and the suburban explosion The main processes in the transformation of urban space in the former socialist cities and their metropolitan areas were the commercialization and expansion of city centers; the dynamic revitalization of some urban communities within the overall context of inner-city stagnation; and the radical transformation of outer cities and urban hinterlands through commercial and residential suburbanization (Stanilov, 2007b; Sýkora, 1999, 2009). While the first decade of the transition period was characterized by an inflow of investments into city centers, in the first years of the new millennium suburbanization became the most dynamic process that altered the postsocialist metropolitan landscape.

Suburbanization in the form of low-density, developer-built, middle-class residential environments – virtually nonexistent during the socialist era – quickly developed on a massive scale as the main form of metropolitan growth. The first signs of a modest growth in the suburbs were witnessed in the first half of the 1990s, but they were masked by a concomitant population decline in most Eastern European cities. This early postsocialist suburban growth did not outpace the population losses incurred at the urban core, which resulted in a shrinkage of city regions – a situation described as decentralization and de-urbanization (Hall and Hay, 1980; van den Berg, Drewett, Klaassens, Rossi, and Vijverberg, 1982; Cheshire, 1995; Champion, 2001). With the recovery of the postsocialist economies toward the end of the twentieth century, both core cities and suburban zones in major metropolitan areas began to grow again. Suburban areas gained increasing shares of the metropolitan population, thus changing the balance between urban and suburban territories. While only a small fraction of the metropolitan population and jobs were located outside of the urban core during the socialist period, the postsocialist suburban explosion radically reshaped urban regions.

In the metropolitan hinterlands, landowners, private investors and developers combined forces with local government officials to form alliances similar to the ones aptly described in the literature as “urban growth machines” (Logan and Molotch, 1987), which focused on the pursuit of development opportunities and economic growth objectives. While central cities usually retained high levels of planning control within their jurisdictional boundaries, their attempts to guide development outside of their administrative territories were confronted by the decisions of numerous suburban municipalities, which were competing for a stake in the circuits of real estate development and investments. As a result, suburban landscapes begun to exhibit a haphazard mixture of development patterns: new urban extensions of low-rise single-family and high-rise multi-family housing; low-density housing clusters in and

around villages and towns surrounding metropolitan cores; and nonresidential clusters and ribbon developments of retail, warehousing, and industries stretched along major highways and their intersections. The overall spatial outcome of this suburban explosion was the emergence of highly disjointed city regions, which grew with minimal consideration for the efficient provision of basic services and infrastructure.

By the middle of the first decade of the twenty-first century, many of the most sprawling urban areas in Europe were found in the former socialist countries (EEA, 2006). This fact is remarkable considering that, due to the specifics of socialist urbanization, there was very little evidence of suburban growth in the region as late as the mid-1990s. Thus, in the course of approximately one decade, the spread of suburbanization in the former socialist states dramatically reconfigured their metropolitan landscapes. At the same time, the establishment of sprawl as a dominant form of growth generated a number of economic, social, and environmental challenges.

Placing Postsocialist Suburbanization in the Context of Global Urbanization and Sustainable Development

In this section we relate postsocialist suburbanization to the urban experience of other world regions and argue that the ongoing spread of suburbanization across the globe is a concomitant development of the broader processes of globalization, being linked with the expansion of capitalism as a dominant socioeconomic order on a planetary scale. In consequence, we interpret similarity in spatial outcomes as a phenomenon engendered by the social practices of firms, households, and governments under the ever more homogenized political, economic, and cultural conditions of global capitalism. In the postsocialist countries of Europe, these practices have produced highly dispersed and fragmented patterns of metropolitan growth, which has seriously undermined the prospects of sustainable development and should therefore become a key concern in managing the future evolution of cities in Central and Eastern Europe.

Postsocialist suburbanization and global urbanism

While examining the specificities of suburbanization in postsocialist CEE, we do not want to overlook the linkages of the phenomena exhibited in that region with suburbanization processes that take place in other parts of the world. The analyses presented in this volume are aimed at developing a deeper understanding of these phenomena by highlighting key regional specifics while they also identify important

commonalities of suburbanization across time and space, thus situating the Eastern European experience in the broader context of global urbanization.

At the beginning of the new millennium, suburbanization has become undoubtedly a global phenomenon (Stanilov and Scheer, 2003; Bruegman, 2006; Phelps and Wu, 2011) and it is most likely that for many residents of the bulging twenty-first century metropolitan areas the urban future will be, indeed, a suburban one (Hall and Pfeiffer, 2000; Clapson and Hutchison, 2010). The new body of literature on suburbs as a global phenomenon, which has surfaced in the last couple of decades, has begun to coalesce along two main axes, outlining a distinction between first-world and third-world urban realities (Harris, 2010). An apparent omission in this binary classification is the experience of the former second-world nations, which now form the group of postsocialist countries in CEE. The analysis of suburbanization in these countries can thus enrich our understanding of the patterns, processes, and impacts defining contemporary metropolitan growth around the globe.

A number of recent studies of global suburbanization have cast a light on the variety of suburban experiences, suggesting that the dissonant mixture of suburban environments is a key feature of contemporary urbanization. It appears that the diversity of suburbs in terms of their patterns and forms has become the norm rather than the exception in metropolitan peripheries all around the globe (Vaughan, Griffiths, Haklay, and Jones, 2009; Ekers, Hamel, and Keil, 2012), juxtaposing exclusive gated compounds, modest working-class communities, thriving or desolate shopping centers, crowded squatter settlements, and sleek high-tech logistics parks (Garreau, 1991; Soja, 2000; Lang, 2003; Knox, 2008; Kolb, 2008; Teaford, 2008). This chaotic mosaic has become a common sight not just in advanced metropolitan areas of the West, but in the periphery of many large cities in Africa (Simon, McGregor, and Nsiah-Gyabaah, 2004), Asia (Wu, 2006; Zhou and Logan, 2008), and South America (Pirez, 2002; Heinrichs, Lukas, and Nuissl, 2011).

Suburbs today are so prevalent and so different from the late nineteenth-century bourgeois utopian vision that fueled their early growth (Fishman, 1987) that some scholars have argued that the term “suburbs” has lost any useful meaning, as has the urban–suburban dichotomy, extensively employed in urban literature (Bourne, 1996). The sprawling peripheries of today’s cities, the argument goes, signify an entirely different type of environment; they represent a radical departure from past processes of urbanization and usher in the arrival of a post-suburban world (Teaford, 1996; Phelps, Parsons, Ballas, and Dowling, 2006; Phelps and Wu, 2011; Mace, 2013). The proponents of this view see as doomed

all efforts “to corset emerging urbanisms into existing (but obsolete) analytical containers” (Dear and Dahmann, 2008: 269).

The global dimensions of the ongoing restructuring of metropolitan areas have called into question the relevance of the old approaches to understanding contemporary urbanization processes. There is a growing recognition that the prevailing focus on the Anglo-American experience of suburbanization has hindered a more nuanced understanding of the impact of suburbanization in a variety of local contexts around the globe (Couch, Leontidou, and Petschel-Held, 2007; Harris, 2010). In this light, some scholars have argued that we need a new paradigm for understanding urbanization and suburbanization in the early twenty-first century (Clapson and Hutchison, 2010), one that should be based on enquiries of a broader scope, which encompass the diverse experiences of countries around the world (Harris, 2010).

While we acknowledge that contemporary urbanization in many parts of the globe has moved beyond the urban and suburban dichotomy, our analysis offers support for the argument that, rather than signaling the arrival of a new post-suburban world, recent developments in postsocialist countries manifest more traditional processes of suburbanization adapted to the socioeconomic realities of postsocialist society. Although the pervasive dispersal of urban activities and the emergence of new suburban centers has led to the formation of more complex metropolitan spatial structures, the proclamation of a post-suburban dawn would seem to be a bit premature in the CEE postsocialist context.

At the start of the new millennium, similar forms of market-led urban and suburban development have proliferated around the world in the countries that are trying to realign their societies in accordance with the model of a contemporary capitalism based on strict adherence to neoliberal ideological principles. With its expanding networks – which explore economic opportunities and promote highly diversified and socially uneven consumption, realized within spatially fragmented and decentralized regulatory environments – global capitalism has been the most powerful agent in the spread of suburbanization across the former socialist countries of Europe, as well as in many other regions around the world. Our analysis of the seven case studies included in this book confirms the assumption that the capitalist system bears the crucial conditions for the development of suburbanization as a dominant form of urban growth (Walker, 1981; Harvey, 1989; Gottdiener, 1994). This is particularly the case with the neoliberal variant of capitalism, which has guided economic reforms and shaped social practices in postsocialist CEE, creating optimal conditions for unfettered suburban expansion.

The postsocialist sprawl and sustainability

Since the end of the socialist era, in which the bulk of new development was concentrated within city boundaries, suburbanization has dramatically reconfigured postsocialist metropolitan areas, spreading not only housing but also retail, offices, and industrial uses in highly fragmented and diffused patterns. As we have argued above, we associate this massive suburban expansion with the establishment of capitalist socioeconomic order and its principles in the context of socialist legacies and under the strong influence of globalization forces. Furthermore, urban development in postsocialist CEE has been managed through a mixture of free market practices centered on the belief in the sanctity of private property rights and a highly decentralized, locally based, and regionally uncoordinated system of land development controls conducive to the proliferation of sprawl (see Chapter 10 in this volume; Stanilov and Sýkora, 2012). As in many other parts of the world where suburbanization has flourished, these new forms of metropolitan growth have posed major challenges in postsocialist countries in terms of their finding a path to sustainable development.

In the former Eastern Bloc countries suburbanization, which has been praised in other urban contexts for providing greater individual freedom, choice, and lower housing prices (Gordon and Richardson, 1997; Bruegmann, 2006), has increased the range of housing options for the middle- and upper-income households and has brought employment and shopping opportunities closer to residents living in the periphery of the metropolitan cores. At the same time, sprawl, which has become the typical form of postsocialist metropolitan growth, has created a number of problems. The rampant suburbanization has generated a string of consequences familiar from the experience of many other metropolitan areas around the globe, where sprawl has been linked with cost inefficiencies, higher energy consumption, environmental degradation, and loss of social cohesion (TCRP, 1998, 2002; Burchell, Downs, McCann, and Mukherji, 2005; European Commission, 2011). In postsocialist Europe the list of environmental impacts includes the disappearance of prime agricultural land and open space, the fragmentation of natural habitats, increased instances of erosion and flooding, and higher levels of water, soil, and air pollution. The economic costs of urban sprawl have strained the ability of the public sector to provide infrastructure and services. The dispersal of public and private investments in metropolitan peripheries has undermined opportunities for redevelopment and upgrading in inner-city communities. Suburban shopping centers have shrunk the customer base of small-scale local retailers, while the dispersal of new housing to areas underserved by

transit has increased car dependency, limiting the mobility of large segments of the population without access to automobiles.

Overall, the new patterns of metropolitan growth have seriously undermined the prospect of achieving the goals of sustainable development, whereby the ability of future generations to meet their needs is not compromised by current practices of resource utilization (United Nations, 1987). Regretfully, the knowledge gained from the experience of western cities in regulating urban growth and controlling urban expansion has not been sufficiently recognized and efficiently deployed by the postsocialist governments of CEE.

Suburbanization is usually associated with the extensive spatial expansion of cities, realized outside of existing urban cores; but the distinction between what is considered urban and what is considered suburban varies depending on context. While in the US all areas surrounding central cities are recognized as suburbs, in Europe suburbanization is usually associated with new developments outside of so-called intravilan zones (Gaebe, 1987, 2004; Richardson and Bae, 2004; Cough et al., 2007; Szirmai, 2011). Intravilan growth is represented by development taking place within the urban built-up area and at the edges of the compact city fabric. A range of forms can be employed for the development of such extensions of the urban core, but the important distinction is that these developments are contiguous with the existing urban fabric and therefore are usually well connected with the urban infrastructure and service networks. This sets this type of development apart from the extravilan type, both in terms of their spatial characteristics and in terms of their social, environmental, and economic impacts.

Extravilan development can take a variety of forms, but two contrasting spatial patterns define the ends of this range. In the first one, suburban developments are concentrated in a relatively limited number of nodes of different sizes, which contain a varying mixture of residences, jobs, and services. These nodes of suburban growth are usually anchored in a nucleus of a historical settlement, but they could also be a result of planned development. The second pattern of extravilan growth, on the other hand, takes the form of highly fragmented developments scattered in a large number of clusters, many of which are of single use, often exclusively residential (Galster, Hanson, Ratcliffe, Coleman, and Freihage, 2001). These two generic patterns of suburban development represent the two extremes of a continuum between concentrated decentralization (most characteristic of Western European metropolitan areas) and urban sprawl (typically associated with suburbanization in North America). The two contrasting patterns differ in terms of their economic, social, and environmental consequences (TCRP, 1998, 2002), as well as in the regulatory regimes that

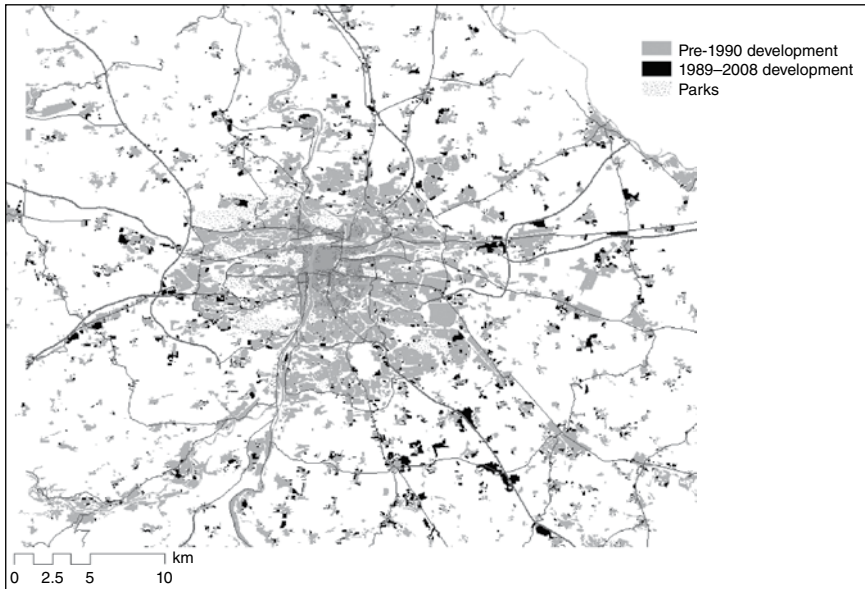


Figure 1.2 Urban development in Greater Prague, 1989–2010. Source: the authors.

govern their development. While concentrated decentralization is usually achieved through a combination of coordinated urban and regional planning and policies, urban sprawl is associated with much looser development controls and the reign of free market forces.

The distinctions between intravilan and extravilan areas, and between the two patterns of extravilan growth, are particularly important in analyzing the explosive growth of suburbanization in the former socialist countries. While the socialist era was characterized by a sharp contrast between the compactly developed cities and their surrounding rural hinterland, this feature of metropolitan form has been consistently eroded since the early 1990s through development that has acquired all of the typical characteristics of sprawl (Figure 1.2).

Postsocialist cities could have utilized much better existing advantages, inherited from the socialist era and related to these cities' compactly built form, high urban densities, and well-developed networks of public mass transit; or related to the expansive extent of central cities' jurisdictions, which often cover vast belts of immediate hinterlands. However, the massive dispersal of urban activities after 1989 in the form of sprawl is swiftly displacing the advantages of the compact urban form inherited from the socialist era.

The explosive growth of the suburbs has impacted negatively the ability of central cities to regenerate some of their areas threatened by long-lasting urban decline. The profound economic restructuring of the post-socialist economies, which resulted in massive deindustrialization, has left large chunks of the urban fabric as derelict industrial land. The opening of vast amounts of territories for development in the suburban periphery has undermined significantly the prospects of brownfield redevelopment, as investment has followed easier and more promising development opportunities on greenfield sites. Similar dynamics have impacted the evolution of the socialist housing estates, where the outmigration of more affluent residents is threatening to put these communities on a path of social decline by syphoning resources to more prosperous suburban or inner-city areas. The servicing of ever-expanding suburban territories, in that respect, has put a strain on limited public resources, diverting attention from the inner cities to the periphery.

These problems highlight the need to consider suburban growth as an integral component of the overall process of metropolitan change. In our view, suburbanization emerges as a defining phenomenon, reshaping an urban region when suburban growth outpaces the growth of the core city. During the socialist era this was hardly the case, as only a small fraction of the metropolitan population resided outside of the urban core. However, since the late 1990s suburban territories began to gain larger shares of the metropolitan population, jobs, and investments, and this led to a change in the balance between urban and suburban territories that signaled a clear shift to suburbanization.

Transforming the urban fabric of a region takes time; but the evolution of CEE metropolitan areas appears to have reached a critical junction. From here on, suburbs having firmly established their presence and importance, there are two possible paths. The first one leads toward a more coordinated metropolitan development, emphasizing concentrated decentralization in line with the principles embedded in the European Spatial Development Perspective (European Commission, 1999). The second path represents a continuation of existing practices that leads to more uncoordinated development and more sprawl, thus seriously compromising the chances of attaining any long-term sustainable development goals.

At this junction in time, the most pressing challenge for confronting suburbanization in the region hinges on the ability of national, regional, and local authorities to recognize that sustainable development requires a thorough revision of the policies and practices pursued since the early 1990s. Taming suburban sprawl and achieving more efficient patterns of urban growth are goals that demand much stronger spatial and interscalar

coordination and planning at the national, metropolitan, and local levels. Yet a type of management based on stricter regulation and stronger governments is still resisted, being associated with painful experiences from the communist past. It also runs counter to the neoliberal ideology that so far has guided the transition of CEE countries to capitalism. Finally, another significant impediment in the path toward sustainable metropolitan growth is the extent of sprawl that has already taken place. As suburbs have grown, so has the influence of investors, developers, landowners, and local politicians with vested interests in sustaining the current mode and forms of suburban expansion.

We argue that a critical starting point for the effective management of suburbanization is the understanding that the phenomenon is not simply a reflection of the preferences of individual households and firms, since the patterns of urban growth are a spatial representation of the fundamental principles of social organization. Urban development is a key arena where societies test and contest the balance between individual freedom and collective responsibility. Ultimately, suburbanization is not just a matter of personal choice, but one of societal choice. The neoliberal paradigm strongly affected postsocialist societies in the formative years of the early 1990s, pushing this balance to the far right. The high priority placed on economic freedom and property rights, coupled with the push for deregulation and decentralization, made it difficult to recognize the larger societal impacts of individual actions, given the complex processes that shape the formation of city regions. The need to redress this issue represents a huge political challenge: it highlights the fact that postsocialist transition is a project still not finished (Sýkora and Bouzarovski, 2012). In this respect, confronting suburbanization has become a mirror of confronting the wider societal challenges that need to be addressed in order to construct a sound framework for a sustainable future development.

Book structure and organization

The purpose of this book is to advance our understanding of suburbanization by exploring the development of this phenomenon in the specific context of the rapid social transformation of CEE countries from one socioeconomic order to another. As the title of this book suggests, the massive explosion of suburbanization in the postsocialist countries of CEE needs to be “confronted.” We aim to do this in two principal ways. First, we attempt to address the challenge of comprehending the nature of the phenomenon by exploring its dimensions, forms, causes, and consequences. Second, we discuss the challenges of managing metropolitan growth and the negative consequences of

uncontrolled suburbanization. These two principal challenges are interrelated, as the ability to change the current course of growth depends on a sound understanding of the forces underlying postsocialist suburbanization.

The book is organized in three parts. In the first part, comprised of this introductory chapter, we lay out our theoretical argument, linking suburbanization to key structural forces and factors that underlies the transition of the former socialist countries of CEE to a capitalist socio-economic order. We highlighted the decisive influence of neoliberal ideology in this process of societal transformation and the impact of globalization and socialist legacies on the patterns of metropolitan growth. While stressing the distinct characteristics of postsocialist suburbanization that emerged in the period of transition, we attempt to situate the experience of the CEE countries in the broader context of global urban change. Finally, we underscore the key challenges facing postsocialist metropolitan areas that are related to the explosive growth of uncontrolled suburbanization, which has dominated metropolitan growth since the collapse of the communist regimes.

The second part of our book – Chapters 2–8 – constitutes the main body of the text. We track the boom of the postsocialist suburbs in seven CEE capital city regions, where the forces of urban decentralization have been strongest during the past 20 years. The seven case studies – Budapest, Ljubljana, Moscow, Prague, Sofia, Tallinn, and Warsaw – represent a typical range of CEE metropolitan areas in terms of their size, ranging from a little over 0.5 million residents (Ljubljana and Tallinn) to a little less than 3 million (Budapest); Moscow (including Moscow Oblast), Europe's largest metropolis, accommodating over 18.5 million residents, is the outlier in our group. Moscow stands out from the other six cities not just by its size, but also by its particular form of state capitalism, adopted since the dissolution of the USSR in 1991. As such, Moscow serves as an illustration of a divergent evolutionary track and as a basis for comparing the impacts of socioeconomic order on patterns of urban development and metropolitan growth.

The analysis of postsocialist suburbanization is based on a common methodological framework that guides the exposition of the case studies and serves as a basis for a comparative analysis offered in the last part of the book. The case studies examine the phenomenon of suburbanization along four main vectors of analysis: development patterns, driving forces, consequences and impacts, and the management of suburbanization. The chapters begin by placing contemporary suburbanization in the historical context of urban development before and during socialism. This historical narrative illuminates key distinctions between different modes of societal organization and their inherent patterns

of territorial development and metropolitan growth. The analysis of contemporary patterns of suburbanization includes both residential and nonresidential deconcentration as integral parts of metropolitan growth. The case studies offer a qualitative assessment of suburbanization patterns and processes, made with the help of simple statistical measures aimed at illuminating the dynamics of metropolitan growth, the morphological characteristics of residential and nonresidential suburban developments, and the social and demographic characteristics of the suburban population. To facilitate comparison across these different case studies, we applied a common definition of suburbanization as a process of metropolitan growth taking place outside of the urban core and leading to an increase in population, housing, and jobs in these territories. The majority of our case studies utilized the official definitions of metropolitan areas and administrative central-city boundaries in order to distinguish between urban and suburban growth (see the discussion in Chapter 9).

The analysis of spatial patterns in each of the case studies is followed by a discussion of the conditions and driving forces of postsocialist suburbanization, with a focus on the narrative of the variety of economic, social, political, and institutional factors impacting the process of urban decentralization. The emphasis is placed on the transition from socialist to capitalist society and on the operation of market forces in transforming the metropolitan landscapes inherited from the socialist past. Each case study underscores the growing role of international and global forces in the production of contemporary suburban landscapes and their interplay with local, regional, and national institutions. This is followed by the critical assessment of economic, environmental, and social impacts of urban decentralization and various forms of suburban growth. The case studies conclude with an overview of the specific public policy and urban planning approaches adopted in addressing the challenges of suburbanization.

The third and final part of our book – Chapters 9 and 10 – offers a comparative summary of postsocialist suburbanization on the basis of the evidence presented in the case studies. The two concluding chapters frame our analytical argumentation by summarizing the insights gained from the detailed accounts of suburbanization in the seven metropolitan areas. Chapter 9 begins by offering a historical perspective, tracing the evolution of suburbanization in CEE from the early days of the formation of metropolitan areas in the region to the present. The patterns of metropolitan growth and change are at the center of this chapter, the core of the text focusing on intraregional similarities and differences and on the key factors that account for

their existence. The final chapter continues the argument about the critical importance of public policies and planning for the spread of suburbanization, which is presented both here in the introductory chapter and in the final section of Chapter 9. The book concludes by casting a speculative glance at the likely future scenarios for metropolitan growth in the region, linking the possible trajectories of suburbanization to the ways in which societies in CEE will address the dual set of challenges arising from problems specific to the region as well as from the problems that face the planet at the beginning of the new millennium.

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Urban Sprawl on the Danube

The Impacts of Suburbanization in Budapest

Zoltán Kovács and Iván Tosics

Introduction

Since the end of the nineteenth century, Budapest, the capital city of Hungary and its principal political, cultural, and business center, has been continuously influenced by cycles of urban concentration and deconcentration. During the last two decades, however, urban sprawl has become one of the most significant phenomena that characterize the development of the Hungarian capital and its region. Undoubtedly this process is closely linked to the postsocialist transition in the country, which encompasses processes like the liberalization of the housing market, a sharp increase in residential mobility, and the rising influence of global capital on urban development (Sailer, 2001). Not surprisingly, the processes of accelerated suburbanization that take place around Budapest in recent years have attracted the attention of a number of urban scholars (Berényi, 1986; Kovács and Dövényi, 1998; Kok and Kovács, 1999; Timár and Váradi, 2001; Izsák and Probáld, 2003; Tosics, 2005b; Dövényi and Kovács, 2006; Szirmai, Váradi, Kovács, Baranyai, and Schuchmann, 2011), who have posed a range of critical questions about the contemporary patterns of urban growth. The inquiries into the nature of the suburbanization phenomenon have become even more relevant after the turn of millennium, as suburbanization has spread to other Hungarian cities as well (Molnár, Szépvölgyi, and Szirmai, 2007; Bajmócy and Hegedűs, 2008; Csapó and Németh, 2008).

The aim of this chapter is to provide a comprehensive overview of recent processes of urban deconcentration in the Budapest region, along with an examination of the socioeconomic and political conditions that have enabled this phenomenon. We first offer an exploration of the historical background of suburbanization in Budapest, followed by an analysis of the contemporary dynamics of urban deconcentration in the region. Then we discuss the conditions of suburbanization, its driving forces, and its most important impacts, concluding the chapter with an assessment of current policies and practices of managing suburban growth around Budapest.

Suburbanization in Budapest before 1990

Urban sprawl around Budapest has a long and complicated history, which can be divided into several distinct phases.

The first signs of suburbanization in Budapest can be traced back to the end of the nineteenth century and the beginning of the twentieth. The extension of the streetcar network and the construction of new suburban railway lines during that period enabled the development of residential areas beyond the city boundary (Enyedi and Szirmai, 1992). By 1912 the suburban light railway network (HÉV) had six lines in operation, in addition to the eight streetcar lines connecting Budapest with its surrounding municipalities. Numerous commuter villages sprung up around the Hungarian capital at that time; they were inhabited mainly by lower income working-class residents.

The second stage in the development of Budapest's suburbs occurred during the interwar period, when a rapid growth in industrial production and skyrocketing rents in the capital spurred the expansion of suburban communes, some of which became medium-sized towns boasting a population of 50,000 to 60,000 inhabitants (e.g. Újpest, Kispest, Csepel). The rapid expansion of Budapest's population and of its built-up area was reflected in changes in the region's administrative division. The original 10 districts, established at the formation of Budapest in 1872 from three independent towns, were increased to 14 in 1930. At that time the authority of the Council of Public Works was extended to 22 surrounding municipalities. Planning regulations set out by this powerful body, which was established in 1870, envisioned the creation of Great Budapest through the annexation to the capital of existing suburban settlements. This goal was ultimately accomplished in 1950, when 23 suburban settlements were incorporated in the territory of Budapest as part of an administrative reform carried out by the communist regime.

The creation of Great Budapest in 1950 marks the beginning of the third period of suburbanization in Budapest. In the following two decades, heavy government investments in industrial development, the consequent rise in the demand for labor, and the collectivization of agricultural land attracted many migrants from rural areas to the capital. A new peripheral agglomeration of satellite settlements began to emerge around Budapest. This growth at the metropolitan edges was aided by the imposition of administrative restrictions on acquiring residency status, a measure introduced during the 1950s with the goal of controlling the influx of people into the capital.¹ As a result, the municipalities surrounding the capital city experienced rapid population increase from the late 1950s onwards. This growth was characterized by the lack of adequate physical and social infrastructure in the emerging peripheral areas. As a consequence, an extensive residential band of development, strictly dependent on the city for jobs and services, arose around Budapest. By 1970 the proportion of commuters among active earners in several of these surrounding settlements surpassed 80 percent.² The expansion of the suburban belt accelerated during the 1970s, when the population growth of the metropolitan periphery exceeded that of the city. This was a special “East-European type of suburbanization” (Ekler, Hegedűs, and Tosics, 1980), fueled not by the outward flight of residents from the urban center but by the influx of migrants from the countryside who could not settle down in the city due to a combination of factors. These included the relatively high housing costs in the capital (by comparison to the rest of the country) and the imposition of administrative restrictions on establishing residence within the city boundaries.

A different and relatively new phenomenon, gaining momentum in the early 1970s, was the construction of thousands of weekend houses, clustered mostly in the northern and western peripheries of Budapest – areas characterized by attractive hilly landscapes with an abundance of open green spaces. In most cases these second homes were erected as simple wooden cabins on a small piece of land and had very basic facilities (normally they were without running water or sewage systems). The owners were typically from modest social backgrounds; very often they were residents from the high-rise socialist housing estates or from the inner-city tenement blocks (Földi, 2006). Gradually, starting from the late 1970s, some of these weekend houses began to get converted into permanent homes, accommodating the first wave of residential outmigration from Budapest (Berényi, 1986). This trend was solidified in the second half of the 1980s, partly as the outcome of a new housing policy adopted in 1983, which provided greater financial support for the private construction sector, and partly as the result of a rapidly

growing income stratification characteristic of the last decade of the communist regime.

Nevertheless, in comparison to the scope of suburbanization processes in Western Europe or in the United States (and especially there), the growth of the suburban belt around Budapest remained limited, in a pattern characteristic for other cities of East Central Europe too. In 1990 the suburban zone numbered 413,000 residents, comprising only 17 percent of the population in the functional urban region. A more intensive decentralization of population and businesses toward the periphery of Budapest's metropolitan area was prevented by numerous factors, including state control over housing and local land markets, the low level of private car ownership, the absence of market-based location choices for businesses, and the weak power of local governments, which undermined their ability to attract investments to the periphery. Since the socialist state made minimal investments in communal infrastructure or services in the suburbs, those areas had little attraction for the affluent segments of the population. The suburban housing stock was comprised predominantly of small single-family dwellings, mainly self-built by blue-collar commuters to the city (Kok and Kovács, 1999).

Dynamics of Suburbanization in the Postsocialist Period

With 2.5 million inhabitants, Budapest is the largest metropolitan region in East Central Europe. Located in one of Hungary's seven Nomenclature of Territorial Units for Statistics (NUTS)-2 regions, the metropolitan territory can be divided into discrete urban zones with distinct housing, morphological, and social characteristics (Figure 2.1).

The oldest and most densely built part of the city, known as Little Budapest, consists of an area of 207 km², which encompasses the core of the urban area. This zone comprises the historical city center and the adjoining residential areas, which are characterized by three- to four-storey buildings constructed mainly during the late nineteenth century. At the fringe of this core land development is less intensive, featuring areas of low-rise working-class housing mixed with industrial estates, warehouses, and transport areas (such as railway stations and depots). This inner urban core is surrounded by an outer ring, which was considered the suburban zone of Budapest prior to 1950. After the annexation of this territory in 1950, the total area of Budapest grew to 525 km². This zone became the target of socialist housing construction, mainly in the form of large, high-rise housing estates. Despite its intensive development during this period, this zone still retains its original rural character, being dotted with open spaces and clusters of single-family houses.

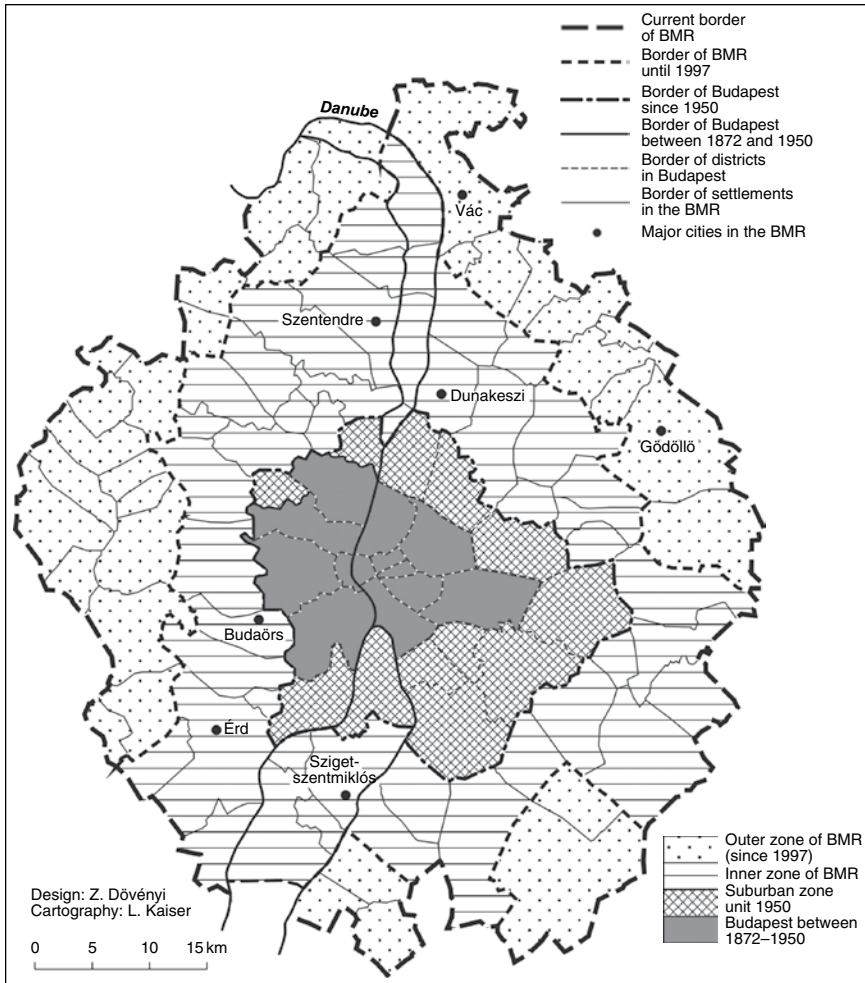


Figure 2.1 Structure of Budapest’s metropolitan region (BMR). Based on data from Dövényi and Kovács, 2006.

Finally, the suburban zone encompasses the settlements around Budapest in which at least 25 percent of the working population commute to the central city and maintain strong ties with the capital. According to the first legal document that specified the official boundaries of Budapest’s metropolitan region (the National Settlement Development Concept approved in 1971), this region included 44 independent settlements. In 1997, in recognition of the intensification and expansion of the functional connections between Budapest and its suburban settlements,

which took place during the 1980s and 1990s, the Hungarian government extended the boundary of the metropolitan region. Today this area encloses 80 settlements, some of which are incorporated towns with robust central functions while others are simply dormitory villages.

In the metropolitan structure outlined above, a clear distinction exists between the inner periphery (the outskirts annexed in 1950) and the outer periphery (the suburban hinterland). For the inner periphery, the postsocialist transformation triggered a number of controversial processes of urban change. These include on one hand processes related to the physical, social, and economic decline of the socialist housing estates built during the 1970s and 1980s in those areas (Egedy, 2000). Many of the middle- and upper-income residents who left these estates moved to the suburbs, thus giving a boost to the process of residential suburbanization and sociospatial stratification. On the other hand, the inner periphery became a breeding ground for the development of exclusive residential parks – a new segment of the housing market, developed mainly by foreign companies as a higher density equivalent of the American gated communities (Hegedűs, 2009). The inner periphery was also severely impacted by the breakdown of the socialist industry, which had left behind a wasteland of derelict industrial areas forming a complete rustbelt around the capital. The first successful redevelopment projects in these areas were initiated after the mid-1990s, when the revitalization of numerous brownfield sites began expanding outward, along the main transportation axes. In our view, the revitalization of the inner periphery is part of the general tendency to deconcentrate people and economic activities, and thus it should be treated as an internal or “hidden” suburbanization.

Residential suburbanization patterns

Since the beginning of the transition period, the population of the Hungarian capital decreased by nearly 300 thousand residents – from a little over 2 million in 1990 to 1.7 million in 2011. This sharp population loss results from a combination of natural decrease (which accounts for about two thirds of the decline) with an accelerated migration of urban residents to the suburban periphery. While this urban population loss was initially masked by a positive influx of migrants from other parts of the country to the capital, by the mid-1990s it became more pronounced, reaching a net figure of 18,000 residents per year. This trend was gradually reversed, and since 2009 Budapest restarted to have a migration surplus; thus the net population decline in the capital was reduced. In the suburban zone, on the other hand, a slight natural decrease in population has been offset by the massive inflow of people moving away

Table 2.1 Natural increase and migration in Budapest's metropolitan region (BMR), 1990–2011.

	<i>Population 1990</i>	<i>Population 2011</i>	<i>Population change 1990–2011</i>	<i>Natural increase</i>	<i>Balance of migration</i>
Budapest	2,016,681	1,733,685	–282,996	–197,752	–123,264
Suburban zone	566,961	817,562	250,601	–3,016	232,251
BMR	2,583,642	2,551,247	–32,395	–200,768	108,987
Central Hungary	2,966,523	2,971,246	4,723	–230,790	185,641

Source: Central Statistical Office (CSO), Budapest.

from the urban core. As a consequence, since 1990 the size of the population in the suburban zone grew by 44 percent, crossing the 800,000 threshold by 2011 (Table 2.1).

The main targets of suburban migration in the last couple of decades have been predominantly rural communities in the hilly areas north and west of Budapest (Figure 2.2), which offer high-quality residential environments in attractive natural settings. The majority of these new developments have been concentrated inside existing suburban settlements (in the form of infill on available plots) or at their fringes (typically on greenfield sites). Here the construction of detached houses, terrace houses, and – occasionally – residential parks has flourished, attracting mostly young middle-class families with children, which are relocating from the capital city. The outflow beyond the boundaries of the capital of residents with specific socioeconomic characteristics has resulted in significant changes in the social and demographic makeup of Budapest's suburban communities. Census data indicate that between 1990 and 2001 the proportion of people with a college degree living in the suburban zone has increased from 3.2 to 12.7 percent. Though data of the 2011 census are not available yet, we expect a further substantial increase in this respect.

The invasion of younger, better educated, and more affluent families into the suburbs triggered a shift in the housing market. While in Budapest the number of inhabited dwellings decreased by almost 50,000 units between 1990 and 2001, the housing stock of the suburban zone expanded by 21 percent. Of the 195,000 new dwellings built between 1990 and 2011 in Budapest's metropolitan region, 47 percent were located outside the boundaries of the capital city (Figure 2.3). The ratio between the volume of construction built in the two zones changed in favor of suburban development, from 1:1 in the second half of the 1990s to 2:1 in 2005. After 2005, however, housing construction in the

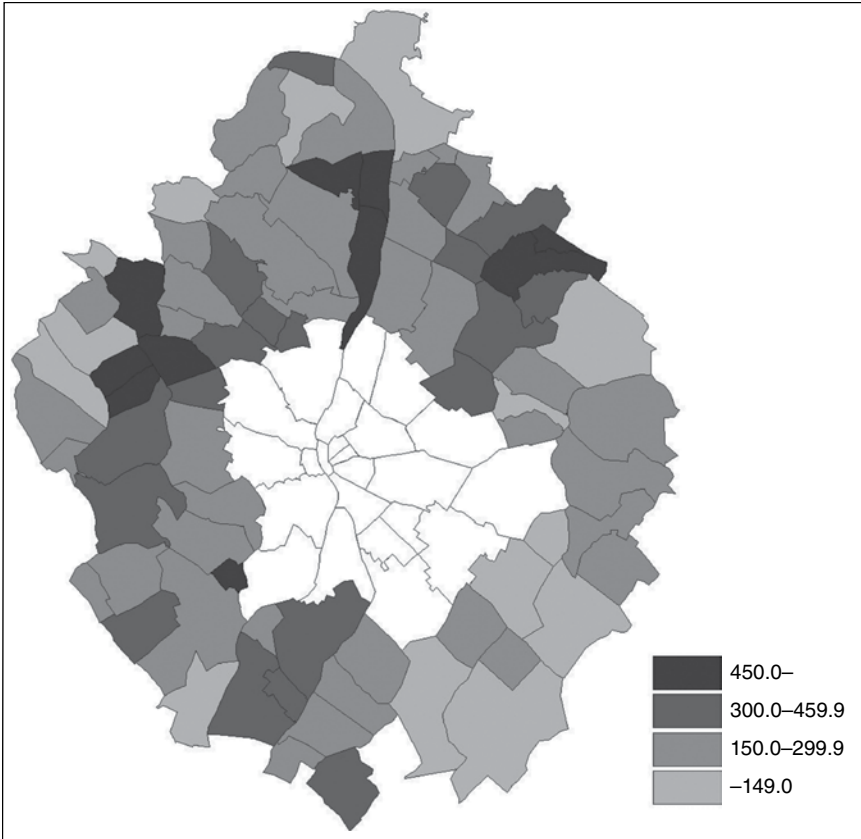


Figure 2.2 Net migration in the municipalities of Budapest's urban region, 1990–2007 (immigrants/1,000 inhabitants). Based on data from the Hungarian Central Statistical Office, 1991 and 2008.

suburban zone has rapidly declined, while the volume of construction in the city of Budapest grew steadily until 2009, when the global financial crisis caused a sharp drop in housing construction both in the city and in its suburban zone. The explanation is twofold. First, a very favorable housing loan system was introduced in Hungary in 2000. The interest subsidy for housing loans was significantly increased, which contributed to a boom in residential construction. From 2005 on, the criteria for receiving mortgage financing were tightened, and in the subsequent years housing construction in the suburban zone dramatically declined. Another factor with a significant impact on the dynamics of the metropolitan housing market has been the success of urban rehabilitation programs introduced around the turn of the millennium: these

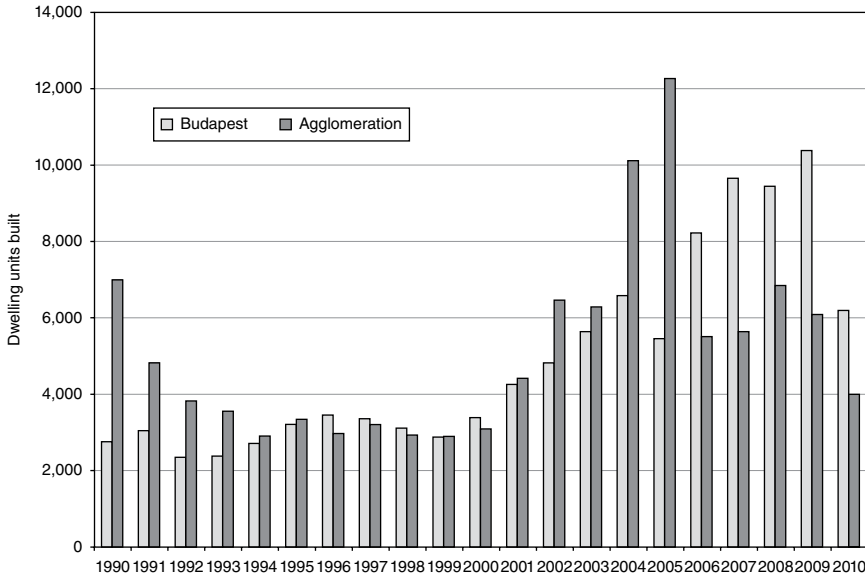


Figure 2.3 Volume of newly built dwelling units in Budapest and its agglomeration, 1990–2010. Based on data from the Hungarian Central Statistical Office, 1991 and 2011.

programs have resulted in a steady growth of newly constructed dwellings inside the city boundaries since 2000. By 2006, more dwellings had been constructed in Budapest than in the suburban zone. Data for subsequent years confirm this trend, indicating that Budapest had already passed the peak of the suburbanization stage, slowly entering the stage of re-urbanization.

Nonresidential suburbanization patterns

The suburbanization of industry and services started somewhat later than residential suburbanization around Budapest. The beginning of the process of nonresidential deconcentration could be traced back to the early 1990s, but its speed remained below the rate of residential suburbanization. The main wave of decentralization of service functions and industry in the metropolitan periphery started in the late 1990s. It was fueled primarily by the establishment of new industries and businesses, usually with foreign investment, which showed a clear preference for suburban locations. The newly erected shopping centers, business parks, logistic and office complexes were typically developments on green field sites, fueling the rapid expansion of suburban enterprise zones and new economic growth poles beyond the urban edge.

A recent study exploring the genesis of economic growth poles has identified three such formations around Budapest, all of which have emerged in the last 15 years (Dövényi and Kovács, 2006). These include: (1) Gödöllő town and its surroundings along the M3 motorway; (2) Szigetszentmiklós-Dunaharaszti-Soroksár along the M0 motorway; and (3) Budaörs–Törökbálint at the M1–M7–M0 intersection. These three poles differ not only by geographical location but in their dynamics, genesis, and structure as well (Figure 2.4).

The economic pole around Gödöllő emerged as a result of the restructuring of an existing commercial area. With a population of 30,000 residents, Gödöllő was a rather modest urban center before 1990. Its agricultural university (now Szent-István-University) was the town's only large urban facility of any regional significance during the socialist period. Industrial activities in Gödöllő at that time included some small and medium-size enterprises of little regional importance too. After 1990, however, this formerly sleepy socialist satellite town became a hotspot for industrial development, accommodating many small high-tech companies, along with some large-scale enterprises such as Sony, Caterpillar, and the Lear Corporation. A biotechnological research center was created in cooperation with the Szent-István-University, with the long-term objective of forming a "Technopolis" intended to tap the synergies created between knowledge-oriented industries and private and academic research concentrated in the area. In addition, the significance of tourism around Gödöllő is also increasing, especially in connection with the Formula-1 racetrack Hungaroring in Mogyoród, the royal palace in Gödöllő, and the thermal spa in nearby Veresegyház (Michalkó, 2001). The large shopping centers built in the adjoining settlement Fót have also contributed to the economic success of this suburban growth node.

During the last decade, the Szigetszentmiklós-Dunaharaszti-Soroksár pole, which emerged along the M0 beltway in the south of the metropolitan area, has evolved into a major axis of development. Massive investments in recent years and several major development projects have turned this part of the southern metropolitan zone into the area with the biggest concentration of logistics in Eastern Central Europe. In addition to smaller logistic clusters, the Budapest Intermodal Logistic Centre, which occupies 100 hectares on the southeastern edge of Budapest, started operations in November 2003. Today this zone is an important commercial transport hub between Western Asia, the Balkans, and Western Europe, highlighting the ever increasing importance of logistics in the process of suburbanization (Dövényi and Kovács, 2006).

During the 1990s the suburbs of Budaörs and Törökbálint changed very quickly their image, transforming the area from a cluster of

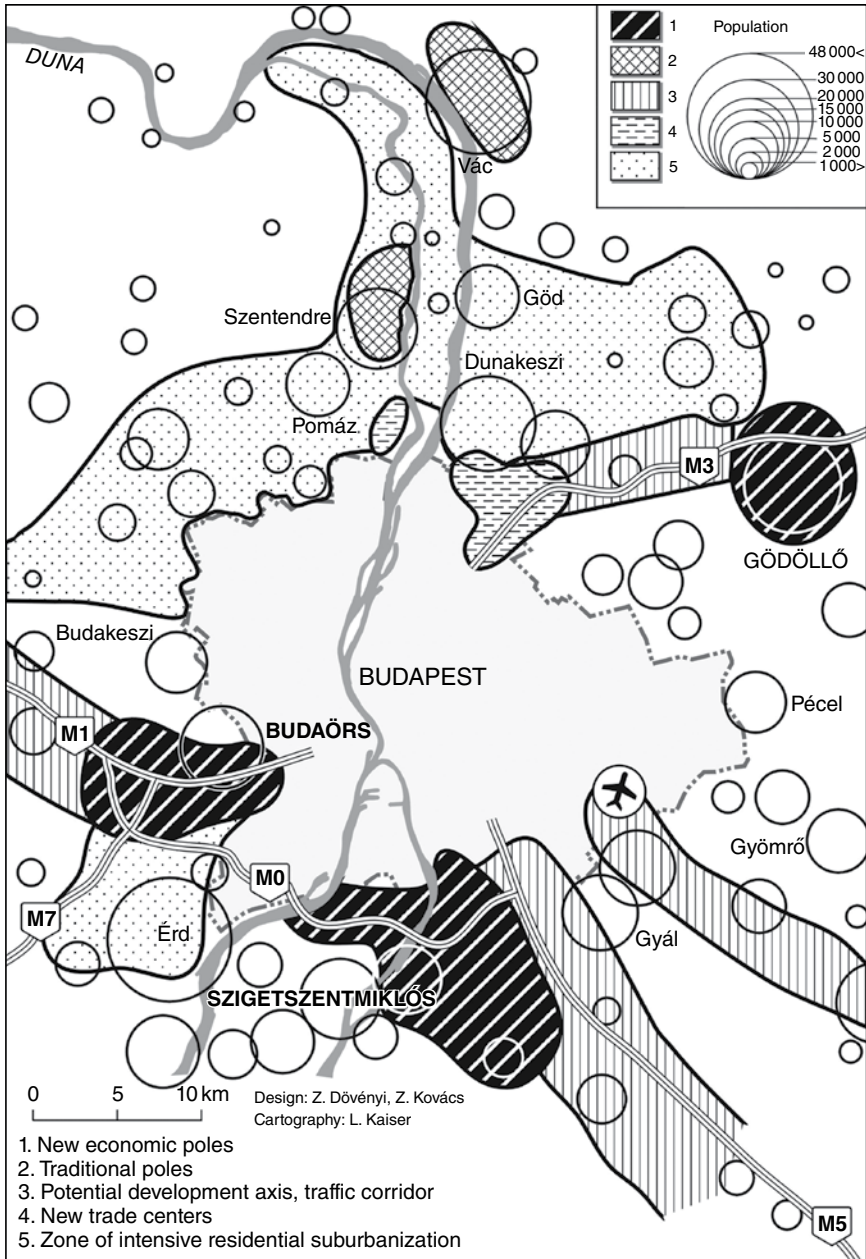


Figure 2.4 Development poles in Budapest's urban region. Adapted from Dövényi and Kovács, 2006.

dormitory communities into the most dynamic pole of economic growth in Budapest's metropolitan region. Prior to 1990 this area suffered from a severe jobs–housing imbalance, Törökbálint being an exclusively residential community. Today Budaörs is one of the biggest commuter targets in the metropolis, and both communities are among the most important centers of employment in the Budapest region. The highly dynamic trajectory of Budaörs–Törökbálint's development as a pole of economic growth shows clear similarities to the evolution of edge cities in North America (Burdack, Dövényi, and Kovács, 2004). The transition to a market economy has allowed the Budaörs–Törökbálint region to take advantage of its location as Budapest's "gateway to the West." The completion, in the early 1990s, of the M0 motorway, which connects the westwards motorways leading to Vienna (M1) and Lake Balaton (M7), was a crucial factor in securing this reputation. The newly created M0–M1–M7 interchange solidified the area's top ranking as the most accessible regional location, thus enticing numerous investors. As a result, the area underwent fundamental changes in terms of its land use composition. Modern industrial, office, and household-oriented services targeting the metropolitan market played an important part in this process. In recent years, a number of logistics centers have also emerged in the area. The dynamic development increased the number of jobs in the Budaörs–Törökbálint area by 6,000; thus a total of 20,000 employees was reached by 2001. Due to its impressive economic growth, Budaörs has been ranked lately among the most prosperous Hungarian cities at the beginning of the twenty-first century (Izsák and Probáld, 2003).

A notable development during the last couple of years is the emergence of a fourth economic pole on the southeastern edge of Budapest, next to the Ferihegy Airport. This cluster is emerging as a result of the agglomeration of wholesale, logistics, and other airport-oriented business activities. The rapidly increasing passenger turnover of Budapest's airport, which reached 8,2 million passengers in 2010, the forthcoming enlargement of its capacity, and recent improvements in the airport's regional connections through the extension of the M0 beltway point with certainty to a continuing growth for this area in the foreseeable future.

Complex assessment

As a consequence of the accelerated residential suburbanization, the population of the municipalities surrounding the city of Budapest to the north and west increased quite dramatically after 1990. In contrast, the number of inhabitants in the eastern and southern parts of the metropolitan zone – parts characterized by less scenic natural conditions – has remained stagnant. During the 1960s and 1970s these areas attracted

the best part of the low-skilled labor force that migrated from rural areas to the capital. As a consequence of these migration patterns from the 1960s and 1970s – and subsequently from the late 1980s and 1990s – a distinct pattern of social polarization has taken shape in the outer periphery of Budapest. The northern and northwestern regions have attracted predominantly upper-middle-class residents, whereas the southern and eastern parts of the metropolitan area are populated primarily by lower income residents.

Residential suburbanization and the decentralization of business activities have led to a rearrangement of the commuting flows within Budapest's urban region given its highly attractive labor-market. In 2001 Budapest still had a positive balance in the number of commuters traveling to work across the city boundaries, the number of employees living in the suburbs and working in Budapest exceeding the number of outbound commuters by over 110,000. Unfortunately there are no available data to allow comparison with earlier periods. Generally speaking, there is overwhelming evidence that, since 1990, the economic interaction between the city and its surrounding areas has become much more intensified, leading to an increasing complexity of the spatial linkages between the metropolitan core and the suburban periphery. In this process, the trend points to a declining role of the urban core and to a continuously increasing role of the periphery as a main domain of new activities.

Conditions, Driving Forces, and Impacts of Suburbanization

Conditions for suburbanization

The analysis of postsocialist suburbanization needs to be grounded in an understanding of the basic political and economic factors that shaped urban systems in the socialist era. Contrary to the view of some geographers, according to whom socialist city development presents only a deferred replication of the general model of urbanization in the developed countries, Iván Szelényi has argued that “societies with different socioeconomic orders will produce qualitatively different urban conditions” (Szelényi, 1996: 290). In line with this argument, the analysis of the specifics of the socialist housing system (Hegedűs and Tosics, 1992, 1996) has served as a basis for the development of a “socialist model of urban development” (Tosics, 2005a: 48).

One of the most striking and visible differences between the western and the eastern models of urban development is revealed in the characteristics of Eastern European suburbanization. This is a clear consequence

of the strong control exercised by the socialist state over all aspects of supply and demand in urban development matters. During the socialist era, public housing within cities was not only limited in quantity but also in its allocation rules. This imposed serious administrative restrictions on the acquisition of such dwellings, practically denying this option to would-be urban residents. Since most aspects of private housing development were also tightly controlled by the state, especially land supply and building materials, privately built housing in cities carried a high-premium price, which made this stock inaccessible to families from the rural provinces. Thus no viable solution remained to migrants to urban areas but to settle down in the vicinity of cities where the administrative control was less harsh and where possibilities existed of overcoming the income–price problems through self-help housing.

The collapse of the socialist political and economic regime inevitably led to the collapse of the socialist housing and urban development systems. Although Hungary initiated economic reforms a few years earlier than most other socialist countries, the critical changes came as a consequence of the political collapse. By the end of 1990, all legal and administrative aspects of state control over demand and supply of housing, land, and infrastructure had changed. This produced radically new conditions for urban development:

- The rising affluence of certain segments of the population led to a substantial increase in the demand for new housing and built space. As in most postsocialist states, income inequalities increased sharply in Hungary during the first half of the 1990s. Since then they have remained relatively stable, slightly below OECD average.³
- The decentralization of public administration, with the practical elimination of the previously very strong state and county control over local decision making, gave the opportunity to all settlements, regardless of their size, to make their own decisions about land policy within their administrative areas.
- The weakened control of Budapest municipality over the local district governments, which acquired the right to elect directly their mayors and local assemblies, eroded the ability of the municipal government to coordinate urban development on a citywide scale.
- The transfer of state-owned real estate assets, including housing and land, into the ownership of local governments gave them additional power to control new development.

The radical changes in the basic legal regulations and institutional systems were paralleled by the introduction of new central government policies, with the main intent to speed up the process of transition

from a socialist state-controlled to a capitalist free-market society. These policies were carried out through the following acts:

- The 1993 Housing Law made the privatization of public housing compulsory with the introduction of the Right to Buy. As a consequence, the share of public housing in Budapest decreased from 50 percent to a mere 6 percent of the housing stock, with the sale of close to 350,000 flats to sitting tenants.
- In order to find “real owners,” state properties such as factories, state-owned companies, and urban land were sold in the form of cash privatization to those who offered the largest financial return. The revenues were split between the central and the local governments.
- Through the process of privatization, the agricultural land around Budapest, as well as elsewhere in the country, was sold to private owners in compensation for the forceful establishment of agricultural cooperatives in the 1950s and 1960s. This process was a key factor in the massive conversion of land from agricultural to residential uses (Schuchmann, 2001: 21).
- The former socialist territorial development policies of the national government were reversed during the 1990s, giving priority to the allocation of financial assistance for infrastructure development in previously neglected regions and to smaller settlements in general.
- Revisions in national taxation policies in the beginning of the 1990s promoted fiscal decentralization through the introduction of local taxation, leaving substantial portions of tax revenues at the local level.

Although most of the political, institutional, and administrative changes mentioned above happened at the beginning of the 1990s, it would be a mistake to assume that urban development processes changed with similar speed. Detailed analyses of the last two decades reveal that the transition from socialism to capitalism can be split into three distinct periods (Tosics, 2006: 133), which are also substantially different with regard to the conditions for (sub)urbanization. These three phases of transition can be summarized as follows:

- a *period of vacuum* spanning the first half of the 1990s, which was marked by controversial regulations and unsettled political and socioeconomic processes;
- a *period of adaptation* covering the second half of the 1990s, which was marked by the advancement of market-dominated ideas about local development accompanied by a reactive public policy approach;

- a *period of adjustment* starting at the beginning of the twenty-first century and characterized by strengthening and increased coordination between policy areas and the promotion of proactive public policy approaches.

This periodization of the transition toward a capitalist market-based democracy can be considered a general framework for sectoral analysis. There are, of course, some differences in timing across the various policy sectors. In some of them, urban development being a notable example, the period of adjustment arrived later – especially in the case of the Budapest metropolitan area.

The driving forces of suburbanization

Residential suburbanization While the individual decisions about residential location are always a matter of specific circumstances, the general changes in the patterns of urban–suburban mobility are structurally determined. Since the middle of the 1980s, there were three pivotal points in residential mobility patterns in the Budapest region, and these shifts can be linked to major structural changes taking place in the Hungarian society at the time (Table 2.2).

LOW-INTENSITY SUBURBANIZATION (mid-1980s to mid-1990s). In Hungary the reforms toward a market-based economy preceded the political reforms toward a pluralist democratic society (in most other Eastern European countries these two processes were closely linked). The first reforms launched in 1968 recognized the multisector nature of the economy, as state, cooperative, and private small-scale economic activities enjoyed equal rights within a socialist economy. At the individual

Table 2.2 Dynamics of mobility patterns in Budapest, 1990–2006.

<i>Period</i>	<i>Population of Budapest</i>	<i>Annual domestic migration balance of Budapest</i>	<i>Annual domestic migration balance of Budapest against Pest county</i>
Uncertainty (1990–1994)	2,015,955 (1992)	–3,775	–6,800
Adaptation (1995–2001)	1,821,000 (1998)	–12,731	–14,150
Adjustment (2002–2006)	1,697,000 (2004)	–7,092	–13,765

Source: Central Statistical Office (CSO), Budapest.

level this meant more opportunities for profit making and more freedom in cultural and private life. This was basically the so-called “goulash communism” – a mixture of economic policies and personal opportunities. The second wave of economic reforms, undertaken during the second half of the 1980s, allowed the establishment of private companies, initiated the first small wave of privatization of housing, and gave local governments more freedom in decision making pertaining to development matters. These initiatives paved the way for the process of suburbanization for a growing (although still limited) number of households; these rented or sold their city dwellings,⁴ thus accumulating the financial means to move out to the city periphery, where cheaper plots of land were available at the time. These “pioneers” of suburbanization could strike lucrative deals, but they had to rely entirely on their own initiative and resources through all the steps of the process – from selling their flat to finding and buying the plot and to building the new house – as no public or private institutions existed to support their endeavors.

STRONG SUBURBANIZATION (mid-1990s to around 2005). The dramatic socioeconomic and political changes instituted during the first half of the 1990s, coupled with the loose regulatory environment of the early transition years, provided excellent conditions for the growth of both the demand and the supply side of suburbanization. Rising personal incomes, along with the additional revenues derived from housing privatization (including the capitalization of the market value of public housing), allowed a growing share of middle-class families to act on their wishes and to invest into new owner-occupied single-family housing. The increased demand for suburban housing was matched by an increased supply of suburban building opportunities. In addition, a number of important public policies enacted during the early 1990s provided a hefty push, propelling the process of suburbanization forward. These policies included the decentralization of decision making, which increased the autonomy of local governments; state infrastructure investment policies favoring previously neglected smaller settlements; the new taxation policies allotting to local governments 100 percent (soon to be reduced to 50 percent, and subsequently to an even lower percentage) of the collected personal income tax revenues. This regulatory environment created incentives for suburban municipalities to adopt policies aimed at attracting middle- and higher income households. Throughout the 1990s, intensive infrastructure development allowed many settlements around Budapest to establish an adequate level of communal services. In addition, in order to entice new affluent residents, many of these settlements re-zoned vast quantities of agricultural

land for residential uses, a right granted to local governments in 1990.⁵ Since residential development within Budapest during the 1990s was limited to small-scale renovation and reconstruction activities, housing supply within the city was quite limited and expensive. The best opportunities, in terms of housing quality and costs, were offered in the suburban settlements surrounding the city, nudging many well-to-do households to relocate to those areas. A less numerous yet substantial segment of households moving out of the city during this period was comprised of those lower income families that had become unable to bear the costs of housing and services in the city and opted to relocate to cheaper suburban communities, where the cost of living was more affordable.

INTENSIVE POPULATION EXCHANGE (2005–2010). Around the end of the 1990s, the strategy of some suburban municipalities to entice new residential development changed as a consequence of the increasing demand placed on these governments to provide public services to a rapidly growing population. This increased burden was made even heavier through the reduction of the revenue that was flowing into local government coffers as a result of the restructuring of national taxation policies. At the same time, new opportunities to acquire business turnover tax revenues became available. Within a short period of time, the interest of suburban local governments shifted from supporting housing growth to attracting nonresidential development investments. Thus, by 2005–2010, Budapest took the lead in new residential construction, the majority of the units being built within the boundaries of the city, partly as garden city developments, partly as infill housing (the latter with relatively small flats, also accessible to first-time buyers through loans).

The changes in the dynamics of suburbanization are in close relationship with the waves of financing residential development. In the 1990s residential developments were based mainly on the savings of the population and on revenues acquired from the sale of privatized housing. In the years preceding the 2008 global financial crisis bank lending became dominant; since then it has further expanded in the period 2005–2008, through FX (foreign currency denominated) loans offered in almost unlimited amounts by banks. In this period suburban settlements and developers launched even completely unrealistic schemes, in the form of large suburban estates in settlements lying far away from Budapest.

The almost unlimited financial opportunities of the period 2000–2008 led to an increase in territorial inequalities within the country, which continued for a while even after the sudden collapse of the real estate market in 2008. In the 1990s the Budapest metropolitan region – that is,

the capital and the suburban area – concentrated 30 percent of all new housing construction in Hungary (a figure slightly higher than the region's 25 percent share of the country's population). In the first decade of the new millennium the concentration of new real estate development in the Budapest metropolitan region grew, and it reached 48–50 percent by 2009–2010 (the source of information is a presentation of Mónika Váradi in April 2012 that refers to an unpublished research of the Centre of Regional Research, Hungarian Academy of Sciences).

The financial crisis brought a sudden stop to the blindly optimistic ideas of development, leaving behind large number of unfinished real estate projects and the serious problems of families unable to cope with the repayment of their FX loans, suddenly increased as a consequence of the dramatic change in the exchange rate between the Swiss Franc and the Hungarian Forint. The share of the problematic loans is the smallest in Budapest but one of the highest in the neighboring Pest county; thus the financial crisis has hit the suburban areas much more severely than the city itself. Also some of the suburban municipalities got into the situation of accumulating debts with no hope of being able to repay them.

Sporadic information on the change in real estate market tendencies shows continuing demand for upper-class suburban houses but dramatic decline for the average-priced ones.

Nonresidential suburbanization The period of intensive socialist industrialization spanning the 1960s and 1970s concentrated the majority of economic investments within Budapest's administrative boundaries. Special restrictions were imposed prohibiting the location of any industrial plants and large companies within a distance of 50 km from the capital. The economic crisis from the 1980s and early 1990s shrunk employment in the region, particularly in the industrial sector, which lost two thirds of its labor force within a decade (Barta, 1998). While the economic crisis in the Budapest metropolitan area was as severe as in the rest of the country, its economic recovery was significantly quicker due to the accelerated restructuring of the economy in the region in the early 1990s. The relatively quick privatization of state properties and the restructuring and consolidation of the banking sector, coupled with the excellent geographic location of Budapest and the political stability of the country, made the region the most preferred place for foreign direct investments in East Central Europe in this period.

Economic recovery was quick not only in Budapest, but also in the surrounding functional urban region covering roughly the area of the agglomeration belt. However, in the first years of the transition period there was a clear distinction between the types of new investments in the two zones. While in Budapest the majority of foreign investments were

directed to the service sector, in Pest county, where the share of foreign investments was also significantly smaller, manufacturing remained the primary target.

This picture changed substantially during the next period of adaptation, and especially during the adjustment phase. After the process of privatization of state properties was completed, the interest of foreign investors turned toward new investment opportunities. In this regard, the settlements in the suburban belt could offer greenfield sites that were much easier to develop than the gray and brownfield options available in Budapest. Not surprisingly, the rustbelt area in the transitional zone of the city did not attract much investor interest for many years, while new industrial parks began to pop up around Budapest one after the other. Many of the suburban settlements adjusted the focus of their development strategies away from residential development, concentrating their efforts on assembling large-scale greenfield sites earmarked for nonresidential investments. The lack of effective policies coordinating regional development patterns resulted in the channeling of the majority of investments to the suburban belt, while Budapest emerged as the clear loser in this competition, hindered as it was by the weight of the problems of its numerous brownfield sites (Barta, 2004). Foreign investors learned quickly how to “play the game” of pursuing easy development opportunities; and in this, once again, Budapest proved to be the weaker competitor. Its two-tier administrative system of municipal and district governments created a more difficult investment environment than in the case of doing business with suburban governments, where development permits were a lot easier to obtain. This situation undermined seriously the efforts of Budapest’s municipal government to impose stricter environmental standards for new constructions, since these initiatives were seen as threatening to push prospective investors further away.

Recent development initiatives in the suburban zone have been spearheaded by the construction of the M0 beltway in the southern, eastern, and northern parts of the metropolitan area. Here specialized large international investors have developed a string of logistics and industrial parks with direct connection to the M0, which allows fast access to the airport and to all other motorways that connect the region to the neighboring cities and countries. Overall, the general patterns of non-residential development in the last couple of decades point to a trend of increasing functional specialization in the different zones within Budapest’s metropolitan area. Innovative and large value-added sectors that depend on highly qualified workforce are still concentrated in Budapest, the large-scale logistics centers are clustered along the M0 and the other motorways, while less innovative ventures of lower profitability have been located in the outer edges of the suburban zone, where land

prices are lowest. While some authors have pointed out the success of brownfield redevelopment in Budapest in recent years (e.g. Kiss, 2007), in our estimate the regeneration of such sites is occurring randomly and is lagging behind the requisite level, all this as a direct result of the highly decentralized planning system in place.

Notwithstanding the intensive suburbanization of residential and industrial activities during the postsocialist years, the most striking examples of changes in urban patterns and forms during the transition period can be found in the retail sector. The infamous socialist shortage economy did not create many retail establishments, and even the existing ones were far below international standards. The *vacuum period* brought an end to the shortage of goods, without being able to solve the problem of inadequate shopping space. The real breakthrough in the retail real estate market came in the mid-1990s, when the first shopping centers and hypermarkets made their appearance on the scene, reorganizing profoundly the operation of this sector. The boom in retail development continued throughout the second half of the 1990s (the period of adaptation) and subsided after 2000 during the next period of adjustment (Table 2.3).

One of the most interesting facts, evident from the data presented in Table 2.3, is that the share of new retail investments in the suburban zone remained stably at about one quarter of all investments of this type in the metropolitan area as a whole. This finding challenges the popular assumption, based on the experience of East German cities and of Prague, that the construction of out-of-town shopping centers has been a driving force in postsocialist suburbanization. Another surprising trend is the steadily increasing share of retail investments in the central areas of the city, which captured about two thirds of all retail investments

Table 2.3 Investments in new retail projects in Budapest and its suburban zone, 1990–2005.

<i>Commercial development, new investments</i>	<i>Vacuum period 1990–1995</i>	<i>Adaptation period 1996–2000</i>	<i>Adjustment period 2001–2005</i>	<i>Total 1990–2005 (percentage)</i>	<i>Total 1990–2005 (thousands of square meters)</i>
Small Budapest	31.1%	45.1%	64.7%	51.0%	531
Inner periphery	45.6%	31.9%	12.2%	26.0%	271
Suburban zone	23.3%	22.9%	23.1%	23.0%	240
Total in thousands of square meters	103	554	385		1,042

Sources: Statistical Yearbooks; authors' calculations.

in the 2001–2005 period. This fact is undoubtedly linked with the increasing share of retail investments targeting brownfield areas in Budapest's old industrial belt.

In spite of this positive trend of directing the retail investment toward the regeneration of dilapidated urban areas with good access to public transportation, the proliferation of large shopping centers and hypermarkets in the suburban periphery during the last two decades has contributed to the collapse of the traditional forms of commerce and the abandonment of many shopping streets in the inner parts of the city.

As in the case of the residential real estate, easier access to credits speeded up also office and commercial developments around Budapest in the first decade of the millennium. The sudden collapse of financing in 2008 left behind huge unfinished developments in many of the suburban settlements.

Environmental, spatial, and social impacts of urban deconcentration

Until the establishment of the automobile as a dominant form of transportation in the 1990s, the axes of Budapest's expansion were determined by the main transportation arteries, the public transport system, and especially the fixed track lines. The sharp increase in car use during the last decade, if continued at current rates, is expected to change the proportion of travel modes within the city of Budapest – public versus private – from 50:50 in 1990 to 28:72 by the year 2020 (Tócsics, András, and Antal, 2007; Főmterv, 2008). The road system of Budapest and the suburban zone is currently operating on maximum capacity and any further increases in car traffic would have dramatic environmental consequences as well as lead to significant economic losses due to increases in congestion.

The anticipated deterioration of the environmental conditions as a result of increases in car traffic is well illustrated in the Environment Program of Budapest (Budapest, 2007). While the EU's air quality standards set the upper limit of days with high levels of dust concentration at 35, in Budapest the number of such days consistently exceeds 150 per year. This situation can be mitigated only by a drastic reduction in car traffic within the city. According to the calculations of the Clean Air Group (Lukács and Beliczay, 2001: 35), car use, which accounted for one third of all trips in Budapest at the turn of the millennium, is responsible for 84 percent of the total internal travel costs, 90 percent of the air pollution, 97 percent of traffic accidents, and 98 percent of public space occupation.

The increasing demand for building plots in suburban areas has led to a significant decrease in green open space and agricultural lands in

the metropolitan region. Suburban expansion has resulted in a growing pressure on municipal governments to secure public investments in extensive infrastructure development projects, including both physical (e.g. roads, water and sewage lines) and social (e.g. schools, daycare centers, police) infrastructure. In this respect, the contradiction between the newly created demand in the metropolitan periphery and the increasingly underused capacities of social service within the city is particularly striking.

The popular belief that suburbanization leads to greater sociospatial segregation seems to be confirmed by the articulation of a distinct pattern of rich and poor areas within Budapest's metropolitan fabric. Up until now, however, with the exception of some small-scale case studies, there is no reliable and thorough empirical analysis conducted on the subject.

Management of Suburban Growth

The problems created by the current administrative fragmentation have undermined significantly any growth management efforts in the region of Budapest. The two-tiered system of government in the capital city (with weak municipal powers and fairly autonomous city districts) does not allow for efficient citywide coordination of development and investment decisions. As a result of the decentralization of political and administrative power, which passed from central to local governments in the beginning of the transition period, the City of Budapest has even less planning authority beyond its administrative boundaries. The powers of the Pest county government to exert efficient development control over the settlements within its territory are even more limited than the options available to the capital's municipal government for coordinating development within its city districts.

Taking advantage of the high degree of independence granted to local governments by the Local Government Act of 1990, all suburban jurisdictions in the capital region have developed public policies centered exclusively on their specific (fiscal) needs. The strategies pursued by the 80 settlements within the suburban zone fall in one of two categories: they are aimed at attracting either high-income population or profitable economic investments. These strategies change from time to time to the extent that they need to adjust to changes in the taxation regulations.

While suburban governments actively enticed new businesses and residents, the City of Budapest, on the other hand, did not have a clear strategy about how to stop the loss of population and economic assets for a long time.⁶ The urban development policies adopted by the municipality

of Budapest still do not consider any regulatory measures that might influence the locational decisions made by households and investors. Even the sectoral policies of the city remain, by and large, limited to its borders, with the exception of some public transport and infrastructure cooperation initiatives.

A number of new ideas have been promoted by experts who point to successful examples of growth management in the international arena, highlighting the applicability of certain mechanisms and tools in the context of Budapest. It has been suggested that the city and its district governments should agree on accepting the Budapest Strategic Development Concept, adopted in 2003, as a starting point in negotiating the allocation of development rights and environmental obligations among the city's constituent districts (Tosics, 2001: 73). Similarly, such agreements among the settlements within the suburban hinterland should be reached on the basis of the concepts laid out in the Spatial Plan of the Budapest Agglomeration. The adoption of such ideas, advanced by experts as they may be, is, however, far from making them a reality; this would require solid political and legal agreements, an accomplishment that might not be possible without the (re)establishment of a middle-tier government positioned above the level of the independent local municipalities. So far, the achievement of such growth management agreements seem an unrealistic goal even for the territory of Budapest, where the municipality exercises little control over the decisions made by its district governments.

Regulating the present competition among suburban municipalities that pursue any opportunity to increase their tax revenues is a critical step, needed in order to strengthen the effectiveness of development controls and environmental regulations. The lack of political agreement among local governments, however, makes the prospects of an equitable redistribution of financial means throughout the metropolitan area of Budapest an impossible task. Regional tax sharing, which has been used as a basis for creating agglomeration associations in France and other countries in Europe, is not high on the political agenda in Hungary. For the time being, the provisions made in some sectoral plans offer the only opportunities for territorial cooperation.⁷

At the regional level only broad strategic planning documents are prepared, as this tier of government is granted very weak institutional powers. Neither the Development Council of the Central Hungarian Region nor that of the Budapest Agglomeration can exert strong influence over investment and development decisions made by local governments. In this regard, the adoption of the Act on Spatial Planning in the Agglomeration of Budapest (ASPAB) in 2005 is a first step in the right direction. Unfortunately, as pointed out earlier, the ASPAB has no real impact on

suburban development, as suburbs had already re-zoned large tracts of land before the adoption of the plan, thus preempting the ability of the plan to contain future development. To some degree, cooperation among settlements is fostered by the process of allocating EU Structural Funds, in which the Development Council of the Central Hungarian Region has an advisory role. While the effect of EU funds has not been evaluated yet in terms of an impact on spatial development patterns, it is clear that the construction of the M0 motorway around Budapest (one of the main projects funded with EU assistance) has given large impetus to the forces of suburbanization, particularly with regard to the deconcentration of businesses.

In the context of globalization and of the evolution of today's Europe, a close cooperation between the various levels of government is a critical prerequisite for addressing urban problems and for capitalizing on the existing potential of metropolitan regions (Homan, Howl, and Tosics, 2007). Yet several key factors shaping the regulatory environment leave us with little hope that an integrated vision for the development of the Budapest metropolitan region could be achieved in the foreseeable future. These factors invite the following considerations:

- The EU Structural Funds regulations and the methodology of defining NUTS-2 regions threaten the territorial coherence of the Central Hungarian Region, which currently contains both Budapest and its suburban belt. The procedure for allocating EU funding linked to gross domestic product (GDP) per capita in a given territory has nudged Pest county to pursue the prospect of becoming a separate region, due to the differences in average household income between Budapest and its suburban hinterland.
- The planned administrative reform aimed at the beginning of the millennium to turn regional governments into directly elected entities with stronger powers did not get the required two thirds majority in parliament.
- The Budapest Agglomeration Development Council, which could form the core of a reformed institutional system at the level of the functional urban region, could not gain any real power over the strong and independent local governments.

The regulatory environment for cooperation among public actors on the urban development scene, which was created in Hungary after the fall of the communist regime, could be characterized as rather weak. This situation has only slowly begun to change during the third stage of the postsocialist transformation (the period of adjustment) with the development of the first proactive public policies – such as the introduction

of public support to urban renewal, the provision of social housing subsidies, and the launch of several planning control initiatives in the suburban zone of Budapest. A major initiative to curb suburban sprawl was introduced in 2005, when the Hungarian parliament passed the Act on Spatial Planning in the Agglomeration of Budapest. With the adoption of this spatial regulatory plan, the settlements around Budapest have lost their exclusive planning rights with regard to their territory, including the right to re-zone land. This decision is aimed at marking a clear break in the development of the suburban belt around Budapest, as the approval of further land use decisions requires broad consultations, which should ensure that the interest of the whole region are represented. Unfortunately, the seven years of heated negotiations preceding the passing of this law allowed enough time for the settlements within the agglomeration belt to re-zone most of their green and agricultural land to urban uses. It has been estimated that the amount of these territories can accommodate 40 years of intensive growth (experts are quoted in Szemző and Tosics, 2005). The presence of this land available for development seriously undermines the success of future plans aimed at promoting compact development in the Budapest metropolitan zone.

According to new information (acquired from Péter Schuchmann's presentation in a conference in April 2012) almost 7,000 hectares have been re-zoned in the agglomeration zone into residential land (10 percent of the total residential area) on which no development has been started yet. The land reserve for economic development is even larger: 7,500 hectares (one third of the total area that can be used for economic development!) with no hope for any development in the near future.

After the 2010 national elections the winning party acquired very strong political power, reaching two thirds of the seats in parliament. This opened up the possibility to change the legal and institutional establishment substantially. First, the 2005 law has been modified, as it did not prove to be successful. The modified law (having taken force in 2011) further reduces the freedom of settlements to re-zone their area to development functions. One of the novelties of the new regulation is the possibility of "exchange of territories": territories that were re-zoned into development areas but lack any real development chances can now be "zoned back" to agricultural land, while the settlement gets the right to re-zone other parts of its territory to development land.

Since 2010 important changes happened in the institutional structure as well. The new government has dissolved the regional development councils as well as the Budapest Agglomeration Development Council. This means a radical change from the previous ideas, which were aimed at strengthening the regional level and at creating efficient administrative structures at the level of the functional urban area. Besides the modification of the

institutional structures for development, the reshuffling of the territorial administrative structure is also under discussion in the parliament – namely through the creation of new microregions, which is expected to improve the functioning of some institutions, but without significant advantages for the government agencies responsible for urban planning.

Under these circumstances, the only force promising realistic advances toward a coordinated approach to regional growth management is defined by the emerging bottom-up endeavor to consolidate the efforts of the various individual stakeholders who participate in the planning and development processes. In the period 2005–2010 the preparation of an areawide strategic plan and the development of integrated public transport programs were the first promising steps in this direction. However, as there are no regulations, institutions, or incentives introduced for territorial cooperation by the new political power, there is no hope that the dissolved regional and agglomeration institutions (which were not efficient) will be replaced in the short run by bottom-up cooperation structures. The new law allows for the voluntary cooperation between the municipalities of Budapest and Pest county, but, except for the organization of a conference, no concrete step was taken in this direction so far.

Conclusions

Our analysis reveals that suburban growth has been one of the key factors in shaping the development of Budapest's urban region during the last two decades; but the origins of urban deconcentration processes could be traced back in history for at least a century. The intensity of suburbanization significantly increased after 1990 due to the liberalization of the property market, the decentralization of the planning system, the infusion of global capital investments, and the change in the preferences of residents and companies in favor of suburban locations. The advance of urban sprawl over the last two decades has been marked by specific features, both in space and in time. The decade of the 1990s could be considered the peak of residential suburbanization, as the city lost a significant portion of its population and the prospects of its long-term sustainability were placed under serious threat. The main thrust of residential suburbanization affected mainly settlements located in the more environmentally attractive areas to the north and west of Budapest. Since the beginning of the twenty-first century, the intensity of residential suburbanization has decreased gradually, giving way to an accelerated deconcentration of retail and industrial activities. These functions have been attracted mostly to the major transport corridors and hubs in the metropolitan periphery.

As an outcome of the continuous and intensifying suburbanization of the Hungarian capital, the spatial pattern of population and economic activities within Budapest's urban region has significantly changed during the last two decades. The emergence of new economic poles and sprawling dormitory settlements, the disappearance of farmland and natural areas, the increasing demand for personal mobility, and the subsequent increase in traffic congestion are the logical products of these processes. By 2005, when the negative effects of urban sprawl became evident to larger segments of the public, the state legislative body was under political pressure to adopt a new Act on Spatial Planning in the Agglomeration of Budapest. The real impact of this law on long-term development is marginal, as the settlements had enough time to create their territorial reserves for development decades in advance. Even so, it is notable that Hungary was the first of the former socialist countries to respond to the challenges caused by urban sprawl, hopefully setting a precedent to be followed by other countries in Eastern Europe.

Since the end of 2008 the financial and economic crisis has significantly slowed down the process of suburbanization. Under the new circumstances the large territorial reserves for future development, created by the suburban municipalities before the agglomeration legislation was enforced, are even more irrational than before. The need for joint territorial planning that pays heed to the economic realities is greater than ever.

After 2010 the new political power brought significant changes to all aspects of territorial administration and regulation of planning. However, the weakness of regional and national planning and governance structures remained vis-à-vis the power of municipalities over local development regulation. The institutional and administrative structure in the region of Budapest became even more fragmented. This gives little hope that stronger growth management strategies could be introduced any time soon. In the light of the recent global economic crisis, it is more likely that economic factors such as the rising cost of energy will have greater power to direct development toward a more sustainable model than the attempts to improve governance and territorial cooperation.

Notes

- 1 Only people who had worked or studied in Budapest for five years could acquire permanent residence status (Kovács, 1994).
- 2 For example, the proportion of commuters in Verseg was of 84.7 percent, in Gyál, of 81.1 percent, in Űröm, of 80.4 percent, in Göd, of 80.3 percent, and in Isaszeg, of 80.2 percent (Burdack, Dövényi, and Kovács, 2004).

- 3 The ratio between the income of the highest and that of the lowest percentile of the population is lowest in Denmark and Sweden (around 1 : 5), highest in Turkey and Mexico (around 1 : 25), while in Hungary it is slightly below the OECD average of 1 : 8 (OECD, 2008).
- 4 These transactions could be carried out even with public housing units, as tenure swapping was allowed in Hungary.
- 5 In most developed democracies this type of re-zoning is controlled by a higher level administrative body that ensures that the total land supply provided for the region corresponds to the planned demand. The opportunity for such control was intentionally terminated when the Law on Local Governments was adopted in 1990. The law granted almost complete freedom of decision to local governments, stripping the county governments of their regulatory functions.
- 6 For instance, an urban planning conference on development issues in post-socialist Budapest held in 1994 did not even mention the emergence of shopping centers, although the first plots had been already acquired and their construction approved.
- 7 One of these is the Budapest Transport Development Plan, which addresses transportation problems and solutions concerning the entire metropolitan area.

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Confronting Suburbanization in Ljubljana

*From “Urbanization of the Countryside”
to Urban Sprawl*

Nataša Pichler-Milanović

Introduction

In Slovenia there is no official translation for the phrase *urban sprawl*. Yet such patterns of development, mostly associated with the construction of detached single-family dwellings by individual households, have characterized the suburban periphery of Slovenian towns for several decades prior to the transition of the country’s economy to a market-based system in the early 1990s.

During the 1960s and 1970s, which became known in Slovenian history as the period of “urbanization of the countryside,” the construction of self-built owner-occupied houses was accelerated by the increased availability of housing subsidies (offered through employers, banks, community development programs, and so on), by chronic shortages of public housing, and by sharp rises in the cost of owner-occupied dwellings in urban areas. Construction of single-family dwellings continued at even greater speed through the 1980s, when it was supported by the popularization of a lifestyle centered on the occupation of a single-family home. During the 1990s, the process of suburbanization was reinforced through transition from socialist to market-based economy, which involved far-reaching political, economic, and institutional reforms. The most important urban phenomenon of this period was the proliferation of residential sprawl, which was driven by the exodus of a significant number of city dwellers to suburban and rural areas; this is

usually referred to as a process of “desurbanization” (van den Berg, Drewett, Klassen, Rossi, and Vijverberg, 1982; Pichler-Milanović, 2001a, 2005a).

Until 1996 urban sprawl in Slovenia was characterized primarily by scattered low-density developments, planned or unplanned, composed predominantly of single-family detached houses but also containing some scattered small business and service establishments. A different type of urban sprawl began to take shape by the second half of the 1990s due to the rising impact of macroeconomic and structural reforms. The resulting new patterns have been characterized by the increasing presence of large-scale residential, industrial, commercial, and leisure developments in areas previously not used for such purposes. Types of such areas are agricultural and forest lands at the edges of the inner city, as well as previously undeveloped territories in more remote suburban and rural areas. This new type of sprawl has been fueled by a host of factors – such as the increase in transport infrastructure investments, the constrained supply of affordable housing for rent or purchase in inner-city areas, the dramatic swell in the rate of motorization, the differences in land and property prices between the inner city and suburban and rural areas, the unforeseen impacts of local government reforms on land use, the popularization of new consumption patterns and lifestyles, or delays in the development of a new spatial planning system.

Yet, despite the well-known negative consequences of suburban sprawl on the environment, on the economy, and on society, it could be argued that in Slovenia suburbanization is more sustainable as a pattern of urban growth than in many other countries in Europe. This claim is supported by the – historically – highly dispersed settlement pattern of Slovenia, which is characterized by a large number of small settlements scattered throughout a heavily forested and mountainous territory.¹ In addition, most new houses are built with planning permission, as energy-efficient buildings with proper water supply and sewage facilities.

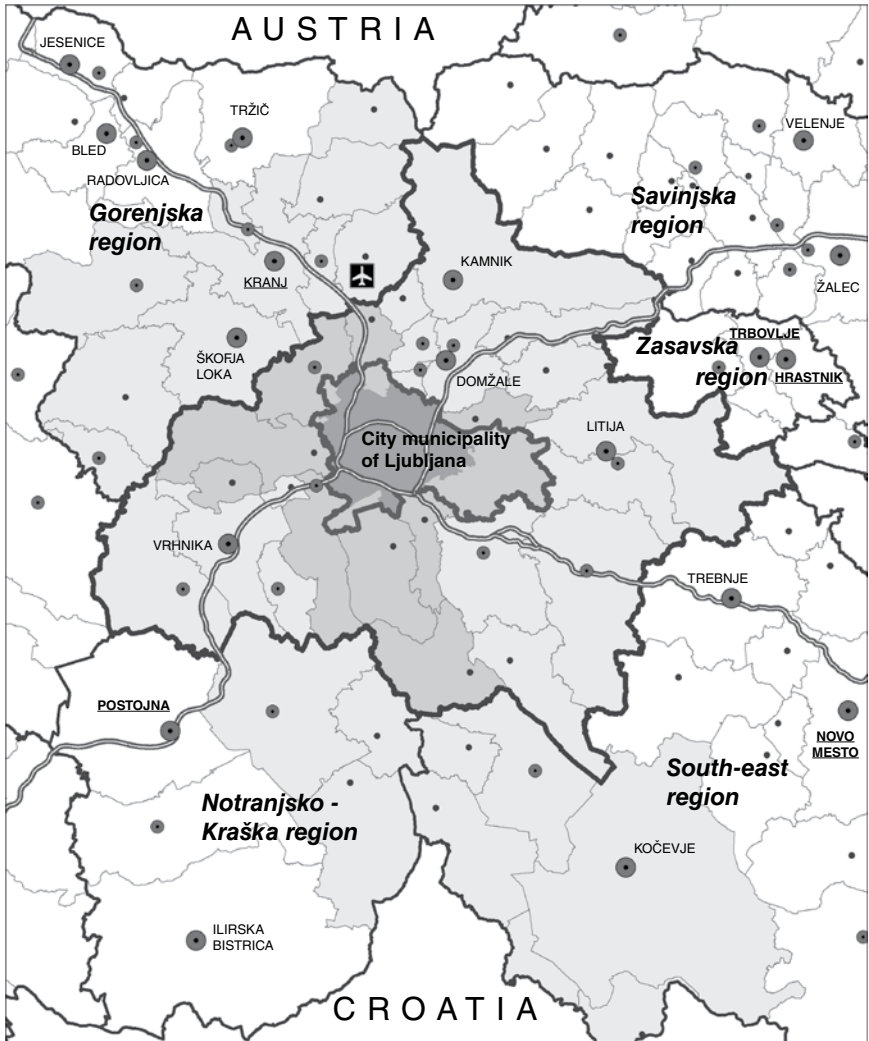
Suburbanization Patterns prior to the Postsocialist Period

As in many other countries of Eastern Europe after World War II, in Slovenia too the drive for industrialization became a development priority of the highest order. The corresponding policy spurred an intensive process of urbanization, which influenced the growth of larger towns as dominant locations of economic activities. The introduction of some market-based economic principles in Yugoslavia during the 1970s and 1980s, coupled with Slovenia’s cross-border links with Austria, Italy, and Germany, allowed the country to become the most prosperous republic in the Yugoslav Federation by the end of the 1980s.²

In order to eliminate the economic gap between different regions and to curb housing demand in the country's larger urban areas, toward the end of the 1960s the Slovenian government instituted new urban and settlement development policies based on the principle of an "equal distribution" of industry and services. The aim was to channel urban growth away from Ljubljana, to the smaller regional and local centers, by placing an emphasis on the development of transport infrastructure, services, and employment opportunities in secondary and tertiary cities and towns. The push for the development of a new, polycentric settlement system was supported by the principles of self-government adopted by the Yugoslav Federal Constitution in 1974, which gave substantially greater power to local authorities. In accordance with the new settlement development policy, about 15 towns were recognized as regional and another 45 as local centers. The small towns in this settlement system served as important job centers for the population that lived within a 45-minute commuting distance from the regional centers (Pichler-Milanović, 2005a; Pichler-Milanović, Gutry-Korycka, and Rink, 2007). The successful pursuit of these policies of polycentric development since the 1970s has been a main factor in determining the currently low primacy rate of Ljubljana, whose residents compose only 15 percent of the country's population.

Another distinguishing characteristic of urbanization in Slovenia is the relatively low share of the country's urban population. Of the total of approximately 6,000 settlements in Slovenia, only 182 (less than 3 percent) were defined as urban by the 1991 census. According to the census of 2002, the share of the country's urban population was approximately 50 percent. These statistics reflect a process of intensive suburbanization, which was triggered several decades before the fall of the communist regime. Today over a third of Slovenia's population resides in settlements of less than 500 inhabitants. Such a large share is impressive, considering that less than 5 percent of the country's population was employed in the agricultural sector in 2011 (down from 10 percent in 1991). These statistics reflect a specifically Slovenian situation in which the majority of the country's rural population commutes daily to nearby urban centers for access to jobs and services.

Another distinguishing characteristic of Slovenia's urbanization – and one that sets it apart from most other Eastern European countries – is the establishment of the rural, self-built, owner-occupied, single-family house as a predominant type of dwelling; this type was strongly supported by the socialist housing policies of the 1960s, 1970s, and 1980s. In Yugoslavia, unlike in many other socialist countries, the government authorities showed greater tolerance for private ownership and the formation of semi-formal private land and property markets. In addition,



Legend

- Ljubljana urban settlement (NUTS 7)
- City municipality of Ljubljana (LAU 2)
- Ljubljana agglomeration (LAU 1)
- Ljubljana's urban region (NUTS 3)
- Ljubljana metropolitan area
- NUTS 3 regions
- Towns
- Urban settlement
- Municipal center
- KRANJ** Regional center
- Highway
- ✈ International Airport

SOURCE: GURS 2012.

Figure 3.1 Administrative boundaries within Ljubljana's metropolitan area. Based on data from Pichler-Milanović, 2005a, various statistical yearbooks of the Statistical Office of the Republic of Slovenia (SURS), and the Surveying and Mapping Authority of the Republic of Slovenia (GURS).

the Slovenian government allocated public subsidies for the construction and maintenance of owner-occupied single-family dwellings and ensured an adequate provision of local and regional roads in rural areas. All of these factors, combined with persistent housing shortages in urban areas, contributed to the proliferation of residential sprawl in Slovenia at an earlier date than in other socialist countries of Eastern and Central Europe (Pichler-Milanović, 2005a; 2008a).

After World War II, the fastest population growth of any urban area in Slovenia occurred within the territory of the country's capital, Ljubljana. Under the socialist regime the population of Slovenia's largest city more than doubled, reaching a little over a quarter of a million residents by the beginning of the 1990. This growth was spurred by the fast rate of industrialization in the city area and by the migration of many residents from other parts of Slovenia and the other Yugoslav republics to Ljubljana during the 1970s and the 1980s. While the population in the city center declined during the 1960s due to ageing, lack of new housing, and the conversion of existing residential stock for commercial uses, urban areas outside the compactly built city experienced the most rapid population growth – particularly during the 1970s, when a number of large housing estates were constructed on greenfield sites in the inner city's periphery. These new developments occurred in areas where urban land was nationalized or compulsorily purchased following the adoption of new master plans calling for such measures.

In the suburban and rural settlements, where land remained mostly in private ownership, real estate transactions were rather loosely regulated. In consequence, population growth outside the compactly built inner-city area rose from under 10 percent during the 1960s to 25 percent during the 1970s. This growth was realized through a rapid increase in the construction of self-built, owner-occupied single-family houses on private land (Dekleva, 1991; Pichler-Milanović, 2005a). The two city districts that initially attracted most developments of this type, Bežigrad and Šiška, are located alongside the main transportation axes, in the northern parts of the capital's urban agglomeration. During the 1980s population growth occurred also in smaller settlements in the southern (Vič-Rudnik) and eastern (Moste-Polje) parts of Ljubljana's urban agglomeration. By the late 1980s, the rate of population growth in the capital's metropolitan area began to slow down as a result of accelerated (sub)urbanization beyond metropolitan boundaries and growth of smaller towns in the outer periphery of urban regions such as Vrhnika, Škofja Loka, Domžale, Kamnik, and Grosuplje. From 1987 on, Ljubljana's urban agglomeration registered a negative population growth, which indicated a shift from the phase of *suburbanization* to one of *desurbanization* – a trend that was further reinforced during the 1990s (Pichler-Milanović, 2005a) and during the recent reurbanization after 2006 (Table 3.1).

Table 3.1 Population growth of Ljubljana and its wider urban area.

<i>Administrative and functional classification</i>	<i>Area (in km²)</i>	<i>Population (2011)</i>	<i>Density (pop./sq.km)</i>	<i>Annual population change (%)</i>				
				<i>1961–1971</i>	<i>1971–1981</i>	<i>1981–1991</i>	<i>1991–2002</i>	<i>2002–2011</i>
Ljubljana urban settlement ^a	147	272,220	1,852	2.9	2.1	0.3	-0.3	0.6
Ljubljana city municipality ^b	272	280,140	1,030	2.8	1.9	0.4	-0.3	0.6
Ljubljana agglomeration ^c	902	347,147	385	2.4	1.9	0.5	-0.0	0.9
Ljubljana urban region ^d	2,555	533,213	209	2.1	1.8	0.7	0.4	1.1
Metropolitan area ^e	4,990	702,705	141	1.6	1.6	0.7	0.4	1.0

Notes:

^aInner-city/compact city (NUTS 7).

^bAdministrative city after 1994 (NUTS 5).

^cAdministrative city from 1955 to 1994 (NUTS 4).

^dAfter 2000: Central Slovenian statistical region (NUTS 3).

^eThe metropolitan area (FUA).

Sources: Pichler-Milanović, 2005a and various statistical yearbooks of the Statistical Office of the Republic of Slovenia (SURS).

Patterns and Processes of Suburbanization during the Postsocialist Period

Since the late 1980s, the processes of residential suburbanization set in place during the preceding decades of socialist rule have intensified, being followed by an accelerated industrial and commercial suburbanization. This dispersal has been taking place primarily in the newly formed suburban municipalities created through the Local Self-Government Reform Act of 1994. This legislation instituted profound changes in the local administrative division of Slovenia, bringing into existence numerous independent municipalities around Slovenia's main urban centers.

Residential suburbanization

Between 1991 and 2011 the national population of Slovenia increased by 3 percent, while the proportion of urban population declined from 50.5 percent to 49.0 percent. Population decline was most pronounced in the largest urban municipalities of Ljubljana, Maribor, and Celje, while the highest population growth was registered in their surrounding suburban municipalities (Figure 3.2) (Benini and Naldi, 2007).

In Slovenia's urban context, the main effect of the political and economic reforms instituted during the 1990s has been the re-establishment of land and housing markets (Pichler-Milanović, 1994, 2001a). Housing privatization was one of the most important political decisions taken in support of private property rights and market-based economic reforms.³ The long-term objective of housing privatization reforms was to establish a more efficient system of production, distribution, and maintenance of housing. The general consequence, however, was a reduction in the government's budget for housing expenditure. A shift in the responsibilities for housing provision to the local level and to the private market and a transfer of the costs of housing maintenance to private owners accounted for this effect. But the major negative outcomes of these reforms were the precipitous decline in new housing construction⁴ and the rise of property prices; both processes exacerbated the problem of housing availability and affordability (see Hegedús, Mayo, and Tosics, 1996; Struyk, 1996; Pichler-Milanović, 2001a).

In the 1990s, the only place where the volume of new housing construction was significant was the sector of owner-occupied family houses, the overwhelming majority of which were built in the periphery of the inner city and in the suburban or rural settlements around it. Of the 16,000 dwellings constructed in Ljubljana's urban region between 1991 and 2000, more than 70 percent were single-family houses located

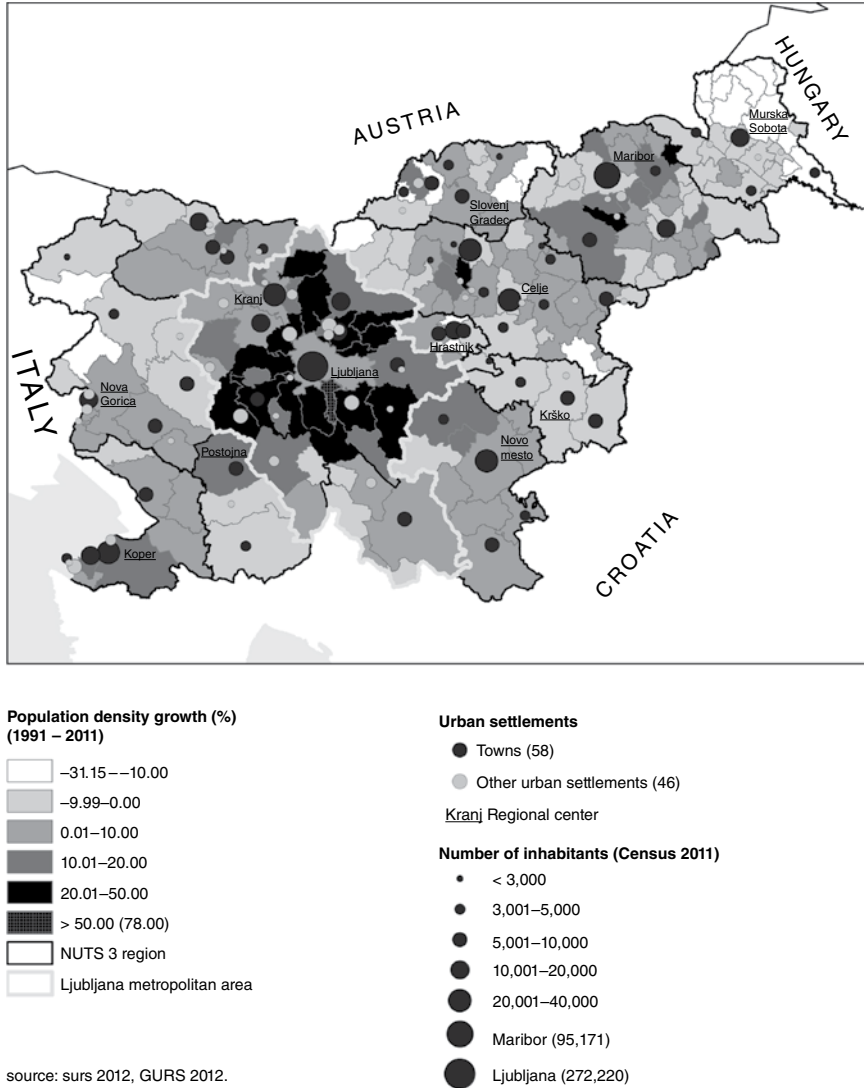


Figure 3.2 Population change in municipalities in Slovenia. Based on data from Benini and Naldi, 2007, various statistical yearbooks of the Statistical Office of the Republic of Slovenia (SURS), and the Surveying and Mapping Authority of the Republic of Slovenia (GURS).

in suburban and rural municipalities. Building activity expanded after 2000: 10,000 new dwellings were constructed in Ljubljana's urban region just between 2001 and 2005 (Statistical Office of the Republic of Slovenia, n.d.), half of them being upscale multi-family dwellings

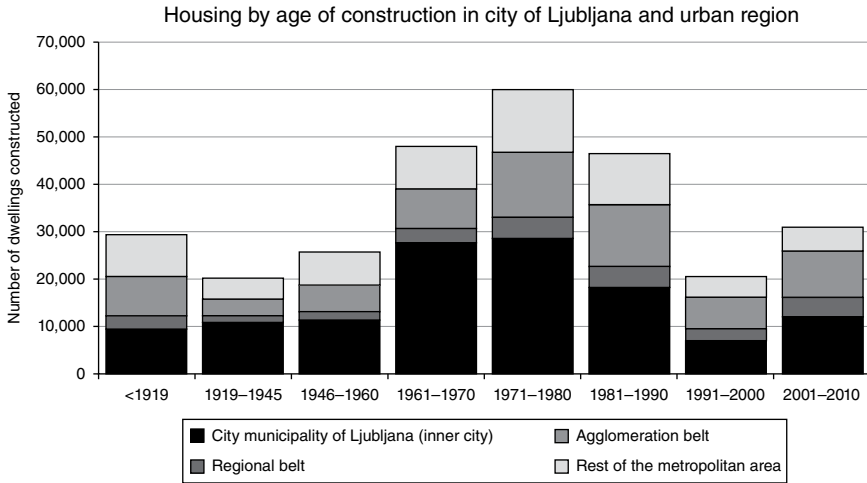


Figure 3.3 Housing construction in Ljubljana's metropolitan area. Based on data from Pichler-Milanović, 2005a and the Statistical Office of the Republic of Slovenia (SURs) for 2012 (methodology of census in 2011).

built within the city of Ljubljana. The remaining 5,000 dwellings were primarily single-family houses built or sold as lower price properties in the outer towns and settlements of Ljubljana's urban region (Figure 3.3). Between 2000 and 2011 the rate of construction of houses of this type was higher in the city of Ljubljana and in the suburban municipalities of its agglomeration area than in the urban or rural settlements located in the regional belt or in the rest of the metropolitan area.

Due to the ongoing financial and economic crisis in Slovenia, since 2009 property prices and housing transactions have begun to decline. By 2011, the number of new construction permits and property transactions reached 40 percent of the levels they had in 2007 (Statistical Office of the Republic of Slovenia, n.d.: census for 2011). Since 2010 many large construction companies have become bankrupt as a result of their speculative supply of upmarket new dwellings financed through bank loans. Many housing projects, especially in Ljubljana's agglomeration area, have not been completed. As a consequence of the lower market demand for owner-occupied housing, the share of the rental housing market has increased, yet the market rent for commercial and residential properties has dropped to levels that are lower than in 2008.

The advance of residential suburbanization in Ljubljana's region has been marked by a diversification of the building typology in areas outside the boundaries of the compact inner city. These territories are now dotted with newly built detached single-family houses and with speculatively built multi-family dwellings, including some low-density

semi-detached units, row houses, and urban villas. The present suburban and rural settlements are being actively transformed through infill development and through the conversion of weekend houses to permanent or second homes. The infusion of new, wealthy residents into the metropolitan periphery has begun to reverse the traditional sociospatial pattern of the socialist city, in which the households' socioeconomic status declined proportionally with their distance from the city center (Pichler-Milanović et al., 2007).

Nonresidential suburbanization

At the beginning of the 1990s, the city of Ljubljana and its region entered a severe economic recession as a consequence of the collapse of the old socialist regime and of the short war with the Yugoslav army that ensued. The dramatic structural adjustments needed in order to make a fast transition to a democratic state led to a substantial decline in Slovenia's economic productivity, output, and employment. Between 1989 and 1993 unemployment in the capital region rose from 3 to more than 10 percent (Pichler-Milanović, 2005a). Most companies lost their export markets and their links to subsidiaries based in the other republics of the Yugoslav Federation. The closing of several large state-run industrial enterprises located in the inner city left substantial segments of Ljubljana's urban fabric in a state of dereliction. In general, the privatization of some of these properties made the subsequent management and maintenance of public infrastructure in those areas very difficult. While the majority of these properties have been released for other uses (most often for retailing and new housing developments), brownfield redevelopment has not been able to absorb nearly as much new commercial, office, or industrial development as greenfield sites in the suburban periphery.

Nonresidential suburbanization in Slovenia has had a significant impact on the transformation of the spatial structure of Ljubljana's urban region, particularly after 1995, through a pronounced concentration of commercial activities in new, large complexes built along motorways and at important transport intersections and some railway stations. Speculative industrial, warehousing, and logistics zones have been developed as well along the motorway network and its major junctions. Recent developments have included the creation of new business, science, and office parks at high-access points in the inner city's periphery or in suburban municipalities of the region (e.g. Trzin, Vrhnika, Grosuplje). Many suburban municipal governments, which have joined the regional competition for jobs and budget revenues, have begun to develop special enterprise zones by packaging land and infrastructure so as to attract coveted hi-tech developments and property investments.

During the 1990s, the role played by foreign capital in Slovenia's reconstruction and economic development was not as significant as in some other former socialist countries of Central Europe, most notably Hungary, Poland, and the Czech Republic. The low level of foreign investment was a result of a combination of several factors, mostly related to the unstable political situation in the Balkans at the time, the specifics of the privatization process in Slovenia (which discouraged foreign participation), property prices and labor costs, which were high by Eastern European standards, and inadequate support from the country's spatial planning legislation for larger scale investments. Yet, over the course of the decade, the foreign direct investment (FDI) stock rose threefold, to reach 12 percent of the national gross domestic product (GDP) by 2000. Most of the FDI in Slovenia (over 70 percent) has been concentrated in the six largest urban areas located along the E5 and E10 trans-European corridors. Notably, almost half of the foreign investments have targeted the city municipality of Ljubljana, which has been established as the almost exclusive recipient of FDI in the financial services (98 percent of the total), also absorbing more than half of the country's foreign investments in trade, real estate, and business services (Pichler-Milanović, 2005a, 2010).

The spatial impact of the inflow of FDI and the new trade patterns have been reflected in a rapid increase in the number of new commercial establishments in Ljubljana, which were also supported by a steady rise in consumer demand. Foreign developers have become influential, most notably in retailing, either by acquiring existing operations or by establishing joint ventures with local partners. Toward the end of the 1990s the emphasis of investors, developers, and public officials was placed on large-scale investment projects. Thus, in the course of only a few years between 1999 and 2001, the total amount of retail space in shopping centers increased by 80 percent (Rebernik and Jakovčič, 2006). Four large new shopping centers were built in the inner city's periphery, near the intersections of the ring road with the city's major transport routs. Today the BTC City shopping and recreation center – one of the largest and most popular new retail destinations, located on a former industrial site 5 km to the northeast of Ljubljana's center – features 50,000 m² of retail space and more than 300 shops, which attract over 30,000 visitors per day.⁵ Rudnik, the second largest commercial area under construction since 1999, has utilized another vacant industrial site, in the southern part of the inner city's periphery. As in the case of BTC City, international retail firms are key players in this development, which offers numerous shops, restaurants, entertainment, and consumer services. Other underutilized industrial sites in Ljubljana's periphery have attracted hypermarket chains such as Interspar, which opened its

Table 3.2 Employment structure in Ljubljana (2011).

<i>Administrative units</i>	<i>Number of jobs^a</i>		<i>Employment sectors^b (%)</i>				<i>Active working population^c</i>	
	2002	2011	I	II	III	IV	2002	2011
Slovenia	768,172	817,311	4.7%	23.0%	38.9%	33.5%	768,172	817,311
Ljubljana's urban region	218,361	271,792	1.8%	13.2%	43.7%	41.2%	211,018	220,250
City municipality of Ljubljana	174,466	205,246	0.4%	9.3%	44.6%	45.8%	115,708	111,389
Other municipalities in Ljubljana's urban region	43,895	66,546	6.2%	25.5%	41.2%	27.1%	95,310	108,861

Notes:

^aPersons in paid employment.^bEmployment sectors (NACE classification): primary (agriculture, forestry, fishing); secondary (manufacturing, mining and construction); tertiary (utilities supply, construction, trade, hotels and restaurants, transport and telecommunications, financial, real estate and business services); quaternary (public administration, defense, social security; education, health and social work; sport, recreation; other public and private services).^cResident population.

Sources: Pichler-Milanović, 2005a and various statistical yearbooks of the Statistical Office of the Republic of Slovenia.

second store in 1997 in the western part of the inner city, and Mercator, which opened the doors of another hypermarket, in the northwestern part of the city, in 2000 (Pichler-Milanović, 2005a). These shopping centers, built in the periphery of the inner city, were the first signs of a suburbanization of retailing and shopping facilities in the relatively small metropolitan area of Ljubljana.

Since the end of the 1990s, hypermarkets and shopping centers have been more frequently developed in suburban and other municipalities of the capital city region, especially in the conurbation area of Kamnik-Domžale-Mengeš-Trzin, located in the northern part of Ljubljana's urban region, as well as on several sites between Ljubljana and Kranj (the fourth largest town in Slovenia), in the vicinity of the international airport at Brnik. New retail developments are also dotting the western parts of Ljubljana's urban agglomeration, stretching along the E5 corridor in Vrhnika, Logatec, and Postojna (see Figure 3.1). The dispersal of retail development beyond the city boundaries of Ljubljana has increased the proportion of service sector jobs in Ljubljana's metropolitan periphery to the levels characteristic for Ljubljana's metropolitan core (see Table 3.2). Smaller scale retail stores are spreading out in more rural areas in the southern and eastern parts of the capital city region.

The majority of new offices constructed during the last couple of decades have been either purpose-built or established in other buildings – residential structures with good accessibility, former industrial premises, and the like – within the city of Ljubljana. A good share of this type of office development can be found in other towns and urban settlements in the capital city region, while new enterprise zones are being established in suburban and other municipalities of Ljubljana's agglomeration.

It should be noted that recreational development has contributed significantly to the proliferation of sprawl in Slovenia – namely through the transformation of rural landscapes into theme parks and leisure parks; through the building of new golf courses; and through the expansion of existing and construction of new ski-slopes, marinas, hotels and other tourist facilities in the mountains and at the Adriatic sea coast. Recreational sprawl is also related to the sharp increase in the construction of second homes along the coast, in the mountains, near natural spas, or in other areas of natural beauty.

Complex assessment of patterns and processes

Overall, despite the existence of many similarities in the urban and regional development of Central European cities prior to and after the fall of the socialist system, there are some clear differences and specificities to the process of suburbanization in Ljubljana's urban region

vis-à-vis other capital city regions in Central and Eastern Europe. These specificities are highlighted by the following periodization:

1960–1990 This is the socialist period marked by the “urbanization of the countryside” from the 1960s onwards and by residential suburbanization in the 1980s thanks to the availability of private rural land and housing subsidies for the construction of single-family residences in suburban and rural areas.

1991–1995 The first half of the 1990s was characterized by residential sprawl due to the limited supply of new affordable single- and multi-family dwellings in the inner-city area as a consequence of housing privatization, restitution of property, and economic restructuring. The new single-family detached houses built in suburban and rural municipalities were constructed without any government subsidies.

1995–2000 The successful implementation of macroeconomic and structural reforms during the first half of the 1990s led to a new phase of postsocialist suburbanization, which was dominated by the explosive growth of large-scale residential, industrial, commercial, and leisure developments in areas previously not used for those purposes, with an emphasis on the conversion of non-urban land to urban uses at the edges of the inner city as well as in suburban and rural areas. Commercial sprawl dominated the second half of the 1990s due to the privatization of enterprises, the processes of de-industrialization, the influx of FDI, the expansion of motorways and the modernization of roads, and the creation of new enterprise zones and shopping centers on many green-field sites. Residential sprawl was also infused with relatively affordable low-density row houses and various types of multi-family dwellings.

2000–2008 This period of suburbanization is characterized by a general increase in the mixture of new residential, commercial, and leisure developments and, consequently, by a higher complexity of the urban patterns interspersed with new office complexes, technological and science parks, commercial zones, shopping centers, and leisure and recreation areas. Most of these new developments are built on previously undeveloped land, in the context of an increased competition for investments among suburban municipalities and other towns in the capital city region.

2008–2012 This final period is characterized by stagnation in the property market, which is in turn marked by a sharp decline of transactions, property prices, and rents. The economic crisis has shaken seriously consumer confidence in the ability to improve housing conditions. According to a household survey recently published by the Statistical Office of the Republic of Slovenia (SURS, 2012), 86 percent of respondents do

not plan to buy or build housing due to reduction in real incomes and uncertainty about employment prospects. Financing for the construction or purchase of housing has dried up, as banks have considerably tightened their credit limits after a sharp increase in loan defaults. All of these factors have led to a dramatic fall in the demand for new dwellings and a subsequent collapse of the housing construction industry. As a consequence of this new property market situation, suburbanization trends have been slowing down while the demand for dwellings in urban areas has been on the rise. Between 2002 and 2011 the city of Ljubljana and its urban agglomeration recorded once again population growth, which indicates the start of a *reurbanization phase*. This is linked to intensive housing construction in these areas in the past 10 years.

Overall, the peculiarities of suburbanization in Slovenia are related to the following specific points:

- an extensive support for decentralization through the “urbanization of the countryside” strategy pursued by the state government from 1960s onwards, including the provision of public subsidies (by employers, banks, local communities) for the construction of single-family detached houses in suburban and rural areas near urban (employment) centers;
- relatively small size of towns and a large number of small rural settlements located within 30-minute distance from nearby urban centers, well connected via local and regional roads;
- small size of suburban and rural municipalities competing for investments as a source of budget revenues;
- high levels of home ownership as a consequence of housing privatization in 1990s, and using the equity realized from the sale of dwellings in valuable inner-city areas as down payment for suburban houses;
- high accessibility and good quality of road networks in suburban and rural areas;
- high environmental quality and diversity of landscapes in suburban and rural areas (e.g. forests, green areas, mountains, hills, sea coast, river valleys).

Conditions and Driving Forces of Suburbanization

In Slovenia suburbanization can be interpreted as a consequence of the processes of transition to a more democratic form of social organization. The main principles of this transition have been the establishment of a market-oriented economy (through privatization, restitution,

decentralization, and deregulation) and the protection of citizen rights (including private property rights and the freedom to make individual choices).

These processes have been taking place in the context of the functional (re)integration of the country into the global socioeconomic networks, which led to the adoption of western values, standards, and lifestyles. These socioeconomic and cultural shifts have called for the development of new shopping centers, enterprise zones, residential communities, golf courses, theme parks, and other contemporary essentials of middle-class urban existence. In this light, the most important driving forces of suburbanization and urban sprawl in Slovenia, and particularly in the capital city of Ljubljana, can be summarized under two broad categories: economic forces and demographic and lifestyle changes.

Economic forces

Some of the strongest drivers of suburbanization in postsocialist Slovenia are rooted in the specific economic circumstances of the transition period. The most critical features of this urban context can be framed by the following three characteristics:

Lack of affordable housing in inner-city areas Due to the highly constrained supply of new dwellings in Ljubljana's inner-city areas, housing prices doubled between 1993 and 2000, an additional 100 percent jump being registered between 2000 and 2007. The lack of affordable housing in the inner city has redirected the attention of homebuyers to the urban periphery and the prevalent stock of single-family houses offered in suburban and rural areas. The price differential between properties in the inner-city areas and suburban and rural areas has become one of the main drivers of suburbanization, not just in Ljubljana, but in Slovenia in general.⁶

Lack of developable land in inner-city areas The privatization of real estate, the establishment of a free property market, and the subsequent rush to buy land available for development within the city for speculative purposes have resulted in a rapid escalation of not just housing prices but land values as well. Thus most new residential as well as commercial and industrial development has been pushed out, to greenfield sites in suburban and other municipalities within the capital city region, where land values and the cost of development in general have been significantly cheaper.

Economic growth and the rise of a middle class From 1995 to 2008, the growth in real income has been an important and consistent hallmark

of the transition period in Slovenia. This process was particularly strong in Ljubljana, where productivity (e.g. value added per employee) is more than 25 percent higher than in the rest of Slovenia. The average salary in the capital is 20 percent above the national average, mirroring the concentration of employment in higher value-added activities (e.g. banking, insurance, public administration, pharmaceuticals), and the rather successful transformation of a socialist industrial city into a service-based Central European metropolis (Pichler-Milanović, 2005a; Regional Development Agency of Ljubljana Urban Region, n.d.). This rise in economic affluence has fueled a demand for housing and non-residential space, most of which has been absorbed by the suburban areas, for the reasons outlined above.

Demographic and lifestyle changes

In addition to the economic factors outlined above, the rise in the demand for single-family housing has been driven by changes in the demographic structure of the urban population in Slovenia. These demographic changes are marked by the general increase in the number of households, a process driven mostly by a reduction in average household size. The increase in the number of households – which is due to the disaggregation of large households along generational boundaries – and the commercial and residential gentrification of the inner-city areas have been significant factors linked to the rising demand for affordable dwellings and, by extension, to the processes of suburbanization. The continuing migration of middle- and upper-income residents from urban to suburban and rural areas and the subsequent social diversification of the metropolitan periphery have in turn attracted more urban residents to those areas.

An additional factor fueling suburbanization has been the rise in the number of households that acquired second homes in suburban and rural areas. The long-established cultural traditions in Slovenia have shaped a strong residential preference for privately owned, detached, single-family houses located in small peripheral or rural communities. For the majority of Slovenians, the ideal living arrangement is associated with a family house with large garden, located at the edge of a forest, yet within easy reach of an urban or employment center. In pursuit of this ideal, over the course of several decades during the socialist years more than one third of households in Slovenia acquired a weekend home or a second home in suburban and rural areas. Most of these houses were self-constructed or inherited rural farmhouses. Since the mid-1990s, many of these properties have been converted into second homes or permanent residences, primarily serving the needs of young families or their retired parents.

Property rights and land development policies

As a result of the policies pursued in the early 1990s by the government – which enabled the low-cost sale of state-owned, municipal, and company dwellings to sitting occupants and the restitution of older housing in kind – many former tenants and their close relatives living in public rented dwellings ended up with unexpected equity. The significant profits that could be realized by pocketing the difference between the market value of the units and their purchasing price prompted many of the owners to sell their newly acquired property on the open market after 1996, when such transactions became possible. This equity, combined with additional financing through inheritance, family savings, bank loans, and mortgages (available since 1998), helped many families to become first-time buyers. Not surprisingly, the large majority in this group of consumers opted for targeting the more affordable suburban housing market.

In Slovenia suburbanization has also been aided by the set of government policies that pushed the property rights agenda: such policies have eased the conversion of agricultural land for urban uses in suburban and rural municipalities. They have been coupled with state and local policies that have emphasized the development of transport infrastructure in suburban and in rural areas, thus facilitating still further the processes of urban decentralization. The massive conversion of agricultural land for urban uses, which ensued with the help of such government policies, has resulted in an accelerated decline of agricultural activities in rural areas. This process has also been fueled by the continuing restructuring of the economy, which in turn was marked by the growth of the service industries at the expense of the industrial and agricultural sectors.

In addition to pushing the property rights and economic development agenda, neoliberal thinking – which dominated Central and Eastern European countries during the 1990s – was characterized by the low political priority accorded by central governments to physical planning, regional development, and housing policy. On this count, Slovenia was hardly an exception. The absence of comprehensive national spatial development strategies and coherent regional policies was evident during the country's transition period, marked as this was by protracted disputes regarding the basis of the much-needed new planning legislation. Consequently, land use planning at the municipal level has been characterized by the prevalence of ad hoc political decisions, investment-led approaches, and weak development controls rather than long-term strategic initiatives. This has been a direct result of the “planning vacuum” that set in during the 1990s, when macroeconomic reforms

took center stage and planning was generally viewed as a nuisance, handed over from the socialist regime (Pichler-Milanović, 2001a). In this context it was fairly easy to get approval for planning and building permits that did not comply with the local development plans prepared during the 1970s and 1980s. The regulatory environment was further handicapped by the massive amount of unresolved property rights related to privatization, restitution, and inadequate property registry. Naturally, in these circumstances, development was attracted to places where it was easier to realize new development projects, such as greenfield sites in development-friendly suburban municipalities and rural communities. Since 1994, when local government reform helped to establish a large number of new small municipalities, these local governments embarked almost immediately on a quest to attract new investments as a way of securing an inflow of budget revenues. As a result of this intergovernmental competition for jobs, housing, and services, the process of suburbanization and urban sprawl has markedly intensified.

The Consequences of Suburbanization and Urban Sprawl in Ljubljana's Urban Region

The effects of urban sprawl have been classified traditionally along three main dimensions – environmental, economic, and social (Couch, Leontidou, and Petschel-Held, 2007). In Slovenia and in the urban region of Ljubljana, the consequences of suburbanization could also be traced along these three principal axes of impact.

Environmental impacts

The city of Ljubljana was infamous for its legacy of poor environmental conditions, which dated back to the period of industrial expansion that lasted until the end of the 1980s. While some of the worst problems associated with air pollution have been mitigated by the collapse of many of the socialist industrial enterprises, other environmental problems, related with the rise of motorization, have worsened since the 1990s. Energy consumption in the Slovenian capital city increased substantially due to growth in the number of dwellings and increase in the number and use of private motor vehicles. Traffic congestion today represents one of the most pressing problems in Ljubljana, especially with regard to its impact on air and noise pollution. Significant loss of agricultural land and of areas of unique natural beauty has occurred as a result of residential and commercial sprawl and continuing upgrades of the region's transport infrastructure. Surface sealing has increased substantially as a



Figure 3.4 An example of a new single-family detached house in Ljubljana's urban region. Photo by Pichler-Milanović.

consequence of the accelerated conversion of agricultural land to urban uses and through the intensification of building activities on previously undeveloped greenfield sites. Ecosystem fragmentation has become a typical characteristic of the landscape in the suburban periphery, being caused primarily by the development of new motorways. Unplanned (or poorly planned) urban sprawl at the edge of existing settlements has disrupted the network of eco-corridors important for the migration of some animal species. Noticeable increase in the concentration of heavy metals in the soil has threatened the quality of underground water reserves and the crops of the prime agricultural lands in the urban region due to the growing number of septic tanks and individual sewage facilities built to service the sprawling new single-family and commercial developments.

The loss of historical character and local identity is another negative effect of suburbanization, quite visible in the surroundings of the Slovenian capital, which abound in new houses that look equally generic, regardless of whether they are inspired by modern or postmodern architecture (Figures 3.4 and 3.5). The proliferation of suburban sprawl



Figure 3.5 An example of a new mansion-style house in settlements within Ljubljana's suburban periphery. Photo by Pichler-Milanović.

and the architectural diversity introduced by burgeoning residential and commercial buildings have significantly changed the rural landscape of Ljubljana's periphery. The traditional distinction between urban and rural environments has disappeared, being replaced by "hybrid" landscapes, which blend city and country characteristics in an amorphous, nondescript pattern. Extensive retail strips have begun to emerge and solidify along the main arteries that lead out of the city, attracting the usual assortment of car dealerships, fast food restaurants, and large shopping centers.

Economic impacts

Since the mid-1990s, the rising demand for space for new warehouses, shopping and leisure centers, industrial and office parks, and new housing has increased the overall cost of land development and real estate values in general. In the inner-city areas of Ljubljana the overall increase in property prices since 1995 has led to an extremely high price-to-income ratio, to the emergence of speculative urban land

banks, and to a severe shortage of affordable housing. While the intensive construction in suburban areas has mitigated some of these problems by meeting substantial portions of the new demand and by providing lower cost residential and business accommodations, it has also shifted public resources away from the existing inner-city communities. A number of large-scale projects have been undertaken in or near Ljubljana with the goal of improving the competitiveness of the Slovenian capital on the international scene. The emphasis has been on enhancing regional accessibility and transport infrastructure through upgrades of airport and port facilities, motorways, and inter-city transport. This strategy has led to an underutilization of the existing social and technical city infrastructure and to a relative decrease in infrastructure maintenance and service provision in some parts of the capital municipality. The designation of a large share of public funds for the upgrading of motorways and airports has shrunk the amount of funding available for investments in rail infrastructure or in an efficient public transport system, fostering in return higher levels of automobile use, traffic congestion, and environmental pollution.

The dispersed settlement network and the new, sprawling suburban development patterns have contributed also to a sharp rise in car ownership.⁷ While the suburban railway system is still not well developed in Ljubljana's urban region, buses remain the main mode of public transportation for suburban residents. In consequence, more than 70 percent of the 120,000 daily commuters to the city use private cars (Dekleva, 2002; Regional Development Agency of Ljubljana Urban Region, n.d.). Daily commuting flows are especially intensive in the northwestern parts of Ljubljana's functional urban area, where the towns of Kranj and Škofja Loka and the conurbation of Jesenice–Radovljica–Bled are located. With the completion of the motorways along transport corridors E 5 (west–east) and E 10 (north–south), the 60-minute commuting shed of the capital city of Ljubljana has widened to cover more than 70 percent of the Slovenian territory, including the second largest town of Slovenia, Maribor, and the Koper–Izola–Piran conurbation on the Adriatic coast.

Social impacts

Since 1990 the sociospatial differentiation of Ljubljana's urban region has been driven by the processes of industrial restructuring, decentralization of economic activities, and growing income polarization. The process of sociospatial differentiation has emphasized particular city locations with specific housing, demographic, and social structures and functional land use composition. The suburbs have become a location

avored by the more affluent segments of the population, channeling an outflow of human and financial resources to the periphery. As a consequence, the processes of accelerated suburbanization have contributed to the deterioration of some inner-city areas and to increase in sociospatial differentiation. High property prices in the capital city due to deferred provision of affordable housing and a speculative urban land market have fueled further suburbanization, as has the disappearance of lower end residential services from the neighborhoods in the city core. The decline of retailing in the city center has been aided by the development of new large shopping centers in the city periphery. A positive sign of reversing this trend is the renewal and upgrading, evident in recent years, of the older housing stock and retail shops in the inner-city areas of Ljubljana. This process has been spearheaded by different forms of public–private partnership that have utilized recently available renewal subsidies and equity loans (e.g. EU funds, national subsidies, local municipal grants, bank loans, private investments, and the like).

Given the high level of suburbanization of the Slovenian capital city region, it is quite remarkable that the inner city of Ljubljana has preserved strong and viable residential functions. This has been mainly a result of the relatively low maintenance costs of the existing structures and of the strong attachments of older residents to their properties and neighborhoods. And, while there are very few gated communities to be found in Ljubljana's urban region (yet), differentiation in the quality of traditional and new housing is clear in the inner city, suburban, and rural areas. Lifestyle conflicts are evident between newcomers (suburbanites) and traditional (rural) residents, who are bound to share spatial resources yet have different outlooks on how these should be appropriated. Another set of social problems exacerbated by suburbanization relates to the unequal distribution of and accessibility to jobs, schools, and shopping and leisure facilities in suburban and rural areas within the urban region. While local authorities in suburban and rural municipalities will be called to provide more services, inevitably they will be forced to increase local taxes in order to finance these initiatives. The variations in the ability of the various segments of the suburban population to foot these bills will undoubtedly heighten social tensions already brewing in the suburbs.

Management of Suburban/Metropolitan Growth

The success of the political, economic, and institutional reforms in Slovenia following the collapse of the socialist regime has impacted strongly the transformation of Ljubljana's urban region. At the end of

the 1990s, Ljubljana became one of the most competitive cities in Central and Eastern Europe,⁸ with substantial comparative advantages derived from its geographic location, the strengths of its national and city economies, its high level of social cohesion, and the high quality of its natural and built environment (Pichler-Milanović, 2005a, 2005b, 2006). It should be noted that this position was not a result of any coherent urban development strategy. The impact of the public sector on urban development in the region during the postsocialist years has been limited to several sectoral development programs led by the national government in its quest for full-fledged EU membership and a string of ad hoc development decisions taken by investment-led public authorities in the municipality of Ljubljana and in other municipalities within Ljubljana's urban region.

The absence of comprehensive new national spatial development strategies and coherent regional policies during the 1990s, the priorities placed on macroeconomic reforms, and the disputes regarding the basis for a new planning legislation created an apparent "planning vacuum" during the first decade of the transition period (Pichler-Milanović, 2001a). The lack of an adequate planning regulation at the national and local levels resulted in a shift of population and economic activities from the inner city of Ljubljana to suburban and rural municipalities. Throughout the 1990s, land use planning at the local (municipal) level aided that process of decentralization, as it was characterized by the prevalence of ad hoc political decisions, weak development control, and a *laissez-faire* approach to city development. Thus market forces, not planning, dominated the decade of the 1990s. Only toward the turn of the millennium was the need for effective planning regulation recognized as a necessary form of public intervention – namely one needed to control and direct spatial development at the national, regional, and local level (Pichler-Milanović, 2001a, 2010).

Spatial development policy in Slovenia

Shortly after gaining its independence from the Yugoslav Federation in 1991, Slovenia abolished its former socialist system of comprehensive planning. While politicians and experts were laboring on the fundamentals of the new planning system, directions from the spatial planning documents approved in the 1980s were officially extended during 1990s.⁹ The adaptation of the old planning documents to meet the new spatial development needs involved time-consuming, costly, and demanding administrative procedures. As a result, many spatial development activities and projects were not implemented at all. Similarly complex, time-consuming, and expensive were the procedures

for obtaining building permits. These were granted at two levels for the same development activity: as a planning permit and as a building permit. In consequence, developers often withdrew their proposals – this was especially the case when the projects involved foreign investments – or resorted to semi-legal housing construction in the periphery of the inner city or in rural areas where the enforcement of regulations by authorities was rather loose. The broader impacts from the lack of an effective system of planning during the 1990s can be linked to the increase in unplanned (but legal) suburban developments, the inadequate provision of municipal infrastructure in the growth areas (e.g. water supply, sewage and waste management systems), the decline of old urban communities, and the losses of agricultural and forest land to urban use.

The beginning of the new millennium marked a flurry of legislative initiatives designed to set in place a new system of spatial planning in Slovenia. In 2002 the National Assembly adopted the Spatial Planning and Management Act and the Construction Act. Two years later, the Spatial Development Strategy and the Spatial Order of Slovenia Acts were passed; they contained clear priorities and guidelines for the development of settlements, infrastructure, and landscape areas at the national, regional, and local levels. In 2007 the National Assembly of Slovenia adopted a new Spatial Planning Act, intended to address some weaknesses identified in the earlier planning legislation and to strengthen the coordination of planning activities carried out at various levels. The act allowed for the possibility of planning at a regional level on the basis of agreements established between two or more municipalities. It was also aimed to strengthen the universal enforcement of spatial plans and measures of implementation, requiring that all municipalities in Slovenia prepare new strategic and detailed local spatial development plans by 2010. This has turned out to be a more difficult task than envisioned by the law, as only 33 out of the 211 municipalities of Slovenia had adopted new municipal spatial plans by mid-2012.

Both the Spatial Development Strategy of Slovenia and the Spatial Planning Act devote special attention to managing the dispersed settlement patterns that have evolved in the country as part of the traditional settlement morphology or as new areas of growth. Local municipalities are required to take measures for curbing urban sprawl by emphasizing the densification and revitalization of existing communities. Special attention is to be placed on the renovation of existing town centers as well as on the revitalization of industrial zones, abandoned military sites, and other degraded urban areas (e.g. brownfields). Particular emphasis is placed on the need to protect the natural and cultural heritage and on the prioritization of initiatives intended to reduce the use of passenger cars while promoting user-friendly public transportation.

Another area of public policy that has a strong impact on (sub)urban development is defined by various national sectoral development programs and strategies adopted during the 1990s and updated later according to the requirements of Slovenia's accession to the European Union in 2004. National spatial and regional development programming documents for the periods 2004–2006 and 2007–2013 have been harmonized with EU policies related to the concepts of sustainable, balanced, and polycentric development at the national, regional, and local levels. But inadequate coordination between spatial planning, housing, transport, and environmental policies at the national level and their implementation at the municipal level in the absence of administrative Nomenclature of Territorial Units for Statistics (NUTS) 3 regions are allowing competition between municipalities for investments and budget revenues to continue unabated, fueling further urban sprawl. The low effectiveness of spatial planning policies at the local level is also caused by frequent changes in legislation, weak local governance, strong development lobbies, bureaucratic inertia, poor communication among different stakeholders, and a lack of efficient property and transport taxation, all of which undermine the possibility of curbing sprawl.

Management of growth in Ljubljana's urban region

An earlier attempt to put together a planning document regulating the development of Ljubljana's urban agglomeration in line with market principles and property rights reforms dated back to the mid-1980s, when "Ljubljana 2000" (the official urban development strategy adopted by the socialist government) was revised to address principles such as restitution, privatization, and abolishment of compulsory purchase. The revised urban plan proposed the densification and recycling of the existing urban built-up area, stressing the need for a renewal of the communities built during the 1950s and 1960s.

The plan failed to achieve these goals, due to the changes in the country's political and economic system at the end of the 1980s and the adoption of local government reforms during the mid-1990s that resulted in greater administrative fragmentation, fostering competition among municipalities for new capital investments. The absence of an effective regional institutional framework and the delayed formation of administrative NUTS 3 regions created the perfect conditions for the proliferation of urban sprawl.

In order to improve the state of regional planning, a new Regional Development Agency for the Ljubljana Urban Region was established in 2002, with the main task of preparing regional development programs to cover the 2002–2006 and 2007–2013 programming periods. In addition,

the agency's responsibilities include the preparation of operational programs for projects of regional importance that are eligible for EU funding. Of late the agency started spearheading the preparation of the first regional spatial development concept for the Ljubljana urban region according to the requirements of the Spatial Planning Acts of 2002 and 2007. The project is organized as a joint venture with the city municipality of Ljubljana and the surrounding municipalities of the Ljubljana urban region, with the broader participation of other main stakeholders (e.g. larger employers, public and private institutions, non-government and civic organizations).

Since 2000, the city municipality of Ljubljana has been actively engaged in the development of a new generation of local spatial development documents while updating and revising its existing land use and detailed site plans. A new urban development strategy and a spatial development concept for the city of Ljubljana were adopted in 2002 under the paradigm of sustainable development. These two documents became part of the new Strategic Spatial Development Plan of the city municipality of Ljubljana, which underwent public revision between 2007 and 2010. This strategic municipal planning document was adopted in 2010 together with an implementation (land use) plan.¹⁰ The principal goal of the spatial plan is to achieve "smart city" growth, emphasizing also the internationalization of the Slovenian capital and its development as a center of art, culture, and knowledge. The urban development strategy also emphasizes the need to maintain and improve the quality of life for local citizens by preserving local identity, which is increasingly threatened by the expansion of market forces and the process of global homogenization of cityscapes. A critical step in this direction is the recognition of the need to confront the challenges of poorly regulated urban growth leading to further suburbanization and urban sprawl, the decline of the city center, and the loss of urban identity.

A review of the main principles and ideas embedded in the new generation of national, regional, and local spatial development plans that address the future growth of Ljubljana's urban region indicates that priority has been placed on projects that target improvements in the transport infrastructure (e.g. comprehensive renovation of the main rail and bus stations, enhancement of the public transport system, provision of additional parking garages, and so on), the construction of infill low-density multi-dwelling housing, improvements in the waste management system, and the provision of new recreational areas. The implementation of these strategies still awaits the development of effective policy instruments, including the identification of financial resources and the formation of specific partnerships between different stakeholders. It is encouraging that greater emphasis has been placed on

the vertical and horizontal integration of different planning activities at the international, national, regional, and local levels.

The main challenge now, particularly in the context of a growing global financial and economic crisis, is how to achieve further economic growth and land and property development in the capital city region, while avoiding additional urban sprawl and its negative environmental, economic, and social consequences. The achievement of this goal will depend upon the ability of local leaders to encourage the active involvement of different professions, social groups, and local communities. Strong political leadership with cooperation and partnership between different public and private institutions and other stakeholders, which was often so desperately lacking until recently, is essential for the implementation of these comprehensive strategies in what seems an increasingly uncertain future.

Conclusion

Since 1991, the population growth of Ljubljana's urban region has been marked by a continuous decline within the city municipality and by an intensive suburbanization of the capital region's outer areas. While the roots of these processes were planted by the socialist regime's spatial development policies enforced during the 1970s and the 1980s, the advance of market-based economic principles and of private property rights, combined with the lack of coherent strategic planning policies at all levels of government during the 1990s, accelerated significantly the pace of urban decentralization. In recent years there has been a growing recognition of the need for stronger regulation of urban growth, one that requires greater cooperation between the city of Ljubljana and its surrounding municipalities.

The successful implementation of the new urban and regional development strategy, which has been developed during the last few years as a result of the effort to increase intergovernmental cooperation, depends upon the ability of public officials to encourage the active involvement of a wide range of professional organizations, social groups, and local communities, in a concerted effort to broaden public support for this initiative. The success of the strategy also depends on the adoption of an effective set of implementation measures. Significant advances could be made by employing a broader arsenal of regulatory mechanisms, including adjustments in the taxation system and in the implementation of other fiscal and legal anti-sprawl instruments (use of impact fees, transfer of development rights, and so on); by making improvements aimed at strengthening development control (improvements such as the enforcement of stricter sanctions); and, last but not

least, by raising public awareness (in citizens, investors, and elected officials) of the negative impacts of sprawl.

These measures should go hand in hand with the implementation of a set of programs that support urban revitalization in the inner-city areas, placing emphasis on improving the availability of non-profit rented housing and affordable owner-occupied housing in Ljubljana's inner-city areas. This goal could be accomplished by improving the availability of financial resources to municipalities and by encouraging public-private partnerships for the provision of affordable housing in urban areas. At the regional level stronger emphasis should be placed on the integrated development of transport infrastructure and land development, with adequate provision of public transport coverage and level of services.

The overall goal of Ljubljana's new regional policy is to strengthen economic and social cohesion and balanced regional development within the paradigm of sustainable development. At the local level the urban-planning goals are related to the development or revitalization of urban, suburban, and rural settlements, with efficient urban land use (anti-sprawl) development and management. The planning documents developed recently at the national, regional, and local level call for comprehensive agreements between different stakeholders, but their implementation will be sternly challenged by the duration of the current economic and financial crisis, by the continuing energy and climate change demands, by the ageing of Slovenia's population, and by the increasing level of market saturation for consumer demands.

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Notes

- 1 Over 65 percent of Slovenia's territory is covered by forests.
- 2 With less than 8 percent of the total Yugoslav population, Slovenia produced 20 percent of the federal GDP and 29 percent of the federal exports in 1990 (Pichler-Milanović, 1996; 2005a).
- 3 As a result of the rapid privatization of public housing during the 1991–1994 period, the rate of home ownership in the country increased dramatically from 67 to 90 percent (Mandič and Stanovnik, 1996; Pichler-Milanovic, 1999; 2001a; 2001b).

- 4 In the 1990s the organized (not individual) type of housing construction in Ljubljana declined to approximately 450 dwellings per annum from an annual average of 2,750 dwellings achieved during the 1970–1985 period (Dekleva, 1991; Pichler-Milanović, 2005a).
- 5 BTC City was initially developed in the early 1990s by retrofitting a cluster of former warehouses into retail shops. The Austrian supermarket chain Interspar first opened its premises there in 1993. In the late 1990s, BTC expanded further by acquiring and refitting additional industrial premises and by adding new infill developments such as supermarkets, furniture stores, designer outlets, multiplex cinema, fitness centers, an aqua park, a fringe theater, and several restaurants and kindergartens.
- 6 On average, property prices in Ljubljana rose several times higher than in other Slovenian towns. Price increases have been most significant in several attractive locations within the inner city and in some attractive residential areas at the city periphery, generally marking a sharp price differential between urban, suburban, and rural areas in the city region (Pichler-Milanović, 2005a)
- 7 Between 1989 and 2006, the number of cars registered per 1,000 residents increased from 320 to 480 (Statistical Office of the Republic of Slovenia [SURSTAT], n.d.).
- 8 A recent study of about 70 medium-sized European cities, which is based on the analysis of 74 quality of life indicators, has ranked Ljubljana among the top 20 cities and as the top city among the new EU member states (Giffinger, Fertner, Kramar, Kalasek, Pichler-Milanović, and Meijers, 2007).
- 9 Only a few amendments were added to the existing articles of the spatial planning legislation during the 1990s: the Spatial Planning Act in Transition, 1993, 2000; the Settlement Planning Act, 1993, 1997; the Building Land Act, 1997; and the Construction Act, 1999, 2000. The aim of these amendments was to provide more land so as to meet market demands and facilitate the adaptation of local land use plans.
- 10 The city municipality of Ljubljana has already adopted, in 2007, a document called “Vision of the City of Ljubljana by Year 2025,” which emphasizes 22 strategic projects to be implemented by 2025.

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Suburbanization of Moscow's Urban Region

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Introduction: Main Characteristics of Moscow's Region Development

The last two decades have dramatically transformed the landscape of Moscow's periphery. A drive around the edges of the city in the late 1980s would have revealed a mosaic scenery composed of fields, meadows, and forests dotted by villages, small and mid-sized towns, industrial facilities, and dacha communities. Today a person taking a trip through the fringes of the metropolis – which is exceeding 12 million residents – has to navigate through a maze of endless traffic jams, stringing along countless new supermarkets, furniture stores, car dealerships, leisure facilities, and housing. In the wake of this new suburban development, very little has been left of the former open spaces, fields, and forests, which were the distinguishing features of Moscow's periphery not that long ago.

During the early 1990s, the newly emerging spatial patterns of development in Moscow's metropolitan area, which encompasses the City of Moscow and Moscow Oblast, were characterized by stark economic and social polarization. The inner city was transformed by the emergence of new office clusters and by the consolidation of shopping areas that catered to the tastes of the new business elite. At the same time, the built environment of the urban periphery was marked by a general state of decline, with the exception of a few locations that attracted low-level business

activities that required minimal capital expenditures. These new developments included spontaneous open-air markets, small shops, and low-end service establishments – all characteristic of the early stages in the transition to a market-based economy.

The gradual economic consolidation of the Russian Federation, which began in the late 1990s, spearheaded the first large-scale investments in Moscow's periphery. Hundreds of new housing developments, including entire small towns, have been erected at the outskirts, beyond the capital's outer beltway. These formerly remote areas have become one of the most important investment zones outside of Moscow's downtown. Spacious new suburban retail complexes have given the periphery of the Russian capital a distinct cosmopolitan look. The extreme disparities between center and periphery, characteristic of the Moscow region in the 1990s, have been dissolved by the barrage of new developments that have sprung up at the edges of the metropolis during the last ten years.

Moscow Oblast

Today Moscow's suburbs essentially cover the entire territory of Moscow Oblast. This growth has made the Oblast a strong competitor to the capital city in economic and political terms. Since the end of the 1920s, the City of Moscow and Moscow Oblast have existed as two autonomous administrative entities of equal status within the Russian Federation. In addition to spacious rural areas, Moscow Oblast features 80 large and mid-sized towns and numerous newly erected residential communities. In 2010 the Oblast ranked second in the Russian Federation, immediately following the city of Moscow in terms of residents, workforce, and retail turnover, and third with respect to gross domestic product. In terms of the volume of residential construction, Moscow Oblast has lately surpassed even the city of Moscow, taking first place in the federation (Tables 4.1 and 4.2).

While Moscow's economic dominance nationwide has been somewhat weakened during the last decade, the city's leading role within its urban agglomeration has been sustained, as the surrounding jurisdictions continue to be highly dependent economically on the metropolitan center. The residents of Moscow Oblast acquire most consumer goods and services from the capital. Moscow's more attractive and diverse labor market has absorbed also most of the workforce from the region. This has led to a situation in which Moscow Oblast's businesses from various economic sectors experience severe shortages of qualified labor. But, in spite of these problems, Moscow Oblast has elevated its status to become one of the most important economic regions in the nation, boasting a highly productive industry and research potential.

Table 4.1 Economic indicators for Moscow Oblast, City of Moscow, and St. Petersburg as a percentage of the totals for the Russian Federation in 2001 and 2010.

	<i>Moscow Oblast</i>		<i>Moscow</i>		<i>St. Petersburg</i>	
	<i>2001</i>	<i>2010</i>	<i>2001</i>	<i>2010</i>	<i>2001</i>	<i>2010</i>
Population	4.4	5.0	5.9	8.1	3.2	3.4
Gross domestic product	3.1	4.8	21.4	22.3	3.3	4.6
Capital stock investment	3.4	3.8	11.8	6.9	3.2	4.4
Industrial production	3.6	7.1 ^a	4.9	10.3 ^a	2.7	6.7 ^a
Retail sales	4.0	6.2	29.2	17.5	3.7	4.1
Housing construction	8.9	13.6	11.7	3.0	3.5	4.5

Note: ^aRecent changes in the classification of economic sectors makes quite difficult the 2010 comparison of industrial production of Moscow region, Moscow, and Saint Petersburg with the industrial production of Russia as a whole.

Source: Roskomstat, 2002, 2011.

Metropolitan spatial structure

The basic shape of Moscow's metropolis could be described as a radial, concentric structure that has developed gradually over a long period of time. It is accentuated by the presence of three main ring roads that demarcate four distinct zones (Makhrova, Nefedova, and Treivish, 2008: 121). The inner beltways, called the Boulevard Ring and the Garden Ring, are the most recognizable structural elements encompassing Moscow's *historic core*. The next zone, the *compact city*, is enclosed between the Garden Ring and the Third ring. This zone is characterized by a dense urban form with well-developed infrastructure. It roughly corresponds to the built-up area of Moscow from the 1930s and covers only 6 percent of its current territory. The area extending from the edge of the compact city to Moscow's city limits, marked generally by the Moscow Automobile Ring Road (MKAD) beltway, comprises the *inner periphery* of Moscow's metropolitan area. This territory is distinguished by vast spaces dedicated to industrial facilities, transportation infrastructure, zones of mixed use, and large-scale housing developments inhabited by the majority of Moscow's residents. The current administrative boundaries separating the City of Moscow from Moscow Oblast run for the most part along the MKAD beltway, which was completed in 1960 and had initially been conceived as a feature demarcating Moscow's city limits. Since then, the administrative boundaries of the city were extended in several areas beyond the MKAD beltway as a result of a

Table 4.2 Percentage of per capita socioeconomic indicators for 2001 and 2010 in Moscow, St. Petersburg and neighboring oblasts relative to Moscow Oblast.

	<i>Population income</i>		<i>Gross domestic product</i>		<i>Capital stock investment</i>		<i>Retail sales</i>		<i>Housing construction</i>	
	2001	2010	2001	2010	2001	2010	2001	2010	2001	2010
Moscow Oblast	100	100	100	100	100	100	100	100	100	100
Russian Federation	115	85	143	99	129	131	111	80	50	36
Moscow	448	197	520	299	258	112	546	174	99	14
St. Petersburg	130	110	149	141	129	159	128	98	55	49
Vladimir	59	56	73	58	46	68	48	47	35	30
Kaluga	63	49	80	69	69	136	58	68	40	44
Ryazan	67	61	83	58	90	65	60	58	32	36
Smolensk	85	66	90	57	93	98	92	72	37	31
Tver	59	62	80	64	79	122	59	65	37	30
Tula	74	69	83	61	55	87	59	68	17	23
Yaroslavl	93	65	110	72	120	102	66	58	26	20

Source: Roskomstat, 2002, 2011.

series of annexations. This policy of aggressive territorial expansion came to an abrupt halt in the early 1990s.

The *outer periphery*, which includes four zones of Moscow Oblast, is the focus of this chapter, as it is the key domain of Moscow's suburban development. Here we use the classification of Moscow's periphery suggested by Ioffe and Nefedova (2000: 52), who group the 39 municipalities of the Oblast into four concentric rings, according to their adjacency to Moscow (Figure 4.1: a). The first of the outer peripheral rings in the Moscow Oblast is formed by the eight municipalities located in immediate adjacency to the central-city boundary. This ring encompasses an approximately 20-kilometer-wide band outside of the MKAD, and its outer limits roughly correspond to the Forest and Park Protective Belt (FPPB).¹ The next ring, including the second-order neighbors of the central city, covers a territory stretching between 20 and 60 km from the MKAD. It is roughly equivalent to the periurban zone described in urban studies literature.² The third ring encompasses the municipalities located between 60 and 100 km away from the MKAD beltway. Finally, the fourth zone includes the most remote municipalities of Moscow Oblast, which are located over 100 km away from the capital city's boundary. Roughly 30 percent of the population residing in the Oblast is concentrated in the first ring, which comprises only 7 percent of its territory. Both population size and density in Moscow Oblast decrease steadily with distance from the MKAD³ (see Table 4.3).

In addition to the above subdivision of Moscow's outer periphery into concentric rings, we use a classification of the metropolitan territory into four radial sectors (north, south, east, and west) as a way of highlighting certain spatial tendencies of Moscow's metropolitan structure (Figure 4.1: b). The main differences among the radial sectors are most clearly recognizable in terms of their specific economic structure, urbanization characteristics, and per capita production output (see Table 4.4). The city of Moscow is surrounded by service industrial areas in the north, agroindustrial areas in the south, industrial and agrarian areas in the east, and service agrarian areas in the west (Makhrova et al., 2008: 292). Historically, the southern and eastern sectors have been the most industrialized, contributing two thirds of the Oblast's industrial output in the early 1990s, by comparison to one fifth produced in the northern sector and one eighth in the western one (Treivish, 1996: 22). Consequently the western sector has been regarded as the most desirable area for recreation and residence in the metropolitan area, a preference that the land and real estate markets now clearly reflect. The most industrialized eastern sector remains the economic pillar of the Oblast; it has many export-oriented enterprises.

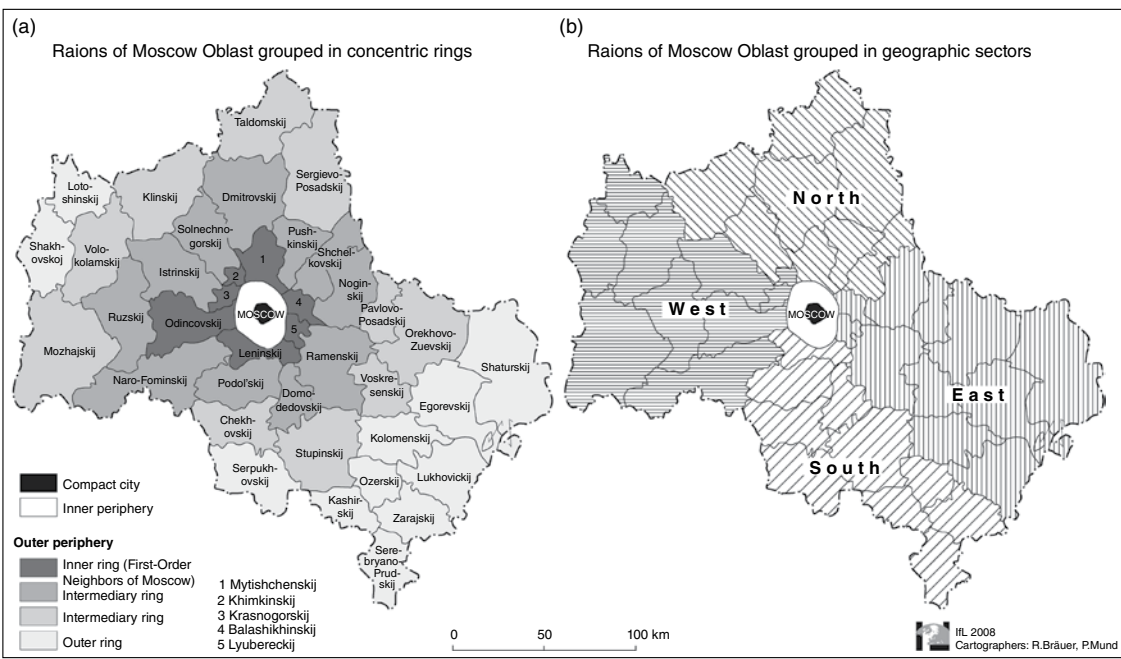


Figure 4.1 Concentric and sectoral structure of Oblast Moscow. Based on data from Ioffe and Nefedova, 2000: 52.

Table 4.3 Selected attributes of rings within Oblast Moscow in 2010.

	<i>Moscow Oblast</i>	<i>Moscow Oblast rings</i>			
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Share of surface (percentage)	100	6.7	30.7	34.0	28.7
Share of population (percentage)	100	28.4	38.7	18.8	12.4
Share of industrial production (percentage)	100	20.4	43.3	21.3	13.1
Population density (inhabitants per km ²)	155	650	195	86	67
Street density (km/1000 km ²)	301	541	447	210	147

Sources: Makhrova, Nefedova, and Treivish, 2008 and Roskomstat, 2011.

Table 4.4 Selected attributes of sectors within Moscow Oblast 2010.

	<i>Moscow Oblast</i>	<i>Moscow Oblast sectors</i>			
		<i>North</i>	<i>South</i>	<i>West</i>	<i>East</i>
Share of surface (percentage)	100	23.9	19.8	27.9	28.4
Share of population (percentage)	100	29.3	18.8	15.8	36.1
Share of industrial production (percentage)	100	23.8	31.9	14.2	30.1
Population density (inhabitants/km ²)	155	190	146	87	196
Street density (km/1000 km ²)	301	360	355	214	301

Sources: Makhrova, Nefedova, and Treivish, 2008 and Roskomstat, 2011.

In 2011 the policy of enlarging the territory of the capital city was reinstated with the adoption of a federal government's decision to increase dramatically Moscow's territory. This increase took place via the annexation of a huge chunk of Moscow Oblast lying to the southwest of the capital, and reaching as far as the border of the Kaluga region. While no activities aimed at the development of this "New Moscow" have started yet, it should be expected that this annexation, which more than doubles the territory of the capital, will result in significant changes in the spatial structure of Moscow's metropolitan region in the future.

Development of Moscow's Periphery during the Soviet Period

During the first half of the twentieth century, most of Moscow's urban growth was accommodated through densification of its urban fabric, which was made possible through significant improvements in city's infrastructure and through a strong control over its territorial expansion. As a result of this concentrated growth, by 1959 Moscow's population density reached its historical record of 17,200 people per square kilometer. In the inner-city densities reached 51,000 residents per km², dropping down to 1,000 residents per km² at a distance of 10 km from the center (Leupolt, 1988; Ioffe and Nefedova, 2000: 56). Urban expansion followed several major axes that extended out from the city center. Development along those growth corridors included high-density, mixed-use building ensembles with distinct architectural design qualities.

The rapid growth of the Russian capital after World War II called for a revision of the existing urban growth policies. During the 1960s an emphasis was placed on decentralization and territorial expansion of the city, as well as on a series of annexations and the construction of an increasing number of vast industrial and residential districts in the outlying areas. Methods of industrialized housing production became established, in order to speed up the supply of dwelling units needed to address the severe housing shortage. New large-scale housing estates increasingly pushed their way out, reaching the territory of Moscow Oblast by the late 1960s. This aggressive expansion of Moscow led to significant increases in population density in the periphery. By the 1970s and 1980s, population densities in the large-scale housing developments located on the city's outskirts reached 10,000 residents per km² within a radius that stretched as far as 20 km from the city center (Ioffe and Nefedova, 2000: 56, Brade and Rudolph, 2006). At the same time, the inner-city districts experienced rapid population decline, densities falling to about 20,000 residents per km². The historical core of the city was hit particularly hard by the processes of residential decentralization, which continued until the end of the 1980s and beyond. Thus, while in the beginning of the 1960s the population residing in the historical core numbered close to 1 million inhabitants, by the early 1990s it declined by 25 percent (Mosgorkomstat, 2001).

It should be noted that shifts in the balance of population between the center and the periphery within the city of Moscow have been primarily a result of changing city boundaries through annexation. The suburban territories acquired through this process earned city status and, along with it, received new, standard multistory housing estates, yet in reality they did not change their nature as dormitory suburbs.

Another distinct feature of Moscow's metropolitan growth during this period is the emergence of highly specialized satellite towns in the outer periphery of the capital region. These towns could be classified into two types of settlements. The first type developed as employment nodes; they attracted large research and technology firms in hi-tech areas such as nuclear research and aerospace technology.⁴ In contrast to these jobs-rich settlements, the second type of satellite towns developed as pure "bedroom communities," whose residents commuted to work in Moscow on a daily basis.⁵ Both types of satellite towns experienced an explosive population growth that undermined the intentions of Soviet urban planners to control metropolitan expansion through the development of a balanced settlement pattern. The rapid growth of satellite towns and other peripheral settlements was fueled in large part by the stringent administrative restrictions known as *propiska*, which were imposed on migration to the city of Moscow since 1932.

Administrative instruments designed to control migration were enforced within the Moscow region as well. All enterprises, for instance, had set limits on employing new staff. In the Moscow Oblast the limits were less strictly enforced than in the capital city.⁶ Overall, the attempts to curb the growth of the capital through administrative means during the Soviet period produced little results (Glushkova, 1999). The fast population growth and narrow specialization (industrial, scientific, residential) of most of the cities within the Moscow region led to a steady increase in the number of commuting trips from the metropolitan periphery to the capital.

The residents of Moscow, on the other hand, perceived the territory surrounding the capital city first and foremost as a recreational area. By the end of the 1980s, huge garden and forest colonies extended along the radial suburban railway lines, featuring close to a million summer cottages called *dachi*.⁷ Since the 1930s, areas in the city's periphery were systematically designated for this purpose. *Dacha* communities were formed as loose clusters of garden plots, typically numbering several hundred parcels. With the acceleration of urbanization during the Soviet era, these settlements grew even faster, serving as a safety valve for the frustrations of urban residents who crowded the densely built city quarters (Figure 4.2). After the adoption of legislation liberalizing the acquisition of land for garden use in the early 1980s, *dacha* development reached its peak in the mid-1980s.

The preponderance of such seasonally occupied colonies in the vicinity of Moscow suggests the existence of a specific form of socialist suburbanization, the appearance and the social context of which are quite distinct from the patterns and processes of suburbanization in the western world (Brade and Nefedova, 1998; Nefedova, 2011). Yet,



Figure 4.2 Typical Russian dachas. Photo by Tatyana Nefedova.

during the Soviet period, Moscow's inner and outer periphery exhibited some suburban characteristics commonly recognized in the early capitalist suburbs as well. These features were related to the mono-functional nature of the newly built peripheral settlements, their strong functional dependence on the central city, and their low level of infrastructure provision.

Patterns and Processes of Suburbanization during the Postsocialist Period

The period of Russia's transition to a market-based economic system, which started in the early 1990s, has also become a period of dramatic restructuring of the spatial patterns of urban activities within the metropolitan area of Moscow. These changes have been particularly visible in the explosive growth of Moscow's suburbs and in the reformulation of the role played by these territories in the life of the capital.

Migration patterns

During the economic crisis of the early 1990s the population of Russia was faced with supply shortages, escalating prices, and uncertainty about the future; this led to decreased migration inflows to Moscow. The

Table 4.5 Migration inflows to the City of Moscow, Moscow Oblast, and the neighboring oblasts per 10,000 inhabitants.

	1979–1988	1989–1994	1995	2000	2005	2010
City of Moscow	80	5	258	236	53	75
Moscow Oblast	50	36	86	76	83	108
Neighboring oblasts	13	48	60	–1	13	1

Sources: Goskomstat Rossii, 1996 and Roskomstat, 2011.

economic recovery, which began during the second half of the 1990s, helped to overcome some of the supply shortages and created new employment opportunities in the city. As a result, the migration trend was reversed. However, at the start of the new millennium, Moscow Oblast became more attractive for newcomers than the City of Moscow; this was due to new economic barriers (e.g. escalating housing prices) and difficulties of registration in the capital. Thus the inflow of population into Moscow Oblast surpassed again the rates registered in Moscow. This margin continues to grow today (see Table 4.5), while about 2 million people from the Oblast commute daily to the capital for work, education, and services.

The emergence, in Moscow, during the period of transition, of a well-developed labor market with high wages has led to an increase of commuting trips to the capital by 1.3 million people. This growth was caused not only by the higher intensity of commuting from Moscow Oblast, but also by an increase in longer term (weekly) commuting, which came from a growing number of migrants settled in adjacent regions. Overall commuting patterns have become more complex, as the booming economy of the region has attracted a growing number of temporary migrants from surrounding places – people commuting not just to the capital city but to Moscow Oblast as well.

Another phenomenon of the post-Soviet years is the migration of workers from all over the Russian Federation (from Vologda and Kostroma to Stavropol region) to Moscow's region. Those migrants retain official residence in their home regions while living in rented apartments in Moscow.⁸ Another new migration phenomenon is the inflow of temporary, mostly low-qualified workers from the former Soviet republics. They are the replacement of *limitchiks* from the Soviet times. And, while the government has set quotas on work-related migration from foreign countries that get stricter with every year, the amount of illegal immigrants has grown steadily over the last decade.⁹

As in Soviet times, the large majority of migrants, both legal and illegal, who settle in the periphery of Moscow are unskilled workers.

It is difficult to estimate their real number, as the majority of them live without official registration. The wealthier migrants to the capital region usually purchase property in Moscow's surroundings. Some of them build their own houses, but most prefer to buy a flat in the cities or towns in Moscow Oblast while holding a job in the capital. However, the majority cannot afford to purchase housing of any type anywhere in the region. Renting an apartment or a room in Moscow Oblast is the only viable option, given the region's escalating housing prices.

The scale of seasonal migration in the region of Moscow has increased by comparison to that of Soviet times. This is due to the fact that nowadays a greater share of capital city and Moscow Oblast residents are leaving their cities for their summer cottages (*dachas*) in the suburbs. According to some estimates, more than 4 million people leave their urban quarters during the summer weekends. A new trend is to use residences in the country, especially those in newly built developments, as alternative second places of permanent residence.

In the settlements closest to Moscow, the majority of house owners are Muscovites. A great number of them are registered residents of the capital who hold apartments and jobs in Moscow. These are wealthy upper-class or upper-middle-class individuals (businessmen, politicians, famous artists) who have bought large single-family detached residences or townhouses in gated communities, in an attempt to isolate themselves from the general population. They or their relatives (children, parents, grandparents) live in these second houses for the best part of the year, in elite settlements concentrated not far from Moscow's boundaries, mostly to the west and north and partly to the south of the capital.

Most of the middle-class Muscovites inhabit their *dachas* seasonally, in settlements or villages located not only in Moscow Oblast but also in Yaroslavl, Tver, Vladimir, Kaluga, and other neighboring oblasts (Nefedova, 2011). Some of the economically distressed residents (particularly pensioners) have opted to lease their Moscow flats, using the income generated from the rented properties to live in their old wooden *dacha* all year round. Other Muscovites have preferred to relocate permanently by buying a flat in Khimki, Krasnogorsk, Odintsovo, Troitsk, or some of the other cities and towns in Moscow Oblast, cashing in the difference between the buying and the selling price and taking advantage of the lower living costs outside of the capital.

Residential suburbanization: Patterns, processes, and factors

Whereas new development in the city of Moscow during the last two decades has been possible mainly through redevelopment and densifica-

tion of the urban fabric, growth in the surrounding region has been spreading over the landscape through the occupation of ever-increasing areas of formerly pristine natural environments. A large share of this new suburban growth is comprised of single-family residential developments that target the aspiring middle class' needs and tastes for better quality housing. As a result of the skyrocketing housing prices in the city,¹⁰ a growing number of Muscovites are flocking to the suburbs, where prices are still relatively low and the supply of new homes fast-growing. Despite the current economic crisis, during the last 5 years the volume of construction in the single-family housing sector in Moscow Oblast reached 3.5 million m², comprising nearly two fifths of the gross construction volume.

The construction of single-family detached residencies in Moscow's periphery started in the mid-1990s in the form of individual properties, developed incrementally and scattered throughout the outskirts of the city in a haphazard manner. By the year 2000, however, entire single-family residential communities began to make their appearance in the periphery of the capital. These new types of housing developments quickly overtook the suburban residential market. While in 2001 there were only about 30 such communities in the suburbs of Moscow, by the end of 2007 they numbered more than 700, reaching 1,000 by 2011 (Makhrova, 2007: 34; Moscow region: Analytical review, 2011). This explosive growth of new residential communities has reshaped to a significant extent Moscow Oblast's overall settlement patterns, especially within the two rings closest to the city (Figure 4.3).¹¹

Before the current crisis, a main characteristic of the suburban housing market was the absence of large-scale development projects containing 100 or more houses. Since competition in this segment is rapidly growing, developers are seeking to gain a competitive edge by offering special community design features such as artificial lakes and canals, extensive green spaces, and covered parking. The most ambitious recent developments include community facilities such as restaurants, schools, and kindergartens. The vast majority of the new developments are not only gated, but tightly secured by the services of professional private guards. Access to these elite developments is highly restricted (Blinnikov, Shanin, Sobolev, and Volkova, 2006). Many of them usually do not feature any signs on the main roads, in an apparent attempt to make their inhabitants "invisible" for the outside world. There is a clear trend away from the ostentatious mansions and mini-palaces of the 1990s and toward a more economical design, with an emphasis on providing maximum comfort. Increasingly, more attention is being placed on landscape design and the provision of quality infrastructure, particularly communication facilities such as high-speed Internet, cable, and digital TV.

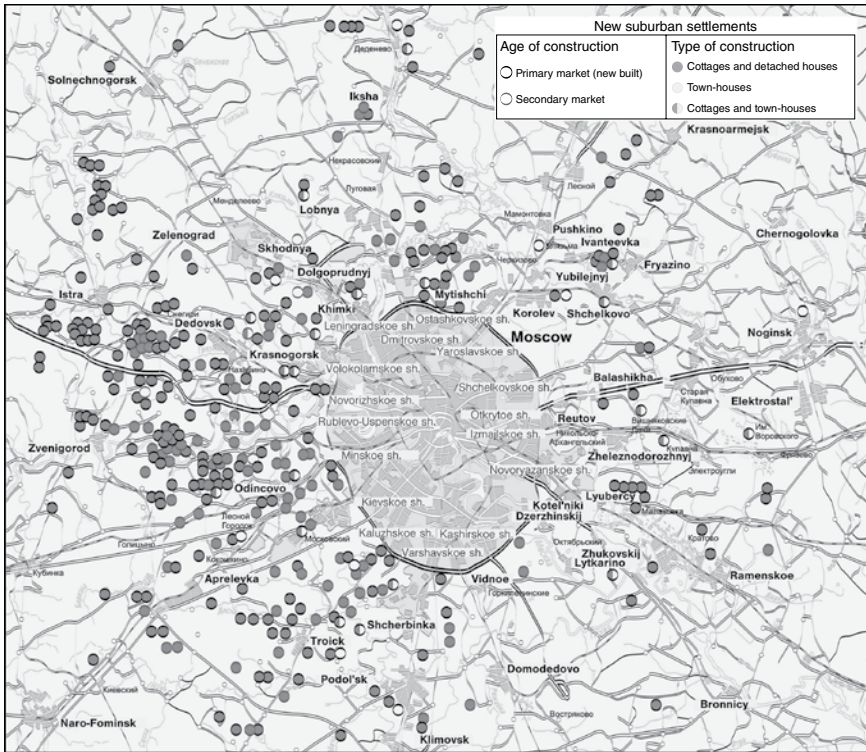


Figure 4.3 Distribution of new suburban settlements in Moscow's suburban region. Based on data from Makhrova, 2006.

The prevailing opinion among real estate experts is that the low share of single-family houses registered as permanent residences in Moscow's suburbs (about 30 percent) is to a great extent a reflection of the poorly developed physical and social infrastructure of the metropolitan periphery. Quite notable in that respect is the desire of the new suburban residents to distance themselves socially and spatially from the residents of the traditional villages, notorious for their low standard of living and parochial lifestyle. Yet economic dependencies tend to break through the barriers between the two social groups, as villagers are hired by the newcomers to provide services such as yard work, house repairs, and childcare. Selling fresh produce to the "townspeople" has opened up opportunities for the locals to earn additional income – especially the elderly residents of the villages, who survive on meager retirement wages.

Most of the single-family residential communities built in the suburbs of Moscow since the early 1990s are located within the first and the second

rings surrounding the capital and can be found in the western, southwestern, and northwestern sectors (Figure 4.3). This spatial pattern is a reflection of historical trends in the development of the periphery. During the pre-revolutionary era many members of the Russian elite were drawn to the western edges of the city, where they erected dachas in the heavily wooded areas accessible by rail and private carriages. Later, these early suburban settlements were populated by the Soviet elite, followed in the 1990s by the growing class of the Russian *nouveaux riches*. Unlike the eastern sectors of the metropolitan area, which have attracted the largest share of industrial development, the western territories of Moscow's periphery have been preserved for predominantly residential and recreational uses. Another distinguishing characteristic of the affluent western suburbs is the quality of the transportation infrastructure, which is significantly better than that of the other parts of the region. As a result of all these factors, the western periphery has solidified its reputation as the most prestigious location outside of Moscow's city center, a perception that is duly reflected in the land values of this area.¹²

However, since the start of 2005, Moscow's market for luxury suburban homes has begun to cool off. An oversupply of expensive mansions has basically stabilized this segment of the market. The 2008 crisis transformed the suburban real estate market profoundly, supply shifting its focus to the economy class. In 2006 the majority of the suburban housing supply was comprised of elite and business class real estate, while supply at the lower end of the residential market was scarce. By 2011, however, the economy class real estate sector accounted for 80 percent of the new residential supply in the suburbs, reflecting radical changes in the housing market.

The current strategies employed by development companies are based on trends that became apparent in the years preceding the crisis. These trends include an increase in the average size of new communities, a decrease in the size of individual buildings and plots, and further territorial expansion of activity to more remote but lower cost locations. The main new strategy adopted by developers in order to cope with the crisis consists in assembling large chunks of land for the sale of individual parcels – namely preparing them by providing minimal infrastructure without constructing the actual housing. In 2011 these sales comprised half of all the transactions in this segment of the market, while the share of such properties sold in new communities was even higher. Demand for land plots with a minimum of necessary facilities is high, due to the decline of personal incomes in recent years. The increase of their popularity among developers is a reflection of this rising demand, as well as of the higher profits that developers can make from selling such properties.¹³ Currently no new communities are



Figure 4.4 Townhouse community in Dubrovka. Photo by Tatyana Nefedova.

constructed in the elite segment of the market; only already existing ones are being extended.

The crisis-driven market trend, emphasizing the economy segment of the market, is reflected in an increasing mixture of lower cost building types, with an emphasis on smaller properties. Town houses with approximately 215 m² of living space have maintained their market share and their spatial patterns. As before, these types of developments are concentrated in the communities located closer to the city, targeting mostly young middle-class families that rely on the good network of schools and child care facilities provided in the capital (Figure 4.4). The demand for multi-family housing has not subsided either. This type of higher density development, which takes the form of mid-rise housing, is being built mostly at the outskirts of existing peripheral towns and, to a much lesser extent, on isolated greenfield sites.

The patterns of new suburban development reveal that the city of Moscow still exerts a strong gravitational force, most of the housing construction being concentrated in the inner suburban rings (Figure 4.5, Table 4.6). As the amount of developable territories in the inner rings of the western sector is dwindling precipitously and property prices remain at their highest, the attention of the housing market has turned to the areas located in the southern territories, which feature lower prices and a higher supply of land. The availability of recreational opportunities provided by the reservoir and the rolling hills covering the northern sector of Moscow Oblast have become valuable marketing

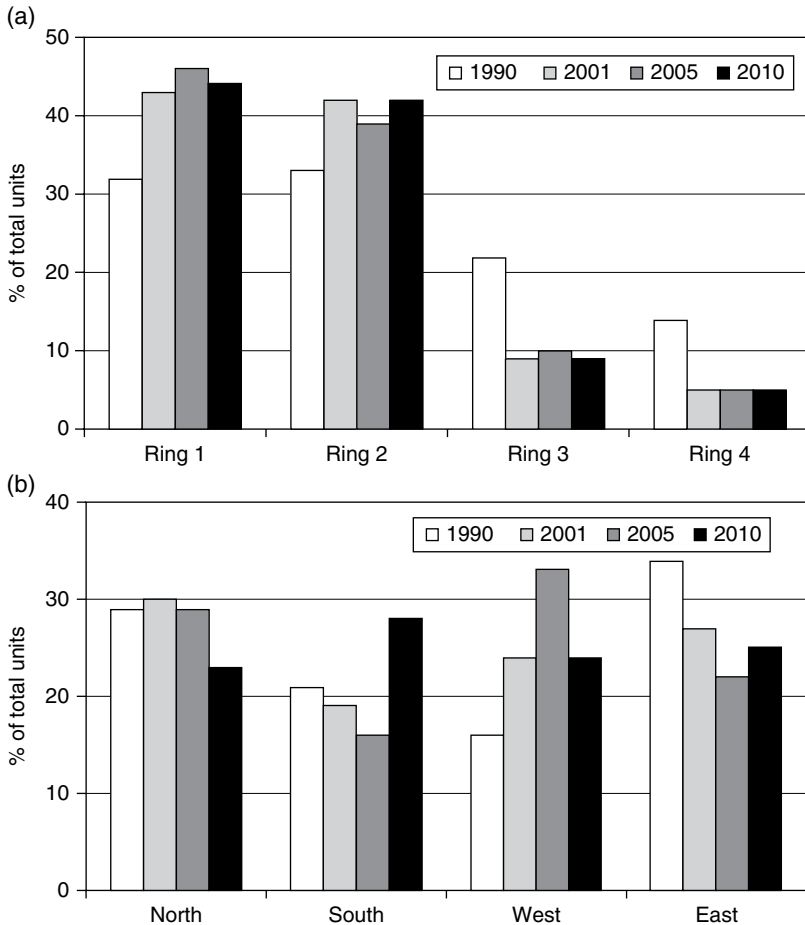


Figure 4.5 Raion ring (a) and sector share (b) in new residential construction in Moscow Oblast: 1990, 2001, and 2005. Based on data from Roskomstat, 2006.

points for attracting residents to the growing number of new, more expensive business-class communities that are popping up in this part of the metropolis.

Before the crisis, the dispersal of residential activities to Moscow's more distant outskirts was proceeding at a much slower pace than dispersal to the inner ring suburbs. Only 1 percent of the new residential communities were located more than 55 km from the MKAD beltway (Makhrova, 2006). The recent shift toward the economy segment of the housing market has spurred developers' interest in some

Table 4.6 New residential constructions according to rings and sectors in Moscow Oblast for 1990, 2005, and 2010.

	Year	Moscow Oblast	Rings			
			1	2	3	4
Share of new residential constructions (percentage)	1990	100	32	33	22	14
	2005	100	46	39	10	5
	2010	100	44	42	9	5
New residential constructions per capita (m ²)	1990	0.3	0.4	0.3	0.3	0.3
	2005	0.8	1.3	0.8	0.4	0.3
	2010	1.1	1.6	1.2	0.5	0.4
			Sectors			
			North	South	West	East
Percentage of new residential constructions (percentage)	1990	100	29	21	16	34
	2005	100	29	16	33	22
	2010	100	23	28	24	25
New residential constructions per capita (m ²)	1990	0.3	0.3	0.4	0.4	0.3
	2005	0.8	0.8	0.7	1.7	0.5
	2010	1.1	0.9	1.6	1.7	0.8

Sources: Makhrova, Nefedova, and Treivish, 2008 and Roskomstat, 2011.

more distant locations. By 2010 one third of the suburban communities were being constructed 30 to 60 km from the MKAD, 14 percent were located at a distance of 60 to 90 km from the beltway, and 17 percent were still further away. Before the crisis, the edges of Moscow Oblast were increasingly becoming fashionable locations for upscale park-like estates, attracting the most affluent buyers from Moscow and beyond. These properties typically cover several hectares of land and include, apart from the main residence, a number of other buildings designed to accommodate guests, domestic staff, and other auxiliary functions. With the onset of the crisis, the periphery of the Moscow region became the focus of the development of less expensive, remote cottages. The low land prices, combined with favorable environmental conditions, led to an unprecedented 25-fold growth in the sale of land plots situated at a distance of 70 to 120 km from the MKAD (Suburban market during the post-crisis period, 2011).

Around 2005 a set of factors such as the growth of solvent demand, higher migration inflows, and the vertical integration of businesses led to another type of development, which was emerging on the fringes of the capital in the form of large-scale master-planned communities called clusters. These developments have included not just upscale residences, but also shopping and business centers complete with class-A offices, hotels, restaurants, banks, and other facilities designed to serve the needs of the new residents. The packaging of a carefully selected mixture of uses in these edge cities has provided their inhabitants with a level of self-sufficiency that frees them from their dependence on the central city, for instance from the need to expose themselves to the daily grind of a lengthy commute.

The crisis substantially changed the dynamics of the development of these clusters. A number of such projects have been transferred to creditors as a result of bankruptcy procedures. Speculative investment projects have ceased to exist. Many projects have been stopped or postponed. As a result, only two such projects lived up to construction phase; most developers stopped implementation during the design stages. And, while these projects were initially advertised as complex environments intended to provide not only residential estate but also infrastructure and local jobs, in reality only the residential component was carried through. Thus, in contrast to the new satellite towns of the Soviet times, which placed priority on the comprehensive development of an industrial base and its supply with labor, the post-Soviet suburban clusters had as their main stimulus for development the private investors' collection of profit, mainly derived from the sale of residential properties.

Nonresidential suburbanization

Since the early 1990s the Moscow region has experienced severe deindustrialization, rapid expansion of the service sector, and an extraordinarily dynamic growth of the small business sector. The shock of the economic crisis brought by the collapse of the old regime was most deeply felt during the first years after the dissolution of the Soviet Union in 1991. By 1996 industrial production in Moscow dropped to 37 percent, and in Moscow Oblast to 43 percent of the 1990 level. The emergence of a growing number of small businesses toward the middle of the decade – a first sign of successful economic restructuring and recovery – was largely rooted in informal networks, as the country still lacked a reliable economic framework and much needed free market institutions. The majority of the new small businesses were in the service sector and were marked by rather low levels of investment.

For many budding entrepreneurs, the adaptation to “capitalism without capital”¹⁴ provided simply a survival strategy at a time when the old systems of social provision were rapidly eroding. Toward the end of the 1990s, after almost a decade of continuous industrial decline and increasing diversification within the manufacturing sector, industrial output in the capital region stabilized and economic growth finally became a reality. By 2005, Moscow Oblast finally reached the industrial output levels of the end of the Soviet era, while Moscow achieved this comeback only in 2007. The most rapid reindustrialization-driven development has taken place in the periphery of Moscow Oblast, where new, highly automated enterprises oriented toward satisfying regional demands are being continuously established.

Distinct economic dynamics in different parts of the Moscow region caused uneven development and differences between the center and the periphery during the post-Soviet period. After the dissolution of the Soviet Union, all of the politically powerful and market-oriented local and national institutions were concentrated in the inner city, where international businesses also established their offices. The use of land and most of the existing nonresidential building stock were placed under the purview of the city’s administration, without being subject to direct public control. The actively pro-growth position adopted subsequently by the city government led to an explosion of construction activity and an extraordinarily rapid pace of development. Spectacular new projects were spearheaded by a coalition of powerful players including the Russian state, the City of Moscow, and a group of mighty, power-wielding corporations, all of which shared a desire to place Moscow on the global cities map as a leading competitor. In these conditions the commercial real estate market boomed, reaching annual returns in excess of 20 percent (Jones Lang LaSalle, 2002). The city center became the hottest spot on the market, drawing the lion share of investments.¹⁵ While employment numbers in the city’s inner periphery dropped by 13 percent during the 1990s, in the central business district they rose by 21 percent (Brade and Rudolph, 2006). The boom of commercial development in the city center brought a set of new urban problems, including the displacement of a large number of residents and of residential support functions from the urban core.

The inner periphery The decade of the 1990s was marked by the collapse of many industrial enterprises located in the inner periphery, followed by a protracted period of severe disinvestment in these areas. In many communities of this zone the number of jobs shrunk by more than a half; in some cases losses were over 70 percent. Gradually, newly

emerging small businesses began to fill in the premises previously occupied by formerly prominent but now defunct companies. Other enterprises – especially those in the food and tobacco industry, the pharmaceuticals, and the construction materials industry – successfully managed to restructure their operations and to diversify their production.

The turn of the century marked the beginning of a decentralization of large-scale nonresidential investment projects, which moved from the city center to the inner periphery. An ambitious development proposal for an office cluster called Moscow City targeted a former industrial site on the western fringes of the inner city (Figure 4.6). The Federation Tower, designed at the heart of the complex as the highest building in Europe, has become a symbol of Russia's growing economic self-confidence. In 1999 Moscow's restrictive property laws and development regulations were relaxed, giving local and foreign investors the opportunity to acquire property. The new, investor-friendly laws, coupled with the growth of the economy and the dynamic real estate market, have made brownfield redevelopment an attractive and viable proposition. So far it is notable that smaller businesses are the ones that are most successful at converting old industrial sites located close to the inner city into office and business centers. A good example of



Figure 4.6 Construction of Moscow City. Photo by Tatyana Nefedova.

this trend are the old brick structures of a former textile plant located on the fringes of the northern district, which have been developed into the modern business complex “Savyolovski”; the complex features 30,000 m² of floor space occupied by small IT businesses, professional offices, and artists’ studios. The majority of investors in this kind of brownfield redevelopment projects are either former managers of the industrial enterprises or local entrepreneurs. Foreign investors, for the most part, still prefer to build large-scale investment projects on undeveloped sites on the outskirts of the city.

Whereas in the early 1990s capital-intensive forms of retailing (high-end boutiques, shopping centers, and malls) were concentrated exclusively in the city center, since the late 1990s huge supermarkets, car dealerships with modern showrooms, and spacious shopping malls have been spreading throughout the inner periphery. The City administration is attempting to reign in the untidy open-air markets, which sprung up during the 1990s, and to establish more “civilized” forms as a dominant mode of retailing – for instance shopping centers, malls, and hypermarkets, which are considered more fitting for the desired image of Moscow as a global city.

The decentralization of business service providers – their move from the downtown toward the inner periphery – has led to a more pronounced sectoral differentiation along the various urban axes that frame the spatial structure of the metropolis. The main southwest-bound (Leninski prospekt, Profsoyuznaya ulitsa), west-bound (Kutusovski prospekt), and northwest-bound (Leningradski prospekt) thoroughfares of the Stalin era have become axes of intense development of new retail and business-related services. These locations command the highest rents for retail floor space outside of Moscow’s downtown. New multistory apartment buildings, supermarkets, car dealerships, and leisure facilities are being erected in the vicinity of those major traffic corridors (Jones Lang LaSalle, 2002).

The southwestern zone of Moscow Oblast, which enjoys high social prestige for its concentration of education and research facilities, has become a hotspot for the relocation of company headquarters by a number of major Russian banks and prominent gas and oil companies such as Gasprom, Itera, and Sibirsko–Uralski Neftegas. This and the western sector are favored areas for exclusive residential developments as well, featuring the first gated communities built in the capital’s metropolitan area during the 1990s. A number of business and residential parks are currently being developed on Rublevskoe Avenue (which was known in the Soviet past as the address of many party and government functionaries), and there is a projected area of 40,000 m² of office space designated primarily for hi-tech businesses.

The outer periphery The industrial decline of the 1990s hit particularly hard the highly specialized industrial and research towns located in Moscow Oblast. To cope with the massive downturn in production, many companies downsized employment and activity, and only a few manufacturing and service businesses were carved out for privatization. After a period of painful adaptation to the new market realities, some companies succeeded in restructuring their operations while maintaining their technological cores and attracting new orders from national and international markets. Several towns have benefited from the establishment of new businesses, mainly in the food processing, distribution, and construction materials industries, which serve the growing needs of Moscow's regional market. In the north-western fringe of the metropolitan region, the town of Khimki, once a hub of the aerospace industry, has opened several large-scale retail and leisure complexes (Greenwood, Country Park, Khimki City, and Khimki Business Park), which now dominate the structure of the local economy.

The emerging spatial pattern of new business locations in the suburban periphery of Moscow is largely bound to the physical infrastructure established during the period of Soviet industrialization. In the area around Sheremetevo International Airport, about 15 km to the northwest of the MKAD, several free-trade zones and tax-advantaged business districts covering a total area of approximately 165 ha have been established to create the special economic area of Sherezona. In Moscow Oblast, capital from gas and oil corporations has flown into modernizing existing business locations and into erecting new manufacturing, storage, and office complexes along the main arteries.

Investments by large foreign investors in a number of greenfield sites¹⁶ have played a major role in the growth of the manufacturing sector in the outer periphery. In the municipality of Stupino, located in the southern peripheral part of Moscow Oblast, more than 10 new industrial enterprises have been built, making that municipality one of the leaders of direct foreign investment. These developments take advantage of the large labor and consumer market of the capital region and of the lower cost of establishing operations in Moscow Oblast, where land is substantially cheaper than in the capital and governments are much more accommodating of investors' needs.¹⁷

An upturn in investments since 2000 has changed the face of the business districts located in the vicinity of the MKAD beltway and in the outer periphery. Outdoor building supply stores, used car lots, and low-budget markets of all kinds, which dominated the suburban landscapes around major arterial roads in the late 1990s, are being replaced by spacious shopping malls, new supermarkets, big-box home supplies and furniture stores, and brand-name car dealerships. Within the past few years Moscow's MKAD beltway has evolved into the city's most important

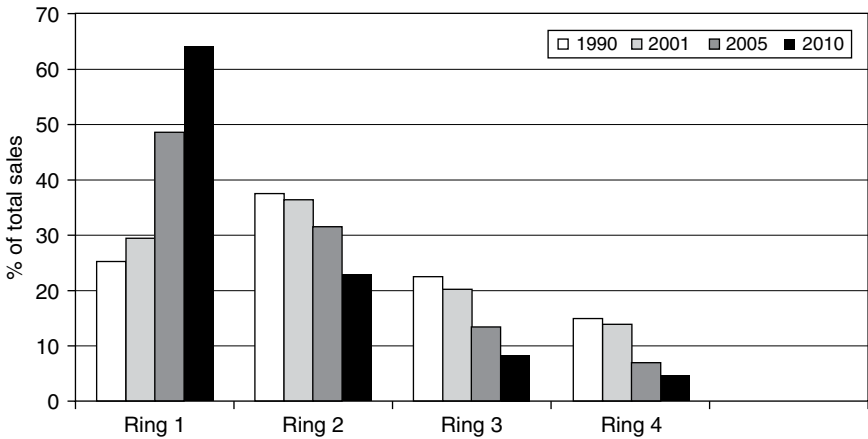


Figure 4.7 Raion ring share in retail trade in Oblast Moscow: 1990, 2000, 2005, and 2010. Based on data from Makhrova, Nefedova, and Treivish, 2008; Rosmosoblkomstat, 2011.

investment zone. Western retail chain giants such as Ikea, Metro, and Auchan have begun to dominate investment activity in this area.

The construction rush experienced in the area around Moscow before the crisis is unlikely to take place again in the near future. Real estate analysts have calculated that between 2003 and 2006 the total floor space of shopping centers meeting international standards has doubled in the region. The crisis has disrupted this trend. In 2011 shopping center space per capita in Moscow was just a little below the average in European countries – 350 m² per 1,000 residents. At the same time, the trend of trade decentralization and expansion beyond the MKAD has persisted. Thus, while in the early 1990s most residents of Moscow Oblast did their shopping in the capital city due to a lack of adequate shopping facilities, the situation has radically changed in recent years. Now Muscovites increasingly frequent shopping centers on the other side of the beltway, which seem more accessible by car than those located within the city districts. The growing popularity of beltway shopping centers is reflected in the increasing percentage of retail sales that take place in the first ring of the outer periphery (Figure 4.7).

In Moscow's metropolitan area the suburbanization of office activities has begun relatively late by comparison to the decentralization of residential and retail uses. Since about 2005, however, businesses with large office space needs and research institutions, especially those in the hi-tech sectors, have begun to abandon the once favored inner-city locations. The growing levels of traffic congestion, the scarcity of available office space,

and the ever-rising real estate prices in Moscow have been the main driving forces behind this phenomenon (Jones Lang LaSalle, 2007). The first business zone located within 3km from the MKAD was Khimki Business Park, developed by IKEA. A second large business cluster developed in the vicinity of Krasnogorsk – another satellite city to the west of Moscow. Its nucleus is the block of Moscow Oblast administration buildings, erected on land owned by the KROKUS company. The area is served by the first Moscow Oblast subway station, which was put into operation in 2009, with significant financial support from the KROKUS company.

Many of the satellite cities located both near Moscow and in the periphery of Moscow Oblast (Khimki, Krasnogorsk, Odintsovo, Dubna, Stupino, Obninsk, and others) have developed into autonomous entities in terms of employment, consumption, and recreation, becoming true “edge cities” in a modern post-suburban space (see Phelps and Wu, 2011). This phase in the development of these settlements, during which they have become subcenters of labor utilization within the continuous fabric of Greater Moscow, is akin to the phase of multifunctional postindustrial suburban development, which is observed in other metropolitan regions of the world; and it proves that radically new processes of sociospatial organization have begun to take shape in the region of the Russian capital (Golubchikov, Phelps, and Makhrova, 2010).

Suburbanization and suburban agriculture

The agricultural sector of Moscow Oblast has benefited from its proximity to the capital, taking advantage of the latter's huge market for its products. In Soviet times the Oblast was one of the regions of the USSR ranked most highly for their gross agricultural production. While adjacent regions faced severe agricultural problems as a result of rural depopulation, Moscow Oblast was thriving due to its proximity to the large capital market, its relatively well-developed infrastructure, and the large size of its workforce. After the post-Soviet reforms, large Moscow-based agricultural holdings started purchasing and modernizing the former Soviet state-run agricultural enterprises (*kolkhozy*) in the region. Many of these new enterprises are the main suppliers of the large food-processing factories located in Moscow and in Moscow Oblast, including those with foreign co-ownership (Danon, Câmpina, and so on).

In 2010 the amount of productive agricultural land in Moscow region reached 550,000 hectares (see Federal State Statistics Service, 2011), in spite of the relatively small size of the areas designated for agricultural use. By comparison to the situation in the 1990s, agricultural land in the region shrunk 2.5 times; but it still remained larger than in the surrounding non-black soil regions, which faced a severe slump in

agricultural production. However, high land values and residential development expansion have led to a significant shrinkage of agricultural land in the region of the capital. Agricultural production is being forced out into the periphery and into the neighboring regions, where Moscow-based agricultural holdings establish their non-labor-intensive branches.¹⁸

A Complex Assessment of Patterns and Processes

The Russian Federation's gradual economic consolidation since the late 1990s has been accompanied by a diffusion of investments from the capital city to its suburban periphery. The uncoordinated growth of large-scale residential developments, of scattered single-family homes, of a wide assortment of shopping centers, and of a growing number of office and industrial parks picked up speed in Moscow's periphery toward the end of the 1990s and has continued unabated ever since. The process has generated vast areas of urban sprawl that stretch over the entire region. Rather than an amorphous diffusion of activities, however, the new patterns of decentralized development have begun to articulate a new spatial order, which becomes more visible as the capital region adjusts to operate within the framework set up by the new national economic policies under the increasing influence of global capital and markets.

The articulation of a new spatial structure of Moscow's periphery is not taking place in a vacuum, but is strongly conditioned by several distinct features of the metropolitan edge established during the period of Soviet urbanization. These features include the network of satellite towns, the patchwork of dacha communities, the sites of large industrial enterprises, and the basic framework of the regional transportation infrastructure, all of which were essential components of the landscape of Moscow's periphery prior to the collapse of the old regime. The suburban development boom described here adds a new layer to that preexisting spatial structure, adjusting it to contemporary socio-economic demands.

The pattern of real estate investments, which has emerged in Moscow's periphery since the late 1990s, indicates a rapidly evolving spatial order, yet one about to become settled. In the course of this development, the features that emerged as elements of the transitional economy have faded away, being replaced by manifestations of global economic forces that, in recent years, are very actively molding the suburban landscape of Moscow's periphery. While it is still easy to spot low-level retail establishments such as outdoor markets and tacky commercial strips, the new

malls and shopping centers that reflect global contemporary patterns of consumption are becoming the dominant feature of the metropolitan periphery. Coupled with the emergence of new business parks and enterprise zones, these developments have diversified the suburban economy and reduced the dependence of the peripheral raions (or districts) on the central city.

Similar changes are taking place in the residential development sector and in the housing segment of the suburban real estate market. The dacha settlements, which have traditionally served as places for seasonal recreation, are morphing into large-scale master-planned communities, equipped with a set of communal facilities and services, which are securing the relative self-sufficiency of their population. As the popularity of suburban living increases, the social composition of the population that relocates from the urban neighborhoods of Moscow to the metropolitan edges becomes more varied. While the initial impetus for residential suburbanization was fueled by the most affluent strata of Moscow's population, with the upswing of the economy the suburban lifestyle has become the norm for an aspiring and growing middle class. Escalating housing prices and traffic congestion have pushed an increasing number of middle-class households to seek more affordable housing in quieter settings, which is offered as a package in a growing number of suburban communities. The high prices of land and housing, on the other hand, coupled with the comparatively low income of the majority of the Russian population, have served so far as a limiting factor in the rampant acceleration of suburbanization of the capital.

The growth of Moscow's metropolitan area and the increasing interdependence between the capital city and its periphery is illustrated clearly by the expansion of the commuter zone, as defined within the functional urban region (FUR).¹⁹ During the late 1990s, approximately 700,000 residents of Moscow Oblast commuted daily to the capital, mostly by using public transportation, while about 200,000 Moscow residents traveled to work to sites located outside of the city boundary (Rudolph, 2002; Burdack, Herfert, and Rudolph, 2005). The number of suburban commuters has increased since then. Currently an estimated 2 million people commute to Moscow daily, while the proportion of commuters is decreasing rapidly with distance from the city. Approximately 50 to 80 percent of the employees who live within the first ring of the outer periphery work in the central city, compared to only one third of the employees residing within the second ring (Makhrova et al., 2008). These commuting patterns highlight the existence of significant imbalances in the distribution of employment in the metropolitan area. The number of jobs available in Moscow exceeds by far the size of the capital's labor force, attracting

thousands of jobseekers from beyond the capital city and even metropolitan boundaries. In contrast, employment opportunities available in Moscow Oblast are more limited and vary locally to a considerable degree.

The full-fledged economic crisis and accelerated processes of deindustrialization, which took place during the 1990s, have given the majority of Moscow's suburbs a distinct flavor of bedroom communities. Since 2000, however, the number of medium and large businesses located in the periphery has begun to grow, tapping into the large labor pool of suburban residents as well as drawing increasingly greater numbers of workers from the city of Moscow itself. This has not yet led to any significant influx of Moscow residents to the suburbs, which are still seen mainly as places for establishing a second home for recreational or investment purposes. Congestion has not yet become a factor that stimulates the residential relocation of reverse commuters (that is, commuters from the city to the suburbs), as in many cases it is easier for people who live in the capital's inner periphery to travel to the suburbs than to get from one part of the capital to another.

Some of the transportation impacts of suburbanization on Moscow's metropolitan area have a distinctly seasonal flavor. The sizable number of *dachniks*, coupled with the influx of residents to the new suburban communities, creates a significant swelling of the population in some areas of Moscow's periphery; and the phenomenon lasts from May through October. This surge has put a great strain on the capacity of the existing suburban infrastructure in general and on the transportation system in particular, especially because of its radial-circular planning. The MKAD beltway has become a "wall" that is very difficult to cross. Extreme traffic jams are now part of the daily suburban experience. Other problems associated with the swell of the *dachnik* population are created by insufficient capacities for waste disposal and sewage treatment. Neither the Moscow Oblast administration nor its municipal counterparts have been able to address adequately these issues.

Regional Governance: General Framework and Protagonists

Urban development in the region of Moscow is distinct from development in Central and Western European metropolitan areas in one fundamental way, which reflects a specific aspect of the social history of Russia and of the Soviet Union. This aspect is related to the strong control exercised by state powers over urban development, which in turn has its roots in the historical traditions of the tsarist regime.

Today the structure of local and regional government in the Russian Federation is based on the national model of strong presidential powers, where the heads of the respective governmental units are granted commanding authority over how public policies are developed and executed. During the 1990s, Moscow's city administration, led by the powerful mayor Yuri Luzhkov, managed to assert its political will against omnipotent state institutions, thus acquiring significant rights over transfer into municipal ownership or privatization of state assets within the territory of the city. Today, despite the fact that some of this property was turned over to the private sector, the municipal administration still remains the principal owner of real estate within the Russian capital. The appointment of Sergey Sobyenin as a new mayor of Moscow in 2010 substantially changed the nature of relationships between different power branches, so that the city administration, which runs the city like a corporation, has significant leverage in its dealings with Moscow's legislative body. The administration of the nine districts of Moscow is simply an extension of the city government, its prefects being appointed directly by the mayor. In all practical respects, an independent system of administrative control and public monitoring of the administration's dealings has yet to be established.

Another characteristic feature of the configuration of power at a regional and local level in Moscow is the close mixing of political and economic actors in urban development. A few prominent national financial and industrial groups (especially from the gas and oil industry) hold significant sway over structural development as strategic investors and are among the top players in Moscow's political and economic affairs. The presence of foreign investors in the region has risen to prominence only in recent years.

In contrast to the City of Moscow, the territorial-administrative structure of Moscow Oblast is, politically, quite fragmented, being defined by 36 raions and by 38 city districts that represent autonomous municipal units, administratively independent from the raions. A decisive factor in the economic success of a raion or of a municipality is the ability of the local administration to establish effective governance, actively promoting a local development agenda. In general, however, local governments in Moscow Oblast have a weak influence on development decisions, which, in cases concerning large-scale development projects, are negotiated directly between investors and the Office of the Governor of Moscow Oblast. The system, which existed until recently, of regional heads being appointed directly by the federal center meant that all the important decisions, even in the investment-friendly Moscow Oblast, were greatly influenced by the federal government and its loyal oligarchs.

In this political context, the mushrooming of new single-family communities in the suburbs of Moscow is a process that unfolds “spontaneously,” with very little effort made by public authorities on issues related to the regulation and management of the emerging growth patterns. Many of these new developments are not officially registered in Moscow Oblast’s records; nor are the residents who occupy them. Municipal administrations and developers strike gentlemen’s agreements, designating areas for development “on demand” and frequently violating provisions for protecting valuable environmental areas. In the spring of 2007, Moscow Oblast finally adopted a General Development Plan, which represents the first attempt made by the Oblast’s government since the Soviet times to create a legal instrument aimed at regulating the outburst of development on its territory. The impact of this initiative on promoting new approaches to metropolitan growth is going to be tested in the next years; yet there are substantial reasons to be skeptical about its outcome, given the lack of a systematic control over investment activities, widespread corruption among public officials, and unresolved questions of administrative authority.

The sharp fragmentation of the government’s authority over the territory of the capital region has produced significant tensions between the City of Moscow and Moscow Oblast over the use of regional resources. Notable points of contention are the rights over the use of regional airports and the location of new industrial enterprises in the contact zone between the first ring of suburban districts and the City of Moscow. Emblematic here are the territorial disputes between the City of Moscow and Moscow Oblast over the proper administrative boundary between the two federal subjects in the vicinity of the MKAD beltway, which has become the hottest investment zone since the late 1990s.

The fundamental relations between the City of Moscow and Moscow Oblast have been effectively defined in an agreement for regional cooperation that was signed by the two parties in 1999. The document provides a framework for the development and implementation of regional planning programs for Moscow and its surroundings. According to the agreement, cities and districts in the zone adjacent to the capital may draft their own plans in coordination with Moscow Oblast’s administration, but these plans are subject to a final approval by the City of Moscow. This procedure clearly favors the role of the central-city government as a leading force in coordinating various planning activities in the region.

The ambitions of Moscow’s government to transform the Russian capital and its surrounding territory into a global city with modern business infrastructure are mirrored in the city’s master plan, approved

in 1999 as a blueprint for Moscow's long-term urban development until 2020 (Rudolph, 2002: 233). A decade after the adoption of Moscow's master plan, however, it appears quite obvious that investment interests have gained the upper hand in setting up development priorities that are in stark conflict with some of the main concepts embedded in the plan. This conclusion is particularly relevant in view of the continuing pattern of unrestrained suburbanization in the areas around the capital. Major new developments are proposed also in areas designated by the master plan as nature reserves. Overall, the master plan has proven to be a fairly unbinding document, easily amended by an administration that is quite susceptible to the influence of powerful interest groups and vehemently averse to the idea of greater public participation.

In May 2010, a new "General Plan of Moscow until 2025" was endorsed by the city government. However, in the following year, after the appointment of a new city mayor with strong backing from the federal authorities, it was decided to enlarge Moscow's territory two and a half times by annexing to it the southwestern territories of the Moscow region. This radical change requires a complete overhaul of the development regulations adopted by all local authorities in the region. The City of Moscow's administration has issued several general statements on the subject and has recently announced the conditions for a tender about creating a conceptual design for the development of Moscow's agglomeration. Yet the implications of this act for the growth of Moscow and its suburbs remain unclear.

The main motivation underpinning the massive expansion of Moscow appears to be the government's intention to subvert the trend of expanding the capital's perimeter by placing an emphasis on the development of the city's newly acquired southwestern territories. Under this scenario, the geographic center of the Russian capital will be displaced some 20 km to the south of the MKAD beltway. This shift of priorities, from balanced development of the agglomeration as a whole to focal development of the newly attached territories, is aimed at solving some of the most acute problems of the city by diminishing development pressures in Moscow's historical core. The new strategy includes the relocation of a number of government offices and the creation of a new development axis anchored in the development of 5 to 6 independent local centers.

While it is too soon to assess the future success of such strategy, which is still quite vague and appears overly ambitious, some of the ideas on which it is based raise concerns that need to be addressed in the early stages of plan development. These concerns relate to the future impacts of the targeted decentralization of business activities on the vitality of the capital's urban core; the need to achieve a

sufficient level of infrastructure and service provision and a good job–housing balance in the new territories; and the need to carefully plan a mixture of housing tenure and building types to avoid sociospatial segmentation. There is a good chance that the “new Moscow” will become another difficult to implement, drawn-out, gargantuan project – just like the “Moscow City” center, which is still far from completion even now, more than ten years after its official start. It is clear, however, that a critical factor in the successful development of Moscow’s metropolitan area will be the effective coordination of efforts at all levels of government. Such coordination requires the active participation of all stakeholders with vested interests in the development of the region.

Conclusion

The study of Moscow’s growth in the post-Soviet years reveals that the suburban territories of its metropolitan region exhibit patterns quite similar to those observed in the contemporary growth of western metropolitan areas. Notably, however, the spatial development of Moscow’s region – like that of many other fast-growing cities on the globe – is not guided by a comprehensive regional planning process that could ensure the balanced development of infrastructure, transportation systems, economic and residential activities. In addition, the background of suburbanization in the Moscow region is marked by the following characteristics, which are specific and unique features of the post-Soviet urban context:

- The newcomers settling in the metropolitan periphery come predominantly from other Russian regions or from the former Soviet republics, and to a lesser extent from the capital city.
- A significant proportion of the new suburban inhabitants are not officially registered; nor are their businesses. Hence a substantial part of the economic activities carried out in the suburbs of Moscow are informal – especially activities related to small businesses and residential construction.
- Moscow residents’ use of the periphery for habitation is still predominantly seasonal, but the proportion of permanent dwellers is steadily increasing in the suburbs.
- Social polarization among the suburban population is rising, along with a diversification of the housing stock in the peripheral communities, ranging from guarded gated compounds to informal dacha settlements.
- The better part of the new jobs in Moscow’s periphery is in the trade and logistics sectors; the production sector is a recent arrival to the scene.

- In the latest wave of urban decentralization big office centers have begun to emerge in Moscow's suburban fringe. Together with clusters of new industrial and scientific enterprises, these employment centers have become the driving force for infrastructure development in the periphery, serving as nuclei for the growth of future edge cities.
- Despite the continuous expansion of residential and commercial development in Moscow's suburban periphery, the region maintains a strong agricultural sector, particularly by comparison to other Russian metropolitan regions. The presence of this sector in the regional economy tends, however, to be diminished by the continuing expansion of urban functions from the capital city to its periphery.

It is reasonable to expect that, in spite of the recent economic slowdown and the latest ambitious plans for a southwestern expansion of Moscow, the trends in the spatial organization of urban functions in Moscow's region that have taken shape during the last two decades would continue in the foreseeable future, solidifying the new features of a radically transformed post-Soviet metropolitan landscape.

Notes

- 1 The idea of the FPPB dates back to the 1920s; it envisaged the belt as a green barrier to urban sprawl, as the city's "lungs," and as a place for leisure. According to the first Master Plan of Moscow (1935), the city was confined to an area of 35,000 hectares and the FPPB to one of 168,000 hectares. Today Moscow has expanded to almost 100,000 hectares, having thus "eaten up" about 40 percent of the FPPB. The FPPB proper has long been reduced to a set of green spots. Over 2 million urbanites reside within its official limits, which also include a lot of industrial and infrastructural facilities (Ioffe and Nefedova, 2000: 49).
- 2 The periurban zone consists of raions that are functionally linked with the city of Moscow and provide specialized services for it. Furthermore, this zone serves as a major supplier of agricultural products and as a main destination for recreational activities.
- 3 The population density in the first ring of the outer periphery is about 650 residents per km², while the population density in the forth ring is almost ten times lower.
- 4 Examples of such towns are Balashikha, Khimki, Dzherzhinsky, Fryazino, Korolev, Troitsk, Zelenograd, and Zhukovsky.
- 5 Examples of such settlements are Lobnya, Odintsovo, Pushkino, and Vidnoye.
- 6 *Limitshik* was a colloquial term, coined to designate migrant workers who were granted temporary residence in Moscow and Moscow Oblast in order to fill desperately needed but unattractive positions. The *limitshiks* were allotted modest accommodations in boarding houses and lived in social isolation, which set them apart from the "true" residents of the city and its suburbs.

- 7 The emergence of the first dacha settlements goes back to the late nineteenth century, when spending the summer days in the countryside became a fashionable trend among the Russian elite. By 1917 there were 20,000 dachas in the vicinity of Moscow, all occupied by affluent Muscovites during the warm days – a period stretching from May to September (Khauke, 1960).
- 8 According to the Pension Fund of the Russian Federation data, 300,000 people employed in the capital come from eight adjacent oblasts (excluding Moscow Oblast), and another 750,000 come from the rest of the country.
- 9 During the period 2007–2011 the quota for foreign workforce on Moscow's labor market decreased from 500,000 to 200,000 people, while the number of illegal foreign workforce is estimated to range between 0.5 to 1 million people.
- 10 In the overheating real estate market of the Russian capital, condominium prices nearly doubled in 2006, reaching \$4,200 per square meter; and they reached \$6,800 per square meter by July 2008. In 2011, as a result of slow-paced recovery from the crisis, the average real estate price in Moscow was \$5,400 per square meter.
- 11 In Russia only towns, residential areas of urban type (*posolki gorodskogo tipa*), and rural communities hold official administrative status. Although settlements of dachas and new constructed cottages cover a significant fraction of Moscow's metropolitan area, they do not have an official administrative status. These settlements, consisting of hundreds of houses for seasonal or permanent living, have designated names and addresses. However, they are not registered as entities in the official statistics. Their population (only the registered inhabitants) is assigned to the adjacent communities or municipalities. Hence it is very difficult to obtain data on settlements of this type.
- 12 In 2011 the average cottage price in the area of Rublevskoe Avenue, a major arterial in Moscow's western suburbs, was \$5.2 million, which represented an average price of \$6,700 per m².
- 13 House prices in Moscow's suburban communities dropped in 2008 almost by half, while land prices dropped only by one third.
- 14 Referring to the lack of capital required to finance the setting up of business operations.
- 15 Between 1995 and 2002, two thirds of the total investments in Moscow were channeled into the downtown district (Rudolph, 2002).
- 16 Most notable among these are Mars and Campina in Stupino, Pepsi Cola in Solnechnogorski Raion, Ehrmann in Ramenski Raion, Knauf in Krasnogorsk, Rockwool in Zheleznodorozhny, and KBE in Voskresensk.
- 17 The incentives include tax advantages and the abatement of rents, both granted by the governments of Moscow and of Moscow Oblast.
- 18 According to the Department of Trade and Industry (DTI) Property Management, over 650,000 out of the 1 million hectares of Moscow region's farmland are either unused or misused (used for other purposes). Most of this land is concentrated along the Yaroslavl and Simferopol highways, where the price of a hectare of agricultural land reaches \$200,000 in a zone within 20 km of the MKAD and \$120,000 in a zone 20 to 50 km away from

the MKAD. Currently the Moscow regional authorities prepare a bill that will allow them to raise the maximum rate of the misused agricultural land tax from 0.3 to 1.5 percent of the cadastral cost.

- 19 By 1939 the commuter zone extended to a distance of approximately 20 km from Moscow's city center, thus coinciding with the first ring of the outer periphery. By 1970 the commuter zone reached as far as the third ring (Glushkova, 1999).

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Prague

Urban Growth and Regional Sprawl

Luděk Sýkora and Ondřej Muliček

Introduction

The main aim of this chapter is to provide a comprehensive discussion of suburbanization in Prague's city region since the collapse of communism. Our discussion begins with a general historical overview of urbanization processes and patterns. Suburbanization in metropolitan Prague developed initially under capitalist conditions, during the interwar period, when the city became the capital of the newly established state of Czechoslovakia. Suburban growth was halted during communist times by the state's central planning urbanization policies, which channeled investments to urban centers and high-density, high-rise housing estates erected at the edges of the city. The concentration of urban growth in Prague's core became a dominant pattern of metropolitan development under communism (Posová and Sýkora, 2011).

After 1989, the re-establishment of a capitalist system based on the principles of decentralized decision making within a free market economy and a democratic political system brought radical internal transformations to social practices and social structures (Sýkora and Bouzarovski, 2012). The urban landscapes of Prague formed under communism began to be adapted to the new conditions developed during the political, economic, and cultural transition to capitalism. While most of these changes benefited society as a whole, some urban reconfigurations presented new problems and challenges for the management of urban

growth. One of the key challenges is related to the processes of rapid suburbanization, which is changing the spatial structure of Prague's city region and is giving rise to concerns about the negative consequences of urban sprawl.

This chapter discusses the problems of suburbanization and sprawl in metropolitan Prague in four parts. First we describe the initial period of Prague's housing boom, which peaked between 1996 and 1998. During this time, while housing was developed intensively in both the central city and its suburbs, house-building activities concentrated in the suburban zone, with an emphasis on the construction of single-family dwellings. The second part of the chapter documents the changing balance in the distribution of residents within the city region – a dynamics driven by the explosive growth of suburban zones and by the subsequent increase in the percentage of metropolitan population residing in those areas. The third part addresses the growth of suburban jobs related to the development of new shopping, warehousing, distribution, and logistic centers around Prague. In the final part we discuss the highly fragmented character of decision making related to land development and urban planning in Prague's city region, which is administratively split into over two hundreds independent municipalities in eager competition with one another for attracting new jobs and residents.

A Historical Account of Urbanization and Suburbanization in Prague

As in many other major Central European cities, the contemporary urban pattern of Prague as a modern metropolis began to take shape during the second half of the nineteenth century, in conjunction with the expansion of industrialization and urbanization. Furthermore, the spatial structure of Prague was shaped and reshaped in consecutive waves, under the influence of the two contrasting political regimes of capitalism and socialism. The city grew through concentric additions, and by the late twentieth century it was composed of five zones: (1) the historical core; (2) the inner-city blocks of apartment houses; (3) the belt of villa neighborhoods and garden towns; (4) the ring of communist housing estates of prefabricated high-rise buildings; and (5) the outer zone of rural landscapes interspersed with small towns and villages (Sýkora, 1999).

Despite the fact that the historical core accounts for only 2 percent of the city's area and contains only a fragment of the total population, this zone has continuously served as the country's political and business command and control center, and also as a major tourist destination. The historical core is encircled by a belt of inner-city neighborhoods

built from the mid-nineteenth century until the beginning of World War II. It is characterized by blocks of four to five story apartment buildings, which are organized within a regular street pattern. During the last few decades, these neighborhoods, which accommodated residents of various social backgrounds, have experienced diverging trajectories of gentrification and regeneration, as well as stagnation and decline. Smaller old industrial districts, which penetrated this zone until the 1990s, have been converted recently to new commercial centers and residential districts, while some patches of land still remain as brownfields. Around this second zone of the compact inner city lies a belt of villa neighborhoods and suburban garden towns dating back to the 1920s and 1930s. Unlike some of the areas of the compact city, these neighborhoods have maintained their high social status since their origin. The inner zones of Prague, which developed under capitalist conditions, were encircled during communism by a ring of massive housing estates consisting of prefabricated 4- to 12-story high-rises; these housing estates were concentrated in residential districts and housed up to 100,000 inhabitants. Prior to the 1990s, there stretched beyond them a rural landscape dotted with small towns and villages that had been annexed to the territory of Prague in the late 1960s and early 1970s. Since the 1990s, this outer zone of Prague's administrative territory has attracted housing and non-residential construction with typically suburban characteristics, often located at some distance from the edge of the compact city. Behind the city's administrative boundary, the rural metropolitan periphery contains hundreds of small villages and towns. During the communist period, most of these settlements were poorly developed and supplied with a minimal level of infrastructure, while most of their population was dependent on commuting to the capital city for jobs, schools, and services. Since 1990, when these municipalities gained autonomy in decision making concerning physical planning and development, they became a focus of investors' interests, fuelling a wave of massive suburbanization in Prague's metropolitan periphery.

The origins of the first suburbs in Prague's city region date back to the 1920s. After World War I Czechoslovakia was established as an independent state with Prague as its capital. Beside the densification of the city center and inner urban quarters, most of the growth during the interwar years concentrated on greenfield sites at the edge of the city, predominantly in the form of residential villa neighborhoods and garden towns. This decentralization was supported by public investments in new roads and tram lines, which facilitated the commuting of the inhabitants of these peripheral neighborhoods to Prague's center. The city population increased to nearly 1 million just before World War II. New residential areas were also springing up behind the city boundary,

around rail tracks radiating from the city center. They included lower income working-class additions to rural villages, as well as middle- and upper-class settlements with expensive modern villas. The process of spatial deconcentration during that time did not extend to economic functions. In the interwar period, Prague and its hinterland experienced a kind of suburbanization whose sociospatial characteristics were typical for most of the Central and Western European countries at the time (Ulrich et al., 1938).

During the period of communist regime (1948–1989) the city was shaped under the dictates of a centralized planning system. The socialist ownership over production and services and the administrative allocation of resources by the ruling communist party made location an irrelevant economic variable (Musil, 1993). While Prague's inner city suffered from disinvestment, it was encircled by massive socialist housing estates and newly established industrial districts (Musil and Ryšavý, 1983). The estates were served by local commercial centers that provided basic retail and services, while the majority of the population commuted by public transit to industrial zones and to the city core. Some scholars consider these estates to represent a socialist version of suburbanization. However, their high-density urban characteristics, functional interrelation with job centers, and morphological coherence with the remaining parts of the city represent a direct application of functionalist city-planning principles. The socialist housing estates maintained a compact city structure and sharply demarcated the external boundary of the urbanized area, clearly dividing the city from its rural hinterland.

The communist urban policy of concentrating investments in industrial development and production in the cities, while avoiding rural and suburban areas, was not accompanied by a comparable (and adequate) investment in housing and service provision. This phenomenon is known in urban literature as under-urbanization (Szelenyi, 1996). While suburban expansion was avoided through a state-controlled spatial allocation of investments, a faster urbanization of the core was replaced by the massive commuting of populations from rural villages and older, pre-communist suburbs to Prague for work, schools, and services; thus these rural settlements were functionally tied to the central city. At the end of the communist period, the overwhelming majority of the population residing in the city region was concentrated in the compact city. By 1991, out of the 1.4 million residents of the city region, only 272,000 inhabitants lived outside the compact city and less than 170,000 lived outside of Prague's city boundary.

It has to be noted, however, that nearly one third of Prague's households owned small second homes and weekend houses in the city's hinterland or in more remote country regions (Vágner, Muller, and

Fialová, 2011). These houses were concentrated in the southern part of Prague's city region – an area characterized by magnificent landscapes of rolling hills and woodlands. The second homes were either simple cottages clustered in districts in the woods or village houses converted for weekend or seasonal use. For many residents who had moved from the countryside to the city in search of jobs and had settled in prefabricated flats in the housing estates, these second homes served as a corrective to lack of land and home ownership.

By the end of the communist regime, Prague's hinterland was a place of predominantly rural settlements of lower social status, with a population strongly dependent on jobs and services available in the capital city. Thus Prague's metropolitan periphery differed substantially from the suburbs that developed around North American and Western European cities in the decades following World War II.

After the fall of the communist regime, the establishment of democratic, market-based decision-making principles of resource allocation, together with growing exposure to an international economy, created conditions for the spontaneous transformation of social practices. Urban change has been especially influenced by processes of globalization, economic restructuring (in terms of deindustrialization and growth of producer services), increasing social differentiation, and establishment (even entrenchment) of neoliberal political practices that favor unrestricted market development (Sýkora, 2009). The ensuing political, economic, and social transformations have influenced significantly the evolution of settlement systems, and in particular the processes of spatial restructuring within urban areas.

During the period of transition, the spatial structure of Prague and its region was reorganized through the influence of several simultaneously developing processes: the commercialization of the historic core and adjacent city areas; the selective revitalization of specific inner-city neighborhoods; and the commercial and residential suburbanization of the outer city and metropolitan hinterland (Sýkora, 1999). While most of the 1990s were characterized by the inflow of investments to the city center – a phenomenon that led to the center's rapid commercialization and revitalization – suburbanization became the most dynamic process to change Prague's metropolitan landscape since the late 1990s (Sýkora and Ouředníček, 2007). A specific characteristic of Prague's suburbanization is that it developed not only outside the city's boundaries, but also in areas within the city's administrative territory that lie far beyond the edge of the compact city. While these territories, which cover approximately half of the city's jurisdiction, remained largely undeveloped until 1989, they provided ample amounts of land for development in the postsocialist years.

In the remaining parts of the chapter we concentrate our discussion on the explosive growth of Prague's periphery during the postsocialist decades. Our analysis covers both the outer edges of the capital city's territory and its surrounding municipalities. Prague has been the country's main growth pole during the postsocialist period, attracting the majority of investments and firms, as well as domestic and foreign migration inflows. The Czech capital concentrates 12 percent of the national population and generates over 25 percent of the national gross domestic product (GDP). The city is surrounded by Central Bohemia, a region with a population roughly equal to that of the capital and generating 11 percent of the national GDP. The territories of Central Bohemia that are adjacent to Prague currently constitute the fastest growing areas of the whole country. The city of Prague and its surrounding municipalities form a functional urban region, tied together by its spatial division of labor and intensive commuting patterns. In this chapter we focus our discussion on Prague's city region, which consists of (1) the capital city

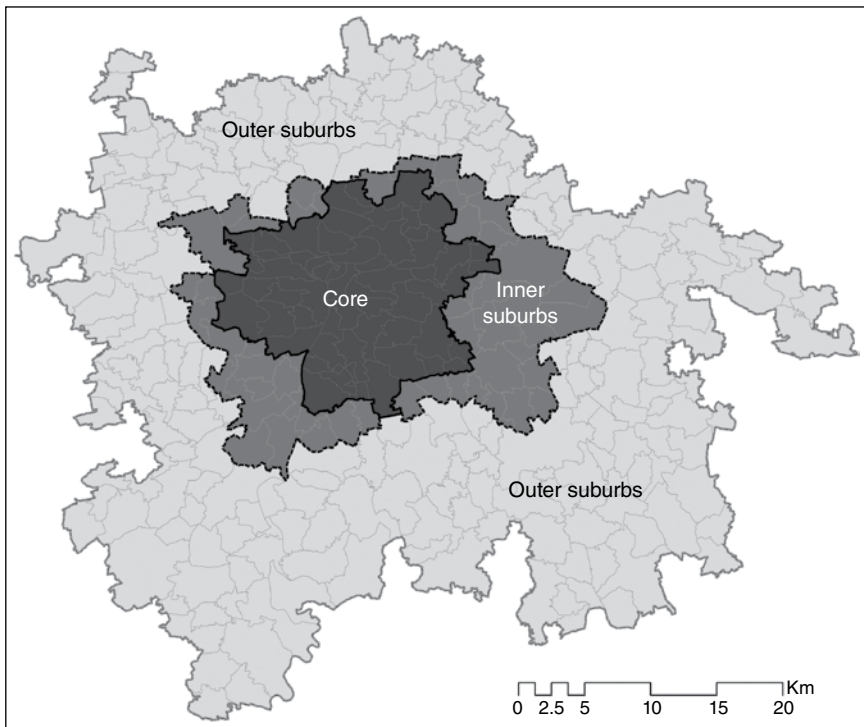


Figure 5.1 Prague's city region and its zones. Source: the authors.

and (2) the surrounding municipalities where a minimum of 25 percent of the economically active population commutes daily to Prague for work (for details, concerning the method of delimiting city regions in Czechia, see Sýkora and Mulíček, 2009). Within the city region we distinguish three major zones: the urban core, which encompasses the compactly built-up urban area; the inner suburbs, defined as the Prague's territory located outside the compact city but still within the city's administrative boundary; and the outer suburbs, which consist of municipalities in the Central Bohemia region that meet our threshold for commuting (the 25 percent criterion specified above) (Figure 5.1).

The Housing Boom: Compact City and Suburban Sprawl

From the collapse of the communist regime in 1989 until the mid-1990s, there was very little development activity in Prague and its suburban periphery. The volume of construction of new housing declined sharply after the withdrawal of the state from its role as a main housing provider. Due to general decline in the Czech economy and to the low purchasing power of the country's population, new housing construction starts in the private sector were limited to a small number of people who benefited from the privatization of the state's assets and from the newly emerging economic opportunities. In Prague and its city region housing development began to rise quickly in the second half of the 1990s, with the gradual recovery of the economy and the subsequent growth in household incomes, coupled with an increase in the flow of migrants from the other, less quickly recovering Czech regions. Thanks to the establishment of the banking sector and the launch of the housing mortgage system, loans for residential construction became available in the second half of the 1990s. The growth of the housing construction sector was further supported by national housing policies that offered state subsidies for the provision of low-interest mortgages and for the construction of municipal housing (Sýkora, 2003). After housing production reached record low levels in the first half of 1990s, housing construction increased steadily, culminating in a major housing boom, which lasted from 2004 to 2008. By the turn of the twentieth century suburbanization became the most important process of urban change in Prague. New residential districts sprung up in hundreds of locations scattered throughout the metropolitan hinterland; they were accompanied by the emergence of new shopping and warehousing clusters strung along highways and major intersections.

Housing completions continued at relatively high levels even in 2009 and 2010, the initial years of the current economic crisis; this was due mainly to the impetus gained during the preceding years of the

housing boom. Nevertheless, housing starts registered a sharp decline, reflecting the effect of the economic crisis on housing demand and on the house-building industry. However, this decline is also an outcome of specific fiscal policies carried out by the Czech government that, in 2008, led to an increase in VAT on newly built housing; and there were further increases in 2010 and 2012. These VAT increases had been predicted, therefore stimulating demand in the years before 2008. By 2009, however, housing starts in the city of Prague dropped to only about a third of the 2005–2006 levels. After a two-year lag, this drop affected housing completions in 2011, which halved by comparison to the level achieved in the peak years, from 2004 to 2008; and it is quite likely that the slump will continue in next few years. The dramatic up and down swings of the housing market have been reflected in the dynamics of housing prices, which experienced a sharp growth until 2008 and considerable decline thereafter. In 2011 housing prices in Prague became stable at a level below that of 2008 by 18 percent; since the beginning of 2012 they started rising again. The value of single-family homes has dropped by only 5 percent since the end of 2008, while no decline has been registered in the price of land for construction. For the whole Czechia, housing starts have dropped by about one third, the lowest decline (about one fourth) being registered in two suburban districts around the capital city. Unlike Prague, which was strongly affected by the economic crisis, its outer suburban zone has been least impacted. At the national level, the decline in house building affected most strongly the multi-family sector; single-family housing starts registered only a very moderate decline. It seems that the recent economic crisis has not impacted significantly the suburbanization of the wealthier parts of the population. Combined with the effect of the VAT increase, however, the crisis derailed the realization of the housing dreams of younger middle-class and lower middle-class households.

It should be noted that the trajectory of Prague's suburbanization differs from the dynamics displayed by the housing sector in the rest of the Czech Republic. Since 2000, Prague and its metropolitan periphery experienced a threefold increase in housing construction. By comparison, housing construction levels in the rest of the Czech Republic grew only by one third. Furthermore, while housing production in metropolitan Prague steadily increased from 1997 through 2007 (see Figure 5.2: a), housing completions in the rest of country increased only during the 2007–2010 period. These statistics underscore the importance of Prague for the country, the time lag of urban and suburban growth in other Czech cities and towns, and the effect of VAT changes, which stimulated the housing boom of 2006–2008. Between 1997 and 2010, Prague's metropolitan area registered an

annual average of 4.9 newly built dwellings per 1,000 residents, far above the average of 2.5 for the rest of the country. However, there were major differences between Prague's core (2.5 dwellings per 1,000 residents), the inner suburbs (16 dwellings per 1,000 residents), and the outer suburbs (9 dwellings per 1,000 residents). From the total of 103,203 dwellings built in the Prague region between 1997 and 2010, 39,925 (37.7 percent) were completed in the core, 30,564 (29.6 percent) in the inner suburbs, and 32,714 (31.7 percent) in the outer suburbs (Figure 5.2a). While the core of Prague accommodated a significant proportion of the newly built housing, the greatest part of residential construction took place in the suburban areas.

The location of new residential development relative to Prague's city boundary has been an important factor in determining the type of dwellings built by developers in the postsocialist years. Housing construction in the compact city has taken predominantly the form of multi-family buildings, only a small proportion of it consisting of single-family houses (Figure 5.2b). Single-family housing, however, comprised the majority of new residential constructions built in the inner suburbs from 1997 to 2001 and the lion share of residential developments in the outer suburbs throughout the 1997–2010 period (Figures 5.2c and 5.2d). This fact reflects the pent-up demand for single-family housing inherited from the socialist period, when the overwhelming amount of residential development within urban areas came in the form of multi-family buildings. The structural imbalances between what was supplied – the standardized socialist housing stock – and the type of dwellings desired by large segments of the population were a main driver of the post-1989 housing market, as people could finally realize their long-suppressed dreams of living in a single-family house. It should be noted, however, that since 2002 the trend in the inner suburbs of Prague has been reversed, multi-family buildings representing the majority of the newly built dwellings (Figure 5.2c).

While single-family housing continues to be the preferred residential building type outside of Prague, this type of dwellings accounts for only a small proportion of the new housing built within the capital city itself. This state of affairs can be attributed to policies adopted along with Prague's master plan approved in 1999, which were intended to promote compact development patterns within the city boundaries through a spatial concentration of activities and through higher residential densities. The shift from single- to multi-family housing has also been influenced by a saturation of the housing needs of the more affluent population and a parallel increase in the demand for more affordable housing for residents at the lower spectrum of the middle income – as well as by a growing preference for urban living among

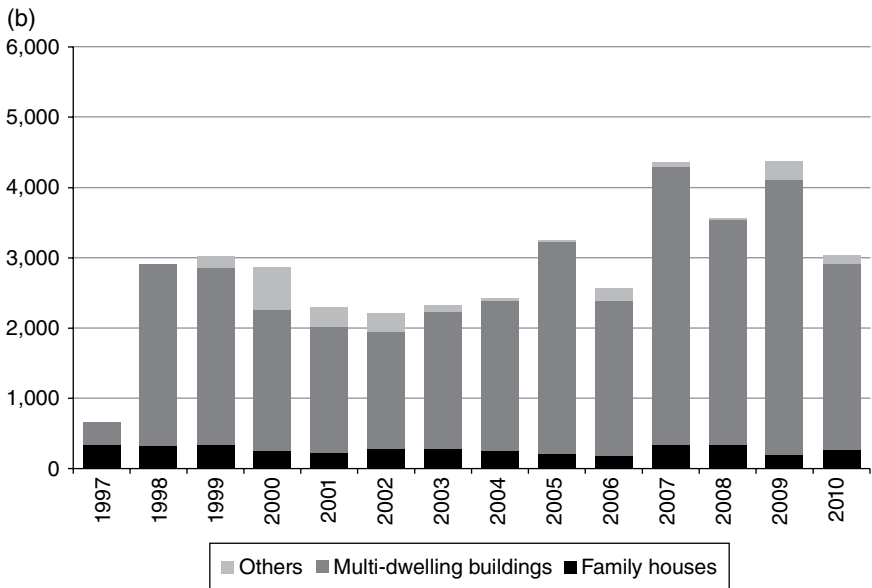
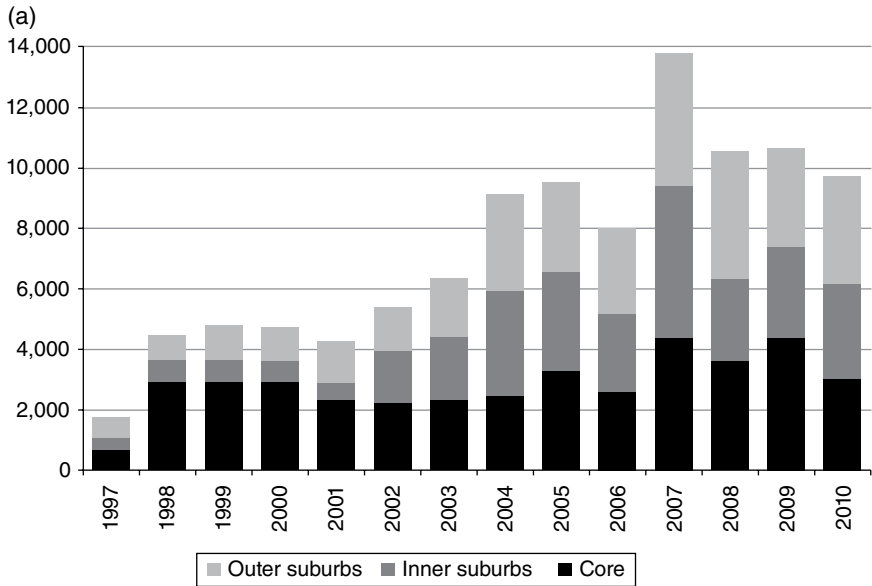


Figure 5.2 Housing construction: number of annually completed dwellings in 1997–2010 according to (a) territorial zones; (b) type of building in core; (c) inner suburbs; and (d) outer suburbs. Based on data from the Czech Statistical Office.

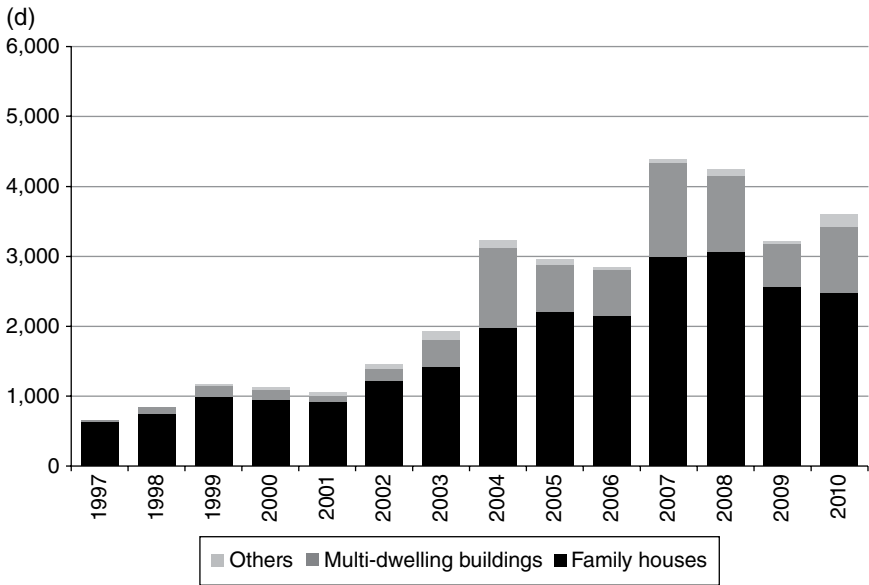
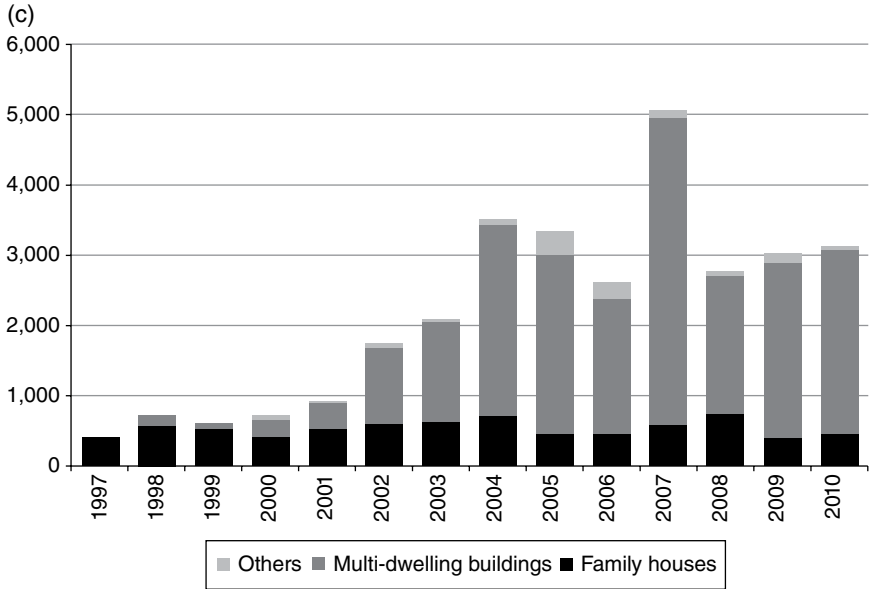


Figure 5.2 (Continued)

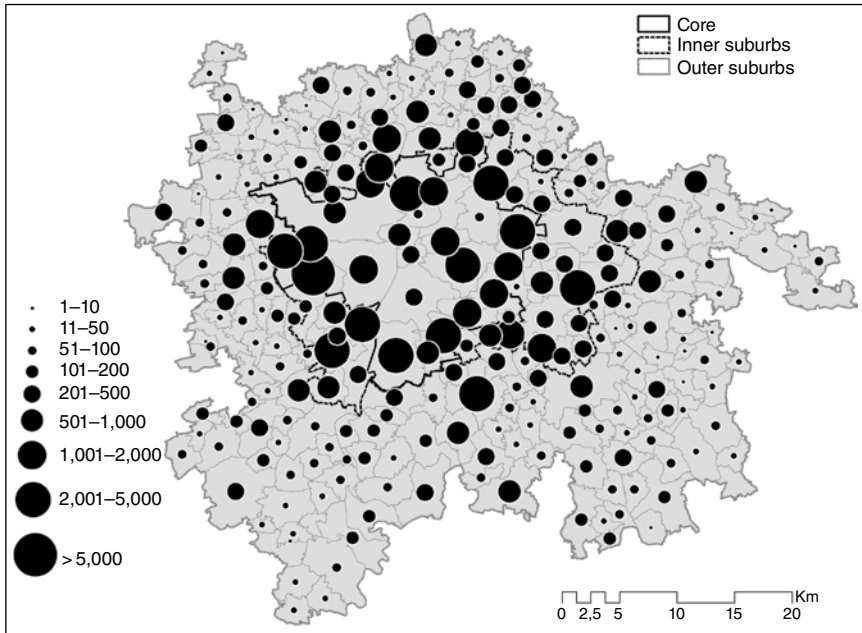


Figure 5.3 Housing construction: number of completed dwellings in Prague boroughs and suburban municipalities in 1997–2010. Based on data from the Czech Statistical Office.

younger households. Shifts in the demographic structure of Prague – such as new forms of partnerships, or the tendency to postpone child-bearing – have also been a contributing factor, along with the fact that developers achieved higher profits from the sale of apartments than from the sale of single-family homes. All of these factors, combined with the effects of VAT increases, led to a surge in the number of multi-family dwellings in all zones of Prague’s city region, including the outer suburbs.

The land occupied by the single-family houses built since 1989 is geographically fragmented in hundreds of locations throughout Prague’s outer suburban zone, but a distinct concentration of this type of development can be found immediately outside of Prague’s boundary (Stanilov and Sýkora, 2012) (Figure 5.3). This spatial pattern can be attributed to differences in the regimes of development established by the city of Prague and its suburban municipalities; to the competition among municipal governments for private investments; and to the neglect, continuously demonstrated by regional and national governments, for the development of adequate urban policies. The concentration of suburban housing developments immediately outside

of Prague's boundary has been stimulated by the availability of land zoned for this type of development by suburban municipalities and by the simplified zoning change and development permit procedures that these governments have adopted. While the city of Prague has pursued a compact development agenda, many small local governments outside of the capital have turned their land into investors' playgrounds, with minimal development controls. Consequently, while authorities in Prague have tried to constrain low-density residential development, single-family homes could be erected with ease just behind the city boundary. Prague's suburban municipalities have been engaged in an intense competition to attract developers' attention – a competition carried by these municipalities not only with the capital city, but also among themselves. Most of the over 200 local governments included in the city region have zoned large tracts of land for development, thus fuelling the processes of urban sprawl, whose primary agent has become the construction of single-family houses. While multi-family buildings absorbed only 7.9 percent of the land developed in the region between 1989 and 2008, single-family houses consumed 54.3 percent of the land converted for urban uses during this same period (Stanilov and Sýkora, 2012). It should be noted that the new patterns of residential suburbanization have been strongly conditioned by the historical settlement pattern of Czechia, which is characterized by a very dense network of small villages. This pattern of growth is distinct from the American-type of urban sprawl and much more similar to the patterns of suburbanization typical of some Western European countries, where old towns and villages served as nodes of suburbanization.

Population Redistribution: Changing the Balance between Core and Suburbs

Housing construction strongly influenced the spatial patterns of migration and population change in Prague's city region (Table 5.1). Between 1991 and 2000, 94,429 people moved to the city of Prague, by comparison with an outmigration of 107,211 residents. During this period, Prague lost 13,440 inhabitants to its suburban hinterland, while also losing population through natural change. As a result of these two processes, the city population declined by 45,068 between 1991 and 2001. This decline was reversed in the subsequent decade, 2001 to 2011, when the city population increased by 103,584. Prague gained 31,423 new residents from the other regions of the Czech Republic, but lost 50,748 to its suburban hinterland. In this decade population growth in the capital was sustained primarily through foreign migration: 148,447

Table 5.1 Migration flows between zones in Prague's metropolitan region (PMR).

From	To					
	Prague		Outer suburbs		Outside Prague region	
	1991–2000	2001–2010	1991–2000	2001–2010	2001–2010	2001–2010
Prague	315,194	290,890	25,748	69,091	81,463	113,476
Outer suburbs	12,362	18,343	7,011	11,852	13,440	18,216
Outside Prague region	82,067	144,899	14,039	29,494		

Source: Czech Statistical Office.

officially registered foreigners accounted for 11.8 percent of Prague's population in 2010. During the same period the outer suburbs grew by 84,312 residents – a number that included the migration gain of 50,748 residents from Prague and of 11,278 residents from the other Czech regions. These suburbs also experienced positive natural change that was influenced by the influx of new suburban families of child-bearing age.

The suburban boom started to change the balance between the core and the suburban parts of Prague's city region (Table 5.2). During the period 1991–2001 the population of the region decreased by 2.4 percent. This negative growth was a result of the 4.7 percent decline in the population of the core, while both the inner and the outer suburbs grew by 7 percent. According to van der Berg's model of urban stages, this situation would be described as desurbanization (van der Berg, Drewett, Klaassens, Rossi, and Vijverberg, 1982). However, the 1990s was a decade of radical social change, from a communist to a capitalist system, with relatively modest changes in the spatial distribution of population. The situation was altered dramatically in the following decade, which witnessed a very dynamic redistribution of population between the core and the suburbs. While the population at the core increased by 5.6 percent, the suburbs registered a much higher growth, of 44.3 percent (40.6 percent in the inner suburbs and 46.6 percent in the outer). According to van der Berg's model, the 14 percent overall growth of Prague's region, accompanied as it was by a higher growth in the suburbs, would be described as a stage of suburbanization with relative decentralization.

The detailed mapping of population change shows a clear pattern of decline in most of the region's core between 1991 and 2001

Table 5.2 Population change, 1991–2011.

	<i>Population</i>			<i>Proportion in the Prague region</i>		
	<i>1991</i>	<i>2001</i>	<i>2011</i>	<i>1991</i>	<i>2001</i>	<i>2011</i>
Prague	1,214,174	1,169,106	1,272,690	87.8%	86.6%	82.8%
Core	1,111,003	1,058,752	1,117,592	80.3%	78.4%	72.7%
Inner suburbs	103,171	110,354	155,098	7.5%	8.2%	10.1%
Outer suburbs	168,916	180,992	265,304	12.2%	13.4%	17.2%
All suburbs	272,087	291,346	420,402	19.7%	21.6%	27.3%
Prague region	1,383,090	1,350,098	1,537,994	100.0%	100.0%	100.0%

	<i>Population change</i>			<i>Change of proportion in the Prague region</i>		
	<i>1991–2001</i>	<i>2001–2011</i>	<i>1991–2011</i>	<i>1991–2001</i>	<i>2001–2011</i>	<i>1991–2011</i>
Prague	–45,068	103,584	58,516	–1.2%	–3.8%	–5.0%
Core	–52,251	58,840	6,589	–1.9%	–5.8%	–7.7%
Inner suburbs	7,183	44,744	51,927	0.7%	1.9%	2.6%
Outer suburbs	12,076	84,312	96,388	1.2%	3.8%	5.0%
All suburbs	19,259	129,056	148,315	1.9%	5.8%	7.7%
Prague region	–32,992	187,896	154,904	—	—	—

Source: Czech Statistical Office, Census (SLDB) 1991, 2001, and 2011.

(Figure 5.4). The population growth recorded in some inner-city areas was a result of the completion of housing estates on the eastern and western edges of the compact city, whose construction started under the communist regime. The completion of the first suburban residential districts in the late 1990s contributed to a relatively modest overall increase of population in suburban areas, both in the outer reaches of Prague's administrative boundaries and in the suburban municipalities outside it. Despite the small increase in absolute numbers, however, this influx of new residents to the suburbs produced a significant relative increase in the suburban municipalities, due to the small original size

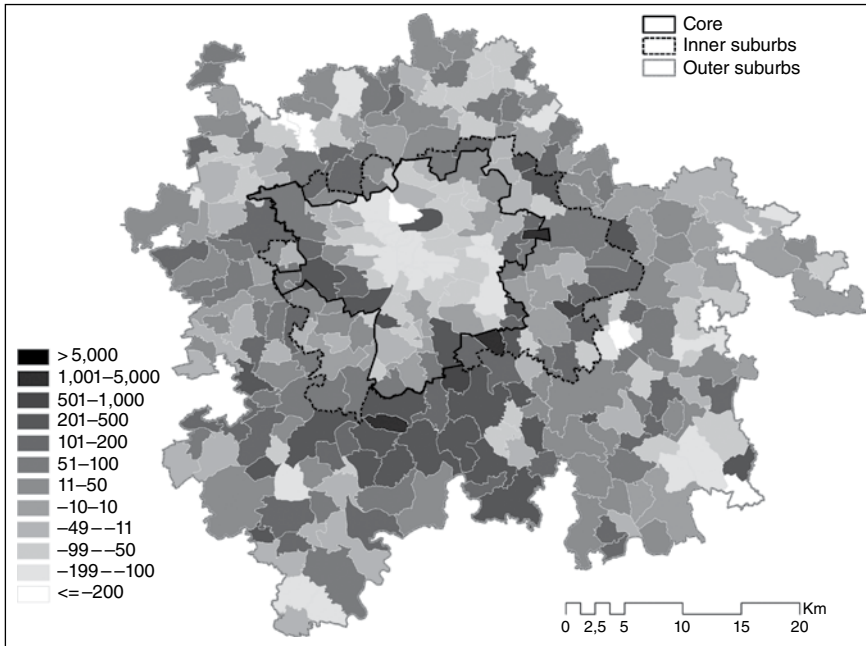


Figure 5.4 Population change, 1991–2001 (relative increase per 1,000 inhabitants). Based on data from the Czech Statistical Office.

of the population in these areas. Most of the growth was concentrated within the outer areas of Prague and in municipalities adjacent to Prague's administrative boundary, particularly in the southern sector of the region, which featured some of the latter's most attractive natural landscapes. During the period 2001–2011 the population increased in virtually all suburban areas – both within the capital city and in municipalities outside – as well as in many areas within the core. As in the previous decade, the highest intensities in population growth were concentrated along Prague's administrative boundary, but they spread to greater distances toward the edge of Prague's city region (Figure 5.5). Population growth in suburban Prague followed the sprawling pattern of house building.

The processes of suburbanization, which led to an unprecedented redistribution of population within the Prague metropolis, contributed to significant changes in the sociospatial pattern of the city region. The suburban zones have experienced an influx of younger and better educated households, with much higher incomes than the original population (Ouředníček, 2007). The two population groups are spatially quite distinct: the residential districts of the prosperous newcomers are

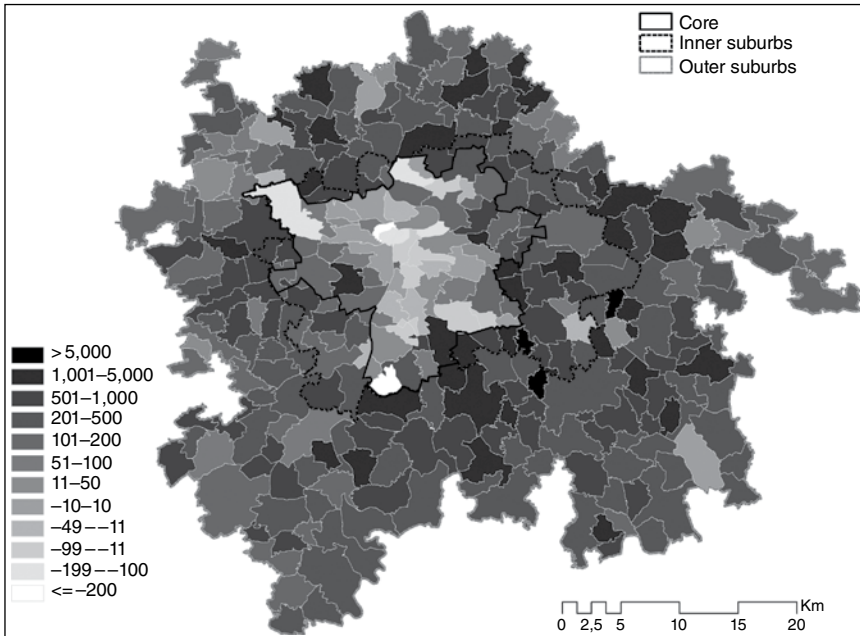


Figure 5.5 Population change, 2001–2011 (relative increase per 1,000 inhabitants). Based on data from the Czech Statistical Office.

located at the edges of settlements and often contrast sharply with the older parts of the village core. While suburbanization has lifted the social status of the population in the metropolitan periphery, it has contributed to a decline in social status for the population residing in the socialist housing estates. These trends have led to a reversal of the traditional sociospatial pattern of the socialist city, in which socioeconomic status decreases with distance from the center (Sýkora, 2007a).

Nonresidential Growth and Suburban Jobs

In 2001 Prague's metropolitan region concentrated 17.1 percent of the country's jobs, while it only represented 13.2 percent of the country's population. From the total of 819,095 jobs in the city region, 91.1 percent were located in the city of Prague, reflecting a high level of centrality of the Czech capital. However, between 1991 and 2001 Prague's suburban belt experienced the highest job growth in the country, namely a growth of 21.5 percent, compared with a modest growth of 3.6 percent in the city of Prague and a decline of 9.3 percent in the

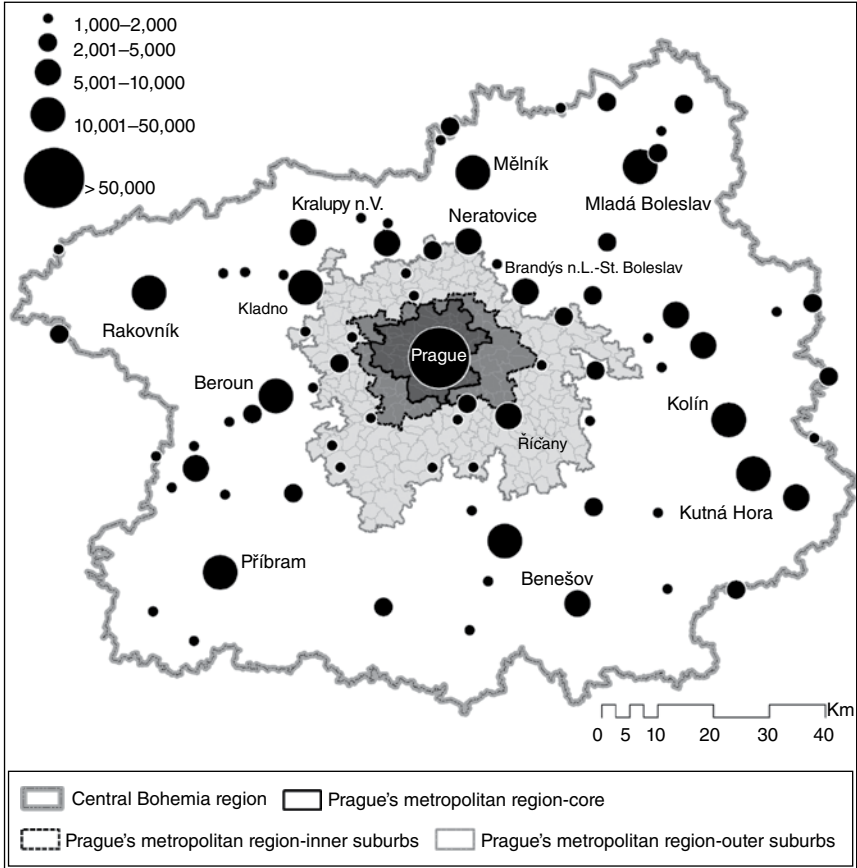


Figure 5.6 Number of jobs in towns and cities in Prague and Central Bohemia in 2001. Based on data from the Czech Statistical Office.

whole of the Czech Republic. By comparison with this concentration of employment in Prague's city region, in 2001 the Central Bohemia region, which surrounds it, had a population of 941,160 residents and only 411,714 jobs – that is, nearly half of the residents-to-jobs ratio of the capital region. The Central Bohemia region contains an archipelago of smaller job centers, nine of which offer 10,000 to 50,000 jobs while another nine clusters feature 5,000 to 10,000 jobs (Figure 5.6). These job centers have formed their own local labor markets, which are to some extent autonomous and independent of Prague (Sýkora and Mulíček, 2009); yet the dominance of Prague's job market is reflected in the number of commuters from these towns and their regions who travel the longer distance to Prague.

The strong centrality of Prague within the city region – a characteristic it inherited from the communist period – has been challenged by the growth of jobs since the mid-1990s in an increasing number of suburban retail and warehousing clusters. The period at the beginning of the new millennium was marked by a rapid growth in nonresidential developments, which was fueled by the demand of international firms that expanded on the Czech markets. At that time it seemed that nonresidential suburban growth was more dynamic than the expansion of the residential sector. However, by the middle of the first decade of the new millennium residential suburbanization reached massive proportions, prompting a 44 percent growth in the suburban population between 2001 and 2011.

A specific characteristic of nonresidential suburbanization in Prague's city region is that the processes of deconcentration have been limited to the retail and warehousing sectors. Office developments have been confined to Prague's urban core since the early 1990s (Sýkora, 2007b), and no new industrial zones have emerged in Prague's hinterland. This phenomenon highlights a major difference between the growth of Prague, which is driven by its role as a national command and control center, and the growth of medium- and small-size towns across the Czech Republic, which is driven by reindustrialization. The development of new suburban shopping, leisure, and logistics centers has been concentrated on greenfield sites along major highways and important transport intersections. Another important locational factor in Prague has been the underground transport system, which extends to the outskirts of the capital, thus providing greater accessibility to a number of areas at its urban edge.

The most important shopping centers located at the edge of the capital city and further out in the suburbs are Zličín (west), Ruzyně (northwest), Letňany (north), Černý Most (northeast), Štěrboholy (east) and Průhonice/Čestlice (southeast) (Figure 5.7; see also Pommois, 2004; Garb, 2007; Spilková and Perlín, 2010). All but one of these centers are located just at the edge of the compact built-up area and are served directly by underground lines or by bus lines linked to underground stations. Only the Průhonice/Čestlice area is located outside the city of Prague, being situated at the beginning of a major ribbon development that contains warehousing, distribution, and logistic parks along the major national highway D1, which links Prague with Brno.

The deconcentration of retail has been fuelled primarily by the expansion of international firms on the Czech markets. The availability of many greenfield sites for development at the edges of Prague and in its suburbs allowed retailers to establish quickly their presence in the region. In addition, the development of edge-of-city shopping schemes

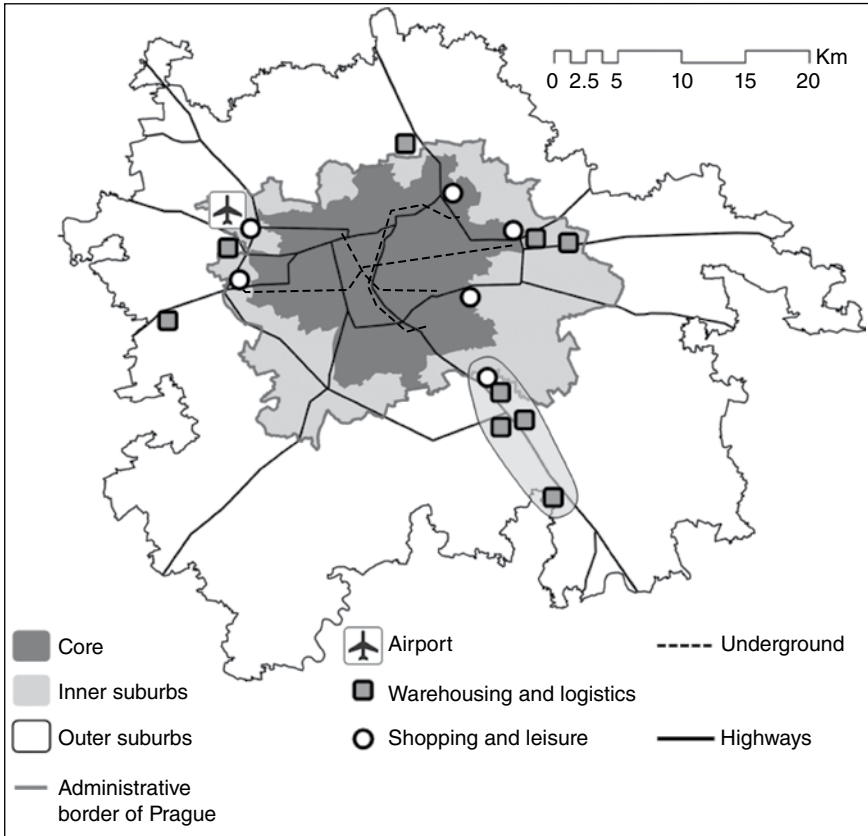


Figure 5.7 Nonresidential suburbanization in the Prague city region. Source: the authors.

was supported by the city of Prague. Three locations (Černý Most, Zličín, Letňany) out of five were designated in the city's strategic and master plans for development as regional commercial centers. The fourth location, initially planned in the southeast of Prague, was abandoned as controversial and alternative retail areas have been developed in Čestlice/Průhonice (out of Prague) and in Chodov (in the inner city). The location of new retail areas at the edge of the existing compact city – that is, in a zone of contact between the population of the urban core and the expanding population of the new suburbs – strategically enlarges the catchment areas of these retail hubs. Since the completion of these retail centers in the periphery of Prague, new shopping malls have been developed in several inner and central-city locations (Spilková and Perlín, 2010).

Prague has benefited from its positional advantages as a regional center situated in the middle of Bohemia. This geographic location combines the benefits of a central place from which the country markets can be reached with the capital's designation as a seat of major command and control functions. The availability of land in accessible locations around the Czech capital and the relaxed development procedures in municipalities outside of Prague have led to the proliferation of new warehousing and distribution facilities along all major highways radiating from the city. Major logistic clusters are now found along the D1 highway to Brno and Southeast Europe (southeast), along the D5 highway to Pilsen and Bavaria (west), along the D11 to Hradec Králové and Pardubice (east), along the R10 to Mladá Bosleslav and Liberec (northeast), and along the D8 to Ústí na Labem and Dresden (north) (Figure 5.7).

Metropolis and Localities: Urban and Regional Planning in the Prague City Region

The political landscape of metropolitan Prague is extremely fragmented. The capital city, which is both a city and a region, is subdivided administratively into 57 boroughs that are subordinated to the city government. Prague is surrounded by the Central Bohemian region, which is comprised of hundreds of administratively independent municipalities, each with its own power to regulate land development. The functional area of Prague's city region is divided between two regional and over 200 local governments that do not share the same priorities and whose interests are often contradictory.

A common strategy for Prague and its surrounding region is currently missing. The last plan covering both Prague and the Central Bohemian region was adopted back in 1976. A new land use plan for Prague's region, which was under preparation in the 1990s, exists only as an unofficial draft version (Maier, 2003; Sýkora, 2006). This plan specified the development of main transport and infrastructure corridors and proposed to direct development toward selected areas with good transport infrastructure, toward areas adjacent to the compactly built-up zone of the capital city, and toward larger settlements in the suburban zone that had sufficient social infrastructure such as education, health, and cultural facilities. Initially the elaboration of the plan was under the supervision of the Ministry of Regional Development, but with the establishment of regional governments in 2000 the responsibility for metropolitan planning was transferred to regional authorities. The preparation and adoption of the plan depends now on the willingness of the regional governments of Prague and Central Bohemia to negotiate mutual agreements.

Urban development in the city of Prague is regulated by two city-wide planning documents. The Strategic Plan, adopted in 2000 and updated in 2008, specifies the long-term priorities of socioeconomic development for the city, while the Land Use Plan adopted in 1999 is a policy document that details the allocation of functions and regulates the development process within the city's territory. The main principles of Prague's spatial development expressed in both plans include:

- maintaining a compact city structure through controlled city growth at the edges of the urbanized area;
- establishing a polycentric spatial structure through deconcentration of functions from the city center to secondary centers in the inner city and to regional commercial centers in the outer city;
- promoting the development of medium-rise multi-family housing within the compact city and low-rise single-family housing in outer city locations adjacent to the compact city and to existing settlements in the outer zone;
- concentrating new development (a) in areas with good accessibility by public transport; (b) in areas where the extension of the underground system is either planned or currently under way; and (c) in areas where the construction of an inner-city ring road and an outer city express road are being carried out.

A new land use plan for the city of Prague has been under preparation since 2007 and its draft version was approved in 2009. The new plan has been conceived in accordance with the principles of sustainable development, with an emphasis placed on the redevelopment and revitalization of dilapidated areas; the prioritization of development within the compact city; strict regulation of the spatial expansion of Prague into open territory; and the establishment of a green belt around the capital. In 2009 the city government also approved a general planning document called Principles of Territorial Development of the City of Prague. The document places priorities on promoting brownfield redevelopment rather than development of greenfield sites; applying measures for the mitigation of the negative impacts of suburbanization; and developing a mass public transit system in relation to neighboring areas in Central Bohemia. However, the efforts to finalize the new land use plan ceased in 2011, after a change in city government. The new administration blocked the adoption of the earlier draft plan and in 2012 established a wide consultation body to guide the development of a new version of the plan, which should be based on a much simpler zoning code.

The development of the land use plan for the Prague region continued after 2000 under the auspices of the regional government

of the Central Bohemian region. The plan, however, covered only the territory of Central Bohemia, taking the approved master plan of the city of Prague from 1999 as a given. This regional plan, prepared by the Central Bohemian government, was approved in 2006. The plan is binding only in the areas of transport and technical infrastructure and protection of the natural environment. It is not intended to impact directly the management of urbanization patterns, which remain under the control of local land use plans developed by each of the numerous municipalities in the region.

While the city of Prague made efforts to keep development within its boundaries compact, urban sprawl started to reshape the landscapes of the Central Bohemian region that lay outside of the jurisdiction of the capital city. The uncontrolled growth of the metropolitan periphery generated tangible negative effects on the functioning of Prague, especially in terms of increased congestion, stress on city services added by users residing in the surrounding region, outmigration of higher income residents from the city, and dispersal of investments beyond the city boundary, diminishing the potential for urban regeneration. Anticipating these problems, the original Strategic Plan for Prague from 2000 called for greater cooperation between Prague and the Central Bohemian governments in regulating the patterns of new development. The updated Strategic Plan of the City of Prague (2008) put an even stronger emphasis on encouraging tighter relationships between the two administrations, declaring the coordination of their development strategies to be a key task for the 2009–2015 planning period. The plan recommended forging stronger links between the two governments through the creation of a joint work department or of a permanent working group for planning and implementation of transboundary development.

The symbiotic coexistence of the two regions of Prague and Central Bohemia is also acknowledged in the Central Bohemia Region Development Program from 2006 (updated in 2009). The main objective of the program is to achieve a well-balanced growth, based on strong and mutually beneficial links to the capital city and other regions. The program's SWOT (strengths, weaknesses, opportunities, and threats) analysis identified suburbanization as a threat in terms of degradation of the natural environment, loss of identity and disruption of traditional settlement structures, higher intensity of car traffic, increased social segregation, and the like. At the same time the analysis pointed out that suburbanization has created opportunities in terms of improvements in human resources, job availability, and infrastructure development. Specific attention is devoted in the analysis to the effects of massive suburbanization on the growing need for social services, schools, sports

fields, and other facilities. The program analysis underscores as particularly acute the problem resulting from the rise in the number of children in suburban places with insufficient capacity to meet the growing demand for nurseries and primary schools. The program gives priority to improvements in suburban passenger transport, declaring that a main common goal of the Central Bohemia region and of the city of Prague is to construct an effective and integrated transportation system within a 50-kilometer radius from the center of the capital.

The establishment of strong linkages between the development of Central Bohemia and Prague is a key point of departure in the Regional Operational Program for the NUTS 2 Cohesion Region of Central Bohemia (2007–2013). The strategy distinguishes two territorial parts for intervention: the suburban area of Prague and the remaining areas outside of the suburban zone. The main problems of the suburban area listed in the program are the high levels of traffic congestion and the unsatisfactory technical condition of the existing road infrastructure; the uncontrolled housing development resulting from weak planning regulation; the neglect of infrastructure development in the smaller municipalities (particularly those that experienced a considerable influx of new residents due to suburbanization); and environmental degradation. The program secures financial support for the development of transport infrastructure designed to meet the growing intensity of trips between the capital and its surroundings, yet it is not clear what the effect of these investments will be on addressing the rest of the problems caused by suburbanization in the region.

In an attempt to reform physical planning, a new Planning and Building Act was passed in 2006, which stipulates that each region has to prepare and approve so-called principles of territorial development as a regionwide statutory planning document. These plans have to be prepared in accordance with the national Spatial Development Policy of the Czech Republic (SDP), which sets national priorities for sustainable development and identifies development areas, development axes, and specific areas of environmental protection. The SDP calls for curbing uncontrolled suburbanization by encouraging the “economical utilization of developed areas, the protection of undeveloped areas, and the preservation of public green spaces” (MMR, 2009: 17). However, the Principles of Territorial Development of Central Bohemia Region (2012), while acknowledging the discrepancies between the new spatial development patterns and the existing infrastructure, mainly focus the attention of public administrators on the development of infrastructure facilities identified by the SDP as being of national and regional significance. The requirement of the new Planning and Building Act for intergovernmental coordination

is applied in reality only to major infrastructure projects that cross municipal borders.

One of the few successful examples of metropolitan cooperation is the establishment of Prague's integrated transit (PIT) system, developed by the regional mass transit system agency since 1993. The system now connects public transit in Prague with 299 municipalities in Central Bohemia, using a unified fare and ticketing system. In 2010, in addition to underground, tram, and bus lines in Prague, PIT included 152 bus routes outside the city and an extensive network of 224 railway stops. PIT also provides park and ride facilities at the city outskirts, to stimulate links between suburban car users and the public transit system in Prague. Its success in facilitating mass transit linkages between places of residence and places of employment in Prague's wider city region is a rare example of metropolitan cooperation between the capital city, a large number of municipalities in the surrounding region, and both public and privately owned transportation companies. Unfortunately this success has not spurred a comparable effort to coordinate land use patterns and investments in residential and commercial development on a metropolitan scale.

A good example of this failure of intergovernmental cooperation is the development of single-family housing at the edges of Prague. While the zoning adopted in Prague's master plan of 1999 assigned generous portions of land for single-family development in the outer areas of the city's territory, only a little over 500 ha – which amounted to only a quarter of the allotted land – were appropriated for this type of housing within the city borders between 1989 and 2008. This figure pales by comparison with the 2,600 ha of new single-family housing developed during this period outside of the capital city (Stanilov and Šykora, 2012). Clearly the suburban municipalities around Prague managed to attract investors' attention away from the capital city by zoning generous portions of land for new residential and nonresidential development. Furthermore, by comparison with the planning procedures adopted by the city of Prague, negotiations between developers and small municipal governments about zoning changes have proven to be much easier and projects are realized more quickly. The developer-friendly climates that characterize suburban municipalities have aligned the interests of land-owners (who reap substantial profits from the conversion of their agricultural properties for urban uses) with the interests of developers (who seek higher profits by pursuing opportunities for fast development in areas with cheaper land) and of local authorities (who have followed an economic development agenda at all costs) (Stanilov and Šykora, 2012). The abundant availability of land designated for development in the suburban municipalities has allowed investors to choose from

numerous possible locations within Prague's city region. The differences between the tighter planning regime that characterizes Prague and the looser rules and procedures adopted by the suburban municipalities fueled the dispersal of development to the suburban belt.

The decentralized and fragmented patterns of the suburbanization of Prague's hinterland have produced some significant negative consequences. They have left the exploding residential suburbs bereft of services such as schools, shops, or cultural facilities. The proliferation of urban sprawl has increased the amount of travel, effectively contributing to greater dependence on private transportation (Garb, 2007; Novák and Sýkora, 2007) and to a steady increase in traffic jams on the major radial roads. The efforts of municipal governments and regional authorities to increase road capacity are likely to support further the processes of suburbanization. The city of Prague is threatened by a loss of firms, employment, and higher-income population. Tax revenues have shifted to suburban municipalities, while the burden of payment for infrastructure and social services remains upon the city. At a first glance, it seems that the winners in this process are the booming municipalities that are blessed with good accessibility and an attractive natural environment. However, many of the new inhabitants have been trapped in small settlements that cannot meet basic daily demands and have poor transport connectivity to places with jobs and services. In the aftermath of this uncontrolled development, several municipalities affected by recent suburbanization recognized that growth requires greater levels of regulation. Newly elected local politicians have started to push for measures designed to halt new residential construction and to provide much needed services. The next logical step would be to arrive at the realization that local efforts are limited in their ability to control metropolitan-wide processes. Suburbanization is a regional process and has to be approached from a regional perspective, by uniting local, regional, and national governments in a joint effort that would distribute benefits more equally and would mitigate the negative consequences of uncontrolled growth.

The Challenges of Suburbanization

Since the mid-1990s, the rapid growth of suburbanization has reorganized the spatial structure of Prague's city region. The suburban zone has increased its weight in the balance of functions within the capital metropolis. While the process has not reached the levels of suburbanization common for cities in North America and Western Europe, the accelerated pace at which suburbanization around Prague has taken

place during the last twenty years is a cause for growing concern. It should be acknowledged, however, that suburban growth and decentralization within the metropolitan area of Prague have been taking place in parallel with another important process: the concentration – on a wider, national scale – of resources, population, and investments in the region of the Czech capital, which has remained the primary growth pole in the country throughout the postsocialist years. Beside the explosion of suburbs around Prague, this channeling of resources has also been reflected in the growing population and housing construction of the metropolitan core. The process of concentration has been especially noticeable in the development of the sector of advanced services, both in terms of jobs and in terms of facilities; this phenomenon has produced the emergence of new office parks, shopping centers, and leisure areas. But, while the majority of these new commercial developments have been relatively contained within, or in the proximity of, the boundaries of the compactly built-up Prague, this has not been the case with single-family residential development.

Rapidly developing suburbanization creates conditions that will influence the life of society for several generations. Therefore the patterns of urbanization in metropolitan areas should be the target of urban policies and planning. Indeed planning has played an important part in setting the patterns of growth in Prague's city region. Here a specific regime of development has been established in postcommunist years – one that has combined neoliberal preferences for free market economic relations with political paternalism on the part of the local government. Under this regime short-term preferences outweigh strategic considerations. Issues of social justice, environmental sustainability, and balanced spatial development have been subordinated to economic growth. The anticipation of possible problems in the future, which should be at the core of effective and sound urban planning, has played a rather marginal role.

The process of suburbanization has been aided by the specific characteristics of the governance system established in the Czech Republic. It is characterized by the strong devolution of control over land use planning to a highly fragmented system of local governments, composed of thousands of independent municipalities. All matters of land development – housing, shopping, entertainment, warehousing or industrial use – are seen primarily as a responsibility of the local authorities, the state and regional governments coordinating only the planning and implementation of major infrastructure projects. Not surprisingly, the lack of coordination of territorial development at the regional level under such a highly fragmented government system has produced equally fragmented development patterns, commonly

recognized as urban sprawl. Despite the recent recognition, in regional planning documents, of the negative impacts of this kind of development, no measures to coordinate urbanization at the regional level have been adopted to this date.

So far, the consequences of continuous sprawl in Prague's city region have elicited only two types of policy responses. First, it has been recognized that sprawl demands an increase in the capacity of existing transport infrastructure. The development of road networks and mass transit systems has become a key priority for the governments of both Prague's and Central Bohemia's regions. Second, some suburban municipalities that have allowed rapid growth to put an enormous strain on their inadequate municipal infrastructure are revising their land use plans, in an attempt to slow down growth in the future. This approach is particularly relevant, because the suburban area of the capital city is the region of the country least affected by the current economic crisis. Recent signs of better economic performance and a noticeable increase in housing prices indicate that the region is climbing back on the growth trajectory.

While increasing the capacity of the transport system and curbing growth could alleviate some of the pressures of suburbanization, the lack of cooperation between local governments remains the biggest obstacle to achieving a spatially balanced and sustainable development within Prague's city region. And, although the management of growth within the city of Prague can be perceived as successful, this success alone cannot address issues related to the lack of coordination between Prague and the municipalities in its hinterland. Unfortunately, it appears that Prague and Central Bohemia continue to act as competitors, forgetting that they share a geographic space integrated into one functional unit via the regional economy and its labor and housing markets. Until the urban and suburban areas of Prague are regarded as two separate and independent areas, there is little chance that the region could meet the challenges it faces today and those it will confront in the future.

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Sprawling Sofia

Postsocialist Suburban Growth in the Bulgarian Capital

Kiril Stanilov and Sonia Hirt

Introduction

In this case study we present the evolution of the suburban periphery of the Bulgarian capital, Sofia. We show that the intense suburbanization processes that Sofia has recently experienced fit well into the broader context of postsocialist spatial restructuring – a phenomenon observed in other large East European urban centers. For example Sofia’s current peripheral growth, like that of other cities in the region, is premised on a number of general supply and demand factors – such as privatization of land on the urban outskirts, formation of upper and middle classes that have the means and ability to leave the city, and the availability of residential mortgage financing. However, we also show that Sofia’s context exhibits some specificity in both historical and geographic terms. For example, unlike some Central European cities, Sofia did not begin a true process of suburbanization either prior to or during the communist period. Like some Soviet cities, however, it had a well-developed periphery of summer cottages, many of which were owned by members of the communist *nomenklatura*. This “dacha” periphery is currently being transformed into affluent *bona fide* suburbia (or suburbs). Thus far, the new suburbs frame primarily the scenic southern rim of the city, which is quite different from the much poorer northern edge. The latter has been historically the home of many of Sofia’s industries and of its lower income residents.

Acknowledging both the general and the locally specific factors driving the suburbanization process in Sofia, we focus on the social and environmental impacts of suburbanization. We also discuss the startling lack of urban planning mechanisms for confronting the consequences of suburban sprawl in the Bulgarian capital. This policy failure may well exceed in magnitude failures in other large cities in Central and Eastern Europe.

Historical Evolution of Sofia's Outskirts

In 1879, when Sofia was proclaimed the capital of Bulgaria immediately following the nation's liberation from Ottoman rule, it was a small and sleepy town of just around 18,000 residents (Stanilov and Donchev, 2004). Over the next sixty years the city grew exponentially, reaching nearly half a million people by the onset of World War II (Hirt, 2007a; Lampe, 1984).

By the late 1930s Sofia established itself as one of the most prominent industrial centers in the Balkans with a sizable bourgeoisie. However, the process of upper-class residential decentralization, typical for many cities in Europe at the beginning of the twentieth century, never reached critical mass. The urbanized areas grew, of course, as did the urban population, but this expansion formed relatively continuous swaths of territory stretching from the center outward. And, while the first master plan of Sofia, from 1934, envisioned the formation of upper- and middle-class "garden cities" on Sofia's green outskirts, these ideas were never realized (Hirt, 2007a; Lampe, 1984). The urban periphery remained occupied primarily by modest villages and informal areas of self-built huts owned by poor workers and rural migrants who sought cheap land. This land was often completely divorced from the network of urban services (Staddon and Mollov, 2000), especially in the poorer northern extensions of the capital. The north had no desirable qualities to offer to Sofia's elites; it housed the city's rail yards, factories, and the desolate segments of Roma population (even today many residents from this group continue to live on the northern side of the Bulgarian capital).

The status of the city's southern outskirts was quite different. By the 1930s, middle-class neighborhoods, rich in greenery and built in line with European architectural fashions, burgeoned on the city's south side (for instance in various parts of today's Lozenetz and Iztok districts). These areas, however, could hardly qualify as suburbs – they were simply extensions of the urban fabric at a lower density. Farther out, along the southern rim of Sofia, at about 10 km from the city center, the foothills of the Vitosha Mountain offered a place for weekend tourism. The green

fabric of the mountain's foothills was only sporadically interrupted by modest rural settlements. In the absence of developed infrastructure, sheer distance from the city center prevented the conversion of these settlements into suburban areas well into the twentieth century. Overall, the suburban lifestyle seems never to have grasped the imagination of Sofia's early twentieth-century elites in the ways it had in northern Europe or in North America, even though the writings of western advocates of urban decentralization like Ebenezer Howard and Frank Lloyd Wright were widely circulated among members of Sofia's intelligentsia (see Hirt, 2007a). In fact it has been claimed that Sofia's 1934 master plan garnered so little support partly because its premise – that the elites would wish to exit the urban center and settle in “garden cities” – remained a foreign idea.¹

The advent of socialism after World War II marked a new era in the development of Sofia. As most urban land, large real estate, and means of production were nationalized in 1947–1948, urban growth became dominated by the almighty socialist state. Between 1945 and 1989 Sofia expanded substantially, both in population (from about 400,000 to about 1,200,000 residents) and in area (from about 100 to roughly 500 km²). Socialist urban policy focused initially on reconstructing the old urban neighborhoods, some of which were damaged by the war. After the 1960s, however, with the import of industrialized building methods, the socialist authorities shifted focus toward the production of large-scale modernist housing districts, with massive residential towers assembled from prefabricated panels (Hirt and Kovachev, 2006; Hirt and Stanilov, 2007). These districts were realized in the urban periphery, on annexed green and agricultural land. Suburban-type areas (understood in the “western” sense, as areas of predominantly low-density housing) were not constructed; in fact the very idea of such housing was labeled “bourgeois” (Hirt, 2007a).²

A tentative step toward residential suburbanization was taken during the relatively prosperous 1970s and 1980s. As the urban territorial expansion of Sofia continued, small villages like Dragalevtsi, Simeonovo, Knyajevo, and Boyana (all in today's Vitosha district) – where most land remained in private hands – as well as some other green areas along the desirable south side of Sofia changed their original status, becoming recreational zones. This allowed the construction of small single-family summer cottages with modest garden plots, which became known as “villas” in Bulgarian. These properties quickly became more than a recreational asset. Some of them, owned by urban residents of modest means, helped alleviate pressures on the meager household incomes by serving as a source of fresh produce. Properties owned by Sofia's elites, including top members of the government and the upper strata of the intelligentsia, exhibited unambiguous signs of socialist luxury and served



Figure 6.1 Greenbelt between Sofia and villages at the foothills of Vitosha Mountain. Photo by K. Stanilov.

as important status symbols. However, the poor state of the existing infrastructure, characterized by unpaved roads and unreliable water and electricity supply, coupled with the lack of other public services, limited to a great extent the appeal of villa zones as areas for permanent residence. Thus villas remained primarily places for weekend visits. A wide greenbelt was formed between these rural and recreational zones on one side and the sharp urban contour delineated by the last towers of the socialist housing districts on the other. Until well into the mid-1990s, this swath of open space was strictly preserved (Figure 6.1).

Patterns and Processes of Suburbanization in the Postsocialist Period

Residential suburbanization

The collapse of the communist regime in 1989 altered the fundamental principles of housing production and distribution in Bulgaria. To begin with, the economy entered a crisis period and the nearly bankrupt state

institutions withdrew abruptly from the construction of housing. Initially, as elsewhere in Eastern Europe, this caused a dramatic decline in the annual supply of new dwellings (Stanilov, 2007a). State-owned residential properties were privatized, which led to record homeownership rates, which reached about 92 percent in Sofia in the early 1990s.³ By the mid-1990s the quality of urban life notably deteriorated due to serious disinvestment in the existing housing stock and infrastructure, inadequate planning regulations, which permitted haphazard development, massive losses of green space, and increased traffic congestion and environmental pollution. Land in the urban periphery was privatized and made available for development by lifting the stringent restrictions enforced during the socialist period. For the first time urban elites – specifically, members of the old *nomenklatura* and the nouveaux riches – began to look for ways to permanently settle outside the city core.

Census data from 1992, 2001, and 2011 (Nacionalen Statisticheski Institut, 1993, 2003, 2012) showed substantial residential movement toward the southern part of Sofia, namely in areas perceived as the most desirable in the metropolis (Table 6.1). Even though there has been some urban infill (particularly in traditionally prestigious neighborhoods like Lozentez, with pentiful green space to build on), the overall trend has been toward decline in population and dwellings in the city center, stagnation in the socialist districts, and growth in peripheral districts like Vitosha, Pancahrevo, and Bankya – the ones with attractive natural features, in the foothills of Vitosha Mountain (Table 6.1). In fact the district of Vitosha, which includes the majority of the best socialist-era villa zones, has been the fastest growing part of metropolitan Sofia. In 20 years Vitosha's population has grown by nearly 60 percent, whereas

Table 6.1 Population growth in Sofia by districts, 1992 and 2011.

	<i>Population</i> 1992	<i>Population</i> 2011	<i>Population</i> <i>change</i>	<i>Change</i>
Sofia municipality	1,190,126	1,291,591	101,465	8.5%
City center	116,524	100,786	-15,738	-13.5%
Early to mid-twentieth-century districts	454,425	512,772	58,347	12.8%
Socialist districts	443,373	444,467	1,094	0.3%
Suburban districts	175,804	233,566	57,762	32.9%

Source: authors' calculations, based on data from the Nacionalen Statisticheski Institut, 1993 and 2012.

the number of dwellings in the area has increased by nearly 150 percent. This compares to the roughly 8 percent growth in the population of Sofia as a whole and the roughly 32 percent growth in the number of its dwellings during the same period.

Initially, most residential growth came in the form of homes built by individual owners with the aid of small contractors. Growth concentrated on the territory of old villages and villa zones, since there land was already in private ownership and homes could be built while leveraging the existing stock. The other common location for the construction of new dwellings was right at the edge of the socialist housing estates, where the capacity of the existing infrastructure could be utilized. The fragmented nature of the burgeoning private building sector, which was comprised primarily of small, family-owned construction firms (Buckley and Tsenkova, 2001) and did not have the financial and logistic capacity to erect large projects, strongly contributed to that development pattern.

Since the Bulgarian census does not provide information on population flows and household income at the neighborhood level, its data alone do not present evidence for the existence of upper-class residential flight from central parts of the city toward the urban edge (a classic indicator of incipient residential suburbanization). However, a small but representative survey conducted in 2006 among residents of communities in the fastest growing parts of the city – the Vitosha foothills – lends support to the hypothesis that suburbanization is primarily determined by the dispersal of affluent households from Sofia’s urban interior to its periphery (Hirt, 2007b). According to this survey, there are radical differences between the social and demographic characteristics of residents who settled in the area prior to 1989 and those who came after this threshold year (Table 6.2). Specifically, postsocialist “newcomers” tend to be much wealthier. Whereas 42 percent of postsocialist “newcomers” reported monthly household incomes exceeding four times the national average, among the group of respondents who settled in the area before 1989 the corresponding figure was only 5 percent. Newcomers are also better educated and are more likely to work in the city center. They are likely to use cars rather than mass transit for their daily commuting (about a third of new residents commute by mass transit, as compared to about half of the older residents). The physical characteristics of the newcomers’ homes also speak of their relative prosperity (Table 6.3; see also Hirt, 2007b). These conclusions are bolstered by the rapidly rising real estate values in the Vitosha district, which in 2008 reached well over €1,000 per m² – a figure that makes it one of the most expensive areas of Sofia.⁴ These values have, however, fallen since the beginning of the global economic crisis in 2008.

Table 6.2 Social characteristics of long-time residents and newcomers to communities at the foothills of Vitosha Mountain: proportions.

		<i>Newcomers</i>	<i>Long-term residents</i>
Respondent's gender	Male	54%	44%
	Female	46%	56%
Respondent's age	18–30 years of age	12%	4%
	31–40 years of age	12%	9%
	41–50 years of age	34%	13%
	51–60 years of age	28%	16%
	61–70 years of age	10%	28%
	Over 70 years of age	4%	30%
Respondent's education	College degree	56%	36%
	Some college	2%	6%
	High school degree	40%	45%
	Less than high school	2%	13%
Household monthly income	Over 2,000 leva	42%	5%
	1,000–1,999 leva	38%	4%
	500–999 leva	8%	22%
	250–499 leva	10%	30%
	Less than 250 leva	2%	38%

Source: Hirt, 2007b.

Table 6.3 Select housing characteristics of long-time residents and newcomers to communities at the foothills of Vitosha Mountain: means.

	<i>Newcomers</i>	<i>Long-time residents</i>
Average size of dwelling (in m ²)	171.9	106.1
Average number of rooms per dwelling	6.1	4.4
Average size of yard (if any; in m ²)	784.0	685.6
Average number of people per household	3.7	3.6
Average dwelling space per person (in m ²)	51.1	37.2

Source: Hirt, 2007b.

Hirt's 2007 survey further found that postsocialist "newcomers" typically relocate from central Sofia specifically in order to escape the perceived disadvantages of urban living and to find ostensibly calmer, greener, and more idyllic conditions in the burgeoning suburbia. Here are a few representative statements explaining the newcomers' main motivations to settle in the Vitosha area: "Sofia is too polluted for normal people to live in"; "Nadejda [one of the socialist housing districts] became too noisy and dirty for my taste"; "Finally, I don't have annoying neighbors"; "Sofia is a madhouse and now I got the opportunity to escape it!" (Hirt, 2007b: 120).

The preferred type of housing in the new suburbia is the detached single-family home. This reflects new cultural preferences for this type of housing. A survey of Sofia's residents (Genova, 2000) found that, although only 15 percent of the interviewed respondents live in single-family houses, over 50 percent of them declare this type of house to be their preferred alternative. This finding points to a shift in residential preferences since the socialist period, when single-family living was a residential option associated primarily with "backward" lifestyles and with small towns and provincial villages.

The Bulgarian census does not keep statistics with the percentage of single-family homes in relation to the total housing stock, but it reports the average number of dwellings per residential building. Thus in the Vitosha district, for example, the average number of dwelling units per residential building constructed in the 1990s was 1.9, which reflects the fact that the majority of the newly built residences are single-family homes – and also some small- to medium-size apartment buildings (two-family housing is still a relatively rare building type in Sofia). This represents vastly different housing stock and density from those of urban areas, especially urban areas built during socialist rule. In the district of Mladost, for example, which is a large socialist housing estate located just north of Vitosha, the average number of units per residential building erected in the 1980s is nearly 50, and it drops down to an average of 13 units for the buildings built during the 1990s (Hirt, 2006).

New suburban areas offer much larger dwellings than what is typically available in the urban core. Whereas only 17 percent of all dwelling units in Sofia in 2001 exceeded 60 m², the corresponding figure in the Vitosha district was twice higher, at 35 percent. In the neighboring Bankya and Pancharevo, the proportion of dwellings exceeding 60 m² was 32 percent (Nacionalen Statisticheski Institut, 2003). The survey of residents in the exclusive Vitosha foothill communities cited earlier (Hirt, 2007b) found that the average size of single-family homes inhabited by newcomers exceeded 170 m² (Table 6.3). This translates into 51 m² of dwelling space per person – a true luxury compared to the average space

of only 15 m² per resident in Sofia (Urban Audit, n.d.). Green space per person – predominantly in the form of private fenced-off yards – is also relatively generous and typically based on the traditional Bulgarian property of 500 to 1,000 m² (the Vitosha survey found an average lot for new homes to be of about 800 m²; see Table 6.3).

Since 2000, in parallel with the economic recovery of Bulgaria, Sofia's housing market substantially changed, which in turn altered the nature of suburban residential growth. First, as relative prosperity began to trickle down from a small elite to a growing professional middle class, demand for new housing of a higher standard increased. The introduction of mortgage financing in the early years after 2000 made such housing accessible to larger segments of the population. On the supply side, the local building sector consolidated into larger firms, managing larger scale projects. Perhaps even more importantly, Bulgaria's position as a new member of the European Union attracted a number of foreign investors and firms with decades of experience in building suburbia.

The cumulative result of these forces was not only a much greater annual output of dwelling units, but a fundamental shift in development patterns, especially in peripheral settings, where the availability of greenfield sites has drawn substantial residential development. While the 1990s were marked by individually constructed suburban homes and by relatively small and fragmented multi-family residential complexes, the post-2000 period has been increasingly dominated by large-scale (and often gated) suburban compounds, each featuring hundreds of generously sized dwelling units. In fact a recent study identifies over 70 gated residential complexes in Sofia, most of which are located in the southern suburbs. Aside from "secure" "high-class" residential living, these complexes also provide highly maintained common green spaces and shared luxury facilities such as swimming pools, fitness centers, and retail shops. Examples of such large projects include the Residential Park Sofia (900 units), the Simeonovo River Park (250 units), and the Orchid Hills (220 units) – all three located at the Vitosha foothills – and the even larger Tsarigradski Complex situated in the Druzhba district, which features 1,300 gated multi-family units. It is notable that many of these projects are built by foreign firms and are backed by foreign capital.

In addition to the shift in development scale, there has been a notable shift in the geography of the new developments. First, as pointed out earlier, most of the new residences of the 1990s were built either at the immediate edge of the socialist housing districts or within rural and recreational settlements to the south of the capital. This pattern left the greenbelt that separates the socialist districts and the rural and recreational settlements relatively intact. However, as lands in

the greenbelt were privatized and demand for large green-field sites increased, this belt began to experience significant development pressures. Experts from Sofia's Directorate of Architecture and Urban Planning predict its ultimate disappearance within the next decade or so; and this would lead to the eventual merging of the city with the former southern recreational settlements. In preparation for this merging, the city of Sofia recently annexed several of these settlements.⁵ Second, new developments are no longer confined to the closest rural and recreational areas in the immediate south. Farther-out areas, like the villages of Lozen and Kladnitsa, which are not within the current administrative boundaries of metropolitan Sofia and are about 20–25 kilometers south and southeast from Sofia's center, are expected to become future nodes of residential growth (Colliers International, 2007a). Lands to the north are also undergoing some suburban construction. In fact the latest master plan of Sofia predicts that, as the Vitosha foothills become increasingly built out, suburban residential development will shift to parts of the northern periphery, skipping the industrial zones and eventually reaching the foothills of the Balkan mountain range.

These "optimistic" predictions for residential growth were challenged by the global economic downturn. The housing boom in Bulgaria ended, as elsewhere, in 2008. In 2009 new large residential projects were still getting completed on the basis of plans and permits from the previous years, but from 2010 on no such projects were in the pipeline (Colliers International, 2011b). The number of new dwellings produced per year peaked at 3,725 in 2008, then declined to 3,169 in 2009 and to 2,007 in 2010; this represented a 46 percent drop from 2008 to 2010 (Nacionalen Statisticheski Institut, 2012). Residential vacancies are visible throughout the city, as supply appears now to exceed demand in most market segments, with the possible exception of dwellings targeting small groups of extreme high- and low-end buyers. Demand is undercut also by the fact that banks lend less. Mortgage financing declined by about 85 percent just between the end of 2007 and the end of 2008, while credits extended to the development industry declined by about 40 percent during the same period (Kovachev, 2011). The 2012 average price of residential property in Sofia is €664 per m², which represents a 40 percent drop since the peak year of 2008 (Rajkova, 2012). The price of rental property has shrunk by about the same percentage (Kovachev, 2011).

Nonresidential suburbanization patterns

The demise of the socialist economic system after 1989 has led to profound changes in the spatial patterns of economic activities in Sofia,

just as it did in other large metropolitan areas in postsocialist Eastern Europe. In Sofia as well as in the other capital cities of the former Eastern Block, the decentralization of economic activities has become one of the most visible trends in the transformations of the urban spatial structure during the transition period (Stanilov, 2007b).

The process of decentralization of economic activities – their move from the core to the periphery of Sofia – started tentatively during the initial years of the transition period but picked up speed with the recovery of the Bulgarian economy toward the end of the 1990s. The growing size of the national economy was reflected in an ever-increasing demand for commercial space, a situation most vividly felt in Sofia. During the transition period, the Bulgarian capital concentrated large shares of the country's economic capacity, producing close to 30 percent of the nation's gross domestic product (GDP) in 2002. Consequently, Sofia captured the interest of the majority of investors, attracting close to 50 percent of the foreign direct investments in Bulgaria since the early 1990s (Capital Municipality, 2003). A significant portion of these investments has been directed to the commercial sector of the property market. Such investments were initially concentrated in the heart of the city but have become increasingly dispersed to its edges over the past 10 years. With the onset of the recent global economic crisis, the amount of investments in the Bulgarian real estate market dropped sharply, plummeting from €400 million in 2008 to €25 million in 2009 (Colliers International, 2011). This curtailed significantly the process of rapid decentralization of economic activities; yet the impact of the crisis on the retail, office, and to some extent industrial sectors of the real estate market appears to have been less severe than on the residential sector.

One of the signature events of the transition period – events designed to celebrate a given metropolitan region's successful advance on the path to a free market economy – has become the opening of ostentatiously glamorous shopping centers. The increased interest displayed by investors in such development opportunities of the emerging markets of the postsocialist countries has been mainly the result of a pent-up demand for higher quality retail experience and of a significant rise in consumer purchasing power from the mid-1990s to 2008. This is particularly true of the largest metropolitan areas, where average earnings have substantially exceeded those of households residing in smaller towns and villages.

Bulgaria's increasing economic and political stability – enhanced by accession to the European Union at the beginning of 2007 and by growth in the population's disposable income – has made the country's largest urban centers a desirable location for big international retailers. This ushered in an era of big-box retail, and the construction of hypermarkets

and malls went on at accelerated speed after the turn of the millennium (Stanilov, 2007b).

Particularly impressive in Bulgaria has been the boom of shopping centers, which continued well beyond the landmark year of 2008. With the opening of five new shopping malls during the first six months of 2010, the stock of contemporary shopping mall space in the country doubled in size.⁶ As the amount of leasable shopping center space has reached only 211,000 m² in 2011, Sofia still lags behind other major metropolitan areas in Eastern Europe in terms of retail space per capita; but it's getting very close to the EU average.⁷ The demand for such properties appeared to outstrip the supply, a situation confirmed by the fact that all major shopping centers were fully occupied in 2008. Developers have eagerly stepped in to meet this demand. Five new malls are expected to open within the next couple of years, doubling the shopping center space currently leasable in the Bulgarian capital.

Two trends are notable in this frenzy of shopping center development. First, these investment projects are increasingly driven by large international players; and, second, each new crop of shopping malls tends to be located further away from the city center. Four of the five malls currently under construction are located along Sofia's outer ring road, whose capacity has been considerably upgraded in the past few years. The metropolitan periphery is actively promoted as a preferred location for shopping center and big-box development projects by realtors and market consultants alike; both stress the availability of sizeable pieces of developable property at the urban fringe, the lower cost of land, and the ability to secure abundant space for parking in such locations (Ralcheva, 2008).⁸ Yet the pressure of the ongoing economic crisis appears to have finally caught up with mall development. No new malls were opened in 2011 and no opening ceremonies are scheduled in the foreseeable future. However, in these challenging economic conditions, the large food and discount chains have picked up the slack, shifting into an expansion mode. With the current retreat of the malls from the development scene, big boxes have started to define the retail market in Sofia.

The rapid development of the service sector in Bulgaria after 1989 has generated a huge demand for office space as well. The percentage of the labor force employed in the service industries exploded from 19 percent in 1990 to 56 percent in 2000 (CIA, n.d.). The expansion of international companies in the region has stimulated improvements in both the quantity and the quality of office space construction. As in development in the retail sector, the initial demand for office space in Sofia was absorbed primarily through the reconstruction of old buildings and through new infill development in the city center during the

best part of the 1990s. Gradually, new office buildings began to spring up along main boulevards farther out from the center, while the first large-scale office developments started to appear even farther out, in the urban periphery. Toward the end of the 1990s secondary business nodes began to emerge in Sofia – as they did in other capitals in Eastern and Central Europe – in locations with easy access by public transit, and especially by cars (Sýkora, 1999). Particularly prone to decentralization were foreign companies looking for all the trimmings of modern office space, including plenty of parking (Stanilov, 2007b).

Currently the demand for office space is driven mostly by multinational companies that are expanding their operations and need relocation, and not by new market entrants (Colliers International, 2008a). The growing need for office space has directed much of the recent office construction to the urban periphery, where the availability of large tracts of relatively cheap land has allowed production to keep the pace with rising demands. Thus, while in 2006 43 percent of the inventory of class A and class B office space in Sofia was found in the suburbs, by 2011 this figure rose to 68 percent. Currently 70 percent of the office space under construction is located in areas outside the boundaries of the compact city (Colliers International, 2011a).

Business Park Sofia has become a flagship project that showcases the success of the decentralization of office functions and of their move to Sofia's urban periphery. Located at the southeastern edge of the metropolis, this park is one of the largest suburban development schemes of its kind in Eastern Europe, hosting offices for over 150 companies (50 multinational, 35 national, and over 70 medium-size firms) and 10,000 employees, all contained within 300,000 m² of built-up area covering 22 hectares of land. Currently Business Park Sofia operates at 100 percent occupancy rate, awaiting the addition of a number of new buildings. Based as they are on the loudly proclaimed concept of "city within the city," the future plans for the area include the construction of the Residential Park Sofia (already mentioned), which is now nearly complete and has 1,000 dwelling units and a supersized shopping center (<http://www.businesspark-sofia.com>; see also Hirt, 2012: 149–169).

The success of Business Park Sofia as a real estate investment has spurred an explosion of office development in the suburbs of the capital. This has resulted in an oversupply, which, coupled with the impact of the economic crisis, has driven up the vacancy rates in this sector of the market, which had reached 25 percent by the beginning of 2011. Not surprisingly, the highest office vacancy rates are found in the suburbs, and the construction of such schemes has come to a halt: no new office premises have been in the pipeline since 2011 (Colliers International, 2011a).

The decentralization of nonresidential uses has affected the patterns of industrial location as well. Like most of the other cities in Eastern Europe, Sofia inherited an abundance of industrial properties, whose presence in its urban fabric reflects the emphasis placed by the communist regime on the development of industrial sectors of the economy. As a result of the implementation of these policies throughout the Eastern Block countries, the proportion of industrial land in socialist urban areas was, on average, about two to three times higher in Western European cities (Kessides, 2000). In Sofia the industrial land constituted about 27 percent of the territory of the compact city at the end of the 1990s (Capital Municipality, 2003). Most of this land was underused or remained derelict for a number of years after 1989.

With the upswing across the Bulgarian economy toward the end of the 1990s and the subsequent increases in the level of foreign direct investment, the demand for properties available for industrial development in Sofia began to grow, although not as fast as in the residential, office, and retail sectors of the property market. For a number of reasons, the majority of big investors in the industrial sector ignored the existing industrial properties, directing their attention to greenfield sites on the metropolitan outskirts. A commonly shared belief in the postsocialist Eastern European real estate market is that modern technologies of production could not be retrofitted in the physical shells of the old factories inherited from the socialist past – not without considerable costs. Very few investors have been willing to incur these additional expenses, especially considering that the significant levels of pollution caused by the use of outdated production technologies of the socialist era mean high environmental clean-up costs too.

An additional impetus for the decentralization of industrial uses and their push to the exurban periphery has been provided by the steady increase in road congestion in Sofia. The concentration of office and other commercial functions in the heart of the city, coupled with rising levels of automobile ownership and notable cuts in the level of public transit provision, has increased significantly the levels of traffic congestion, reducing dramatically the accessibility of the urban core. Since most of the freight traffic in Bulgaria (as well as in the rest of Eastern Europe) switched from rail to road transportation during the last two decades, congestion began to play a greater role in decisions related to industrial location. The planning and construction of new, higher capacity roads around the Bulgarian capital has helped developers profit from the advantages in accessibility that these locations offer. A most notable case in point is the explosion of development in the area around Sofia's international airport. The proximity to multiple modes of transportation (ground, air, and railroad) has made this

area a most desirable location for the construction of modern logistics and warehouse facilities (Colliers International, 2007b). The US-based Tishman International is planning to develop the largest distribution center to date, on a surface of 14 ha, in the vicinity of the airport. Similar plans are revealed by the Austrian Soravia Group.

The rapid growth of large-scale retailing since the end of the 1990s has been a significant factor in the recent development of warehouse and logistics markets in Bulgaria. The adoption of European Union regulations and requirements in recent years has further stimulated the need for modern industrial space (Colliers International, 2007b). This need has shifted the emphasis toward more consolidated, large-scale projects that tend to be located further and further away from the center of Sofia. There have been some isolated initiatives for a large-scale redevelopment of brownfield sites (such as the project for the Balkankar site in Sofia) and it's likely that there will be more, as the price of urban land increases. Still, redevelopment projects of this kind have been rather rare so far and exclusively focused on retail, entertainment, and office uses.

The dispersal of all urban activities has become a well-pronounced trend in the postsocialist evolution of Sofia's metropolitan fabric. In this process, the suburbanization of office, retail, and industrial uses has had a strong impact on the spatial structure of the Bulgarian capital – an impact equal with that of the concomitant processes of residential deconcentration, if not even stronger. This finding concurs with the observations made in other Central and Eastern European metropolitan areas as to the transformation of their urban form (Lisowski and Wilk, 2002; Nuissl and Rink, 2003; Šýkora and Ouředníček, 2007). The suburbanization of the postsocialist cities differs from the patterns of suburbanization encountered in the West, and particularly the United States, where residential deconcentration has led the dispersal of the rest of the urban functions away from the inner city (Stanilov, 2007b).

In the case of Sofia, nonresidential development in the metropolitan periphery has taken place simultaneously with (and in some cases even before) the spread of residential suburban development. Discount stores, hypermarkets, home improvement centers, and factory outlets have dotted the suburban landscape, lining up the main arterial roads that radiate out of Sofia. In some cases, for instance that of Business Park Sofia, the clusters of the emerging business nodes have served as catalysts for future residential growth. Overall these cases underscore a trend toward the construction of larger and more complex projects in Sofia's urban periphery, which are often offered as a complete package; these instant communities draw residents away from the congested center with the promise of creating an alternative, sanitized urban reality. Whether any of these projects will continue to attract investments and

will turn into full-blown edge cities, transforming the once monocentric structure of the Bulgarian capital, is too soon to tell. Still, it is clear that the combined effect of suburbanization on Sofia's metropolitan landscape during the last 10 years has been a significant reshaping – or repatterning – of urban activities and daily flows.

The impacts of postsocialist suburbanization

The decentralization of housing, jobs, and services that has taken place during the transition period has brought into existence a new and complex urban environment, which has both positive and negative effects on the quality of life of Sofia's residents. The suburbanization of residential activities, for instance, has diversified the housing market, providing more options than were available during the socialist period – when the choice was (by and large) limited to small high-density dwellings in the urban core or substandard single-family detached houses in satellite villages. The establishment of an open land market that includes many areas from the metropolitan periphery with few restrictions on new development has increased the supply of construction sites, thus mitigating to certain extent the dramatic escalation of housing and land values during the transition period (this escalation has subsided since the beginning of the recession).

The geographic spread of nonresidential uses throughout the metropolitan fabric, on the other hand, has increased the residents' access to employment opportunities and services in many urban districts that were previously characterized as mono-functional bedroom communities. In addition, the decentralization of industrial uses – their removal from the urban core – holds the potential of a healing effect on the urban structure of postsocialist Sofia. The exorbitant amount of urban industrial land inherited from socialist times has created opportunities for absorbing new development within the city boundaries, which could be used to stitch together the fragmented fabric of the metropolis and to infuse much needed investments into declining urban areas.

The negative impact of Sofia's rapid suburbanization seems, however, to have overshadowed the positive influences that stem from the decentralization of urban activities. In the largest Bulgarian metropolitan area no less than in other parts of the world, suburbanization has exacerbated a number of environmental, social, and economic problems that have been brewing for a couple of decades.

One of the main causes of distress is related to the fact that the new suburban development has significantly surpassed the ability of municipal governments to manage growth – in terms of both financial and institutional capacity. The postsocialist suburbs at the edges of

Sofia have grown in a haphazard manner, with little if any coordination between new development on one side and infrastructure and public service provision on the other. The lack of adequate road capacity, coupled with poor public transportation service in the burgeoning suburban areas at the foothills of Vitosha Mountain, has created severe bottlenecks in the road network of the fast-growing southern parts of the metropolitan area. The provision of water and sewer lines is also desperately lagging behind building construction in the suburban territories. Under these circumstances, much of the new infrastructure is provided by developers or users in a highly inefficient, piecemeal, and often unauthorized fashion.⁹ Sofia Water, the agency in charge of the capital's water and sewer networks, has estimated that nearly 1,000 km of the water lines (out of a total network of 4,000 km) are illegal. The situation is even worse in the sewer system, where about a third of the grid is unauthorized (Dnevnik, 2004).

Not surprisingly, this situation has created a number of environmental problems. These are concentrated in the dynamically growing communities at the foothills of Vitosha Mountain, where many of the illegal sewer lines are most often dumped directly into the streams or into roadside ditches. Leaks from the numerous septic tanks built in these environmentally sensitive areas have increased underground water pollution. The increase in impervious surfaces has exacerbated flooding along the southern segment of the beltway, creating severe public health hazards.

The apparent failure of state and local governments to deal with the management of urban growth in the largest Bulgarian metropolis has induced further waves of suburbanization, as private developers have decided to build compounds that are seemingly sheltered from urban problems. The new gated communities are a prime example. The physical separation achieved through the location, design, and security features of these suburban developments has arguably translated into social isolation, which affects particularly the children and the female and elderly population.

For example, a recent survey conducted among male and female residents of comparable education and working status from the communities situated at Vitosha Mountain's foothills has concluded that suburban living affects women's mobility patterns and social life more negatively than it affects men (Hirt, 2008). While women travel to the city approximately as often as men, they reported much greater difficulties in accessing urban jobs and services. Women also work generally more closely to home,¹⁰ and some have given up working in the city altogether, as getting there has become too difficult. Furthermore, whereas nearly 70 percent of men commute by car, individually, the

corresponding figure for women is only 25 percent. Nearly half of the women rely on mass transit to reach work, compared to only 17 percent of the male workers; and, while about 8 percent of the women walk or cycle to work, none of the males participating in the survey reported walking or cycling as a commuting mode. Constrained mobility, coupled with prevailing patriarchal relations in the household,¹¹ has distinct negative impacts on women's social life and self-esteem. For example, many women report that, since moving to the suburbs, they feel more dependent on their male partners; others confess that they have made sacrifices in their social life (for instance by reducing contacts with friends) in order to make up for the time lost in commuting and still be able to conduct most household chores (Hirt, 2008).

An overview of the impact of suburbanization in the metropolitan area of Sofia reveals an assortment of the classic economic, social, and environmental issues extensively covered in the large body of literature on urban sprawl that has accumulated during the last couple of decades throughout the world. What makes Sofia a particularly interesting case study of suburbanization is the very active role of public policies at national, regional, and local levels as a main force that fuels the process of suburbanization. The experience of Sofia, while rather extreme, highlights the main public policy failures of the postsocialist countries in addressing suburbanization as part of the larger processes of urban restructuring during the period of transition.

The Management of Suburban Growth

Since the early 1990s, the response of policymakers to the challenges of accelerated decentralization of urban activities in Sofia (as well as in other large Bulgarian cities) has ranged from passive acceptance to enthusiastic support for suburbanization. A general acceptance of the processes of urban decentralization has pervaded all the relevant policy documents issued during the transition period, whether they embrace suburbanization or overlook the challenges posed by it. At the national level, this includes the adoption of property right laws that favor private over public interests (including laws that facilitate the conversion of land from agricultural to urban uses), the lack of a national urban development strategy, and the promotion of an economic development agenda that supports growth in any form, with little regard for its social or environmental costs. The same philosophy is carried consistently through all the regional development programs, including the one adopted for Bulgaria's southwest region, which contains the capital city. At the municipal level – which is traditionally considered the main

public policy domain governing the patterns of urban development – planning attempts to coordinate the expansion of Sofia during the postsocialist years have been highly inefficient, to say the least.

As in most European countries, both before and after the fall of communism, urban development in Bulgaria has been controlled through the adoption of general or master plans and through a set of subsequently developed detailed regulatory plans for specific urban areas. In addition to these, in the late 1990s the city of Sofia adopted a strategy for its development and a special plan focused on the Vitosha area, in response to the latter's rapid (sub)urbanization. None of these plans, however, outlines a coherent set of policies to confront sprawl. In fact sprawl is barely recognized as a problem at all.

A very telling sign of the *laissez-faire* attitude of public officials toward urban growth management in Sofia is the fact that the city did not adopt its first post-1989 master plan until 2007. Thus, while most capital cities in Eastern Europe managed to produce such plans by the end of the 1990s (Stanilov, 2007c), Sofia's growth during the first 18 years of its turbulent transition period was governed by piecemeal upgrades of an outdated master plan, adopted in the early 1960s. This lag in generating a coherent vision for the spatial development of the metropolis has aided the proliferation of haphazard patterns of growth both within and outside metropolitan boundaries. Under these circumstances, the chronic lack of investment in the public infrastructure that would have been necessary to support outward urban expansion served as the only growth control mechanism to curb sprawl during the transition period. The recent economic crisis is acting as another, even more effective deterrent of suburbanization, yet it is mostly perceived as a temporary pause in the dispersal of the city rather than as a pivotal moment that may change the course of its urban development.

The process of decentralization of political power – a hallmark of the transition period that involves the relegation of state responsibilities to local governments – has provided further impetus to the forces of suburbanization. Faced with a mountain of new responsibilities and having no adequate financial backing, local authorities have become actively engaged in the business of securing new revenues, in a desperate attempt to broaden their tax base. Opening up new lands at the urban fringe with the intent to create enticing development opportunities for prospective investors has become a standard strategy for filling municipal coffers throughout the country, and particularly in the dynamically evolving property market of the Bulgarian capital. Most popular among those schemes are the suburban shopping and retail centers. Here the efforts of city officials to attract new large-scale retail development have been supported by a local coalition of property owners, construction

companies, and even representatives of the press, which has celebrated each newly opening hypermarket as another milestone on the way to social and economic prosperity.

Rather than trying to counter these trends, the adoption of the long anticipated master plan of Sofia in 2007 has simply legitimized and fortified the impetus for suburbanization. The plan goes as far as to promote – actively and without any trace of reservation – the “dispersed city model.” The authors of the plan note that, for too long, Sofia has followed the compact city model, which has led to an “imbalance” in its spatial development expressed in the low percentage of residents on the metropolitan periphery, by comparison to that of other European capitals (Capital Municipality, 2003: 61). Consequently the plan’s assessment is that Sofia’s compact city is too densely developed and that the decentralization of both residential and nonresidential uses should be pursued as a strategy within a polycentric model of metropolitan growth.

The idea of polycentrism, however, has been defined too loosely in the postsocialist context. Rather than identifying clear secondary and tertiary growth nodes, the new master plan of Sofia emphasizes the need to scatter urban activities to the suburban and exurban edges. The plan stresses the lack of housing options, pointing out specifically the insufficiently low proportion of single-family dwellings in the existing housing stock and the need to provide the planning and regulatory framework for expanding this type of housing. In a blatantly assertive statement, the plan calls for the development of the leftover, sparsely settled, but highly attractive territories in the foothills surrounding the capital as low-density upscale communities – a “reflection of the new forms of spatial organization typical for the information-age society” (Capital Municipality, 2003: 64). Overall, the plan envisions a population growth of 5 percent (or a little over 50,000 residents) within the boundaries of the compact city, compared to a 95 percent growth in the suburban belt and a 41 percent growth in the exurban territories – which should add up to a total of over 115,000 new residents outside of the compact city boundaries.¹² The plan mentions in passing, as a potential problem, the lack of infrastructure and public land in the suburban and exurban areas targeted for residential growth; but there is no specific analysis of the fiscal, social, and environmental costs of this growth strategy.

Only a few months after the final approval of Sofia’s master plan, the city administration pushed for the preparation of a general revision and update of the newly adopted document. As a main justification for this initiative, the office of the mayor pointed out the protracted period of pushing the plan through a highly politicized process of official approval, during which the matrix of the socioeconomic conditions

in the capital has changed and many new projects, unforeseen by the plan, have already been realized. It was pointed out that the master plan did not accurately predict the current growth of the city's economy and the heightened interest of international investors in the capital's real estate market. The city architect argued that this growing demand for development requires setting aside new territories that can accommodate current and future development projects. These targeted areas would be reserved specifically for large-scale, "strategic" investors who can provide the financing of the required public infrastructure (Dimitrova, 2007). With this the municipal authorities were hoping to close the page on the spontaneous phase of suburbanization, which was pushed by the efforts of small-scale individual investors, and to clear the plate for the entry of big institutional players.

The proposed amendments to the plan call for the conversion of an additional 3,000 ha of agricultural land for suburban uses, and for more than doubling the suburban territories designated for mixed use development (from 900 to over 2,000 ha). The low-density residential development proposed for the remaining part of the newly added territories is promoted by the city architect as an innovative strategy for "preserving" Sofia's green corridors without having to invest any public funds for acquiring the land. The consequences of such "creative" public policies are not difficult to predict – urban sprawl will gobble up most of the remaining farmland and open spaces surrounding the city of Sofia. Overall, the main thrust of the master plan's amendments is, clearly, to facilitate the processes of urban decentralization still further.

Another main policy document put forward by the local authorities is the Strategy for the Regional Development of Sofia 2005–2015 (Prime Consulting, 2005). This plan adopts almost verbatim all of the findings and ideas laid out in Sofia's master plan, highlighting as one of its main strategic goals the need to overcome the core–periphery imbalance due to what the document describes as a "disproportionate concentration" of urban activities within the compact city boundaries of the Bulgarian capital. The transition from a monocentric to a polycentric metropolitan structure is seen as a cornerstone of this strategy, which emphasizes the need for the articulation of secondary centers in the urban periphery. Particular attention is paid to the formation of a new development zone at the northern edge of Sofia that would stretch along the routes of several future trans-European corridors. A main priority is placed on increasing investment in infrastructure that would support the desired decentralization of urban activities.

The strategic plan of Sofia was meant to become part of a larger, coordinated planning effort, tying local with regional and national planning initiatives. But the current state of vertical coordination of the planning

process, required by the EU as a precondition for accessing structural funding, leaves a lot to be desired. Aside from the general emphasis on the need to attract new investments through the development of supporting infrastructure (most of which targets the periphery of urban centers), there is very little overlap between programs and initiatives at the local, regional, and national levels. The recently adopted development plan for Bulgaria's southwest region, which includes the territory of the capital metropolitan area, for instance, delineates agricultural zones that cover large parts of the region and could be used as an effective legislative mechanism for controlling urban sprawl. However, such zones are excluded from the immediate vicinity of Sofia – precisely the territories where most of the urban sprawl has been generated in the last decade.

The lack of a national urban development strategy and of strict natural resource preservation laws has been another factor in the accelerated speed of suburbanization in postsocialist Sofia. The adoption of property right laws that favored heavily private over public interests has been stretched to amend the existing laws in order to facilitate the conversion of land from agricultural to urban uses. Thus, as a result of several relaxations of the rules governing such conversions, over 460 km² of agricultural land in Bulgaria have been reclassified for urban use during 2004 alone (Index Imoti, 2005).

The highest priority placed by the state government on promoting economic development (with little regard for its social and environmental costs) has also favored the forces of suburbanization, and unequivocally so. Most influential among these policies has been the support granted to large investors by the government through the Law on Investments passed in 2004. Under the provisions of the law, a threshold level of €35 million qualifies an investor to “first-class” status, which guarantees government support in the process of project approval and implementation (for instance, fast processing of the required changes in land use designation from agricultural to urban use), as well as other forms of government support (such as public subsidies for land acquisition and infrastructure provision). The first investor to receive this status was the German Lindner Group, the developer of Business Park Sofia. Since then, a number of first-class investor certificates have been granted to other international developers of suburban shopping centers and hypermarkets around Sofia – for instance the French group Carrefour (for the development of several hypermarkets and shopping centers in Sofia and other Bulgarian cities), the Greek Danaos Group (for a 150,000 m² mall at the southern edges of Sofia), the Austrian Shopping City West (for a shopping and entertainment center in the western periphery of the capital), and the Austrian-based Forum Sofia (for a mall right across from Business Park Sofia). The unwavering support

of the government for suburban sprawl reached its crowning achievement with the bestowal of first-class investor status on the Spanish Ferry Group for the development of a golf community of 160 ha – the Katina Golf Resort. The “incentives” package included a symbolic price tag for the acquisition of this attractive piece of municipal land, located in the northern periphery of the capital metropolis. In the context of the current economic crisis, sustainable development principles would most likely continue to be sacrificed or ignored for the sake of promoting economic growth at all costs.

As already noted, Bulgarian authorities stand unique in their profound oblivion to the challenges of suburbanization. In fact decentralization has been embraced as a mantra for solving the problems of excessive densification, which has been blamed as the main cause of the degradation of Sofia’s urban environment since the fall of the old communist regime. What is equally remarkable about the Bulgarian experience is the negligible level of public opposition to the march of suburban development. For most of the capital’s residents and urban policymakers, suburbanization is simply a sign that Sofia is becoming like any other western city – in other words “normal.”

Conclusion

The postsocialist urban development of Sofia represents an excellent opportunity to reflect upon both the general and the local/specific factors behind suburbanization. On the one hand, the case is a good manifestation of the general economic, institutional, and sociocultural causes that lead the suburbanization process. The importance of economic factors is clearly proved by the fact that centrifugal forces were relatively weak during the 1990s, when the economy was in shambles, but they picked up speed during the post-2000 economic recovery. Likewise, since the onset of the current global economic crisis, construction in the periphery of Sofia has slowed down dramatically. The role of institutional factors as agents of suburbanization is also clearly underscored. Whereas the basic legislative structures that fostered suburban growth over Sofia’s greenfields were set in place in the early years of the transition (for instance the legal prioritization of private over public property and the haphazard privatization of land), it was not until recently – until the municipal authorities took more aggressive steps to favor large-scale suburban developments – that such schemes became the new norm. It is clear that popular – and especially nouveau riche – fascination with single-family housing in green settings – a “forbidden fruit” during the socialist years – is another important driver of suburbanization, as evidenced by the surveys and interviews cited above.



Figure 6.2 Commercial advertisement of new housing development at the edge of Sofia. Source: K. Stanilov.

In the case of Sofia, however, as in that of other Central and Eastern European cities, this fascination has been perpetually bolstered by a western imagery of ideal living (Figure 6.2), often associated with western-style gated residential environments. It is not a coincidence that many of the new suburban developments on Sofia's outskirts proudly carry English names and that advertisement signs enticing new homeowners are often written exclusively in English. One may speculate on the extent to which suburbanization is now perceived as a hallmark of Bulgaria's (re)entry into western civilization.

Local factors have left an imprint on the contemporary patterns of Sofia's growth as well. Among them, local geography has played a paramount role in determining where suburbanization occurs. The southern areas of the city, located in the scenic outskirts of the Vitosha Mountain away from the bulk of the industrial zones, have firmly retained their position as most desirable residential areas through three regimes – pre-socialist, socialist, and postsocialist. Whereas latest data do point to suburbanization trends north of the city (and indeed the latest Master Plan envisions further development on the north side), these new trends are only possible because the city is now expanding sufficiently as to eventually “by-pass” the undesirable industrial zones and minority ghettos in the north, and reach into new virgin lands in the outskirts of the Balkan mountain range.

Overall, Sofia's case – like that of other East European capitals – presents the process of suburbanization in a time-compressed form.

What took several decades to develop in Western settings is now occurring within twenty years in Eastern Europe. Furthermore, the process occurs not sequentially (i.e. first residential, then retail, then office decentralization, as it is typical of Western cities) but simultaneously, in part because much of the process occurs with the “aid” of Western development firms. What distinguishes Sofia most clearly from other Central-East European capitals, as described in this book, is the unwavering willingness of public authorities to embrace the process of suburbanization without reservations.

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Notes

- 1 The plan was, after all, prepared by a foreigner – the German architect A. Muesmann. Archives show that some of Sofia’s residents were so shocked by the idea of peripheral “garden cities” separated by large parks (just like Ebenezer Howard had proposed) that they sarcastically protested at public meetings asking whether the future of Sofia would lie in having more people or in “raising deer” in “mighty forests” (Hirt, 2007b; see also Lampe, 1984).
- 2 The author of the second (and first socialist-era) master plan of Sofia had in fact declared that “it is the [private] yard that makes the bourgeois” (Hirt, 2007b).
- 3 It should be noted, however, that housing was primarily in private hands in Bulgaria even during the socialist period. In fact the private homeownership rate stood at 84%, making Bulgaria rather exceptional among its socialist peers (Hirt, 2012: 19).
- 4 Prices in the heart of downtowns, where demand for business space is very high, as well as in some of the most desirable early twentieth-century southern urban districts, such as Lozenetz, remain higher than those recorded in Vitosha (Colliers International, 2008b).
- 5 The former villages of Dragalevtzi, Simeonovo, Boyana, and several other peripheral settlements and villa zones have been reclassified as regular residential neighborhoods of Sofia and are included in the building borders of the city.
- 6 Bulgaria ranked first in the European Union in the number of new shopping malls in 2010 (Sofia News Agency, 2012).

- 7 In 2011 Sofia registered 172 m² of shopping center space per 1,000 residents, when the EU 27 average was 235 m² (CB Richard Ellis, 2011).
- 8 Following clearly this line of reasoning, by 2004 all the parcels along the southern segment of Sofia's beltway had been purchased by investors who intended to develop them for retail uses. Recently an Austrian foundation acquired 130 ha of agricultural land on the western edges of the capital metropolis and a similar piece of land outside the southern segment of Sofia's beltway with the intention of developing both properties as mixed use retail, office, and entertainment centers (Todorov, 2007).
- 9 The most notorious example, widely covered in Bulgarian media, was a cluster of mid-rise multi-family dwellings built in the southern district Manastirski Livadi without any of the basic supporting infrastructure – such as roads, water, or electricity. The residents moved in the new dwellings on the promise made by the developers that the buildings will be connected to the public grid within months. For several years after that, the occupants of the new dwellings had to resort to survivalist strategies, including makeshift hookups to surrounding facilities.
- 10 Whereas about 20 percent of the surveyed women in paid employment work either in the same suburban area or in an area nearby, the proportion of men who work in this kind of proximity to their home is under 5 percent.
- 11 In about 90 percent of the surveyed households women conduct most domestic chores, and in about 75 percent of them they take the lead role in childrearing.
- 12 The plan forecasts that communities in the Votosha collar, which have already seen the fastest growth of the 1990s strain their inadequate infrastructure and natural resources, can absorb an additional 35,000 to 37,000 residents, more than doubling their population. Another area designated for residential growth is in the southern foothills of the Stara Planina mountain range, located 15 to 20 km to the north of the heart of the capital.

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Suburbanization in the Tallinn Metropolitan Area

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Introduction

In the course of the last two decades, the former socialist cities have undergone remarkable changes in terms of their spatial structure and everyday functioning. While socialist urban planners aimed to maintain the compactness of urban areas by keeping residential and employment functions in close proximity (Brade and Nejdowa, 1998), the postsocialist decades have witnessed an increasing separation of functions in metropolitan space. Suburban areas have become attractive residential destinations, while vacant areas and transport nodes at the edges of cities have accommodated commercial activities and new industrial and logistics parks. Ideally, this spatial dispersal of urban activities would begin to form independent multifunctional suburban nodes composing a polynuclear settlement system (Hartshorn and Muller, 1989; Wiegandt, 2000), but the experiences of many postsocialist metropolitan areas point to an increasing level of spatial fragmentation among different activities and to a resulting increase in everyday mobility needs (Aguilera, 2005; Sýkora and Ouředníček, 2007).

This chapter aims to analyze the process of urban decentralization in the metropolitan area of Tallinn (TMA), the capital of Estonia, on the basis of the results of former analyses carried out by the authors (Leetmaa, 2002; Ahas et al., 2007; Anniste, 2007; Leetmaa and Tammaru, 2007; Tammaru and Leetmaa, 2007; Kährrik and Tammaru, 2008; Leetmaa,

Tammaru, and Anniste, 2009; Tammaru, Leetmaa, Silm, and Ahas, 2009; Kährrik, Leetmaa, and Tammaru, 2012; Leetmaa, Brade, Anniste, and Nuga, 2012). We argue that the suburbanization debate should focus on the complexity of the processes taking place in the context of economic and societal restructuring of former centrally planned societies and should recognize the strong impact of the socialist period of urban development on the evolution of Tallinn's metropolitan spatial structure today.

The main data source for studies on postsocialist suburbanization in Estonia has been the National Census 2000 database (Estonian Statistical Office, 2000). In addition, we draw data from different surveys of the TMA: a survey of residential areas (New Residential Area Survey, 2006), various surveys of summer home areas (Summer Home Areas Survey 2002, 2007, and 2009), a focus group survey (Focus Group Survey among Municipal Officials, 2007), a survey on the daily movements of the metropolitan population (Ahas et al., 2007), and data from the Estonian Building Register. For the analyses of suburban development within the Soviet period, we base our arguments on a number of relevant secondary sources (e.g. Bruns, 1993; Marksoo, 1984, 1992, 1995, 2005; Raagmaa and Kliimask, 2005; Tammaru, 2001a, 2001b). Our ambition is to contribute to the general understanding of suburbanization in the TMA by shedding light on two key questions: What are the driving forces behind postsocialist metropolitan decentralization and how have these forces shaped the patterns of suburbanization over the last two decades?

Our contribution starts with a short historical review. We describe the development of the TMA during the Soviet period and we highlight its impact on suburbanization patterns during the subsequent postsocialist decades. In the following section we describe the socioeconomic changes in Estonia since the collapse of the Soviet regime that have formed the preconditions for the new residential and employment location strategies, entrenched during the last two decades. Furthermore, we provide an overview of the main patterns of residential and nonresidential decentralization in the TMA, concluding with a section that discusses the impacts of suburbanization processes and the range of planning strategies employed by public authorities for the management of suburban growth. Our analysis is centered on the period preceding the economic crisis that set in toward 2010. On the basis of the availability of recent data, we also estimate the impact of this crisis on the pace of suburbanization in the TMA.

We define our case study area, the TMA, as a region consisting of central Tallinn (which had a little over 400,000 inhabitants in 2010) and of the surrounding suburban municipalities (home to almost 130,000 inhabitants) – in which at least 15 percent of the working population were employed in the city, according to the 2000 census (see Figure 7.1).



Figure 7.1 Map of Tallinn's metropolitan area (TMA). Source: the authors.

Where data at municipal levels are not available, we have used county-level statistics, as the TMA largely overlaps geographically with Harju County.

Metropolitan Processes from a Historical Perspective

In terms of its belated urbanization, Estonia resembles many other countries in Central and Eastern Europe (CEE). The country retained its agricultural basis for a long time, and the proportion of urban population there remained low. Historical research has identified “two waves of urbanization” in Estonia (Katus et al., 1998). In the late nineteenth century Estonia became an important industrial region within the Russian Empire. After the opening of the St. Peterburg–Tallinn–Paldiski railway in 1870, which connected the ports of the Baltic Sea with the railway network of the empire, many industrial enterprises, including several large military facilities, were relocated to Tallinn (Bruns, 1993). At the same time the empire served as a large migration pool for new residents of Estonia. During the last four decades of the Russian Empire the population of Tallinn more than tripled: it went from 46,000 in 1881 to almost 160,000 in 1917. By 1922 the population of Tallinn dropped to 120,000, as many refugees and industrial workers had returned to Russia or Germany after Estonia gained its independence at the end of World War I (Table 7.1). During

Table 7.1 Population dynamics of Tallinn and its suburban area.

	<i>Tallinn</i>	<i>Suburban area^a</i>	<i>Metropolitan area (MA)^a</i>	<i>Proportion of central city in MA^a</i>
1881	45,880			
1897	58,810			
1922	120,179			
1934	135,738			
1959	279,853	72,194	352,047	79%
1970	362,462	89,576	452,038	80%
1979	429,642	102,154	531,796	81%
1989	478,974	126,441	605,415	79%
2000	400,378	125,304	525,682	76%
2008	401,345	144,785	546,130	73%

Note: ^aSince forming an urban agglomeration in the Soviet period.

Sources: Estonian Statistical Office, n.d. (Population register 2008; Census data 2000 and 2010); Estonian Urbanization Database, 2008.

this period of rapid industrial growth, many low-quality wooden apartment buildings were erected in close proximity to the industrial enterprises in the city (Bruns, 1993; Tammaru, 2000).

Tallinn experienced a modest population growth during the interwar period, when the development of Estonia's settlement system was largely driven by the country's internal demographic resources. As in the case of many other countries in CEE (Lichtenberger, 1998; Šýkora and Čermák, 1998; Kok and Kovács, 1999; Ott, 2001), this was a period when the first signs of suburbanization became evident in the major urban regions of the country (Veldi, 2008). Advances in rail transport infrastructure enabled the separation of jobs and places of residence, giving some more prosperous urban residents the opportunity to enjoy better living standards in the urban periphery. A notable example of interwar suburbanization in Estonia is Nõmme, a town located southwest of Tallinn and originally planned as a summer home area for wealthier urban dwellers. During this period, Nõmme was converted into an area of permanent residence (Lõhmus, 2006). Its population increased from 3,875 in 1918 to 21,748 in 1939, mainly due to the influx of white-collar workers – the first group of commuters – from Tallinn (Pullat, 1978). The ongoing decentralization processes ended abruptly with the outbreak of World War II and the dramatic political changes that followed (Šýkora and Čermák, 1998).

The “second wave” of urbanization in Estonia paralleled the period of Soviet industrialization. The proportion of the country's urban population grew from 33 percent on the eve of World War II to 72 percent by the end of the Soviet era in 1989, while the population of Tallinn increased almost fourfold (Table 7.1). The industrial growth of Estonia and its capital was determined by the needs of the Soviet Union and by the functional specialization of the geographic regions within its territory. As a result, Tallinn became over-industrialized in proportion to its hinterland and labor force potential. The city was transformed into a “big capital of a small republic” (Marksoo, 1990; 1999), Tallinn's share of the country's total population rising from 12 percent in 1934 to 32 percent in 1989.

The population growth in Tallinn after the war was characterized by an intensive influx of workers and military personnel from other Soviet republics, a phenomenon similar to the growth experienced in the city during the first decades of the twentieth century. While the net migration from the Estonian countryside to urban settlements gradually decreased during the Soviet years, migration flows from the rest of the Soviet Union continued to contribute to the growth of the urban population until the end of the 1980s (Figure 7.2) This trend led to differential patterns of urbanization between the two ethnic population

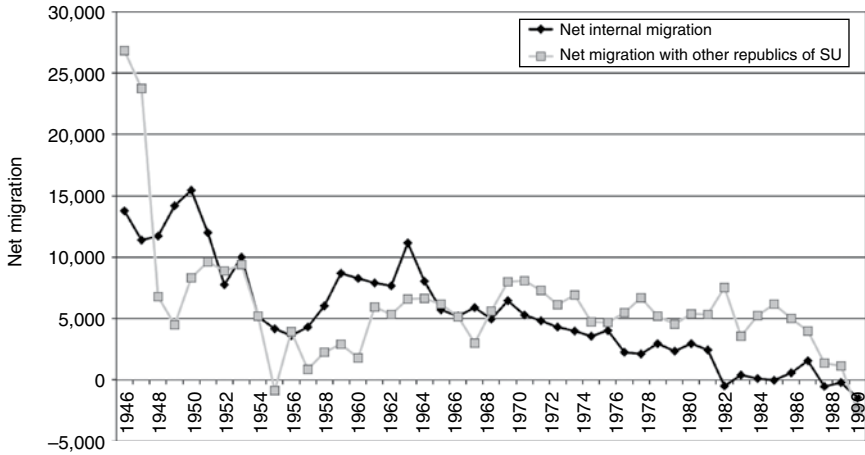


Figure 7.2 Net annual migration to Estonian urban settlements in the Soviet period. Based on data from Sakkeus 1991 and Leetmaa 2008.

groups. By the end of the Soviet era, 90 percent of non-Estonians were concentrated in the country's urban areas, whereas only 60 percent of Estonians resided in cities (Tammaru, 2003). While Tallinn had been almost exclusively populated by Estonians at the end of World War II, by the end of the 1980s it became a multinational metropolis and the proportion of its population of Estonian origin dropped below 50 percent.

The intensive immigration flows to Tallinn during the Soviet years complicated the housing conditions in the city. In order to alleviate the shortage of dwellings and accommodate the continuing stream of workers from other Soviet republics, mass housing construction programs were launched by the Soviet authorities as early as the 1950s. Today three large prefabricated socialist housing estates (Mustamäe, Õismäe, and Lasnamäe), together with other, smaller, socialist apartment block districts, make up approximately 68 percent of the total housing stock in Tallinn. This proportion is typical of many other Soviet cities, but it exceeds the one found in other CEE capitals. Despite large-scale residential construction programs, a chronic housing shortage characterized Tallinn until the end of the Soviet period, living space per person in this city being only 19 square meters.

By the late 1970s and early 1980s, most major cities in socialist Eastern Europe began to develop into urban agglomerations (or functional urban regions). As the socialist system of central planning failed to meet the housing needs of a growing urban population, many people took up residence in peripheral towns and villages, commuting daily to the

central city (Szelényi, 1996). In the Soviet Union as well as in many other socialist countries that followed its lead, this process was also fuelled by the enforcement of administrative restrictions designed to limit the uncontrolled expansion of population in the cities (Renaud, 1992; Rudolph and Brade, 2005; Gentile and Sjöberg, 2006). One of the strategies of central planners was to promote industrial decentralization inside an urban agglomeration by locating industry and other economic activities as well as new dwellings in smaller satellite towns on the edges of big cities (Brade and Nefjodowa, 1998; Lappo and Hönsch, 2000; Tammaru, 2001b). This combination of factors contributed to the growth of the suburban population in the TMA. Thus, despite the rapid growth of the capital city, Tallinn's share of the metropolitan population remained the same during the Soviet decades (Table 7.1).

Another tendency feeding the growth of the suburban population in the TMA was the "urban-rural migration turnaround" that began at the end of the 1970s in Estonia (Marksoo, 1990; 1992). This process was related to shifts in priorities within the Soviet economy. In the context of a chronic food shortage within the Soviet Union, Estonia was assigned the role of an important agricultural producer. This unionwide economic strategy led to a substantial growth in salaries on Estonian collective farms, to general improvements in living conditions in the country's rural areas, and, subsequently, to an increasing attractiveness of rural areas as places for working and living. An additional factor favoring suburban population growth was the location of military facilities and accommodating military personnel in the suburban areas of Tallinn. The diversification of functions in the metropolitan periphery led to an overall increase in commuting flows between the city and its suburbs. By 1982, the number of work-related trips from the city to suburban destinations was comparable with the number of reverse work-related trips, taken from the suburbs to the city (Marksoo et al., 1983). These data would suggest that, in terms of intrametropolitan migration, the processes of decentralization were already present during the Soviet period. However, it should be noted that the growth of Tallinn's metropolitan periphery at that time was largely driven by external migration, while decentralization – described as a process of shifting the population from the city to its suburbs – is not a clearly recognizable factor during this period.

While it is often presumed that a special feature of socialist cities was the absence of a property market, this does not mean that land had no value. Suburban land was used in accordance with the priorities dictated by the Soviet regime and its economic and regional development strategies (Leetmaa et al., 2009). The suburban areas around Tallinn were used by wealthy collective farms, while coastal areas were designated

for military use (Jauhiainen, 1997). Such land designation effectively limited the sprawl of other economic activities and residential housing construction to the metropolitan periphery (Marksoo, 2005). Suburban residential housing development took the compact form of standardized apartment construction in suburban centers, subsidized by the government (Figure 7.3). The construction of suburban single-family housing was also limited by the fact that subsidies were rarely available for this type of housing. Therefore many people opted to live in standard state-subsidized apartments rather than in single-family houses lacking modern facilities (Kõre, Paas, Preem, Tani, and Vahter, 1987).

A typical feature of socialist urban development, which deserves special attention in relation to postsocialist residential suburbanization, is the emergence, around major cities, of large areas designed for agricultural and recreational summer homes (Ioffe and Nefjodowa, 1998; Fialová, 2003; Zavisca, 2003; Hirt, 2007; Mason and Nigmatullina, 2011). The expansion of these “dacha settlements” intensified in parallel with (1) the growth of the population of their central cities;



Figure 7.3 Socialist housing construction in the agricultural centers of Tallinn’s metropolitan area (TMA) (Tabasalu). Photo by Kadri Leetmaa.



Figure 7.4 New construction and renovation in summer home settlements.
Source: Summer Home Areas Survey, 2007.

and (2) the construction of large housing estates at the urban edges. While permanent habitation in dacha settlements was not allowed, the small, self-built houses offered modest but treasured additional seasonal living and recreational space to residents of crowded urban apartments.

Conditions and Driving Forces of Suburbanization in the Postsocialist Period

During the postsocialist years, the metropolitan land and housing markets underwent a process of profound restructuring. At the same time the spatial legacy of the Soviet era set what was to become preconditions for the postsocialist suburbanization process – those related to the characteristics of the inherited metropolitan spatial structure and its housing stock, both in the city and in suburban areas.

A specific factor in the transition period in Estonia, as a former Soviet republic, was the changing context of external migration. At the beginning of the 1990s a substantial proportion of the Russian-speaking

Table 7.2 Components of population change in Tallinn's metropolitan area (TMA) in the postsocialist period.

	<i>Tallinn</i>	<i>Suburban area</i>	<i>Metropolitan area</i>
total population change 1989–2000	–78,596	–183	–78,779
natural change 1989–2000	–14,499	–605	–15,104
net internal migration ^a 1989–2000	–4,228	20,264	16,036
net external migration ^b 1989–2000	–59,869	–19,842	–79,711

Notes:

^aMigration with other municipalities of Estonia.

^bMigration with other countries, residual of other components.

Source: Estonian Urbanization Database, 2008.

minority, including military personnel and their families, left Estonia. Due to return migration to the former Soviet Union, the TMA lost approximately 80,000 residents – which in 1989 represented 13 percent of the city's population (Table 7.2). This resulted in a significant release of housing space on the metropolitan real estate market. While internal migration to major cities in Estonia counterbalanced this loss to some extent during the economic restructuring process of the 1990s, the population of Tallinn decreased overall from approximately 480,000 in 1989 to 400,000 by 2000. Due to the acute housing shortage in the city, however, the housing made available by residents of Russian origin who left Estonia was taken up relatively quickly, and the dramatic fall in population did not result in a significant increase in housing vacancies. Suburban areas experienced a population loss as well. This was due to negative external migration; but internal migration to the suburbs compensated for the decline.

Above and beyond these migration dynamics, the rapid socioeconomic changes taking place during the first decade of the transition period transformed the background of residential preferences and the location choices of enterprises. The gradual economic recovery that started in the mid-1990s brought about an increase in the purchasing power of households, the availability of affordable mortgages, and growing development pressure from investors, who wanted to profit from the accumulated demand for new housing and commercial space. The growth of new construction was facilitated by the activation of land and housing markets following the implementation of privatization and restitution reforms. While privatization of the housing stock was largely

completed by the late 1990s, the legal establishment of property titles on suburban land markets took considerably longer. By the beginning of the new millennium, the combination of all of the factors known to induce suburban growth – the availability of suburban land, a functioning private housing market, an increase in privately accumulated wealth, the availability of a well-functioning mortgage market, and the development pressure applied by investors – was well established and began to bear fruit. At the same time vast areas of land located in attractive areas on the city's edges that had been assigned agricultural and military functions in the Soviet era were now vacated and awaited alternative use. This was when the socialist-inherited spatial structure of the TMA, with its enormous shortage of contemporary dwellings in the city, started to exert a strong influence on the processes of suburbanization.

Postsocialist Residential Suburbanization

During the first postcommunist decade the suburban population of the TMA increased slightly (Table 7.1). However, gross population change is not very informative as a measure of metropolitan decentralization, due to the vast outmigration flows from Estonia at the beginning of the 1990s. Therefore the patterns of internal migration in the country should be investigated more closely. Stronger net migration to suburban areas in relation to central cities was observable in almost all urban regions in Estonia between 1989 and 2000. This trend was expressed most clearly in the capital's metropolitan area (Tammaru, Kulu, and Kask, 2004). While the flows of internal migrants counterbalanced the loss of population in the TMA through emigration, the balance of population flows between the capital city and its suburbs left Tallinn with a net loss of approximately 15,600 inhabitants from its suburban areas – approximately 4 percent of its total population (Tables 7.2 and 7.3).

Despite the fact that Tallinn lost population to its suburbs, during the 1990s 60 percent of the new dwellings in the TMA were built in Tallinn proper (Table 7.4). The percentage of new buildings in the central city was even higher according to the Building Register's data (Figure 7.10). In relation to the existing stock, the growth rate of new housing construction in suburban areas was higher than in the city. Overall, in spite of the low levels of residential construction during the 1990s and of the housing shortages inherited from the socialist period, residential mobility within the metropolitan region increased, due to the amount of dwelling units that became available on the market in the context of a shrinking population.

Table 7.3 Migration related to Tallinn's metropolitan area (TMA), 1989–2000.

	<i>Total</i>
From Tallinn to suburban area	21,103
From suburban area to Tallinn	5,474
From other regions to TMA	35,802
From other regions to Tallinn	26,405
From other regions to suburban area	9,397
From TMA to other regions	19,766
From Tallinn to other regions	15,004
From suburban area to other regions	4,762

Source: Estonian Statistical Office, 2000.

Table 7.4 Proportion of new housing construction in Tallinn and in the suburban areas, 1990s.

	<i>Metropolitan area</i>	<i>Tallinn</i>	<i>Suburban area</i>		
			<i>Total suburban area</i>	<i>Nearby municipalities</i>	<i>Distant municipalities</i>
Built 1991–1995	6,015/100%	61.0%	39.0%	25.3%	13.7%
Built 1996–2000	3,070/100%	58.5%	41.5%	28.8%	12.7%

Source: Estonian Statistical Office, 2000.

In Estonia as in many other Eastern European countries, the decade of the 1990s represented a threshold in history: a point after which suburbanization began to unfold, becoming a key component in the postsocialist restructuring of urban regions (Ravbar, 1997; Kupiszewski, Durham, and Rees, 1998; Ladányi and Szelényi, 1998; Sýkora and Čermák, 1998; Kok and Kovács, 1999; Aring and Herfert, 2001; Kostinskiy, 2001; Timár and Váradi, 2001; Brown and Schafft, 2002; Tammaru et al., 2004). Residential suburbanization in Eastern Europe during the 1990s carried specific economic and social features of the transition period that set it apart from suburbanization in the western world. First, decentralization started to unfold during the first half of the decade, at a time of deep recession and decreasing household incomes. Second, the modest relaxation of the housing market enabled people to move to the metropolitan periphery, where lower cost housing

was available – whereas the prices of housing in the inner city were rapidly escalating after privatization. Third, the abolition of previous restrictions on using summer homes as permanent residences was an additional factor, specific to suburbanization in the countries of the former socialist bloc (Figure 7.4).

Our research results show that the population that migrated to the suburbs during the 1990s was comprised primarily of two groups with distinctly different social backgrounds (Leetmaa and Tammaru, 2007; Tammaru and Leetmaa, 2007). The first group contained people of relatively low social status (unemployed or economically inactive people, or people with lower levels of education), while the second group consisted of economically thriving people, employed in high-ranking and high-earning positions. Not surprisingly, these two population groups moved to different suburban locations. Residents of lower social status opted to settle in existing communities with cheaper housing stock. Such were Soviet-era apartments in satellite towns and single-family houses in dacha settlements or houses constructed in scattered locations during the prewar and Soviet years. Residents of higher social status preferred new single-family houses situated on the coast or in other environmentally attractive areas closer to Tallinn. As a result, residential suburbanization in the 1990s increased sociospatial differentiation. Notably, however, only a small proportion of the residents who relocated to the suburbs in the 1990s were accommodated in new housing (Figure 7.5).

These findings raise the question of whether the theoretical constructs employed traditionally in the analysis of western suburbanization are applicable as analytical concepts to the study of postsocialist suburbanization. Up until the late 1990s, the processes of residential suburbanization in the TMA were driven in large part by the economic motives of people who sought affordable housing alternatives and found opportunities in the underutilized suburban housing stock. In this respect, the process of early postsocialist suburbanization has stronger ties with what is described in western urban studies as a chain of vacancies in a metropolitan housing market (Friedrichs, 1995; Knox and Pinch, 2000; Kaplan, Wheeler, Holloway, and Hodler, 2004; Leetmaa et al., 2009). It should be noted that these characteristics of suburbanization were relatively short-lived. Toward the end of the 1990s new housing construction began to increase, as this segment of the housing market became accessible not just to the most affluent population, but also to buyers from the upper-middle classes.

Since 2000 until the onset of the economic crisis in 2008, the construction of new housing in the urban periphery reached exponential rates of growth. This construction was concentrated in three types of areas: former agricultural fields in immediate proximity to the city's

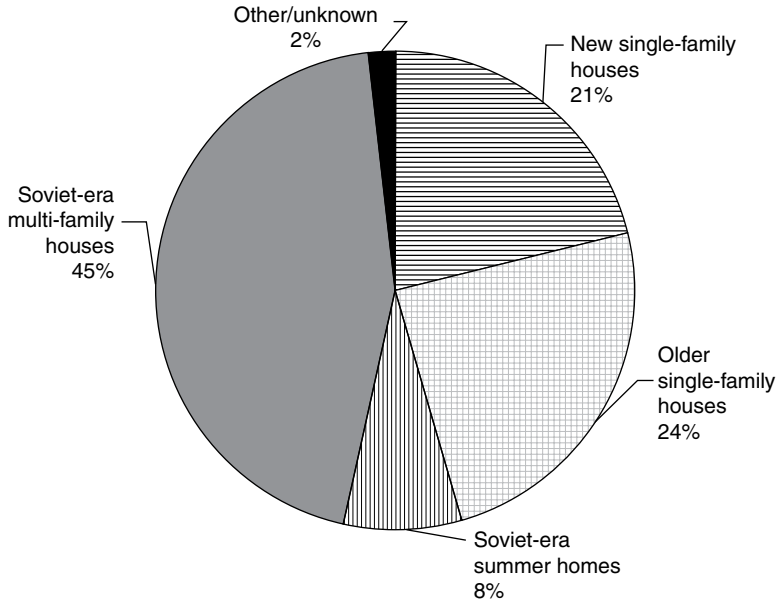


Figure 7.5 Housing types in suburban area of migrants from Tallinn, 1989–2000. Based on data from the Estonian Statistical Office, 2000 and from Leetmaa and Tammaru, 2007: 136.

borders; former militarily controlled areas along the coast; and dacha settlements formed during the Soviet period. However, while construction on dacha settlements took place mostly as incremental infill of individual parcels, the undeveloped areas around the city attracted the interest of investors who began to erect entire new residential communities. A survey of new residential areas conducted in 2006 concluded that two thirds of all the new dwellings built in new suburban settlements were completed between 2003 and 2005 (Table 7.5). In the years leading up to the crisis of 2008 construction activity increased even further. The same study indicated that, when measured by income and education, the socioeconomic status of residents in the new settlements was higher than that of the rest of the suburban population or of residents in Tallinn (Kährrik and Tammaru, 2008). Summer home area studies (Summer Home Areas Survey, 2002, 2007, and 2009) revealed a similar housing boom in the former dacha settlements. In total, during the period 1991–2006, approximately 5,600 new dwellings (new apartment buildings plus single-family homes) were built in new settlements, while 5,000 new or entirely renovated single-family houses were constructed in summer home settlements.

Table 7.5 Temporal dynamics of housing construction in new residential areas in the suburban area of Tallinn.

	<i>Number of new dwellings</i>	<i>Proportion of detached houses</i>	<i>Proportion of dwellings within 15 km of city center</i>
1991–1993	282	41%	89%
1994–1996	252	57%	50%
1997–1999	408	83%	67%
2000–2002	738	81%	70%
2003–2005	3,609	44%	80%

Source: New Residential Area Survey, 2006.

An interesting trajectory is observed in the composition of the housing stock built in new suburban settlements. Whereas at the beginning of the 1990s the completion of formerly launched apartment projects contributed to a relatively low proportion of single-family houses, by the end of the 1990s the overwhelming bulk of new housing construction was in the form of single-family detached residences; and there was also a small number of semi-detached and terraced houses (Table 7.5). Toward 2005 the proportion of single-family houses decreased considerably in favor of large new apartment buildings. Simultaneously, the construction of new dwellings “moved” closer to Tallinn. Between 2003 and 2005, 80 percent of the dwellings in new suburban settlements were built within 15 km of the city center.

Thus we can see two trends in the patterns of residential suburbanization emerging before the crisis. First, traditional residential suburbanization in “western style” – that is, in the form of detached single-family housing that expands away from the urban center – has intensified in the postcommunist period. Second, part of the suburban housing construction has taken the form of new, modern, urban-style apartments on the borders of the city; and there these new apartment buildings have mixed with former single-family houses (Figure 7.6). This latter trend refers to an overspill effect of urban housing construction and could in fact be considered a case of traditional urban expansion. Studies have concluded that the residents of these new suburban apartment buildings maintain close ties with the city (Kährik et al., 2012), the main reason for their relocation being the availability of affordable, modern, spacious apartments on the urban edge. It seems that the renewal of Tallinn’s apartment stock has simply spilled over the city’s borders.

The global crisis that set in 2008 has brought remarkable revisions to the investment choices of residential developers as well as to the housing



Figure 7.6 Merging new suburban settlements on the borders of Tallinn (Tiskre). Photo by Kadri Leetmaa.

choices of individual households. Residential completions reached a peak in 2007 (Figure 7.8). In 2008 the number of user permits issued both by the City of Tallinn and by suburban municipalities fell considerably, and by 2010 housing completions reached the level of the pre-boom years. Since 2008 the role of the central city in housing construction started to increase again, especially with regard to the share of apartments built in the TMA (Figure 7.10). At the same time, the sight of vacant newly built dwellings became less uncommon in the suburbs. Many developers of new suburban communities went into bankruptcy, leaving behind not just unfinished buildings but also incomplete communal infrastructure, which they were supposed to provide according to their contracts with local municipalities.

Postsocialist Nonresidential Suburbanization

The dramatic processes of intrametropolitan decentralization in Eastern European countries have not been limited to residential suburbanization. The spread of new industrial enterprises, shopping centers, office and

logistics parks has reshaped the periphery of all large CEE cities. Some urban scholars who have investigated the processes and forces behind metropolitan decentralization (e.g. van den Berg, Drewett, Klaassen, Rossi, and Vijverberg, 1982; Hartsthorn and Muller, 1989) have highlighted the links between residential and nonresidential suburbanization, arguing that the concentration of people in suburban locations drives the decisions of services and retail enterprises to follow both consumers and the growing proportion of the work force to the suburban and exurban periphery. Other researchers have argued that residential and nonresidential decentralization are only partly causally related (Kunzmann, 1997; Wiegandt, 2000). These scholars have pointed out that suburban locations attract activities that cannot be fitted easily on urban brownfield sites and that these uses tend to become clustered in easily accessible transport nodes outside of the city, where land is plentiful and its cost substantially lower than within the city. It has been pointed out that, even when pockets with different urban functions are located close to each other in a postmodern urban region, they are not necessarily functionally related (Dear and Flusty, 1998; Dear and Dahmann, 2008).

The economic restructuring of the CEE countries and their integration into the global economy since the beginning of the 1990s has radically changed the economic profile of cities in this part of Europe. This transformation involved the collapse of socialist-era industry and the massive expansion of the previously underdeveloped service sector – including financial intermediation, insurance, and other business services (Sailer-Fliege, 1999). The industrial enterprises that survived the collapse of the Soviet economy underwent rapid modernization and restructuring, often under the umbrella of integration into major international industrial groups. Despite the ongoing restructuring, Estonia has managed to maintain its proportion of employment in the secondary sector of the economy, registering relatively little decline between 1990 and 2005 (from 37 to 34 percent). The process of economic restructuring in Estonia, as in the other former socialist states, started to become visible in city centers, but since the late 1990s the creation of new jobs in Eastern European metropolitan areas has increasingly taken place in the suburban periphery (Sýkora, 1999; Wießner, 1999; Herfert, 2005; Sýkora and Ouředníček, 2007). As in the housing sector, new nonresidential construction in the TMA has increasingly taken place on greenfield sites, with the distinction that these uses show a greater dependency on access to transport networks.

In the TMA the decentralization of nonresidential functions gained momentum in the early years of the new millennium (Figure 7.9), first through the spread of new hypermarkets, warehouses, logistic centers, and industrial sites, then through the suburbanization of office functions and consumer-related services (Figure 7.7). While sharp increases in land



Figure 7.7 New retail and service facilities on the edges of the city (Tallinn, Tabasalu roundabout). Photo by Kadri Leetmaa.

costs and urban congestion within the city have been the main reasons for the decentralization of these uses, most enterprises have preferred to stay close to the labor pool of the capital (Uusmaa, 2007). The new business activities are now clustered in established suburban settlements, along major arterial roads, and in specially designed industrial parks, which have provided new facilities with modern infrastructure.

Overall, it should be noted that the main building boom in the nonresidential sector of the TMA has taken place within the city of Tallinn. The total amount of new business space built within the administrative borders of the capital between 1998 and 2009 is more than double the amount constructed in the TMA's suburban area (Figure 7.11). However, a clear decentralization trend is discernible in nonresidential investments during this period. While the share of Tallinn in nonresidential building completions was almost 100 percent in 2000, by 2008 only half of the projects were finished within the boundaries of the capital city (Figure 7.10). It should also be pointed out that there are substantial differences in the preferences of specific business sectors for specific locations. More manufacturing space and warehouses have been built in the suburban areas than

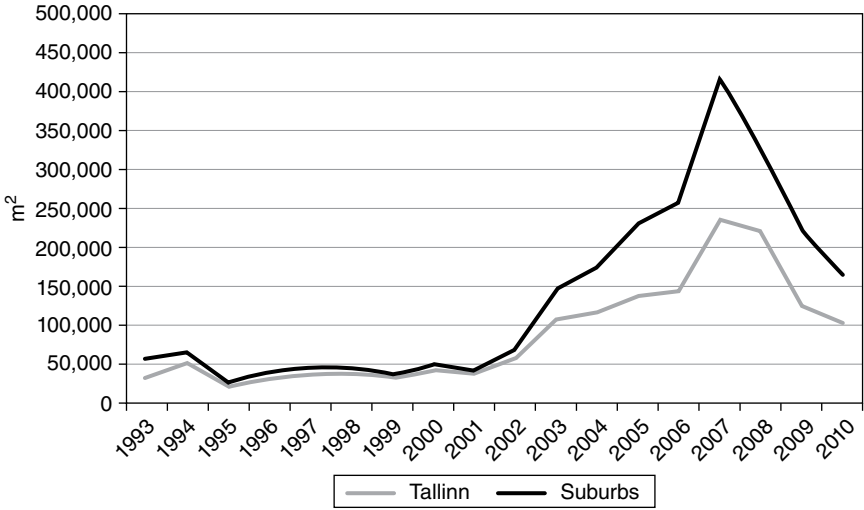


Figure 7.8 Annual residential building completions in Tallinn and its suburbs, 1993–2010 (m²). Based on data from the Estonian Building Register.

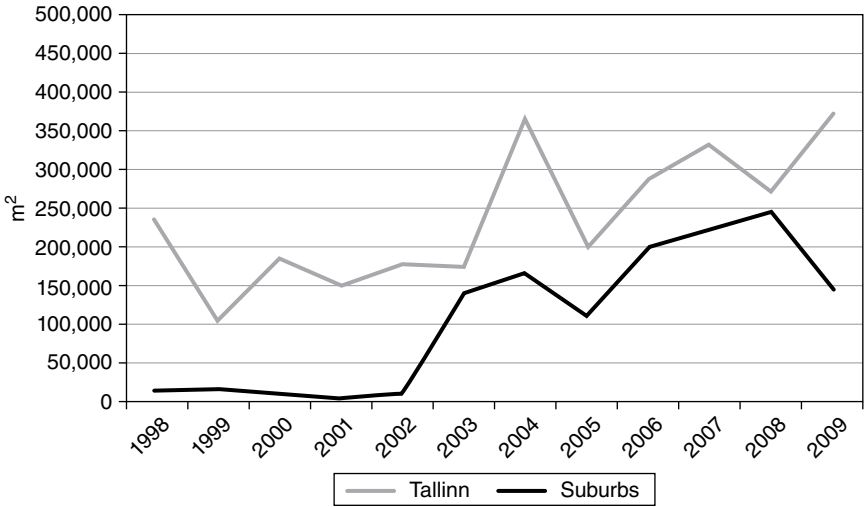


Figure 7.9 Annual nonresidential building completions in Tallinn and its suburbs, 1998–2009 (m²). Based on data from the Estonian Building Register.

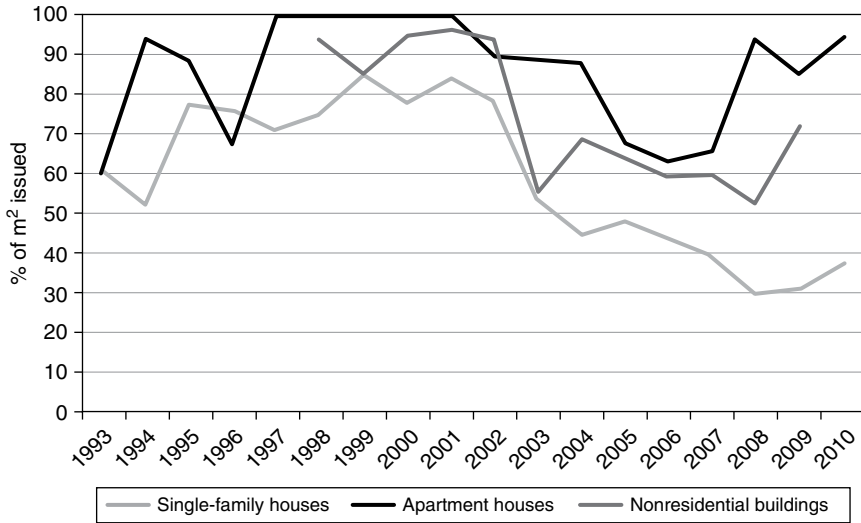


Figure 7.10 Share of Tallinn in national residential and nonresidential building completions (apartment buildings, single-family houses and nonresidential buildings: % of m² issued). Based on data from the Estonian Building Register.

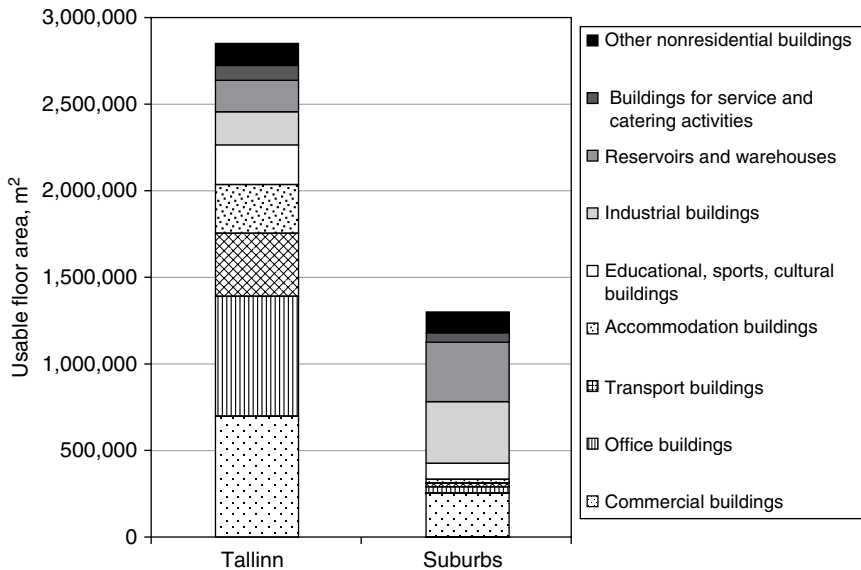


Figure 7.11 Nonresidential building completions by type of nonresidential buildings in Tallinn and its suburbs, 1998–2009 (m²). Based on data from the Estonian Building Register.

in Tallinn proper, while more new office, commercial, service, and transport/communication projects have been built inside the borders of Tallinn. It is still early to estimate the impact of the recent financial and economic crisis on employment decentralization. A number of commercial projects have been postponed, and the extent to which projects that have already passed the long and costly planning process will be realized is unclear. The trends in choosing business locations appear, however, to favor inner-city brownfield sites, which will be the most dynamically changing patches of the postmodern metropolis.

The Impact of Suburbanization on the TMA

An important precondition for suburbanization in the TMA was the existence of large areas of rural and former military land on the Baltic coast, which became available for development after privatization in the 1990s. The pressure to convert agricultural land to urban use was stronger in the areas surrounding Tallinn than in other agricultural areas in the country, as the capital became the hub of postsocialist economic restructuring and growth. The rise in the demand for land that could be developed to accommodate new residents and enterprises resulted in a sharp increase in land prices, which made agriculture into a second-rate economic activity in the region. At the same time, the decline of agricultural production after the collapse of the Soviet economic system undermined the value of land for agricultural use, accelerating still further the transition of such properties to urban development. As a result, the disappearance of arable land, a problem common to all Estonian regions in the postsocialist years, became a serious economic and environmental threat, most strongly felt in the metropolitan area of Tallinn. Another related outcome of the spread of suburbanization in the TMA has been the reduction in open space for public use, particularly in attractive coastal areas and in other environmentally sensitive locations that could be used for public recreation.

The fragmented settlement pattern that has emerged as a result of the suburbanization of housing and businesses in the TMA since the beginning of the 1990s has increased the separation between different functions in the region, leading to a sharp rise in daily mobility needs and in travel demands. This rise was not foreseen by the governing bodies in charge of urban management. On the contrary, the first large residential projects were welcomed by local authorities as an opportunity to increase their budgetary revenues by attracting more taxpayers within their municipal borders. According to a 2007 focus group survey of municipal officials, the development of entrepreneurship and the

growing supply of white-collar jobs were considered important strategic steps in reducing the need for suburban residents to commute to the city (Focus Group Survey among Municipal Officials, 2007). The positive impact of such policies, however, has been rather limited. The decentralization of population and of economic activities has in reality increased the volume of commuting within the TMA.

During the Soviet era the number of people commuting between the city and the suburbs on a daily basis was fairly modest. In 1982 only 7,000 people commuted from the suburbs to the capital, similar commuting flows being registered in the opposite direction (Marksoo et al., 1983). By 2000 suburbs-to-city flows had tripled to approximately 22,000 people, as a result of both a net job loss in suburban areas and residential decentralization (Tammaru, 2005), while commuting from the city to the suburbs remained at levels characteristic of the Soviet period. By 2007 the number of people commuting to the capital reached 38,500 per day. This period was also characterized by a significant increase in commuting flows from the city to the suburban zone – from 6,100 people per day in 2000 to more than 20,000 in 2007 (Ahas et al., 2007: 157).

While some studies have asserted that a growing number of suburban residents are employed in their home municipalities within the TMA (Kuldna, Noorkõiv, Peterson, Sepp, and Veemaa, 2007), this change in commuting patterns clearly indicates that residential and nonresidential suburbanization, at least during these first post-Soviet decades, have not been closely related in terms of a match between people and jobs. Specialized advanced services that offer jobs to well-educated professionals who have moved in large numbers to suburban areas still tend to be located in the city center. Studies of daily mobility in the TMA demonstrate that most of the commuters living in the suburban zone are employed in fact in the city's central business districts (Ahas et al., 2007). The suburbs, on the other hand, tend to offer jobs that lean heavily on the labor pool of the capital. The increased commuting, which has become evident in the TMA during the last decade, is bound to have a number of economic and social consequences well covered in urban literature (e.g. Martin, 2004).

Managing Suburban Growth

Suburban studies analyzing the driving forces behind the decentralization of urban activities often refer to the existence of push factors in the city and pull factors in the suburban area (Caves, 2005). The availability of attractive land in the areas surrounding Tallinn certainly serves as a suburban pull factor, whereas the shortage of contemporary living

and working environments in the city may be considered a push factor. However, a key driving force enabling these conditions is the role played by the public sector in managing the processes of urban decentralization. While the Soviet regime deliberately sought to restrict the dispersal of activities in the TMA, in the postcommunist period the role of the public sector in guiding sociospatial changes in the region has been marginal. Only in the aftermath of the economic crisis that started in 2008 have suburban municipalities begun to revise their former pro-suburbanization attitudes and policies.

The first suburban development projects in the 1990s emerged haphazardly due to the convoluted progress of the land reform, which resulted in a fragmented release of development sites on the market. Later, in the first decade of the new millennium, when suburbanization began to accelerate, many administrative boards in the suburban zone engaged in a competition to attract investment and tax revenue, fuelling the dispersal of urban activities within metropolitan space. In more attractive areas close to the city's borders different development projects (e.g. single-family houses from 1990 on, apartment buildings from 2000 on) began to coalesce, creating new, relatively compact but poorly planned settlements (Figure 7.6).

In postsocialist Estonia the legal framework for urban development regulation was set at the national level by two main legislative acts adopted in the first decade after the fall of the Soviet regime. These were the Local Government Procedure Act, passed in 1993, and the Planning and Building Act, adopted in 1996 and amended as the Planning Act in 2003. The Local Government Procedure Act determines the responsibilities of local governments in Estonia, including their obligation to prepare and implement strategic development plans. The Planning Act regulates planning procedures at various administrative levels and structures the relations between these activities. This act stipulates that planning documents at the national, regional, and municipal levels should be harmonized; yet this is not always the case.

A key issue in managing suburbanization in Estonia is the lack of a specific strategy to target urban problems at the national level, despite the fact that the general aims of managing suburban growth are listed as key priorities in most national-level planning documents. The intention to establish a strategic land use planning approach at the national level was emphasized in "Estonia 2010" – a document adopted by the Estonian government in 2000. Among other topics, "Estonia 2010" declared the need for cooperation between municipalities in urban regions and called for the promotion of urban growth by extending existing settlements rather than by developing new ones. These principles are restated in a new, ongoing, national-level spatial planning process called "Estonia 2030," which emphasizes several planning measures to

combat excessive sprawl. These include support for developing compact settlement structures, emphasizing infill and the reuse of land, discouraging development on greenfield sites, directing new development closer to already existing settlements, strengthening the role of master and regional planning over the use of detailed plot-based plans, reducing the oversupply of land as a result of pro-growth planning, and favoring sustainable transport modes in urban regions.

Since Estonia's accession to the European Union in 2004, a substantial part of the investment in regional development has been distributed from the EU's Structural Funds. Subsequently, the national strategy that frames the distribution of these funds (the National Strategic Reference Framework 2007–2013) has become the key strategy in shaping urban regions. It emphasizes a number of issues relevant to sustainable urban development – such as the revitalization of former industrial and other underdeveloped urban sites, the development of good quality public transport, and the need to tackle urban sprawl. A number of national sectoral development plans also touch upon topics of metropolitan growth; so does the Estonian Regional Development Strategy 2005–2015, the Estonian Housing Development Plan 2008–2013, the Transportation Plan 2006–2013, and the General Educational System Development Plan 2007–2013. Regardless of the statement of means and funds in these plans and of the adopted triennial national budgetary strategy, which should coordinate investments across different sectors, actual financial decisions continue to be made on an annual basis, which devalues the aims laid out in these strategies.

At the regional level several strategic planning documents covering the territory of the TMA have also been adopted. The first regional development strategy for Harju County was drawn up in 1998, and the first strategic land use plan, which determined prospective new settlements in the suburban zone, was adopted by the county in 1999. These regional planning documents were carried out at a time when decentralization processes were at a relatively early stage. Later, in 2003, a green network plan called Environmental Conditions Determining Settlement and Land Use Patterns was adopted as the second phase of Harju County's strategic land use plan. Recently, the county government has adopted a new development strategy (2008) and a strategic regional spatial plan for social infrastructure (2010).

In general, county-level planning in Estonia is designed to carry two functions. It cements national interests at the regional level; and it coordinates the interests of small local municipalities in the region by involving municipalities in the regional planning process. Experience has shown that the first function has been more successfully implemented, while the second has largely failed. Harju County's planning

department has been more effective in supervising lower-level planning activities (municipal master plans, thematic plans, and area-level detailed plans) in cases where they come into direct conflict with existing laws or they impact areas of national importance. However, the principles embedded in the county plan, to which municipalities agreed during the planning process, are only intended to serve an advisory role for municipalities. In reality, municipal development strategies, master plans, and detailed area plans can modify county-level instructions. The Union of Harju County Municipalities is another institution that coordinates voluntary cooperation initiatives between local governments. However, in spite of its efforts, the emergence of enduring cooperation networks – much desired – within the region is far from being reality. As a result, the aggregate outcome of all master plans and detailed plans adopted by suburban municipalities is “over-planning” (Metspalu, 2005). This term is used to stress the fact that land reserved for suburban residential development clearly exceeds the realistic prognoses for population growth, thus favoring the continuation of a sprawling settlement pattern in the future. In addition, over-planning during the boom years has prevented the application of stricter planning approaches, as many of the detailed plans adopted during that period are still in force today, simply awaiting more favorable investment conditions.

In the context of weak regional planning, the policies effectively influencing the spatial development of metropolitan areas in post-Soviet Estonia are adopted at the municipal level. The TMA consists of 23 relatively small suburban municipalities (ranging from 900 to 14,700 inhabitants) and of the city of Tallinn (Figure 7.1). In this fragmented administrative landscape, the approaches of individual municipalities within the TMA to managing suburban growth vary significantly across the region. Most of these local governments have already implemented the practice of regularly updating their planning documents (Harju County Government, 2010). However, the old general plans adopted during the socialist period along with those enacted during the economic boom years continue to exert a strong influence on the spatial development patterns of these suburban territories.

Given all the deficiencies described above at various levels of spatial planning, the public planning process in Estonia, and in Tallinn in particular, has proven incapable of controlling the boom in metropolitan decentralization during the first decade of the twenty-first century. Instead other structural forces (covered earlier in this chapter) have taken a leading role, becoming decisive factors in shaping the patterns of suburbanization. This has resulted in a proliferation of poorly planned, space-consuming, car-dependent settlement patterns, which

thus preclude the creation of multifunctional, compact, well-connected nodes of activities in the suburban zone.

Over time, public awareness of the negative consequences of private sector-led urban sprawl has increased. When affordable mortgages became available in the early years of the new century, local authorities welcomed all new development projects. A few years later, when it became apparent that the cost of providing new physical and social infrastructure and the possible conflict between existing and new activities surpassed the expected benefits, municipalities started to develop strategies designed to contain suburban growth. During the short-lived postcommunist housing boom (2003–2008), a common practice adopted by suburban governments in the TMA was to outsource the obligations to build the necessary physical infrastructure to the developer; this left only the need to provide social infrastructure as a direct public task. When the economic crisis started to influence the construction sector in 2008, the balance of responsibilities and the fulfillment of these obligations often led to disagreements between these parties. Many development projects remained unfinished. Particularly hard hit in this respect was the infrastructure that the developers were supposed to establish according to initial contracts.

On a positive note, all suburban municipalities in the TMA have come to recognize their special role as a constituent part of the largest metropolitan region in Estonia. In the autumn of 2007, a focus group survey was conducted with municipal officials from the suburban area of Tallinn with the goal of identifying problems and possible solutions concerning suburbanization (Ahas et al., 2007). The results showed that local officials recognized a series of common problems and areas where cooperation with other municipalities in the region is much needed and perhaps inevitable. The two most pressing concerns were: (1) poor access to public transport and related road congestion by private cars; and (2) the ineffective provision of schools and kindergartens in relation to settlement growth. The insufficient number of kindergartens was particularly significant for municipalities that were experiencing the fastest population growth. While many kindergartens have been opened or expanded in these areas, it has been difficult to meet the continuous increase in demand. Efforts to solve public transport problems in the TMA, on the other hand, have been mired in economic and legal obstacles. Other critical issues raised by respondents were the need to improve the delivery of other public services (health care, recycling, and so on) in cooperation with other municipalities; and problems related to maintaining the local identity of suburban communities. Many officials argued that building stronger alliances among municipalities at the regional level is needed, but that voluntary cooperation

between these jurisdictions does not lead to the establishment of effective cooperation networks. The participants pointed out that stronger instruments, facilitated by an appropriate legal framework, are needed to force municipalities to cooperate – like those that exist in the Helsinki metropolitan area in the fields of strategic planning, transportation, and waste management (see Mäeltsemees, 2007). The behavior of local governments during the recent crisis and ensuing stagnation in the housing sector in many ways resembles the “wait-and-see” attitude that municipal authorities adopted in the early 1990s. The experience gained during the boom years, coupled with the realities of the subsequent crisis, has forced local public officials to take a more cautious approach to development, which can hopefully lead to better planning and policy decisions.

Summary and Discussion

During the post-Soviet decades, intrametropolitan decentralization has been a clear and significant trend characterizing the evolution of Tallinn’s metropolitan area, with regard to both the pattern of new residential development and the location of economic activities. While the process of decentralization in the TMA was already evident in the late Soviet period, it intensified substantially during the 1990s and still further during the period 2000–2008, leading to the dramatic expansion and diversification of Tallinn’s metropolitan spatial structure. Over time, the factors that have fuelled decentralization have changed, and so have the characteristics of decentralization patterns and processes.

In the early years of the transition period, the relocation of residents to the periphery of the Estonian capital was driven primarily by the rising costs of living in the city and by the opportunities to find cheaper housing at the metropolitan edges. Such opportunities were created by Russian-speaking residents who left Estonia after the fall of the Soviet regime, vacating their apartments, as well as by the large number of summer homes built in the periphery during the previous decades. Since the end of the 1990s, new housing developments have begun to play a stronger role in establishing patterns of suburbanization, as the general increase in personal wealth and the development of an operational mortgage financing system supported a boom in residential construction. While most of this new residential supply has been in the form of single-family detached houses, a significant number of new, modern apartment buildings have been constructed on the edges of the Estonian capital in recent years. The housing boom of the period 2000–2008 was short-lived. The onset of the global economic crisis brought back conditions of uncertainty similar to those created by the economic

crisis of the 1990s. Mortgage rates increased rapidly, while investments in the real estate sector decreased dramatically. So far, the crisis that started in 2008 proved to be the only effective mechanism, successfully slowing down the speed of metropolitan decentralization.

Compared to the decentralization of the population, nonresidential suburbanization in the TMA has developed more slowly, gaining impetus only since the beginning of the millennium. The economic crisis of the early transition years suppressed the decentralization of economic activities. The impact of the economic restructuring was first reflected in the transformation of urban space in the city center, but with the economic growth of the second half of the 1990s the need for new commercial and industrial space increased. Given the dwindling amount of land available for development in the city, the ample expanses of cheaper land in the suburban zone caught the attention of new and expanding enterprises, which were searching for suitable locations for their facilities in the metropolitan periphery. As a result, a growing proportion of office, retail, and industrial development has been taking place on greenfield sites outside of Tallinn's borders.

In the postsocialist period public authorities have played a minor role in shaping new suburban growth patterns in the TMA. They have provided little resistance to all of the structural factors stacked in favor of suburbanization since the fall of the Soviet regime, including the emphasis on private property rights, the priority placed on market-led economic principles, and the decentralization of political power from the state to local governments. To a great extent, public policies and planning have been willing participants in and supporters of the process of suburbanization; and, while statements about the need to confront urban sprawl have begun to appear more frequently in recent official policy documents, very little has been done to rein in the forces of urban decentralization. The recent global financial and economic crisis has brought some positive changes, however, calling as it did for corrections to the boom-oriented planning attitudes exhibited by local officials in the past and offering an opportunity to reconsider and correct the course of development trends established in the past two decades.

The case of the TMA proves that the phenomenon of postsocialist suburbanization is related to many traditional factors – housing demand, land costs, permissive planning regimes, macroeconomic conditions, and so on – that are discussed in the general literature on metropolitan decentralization. At the same time, it also emphasizes the enduring role played by historical factors and former policies and patterns of investment as key determinants of metropolitan form. But, while the urban structure of postsocialist metropolitan Tallinn reflects the spatial legacy of the past, it is also increasingly influenced by contemporary metropolitan

processes that convert the Estonian capital into a typically postmodern metropolitan space.

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Lessons from Warsaw
*The Lack of Coordinated Planning
and Its Impacts on Urban Sprawl*

Andrzej Lisowski, Dorota Mantey,
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Introduction

During the period of transition to a market-based economy in Poland, eight of the country's twelve metropolitan areas have experienced faster population growth in their suburban zones than in their central cities, where a moderate growth has been recorded. The processes of accelerated inflow of population from other parts of the country to the suburbs of the largest Polish cities, coupled with the decentralization of the central cities, have resulted in a substantial geographic expansion of the country's metropolitan areas. This spatial growth has been particularly evident in the case of Warsaw – the only large city from one of the countries recently accepted among the member states of the European Union that has experienced a continuous population increase during the past 50 years (Turok and Mykhnenko, 2007).

The absence of accurate information on commuting patterns makes the delimitation of Warsaw's metropolitan area a difficult (and often highly contested) task. At the end of the 1980s, the central city and its adjacent territories, including highly functionally connected areas, covered approximately 2,000 km², inhabited by 2.4 million people (Chmielewski, 2005; Lisowski, 2007). Within the boundary established recently by the Masovian Voivodeship's Office of Spatial Planning and Regional Development, the Warsaw metropolitan area (WMA) covers 8,800 km².¹ Besides the national capital, this territory includes 38 other cities and towns and 76 rural *gminas* (municipalities) and has a total

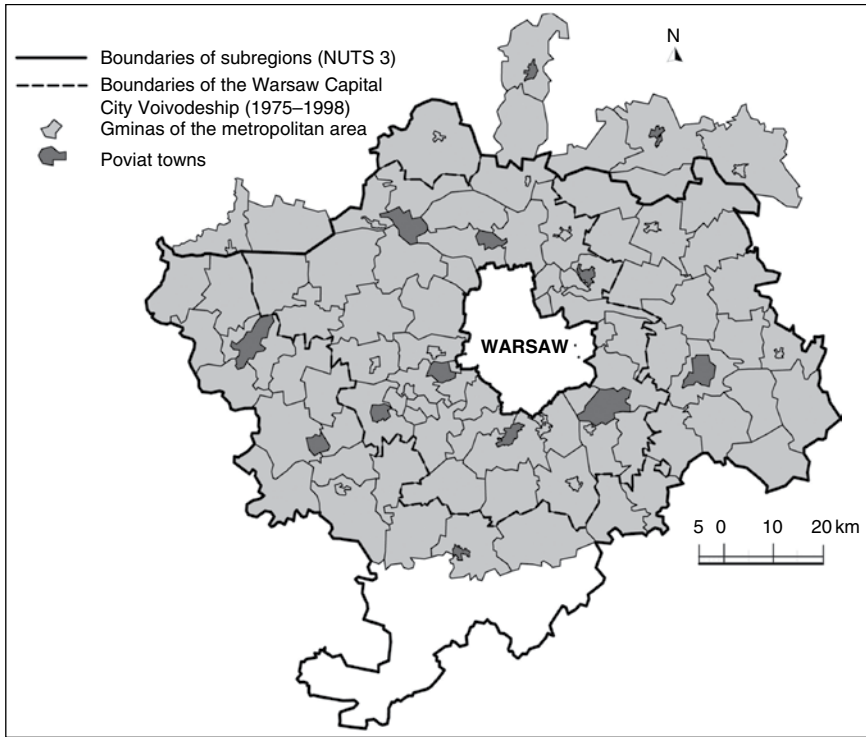


Figure 8.1 Warsaw's metropolitan area (WMA). Source: the authors.

population of over 3 million residents. The metropolitan area overlaps to a great extent with the area of two Nomenclature of Territorial Units for Statistics (NUTS) 3 regions – the City of Warsaw and the subregion of Warsaw (Figure 8.1).

The metropolitan area of Warsaw is a key player in the Polish economy. In 2005 it generated approximately one sixth of the nation's gross domestic product (GDP). The rate of economic growth in the capital's metropolitan area is higher than the average rate for Poland. Thus, while the national GDP increased threefold in the 1995–2005 period, the city of Warsaw registered a fourfold increase by this indicator. The subregion of Warsaw showed a three-and-a-half times increase for the same period, generating only one quarter of Warsaw's GDP. However, compared with the other 44 Polish subregions, the subregion of Warsaw is developing quite rapidly, moving from the 20th place in 1995 to being ranked as number 10 in 2005.

Suburbanization before the Postsocialist Period

The urban agglomeration of Warsaw started to take shape at the beginning of the twentieth century. The compact core of the city was characterized by a very high density, averaging 25,000 people per km² in 1913. Around this period, the expanding railway network had already given Warsaw its radial centric structure, which followed the course of the main railroad routes. It should be pointed out, however, that during the first half of the twentieth century the rate of population growth in the suburban areas of the city was consistently higher than the relative increase in the number of residents registered within Warsaw's boundaries. Due to the significantly lower land prices and rental fees in the periphery, Warsaw's suburbs continued to expand; this process brought into its territory a variety of land uses, ranging from industrial and storage facilities to residential enclaves occupied by middle class families (Jędrzejczyk and Wilk, 1992). During this period, however, the suburbs of Warsaw were primarily a place of residence for those who could not find affordable accommodation in the capital city.

The spread of population to the urban periphery was seen as a solution to problems linked to Warsaw's excessive residential concentration in the first half of the twentieth century. Such policies were pursued by significantly expanding the area of the capital through two annexations – in 1916 and in 1951. A new model for the city's functional decentralization, in line with the ideas laid out in Le Corbusier's Athens Charter of 1933, was elaborated and promoted by Polish urban planners during the early 1930s.

The massive destructions incurred by Warsaw during World War II and the nationalization of urban land in 1945 marked the beginning of an era of wasteful spatial (mis)management in Poland. The country's new socialist government placed the highest priority on the development of the industrial sector of the national economy. The construction of new, labor-intensive factories concentrated in the largest cities absorbed most of the national resources, leaving inadequate funding for housing and infrastructure development in the rapidly urbanizing areas. This situation had a significant impact on the transformation of the suburbs that surrounded the largest urban centers (Domański, 1997). An inflow of low-qualified migrant workers settled in the suburban periphery, where they could find cheap housing in substandard structures. An additional impetus for the migrant labor force to seek housing outside of the city boundaries was provided by the system of administrative restrictions enforced between 1954 and 1984, which made obtaining a legal status as a city resident extremely difficult for newcomers.

A further impetus toward suburbanization was provided by the state and city authorities between 1965 and 1970, when the government experimented with a so-called “de-glomeration” policy, which involved the relocation of existing work places outside the city boundaries and placed restrictions on the location of new ones in Warsaw. Despite some significant infrastructure improvements in Warsaw’s periphery, which took place in relation to this policy during the 1970s, the negative impacts of suburbanization became quite visible by the beginning of the 1980s. These impacts included a poorly coordinated pattern of land development, the disappearance of valuable agricultural land, a general degradation of the natural and built environment, and the escalation of conflicts and tensions between the users of these territories.

The massive expansion of the administrative boundaries of Warsaw in the early 1950s exceeded significantly the needs for urban development, and for a long period to come. In a way, it could be argued that the urbanization of the territory outside the central-city border during the socialist years has been accompanied by a process of “internal suburbanization” – a hollowing out of the central city. Thus approximately 100 km² of what was considered developable land within the city boundaries still lay vacant and undeveloped in 2000 (Bertaud and Bertaud, 2000).

Overall, during the socialist era, the city of Warsaw experienced a relative weakening of centralization by comparison to previous periods of its history. However, it should be noted that the simultaneous growth of the city and its suburbs did not change significantly the proportions of the population that resided in these two areas during the period 1950–1988 (Lisowski, 2007).

The Dynamics of Suburbanization during the Postsocialist Period

The following analysis of the dynamics of suburbanization in the WMA during the postsocialist period is based primarily on data from the national population and housing censuses completed in 1988 and 2002. Another main data source used for this study is the Regional Data Bank of the Central Statistical Office, which provides information on the number and structure of businesses, the amount of commercial building stock, and the patterns of land use changes. The absence of information on the development of business enterprises before 1995 is due mainly to changes in the business classification and to the unavailability of comparable data.

Population

The total number of inhabitants in the WMA in 1988 was 2,922,000. By 2002 this number had risen to 3,066,000, which reflected a 5 percent population increase. Another 70,000 residents were added to the metropolitan area by 2006. Of the total population growth between the two censuses, less than 24 percent took place in the city of Warsaw, 40 percent occurred in the other towns of the metropolis, and approximately 36 percent was accommodated in its rural areas (Figure 8.2: a). As a result of these growth patterns, the proportion of Warsaw's population decreased to 54.3 percent of the total metropolitan population. Migration flows have been particularly strong in the rural areas of the metropolis. These zones accommodated a proportion of the metropolitan migration inflows twice as high as the proportion of the rural areas' population (Figure 8.2: b).

The changes in the age-based population structure of the WMA, which took place during the transition period, show significant differentiation. While the population of working age increased by 10 percent in the entire WMA during the period 1988–2002 (hence this increase doubled the total population increase), the rate of growth among this demographic group was the lowest in the capital city (6 percent) and much higher in the other towns and rural areas within the metropolis (which altogether registered over 16 percent growth) (Figure 8.2: c). The differences in the rate of growth for young to middle-age workers (20–44 years old) were even more pronounced, as the rural areas within the metropolis attracted the highest numbers and were followed by the other towns within the metro area, while the city of Warsaw registered an actual decline in this population group.

Population structure changes that reflected the criterion of education were also greater outside the city of Warsaw than within it (Figure 8.2: d). However, unlike the percentage of young to middle-aged workers, that of people with college education increased more rapidly in the suburban towns of the metropolis and more slowly in its rural areas. As a result, in 2002 only one in 11 residents in the rural areas of the WMA had a college education.

The transition period also brought significant changes to the structure of households within the WMA. While the population of the WMA increased by only 5 percent between the census of 1988 and that of 2002, the number of households in the metropolis increased by 18 percent. During the same period the average household size decreased from 2.8 to 2.5 people. In 2002 the most numerous households were found in the rural areas (averaging 3 residents per household), while the average household size in Warsaw was only

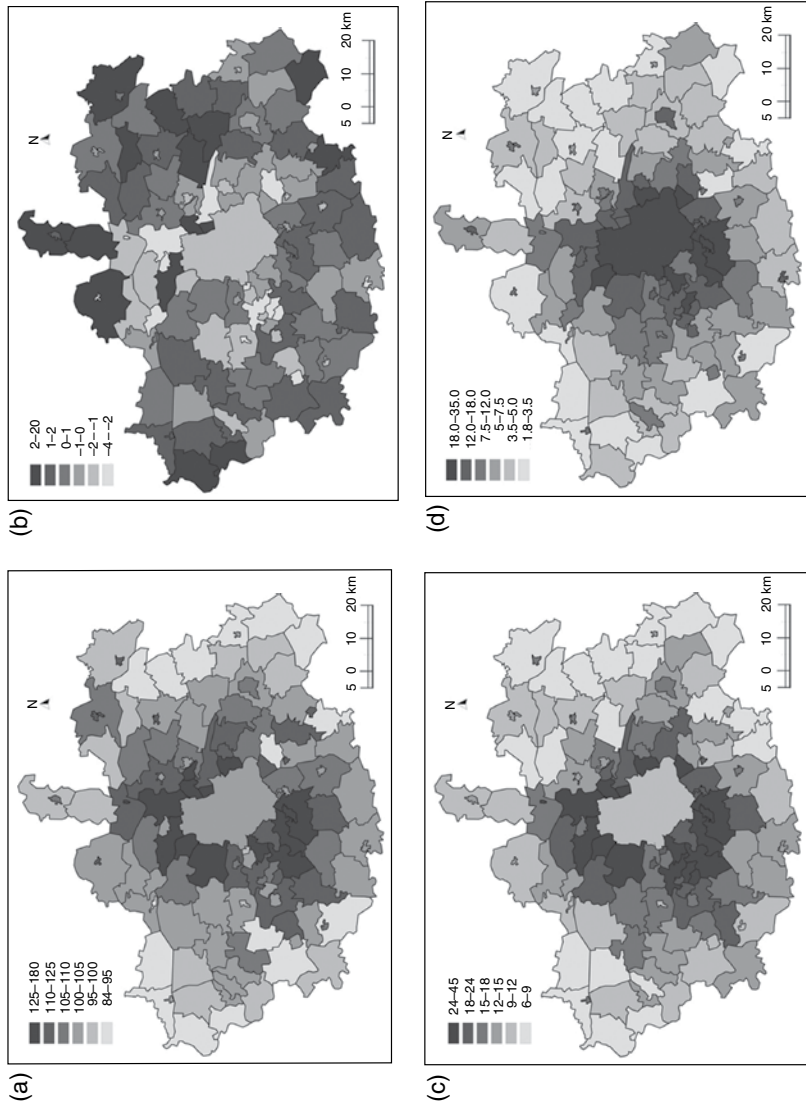


Figure 8.2 Demographic changes. Based on publications by the Central Statistical Office. (a) Change in population (1988–2002; 1988 = 100). (b) Immigrants (1989–2002) as percentage of the total population change in 2002. (c) Population at post-working age (percentage change; 1988–2002). (d) People with higher education (percentage; 2002).

slightly over 2 residents. This reflected the significant increase in the number of single-person households in Warsaw from 26 to 38 percent, whereas both in the suburban towns and in the rural areas the share of such households had grown only by 4 percent. Another related distinction is the large proportion of families with three or more children (40 percent) in the rural areas of the metropolis. While the number of such families has decreased throughout the WMA, the suburban Zone 1 adjacent to Warsaw has become an oasis for nuclear families (Table 8.1). In Warsaw, on the other hand, the proportion of families with one child exceeded 50 percent in 2002.

Housing

During the period 1988–2002 the total number of dwellings in the WMA increased by 35 percent. The rate of increase was lower in the city of Warsaw, relatively higher in the other towns within the metropolitan area, and highest in the rural areas inside metropolitan boundaries (Figure 8.3: a). It should be noted that the dynamics of residential growth varied during this period. Until 2002 the number of dwellings registered the highest increase in small towns, which had better infrastructure than rural areas; but in the past few years the rural have surpassed all the other areas within metropolitan boundaries in terms of rate of residential growth. As a result, the amount of residential floor space in the rural municipalities of the metropolis has almost doubled between the last two census counts.

The increase in the number of dwellings constructed during the 1988–2002 period was paralleled by an expansion of their average usable floor space, which increased from 51 m² to 65 m² (see Figure 8.3: b and Figure 8.3: c). The largest dwellings have been built in the rural areas of the metropolis, where the average size for units constructed between 2003 and 2006 reached 140 m² (compared to an average of 93 m² for the metropolitan area).

New residential construction in the suburbs of Warsaw, which has taken place since the beginning of the 1990s, has significantly improved not just the quantity but the quality of the housing stock in those areas. By 2002, 75 percent of the dwellings in the rural areas of the metropolis had bathrooms, by comparison to less than 50 percent before the transition period. In addition, many of the services available in cities and towns of the metropolitan area have been extended to the rural districts (Figure 8.3: d). While access to the gas grid is provided to less than one third of the rural dwellings, significant progress has been made in the last two decades. By 2005 the gas grid reached the majority of small towns in the metropolitan periphery (33 out of 38) and 46 out of the 76 rural municipalities.

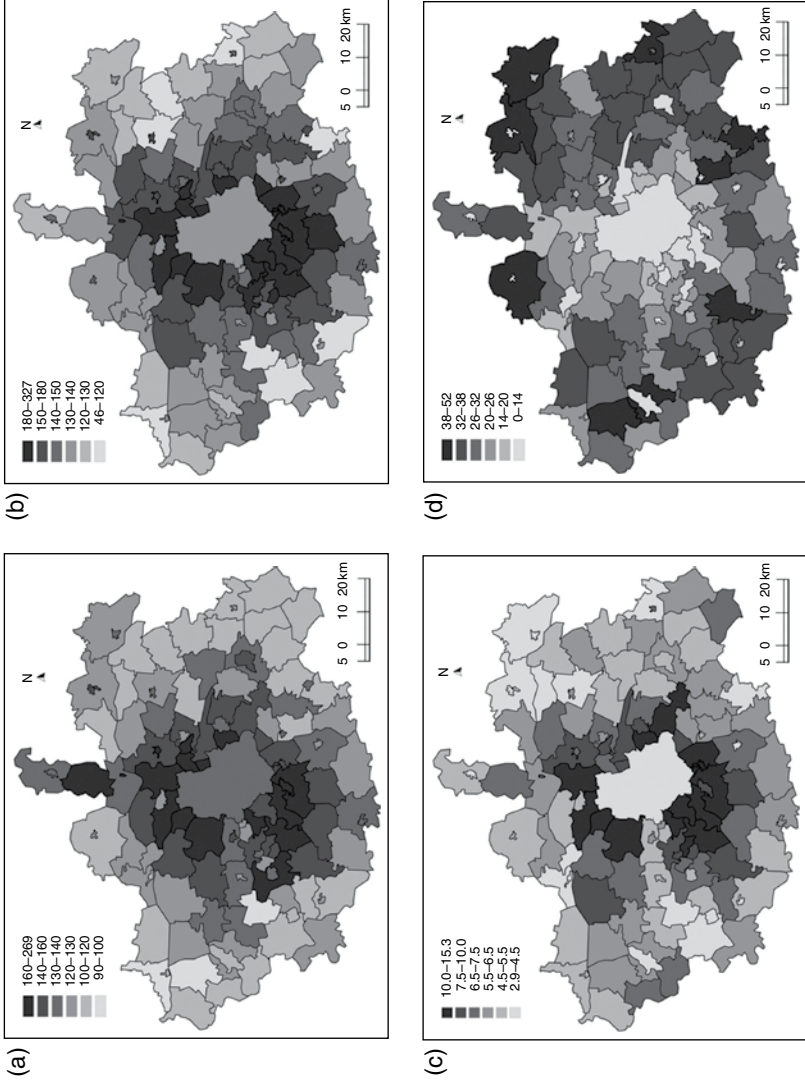


Figure 8.3 Housing changes. Based on publications by the Central Statistical Office. (a) Changes in the number of dwellings (1988–2006; 1988 = 100). (b) Changes in residential floor space (1988–2002; 1988 = 100). (c) Changes in residential floor space per person (1988–2002; in m²). (d) Dwellings with a water pipeline system (percentage change; 1988–2002).

Economic activities

One of the results of the structural changes that took place in the economy of the Warsaw metropolitan region is reduction in the percentage of residents involved in agricultural activities. While in 1988 non-agricultural workers constituted 53 percent of the active workforce in rural areas, by 2002 the proportion of non-agricultural workers in these territories had grown to 81 percent (Figure 8.4: d). More than a half of these workers (58 percent) have found employment in the rapidly growing service sector. This reflects the broad structural changes in Warsaw's metropolitan economy – where, between 1995 and 2003, the presence of the industrial sector decreased from 34 to 26 percent, while the service sector went up from 66 to 74 percent.

The distribution of industrial and service activities within the WMA is still quite uneven. Nearly two thirds of these businesses are located in the city of Warsaw, 20 percent in the small towns, and 13 percent in the rural areas. During the period 1995–2006 the pattern of distribution of economic activity slightly changed, showing a 2 percent increase in rural areas; this was mainly caused by the dynamics of new company formation (Figure 8.4: a). The entrepreneurship index, measured by the number of business entities per 1,000 inhabitants, doubled in the rural areas during that time, reaching 92 points. Yet rural communities are still lagging behind the averages for the WMA and for the small towns, where the entrepreneurship index values are 148 and 130 points (Figure 8.4: b).

In spite of the growth of economic activities in the suburban towns, these centers cannot yet be considered competitive enough for the capital city. They remain largely dependent on it, attracting mainly secondary functions, supportive of the ones located in the city. And, while 38 percent of the total employment in the WMA was found in the suburban towns in 2006, their residential functions still outweigh their economic role. This conclusion is supported by the fact that the rate of increase in the number of dwelling units in suburban towns was higher than the one recorded in Warsaw and its rural areas for the period 1988–2002, while between 1995 and 2006 the rate of increase in the number of business entities was lower in small towns than in rural areas.

The pattern of distribution of foreign capital investments within the WMA is quite uneven, the overwhelming majority of these flows being directed to the city of Warsaw. While during the period 1995–2006 the number of commercial companies with foreign capital participation increased fourfold in the rural areas by comparison to two-and-a-half times in the metropolitan area (Figure 8.4: c), the faster growth rate of

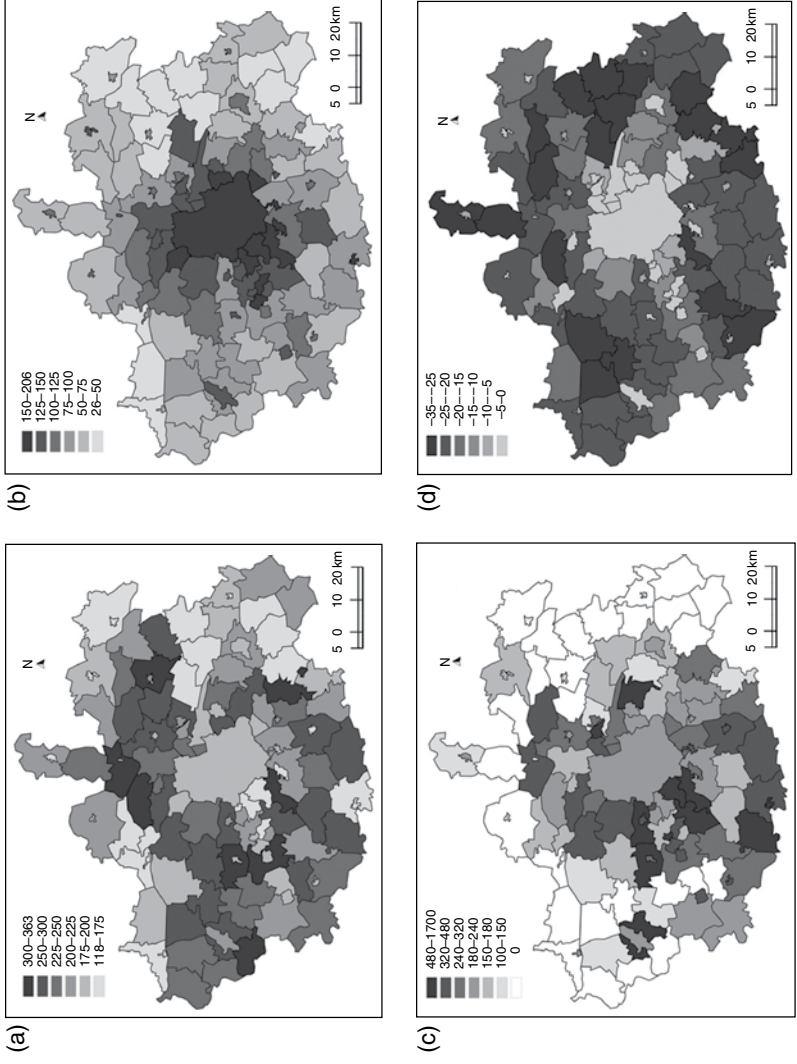


Figure 8.4 Economic changes. Based on publications by the Central Statistical Office (national census results from 1988 and 2002) and on the Regional Data Bank. (a) Change in the number of enterprises (1995–2006; 1995 = 100). (b) Number of enterprises per 1,000 inhabitants (2006). (c) Number of commercial companies with foreign capital participation (change in 1995–2006; 1995 = 100). (d) Population with non-agricultural sources of maintenance (change in percentage; 1988–2002).

foreign investments in the rural zone is mainly a reflection of the very low levels of such investments in the mid-1990s. Today 85 percent of the companies with foreign capital participation are located in the city of Warsaw, 5 percent are found in the suburban towns, and only 10 percent are based in the rural areas.

One of the most rapidly developing economic sectors in the metropolitan region of Warsaw is retailing and wholesaling. During the period 1995–2003 the number of stores increased by 50 percent, similar rates of growth being experienced both in the capital city and in the rural areas. Today over one half of all the stores are located in Warsaw, nearly 30 percent in the other towns within the WMA, and about 20 percent in the rural areas of the metropolis. Overall, the rural inhabitants still have the lowest levels of access to retailing. The differences in retail accessibility are due not only to the number of stores per capita, but also to the fact that in Warsaw (as well as in the small towns) the stores are often bigger, better supplied, and located within closer distances from their customer base.

The metropolitan area of Warsaw is a large market with a growing number of wealthier residents. This has been a driving force not just behind the explosion of numerous retail stores (including stores and networks of major international providers), but also behind the demand for construction and expansion of the necessary storage space and support facilities. While the majority of the modern shopping centers, hypermarkets, and discount retail stores are emerging within or close to the boundaries of the city of Warsaw, the construction of the warehousing facilities is concentrated mainly outside of the city borders, in clusters strung alongside the most important regional roads (Figure 8.5). The notable concentration of warehouses in the southwestern suburban areas of the WMA reflects the main economic connections of Warsaw at national (with the country's south and the west) and international levels (with the EU).² The modern warehouses located outside the city serve primarily logistics companies and the pulp and paper and food industries, while the warehouses in the city are mostly occupied by companies that supply exclusively the capital city's market.

Dynamics of Socioeconomic Changes by Metropolitan Zones

In this section we explore the spatial patterns of population, housing, and economic changes in relation to their distance from the metropolitan center. To carry out this analysis, we grouped the municipalities within the metro area into four zones. Zone 1 is comprised of the municipalities directly adjacent to the central city; Zone 2 includes the municipalities directly adjacent to the municipalities

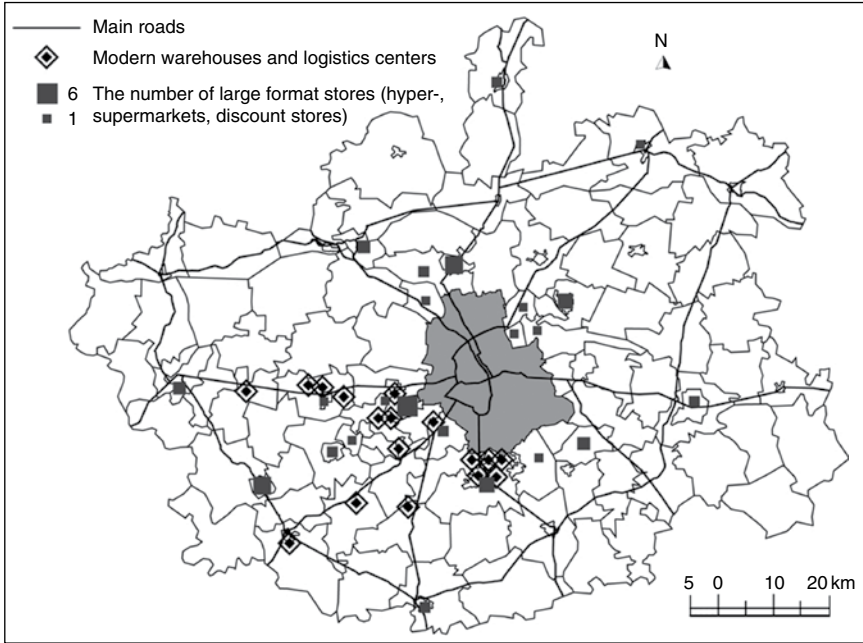


Figure 8.5 Large-format stores and modern warehouses in Warsaw's metropolitan area (WMA), outside Warsaw. Source: the authors.

in the Zone 1; Zone 3 is composed of the municipalities neighboring Zone 2 directly; and Zone 4 contains all the municipalities remaining outside Zones 1, 2, and 3 (Figure 8.6). The number of municipalities included in each zone varies from 21 to 32.

During the transition period the most dynamic changes in population growth and structure occurred in the municipalities adjacent to the city of Warsaw. The rate of population growth in Zone 1 was the highest in the two recorded periods, 1988–2002 and 2002–2006. This was, in large part, a result of the very high concentration of the migration inflows in these municipalities (Table 8.1). Changes in household structure are also most pronounced in Zone 1 – the only one in the entire WMA (including Warsaw) where the number of families with three or more children increased during the period 1988–2002. This was also the zone with the highest increase in the number of residents of working age and with higher education.

The construction of new housing in the Warsaw metropolitan area since the late 1980s mirrors to a great extent the spatial patterns of population growth outlined above. Zone 1 shows the highest growth

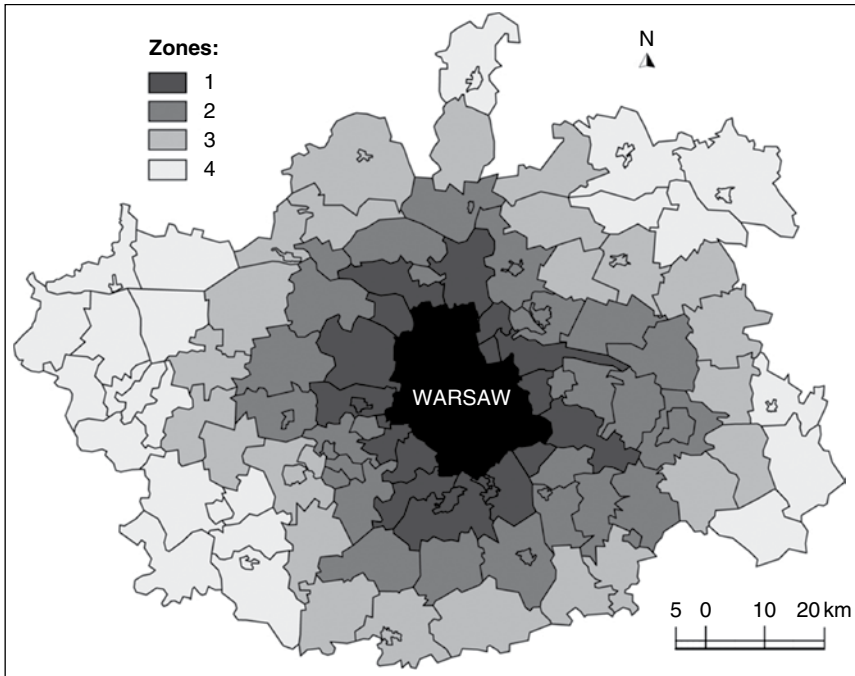


Figure 8.6 Concentric zonal division of municipalities in Warsaw's metropolitan area (WMA). Source: the authors.

rate, both in terms of new dwellings and in terms of usable floor space (Table 8.2). When relative change is measured, the municipalities situated in Zone 2 are characterized by rates of housing development similar to the average rates for the metropolitan area throughout the period 1988–2006. Comparable growth rates are registered in the city of Warsaw, where, after an initial slowdown in the 1990s, the pace of housing construction caught up with the rate of residential construction in the metropolitan region. In Zones 3 and 4 the relative growth in number of dwellings and usable floor space has been on average slower than in the WMA.

The examination of the spatial pattern of the housing development that has taken place after the fall of the communist regime leads to the conclusion that residential growth within the metropolitan region has been strongest in the municipalities that lie immediately outside of the city boundaries. The rate of suburban residential development subsides with distance from Warsaw. However, this conclusion does not apply to

Table 8.1 Demographic changes in zones of the Warsaw metropolitan area (WMA).

<i>Category</i>	<i>Total</i>	<i>Warsaw</i>	<i>Zone 1</i>	<i>Zone 2</i>	<i>Zone 3</i>	<i>Zone 4</i>
Population (2006, in thousands)	3,136	1,702	429	451	259	295
Density (persons per km ²)	356	3,292	409	218	101	113
Area (2006; in km ²)	8,817	517	1,048	2,073	2,557	2,622
Change in population (1988–2002) ^a	0.3	0.1	1.5	0.4	0.2	0.1
Change in population (2002–2006) ^a	0.6	0.2	2.3	0.7	0.6	0.1
Percentage of immigration in 1989–2002	16	10	27	16	14	11
Change in population (1988–2002):						
working age ^a	0.6	0.4	1.8	0.9	0.7	0.4
working mobile age (20–44 years old) ^a	0.2	0.0	1.5	0.2	0.2	0.1
Change in percentage of population with higher education (1988–2002) ^a	4.5	4.6	10.3	6.3	5.0	5.2
Change in number of households with 3 or more children (1988–2002) ^a	–0.5	–0.7	0.7	–0.9	–0.5	–0.7

Note: ^aCompound annual growth rate (%).

Source: the authors' elaboration on the basis of data published by the Central Statistical Office.

the process of renovation and modernization (or upgrading) of the existing suburban housing stock, especially in terms of access to municipal utilities. The rate of increase in the proportion of residences equipped with such facilities has been highest in the more distant municipalities, yet the level of access to water and sewer networks in those areas is the lowest within the WMA.

Since the mid-1990s the number of business establishments in the WMA has been continuously increasing, but the growth rate of business entities does not differ significantly among the four suburban zones (Table 8.3). Overall they have surpassed the growth rate of businesses recorded for the city of Warsaw. During the period 1995–2006 the entrepreneurship index (measured by the number of businesses per 1,000 residents) doubled in Zones 2, 3 and 4, but the index level still remained highest in the capital city, decreasing with distance from its boundaries.

Table 8.2 Housing changes in zones of the Warsaw metropolitan area (WMA).

<i>Category</i>	<i>Total</i>	<i>Warsaw</i>	<i>Zone 1</i>	<i>Zone 2</i>	<i>Zone 3</i>	<i>Zone 4</i>
Change in number of dwellings (1988–2002) ^a	1.4	1.4	2.6	1.2	0.7	0.5
Change in number of dwellings (2002–2006) ^a	2.8	2.2	4.9	3.3	3.8	2.9
Change in usable floor space (1988–2002) ^a	2.5	1.9	5.0	2.9	2.0	2.1
Change in usable floor space (2002–2006) ^a	4.8	4.9	6.4	4.4	3.9	3.1
Newly built dwellings (1989–2002) (percentage in 2002)	19	13	29	20	16	14
Change in percentage of dwellings (1988–2002):						
with a bathroom ^a	0.7	-0.2	1.5	2.7	3.5	3.8
with gas ^a	1.2	-0.1	3.5	8.3	9.3	15.7
Change in number of residential buildings (1995–2006) with connections to:						
water-pipeline system ^a	8.6	4.1	10.1	10.0	11.2	9.9
sanitary sewer system ^a	10.8	4.7	19.1	13.3	11.2	11.9

Note: ^aCompound annual growth rate (%).

Source: the authors' elaboration on the basis of data published by the Central Statistical Office.

The two most notable changes in the labor force structure of the WMA during the transition period are (1) decline in the percentage of the population occupied in the agricultural sector; and (2) growth in the segment of service workers. The first change is reflected also in the decreasing amount of arable land throughout the metropolitan area.

Conditions and Driving Forces of Suburbanization

Economic factors

The transition to a market-based economy re-established the functioning of a land market, triggering a process of land rent adjustments based on locational characteristics. The rapidly escalating costs of land in the metropolitan center spurred investors' increasing interest in the metropolitan periphery, where they found an abundant supply of land and plenty of agricultural property owners eager to sell their land.

Table 8.3 Economic changes in zones of the Warsaw metropolitan area (WMA).

<i>Category</i>	<i>Total</i>	<i>Warsaw</i>	<i>Zone 1</i>	<i>Zone 2</i>	<i>Zone 3</i>	<i>Zone 4</i>
Change in number of business entities (1995–2006) ^a	6.0	5.6	6.5	7.3	6.3	6.3
Change in number of commercial companies with foreign capital participation (1995–2006) ^a	8.5	8.0	13.3	9.9	12.7	9.4
Change in number of business entities per 1,000 residents (1995–2006) ^a	5.5	5.2	4.0	6.6	5.8	6.5
Change (1995–2003) in employment in:						
service sector ^a	0.9	0.8	3.5	0.3	0.6	-1.1
industrial sector ^a	-3.9	-4.3	-3.3	-3.8	-1.4	-3.7
Change (1988–2002) in percentage of households with a person employed in farming ^a	-2.9	0,0	-4.8	-3.1	-2.8	-2.5

Note: ^aCompound annual growth rate (%).

Source: the authors' elaboration on the basis of data published by the Central Statistical Office.

Before Poland's accession to the European Union in 2004, the selling price of building parcels located immediately outside the boundaries of Warsaw was three times lower than the price of the most expensive parcels within the capital. Significantly better bargains, at up to ten times lower costs, could be made 20 km away from the city and beyond (Strzelecki and Kucińska, 2006). Property prices within the city increased still further when foreigners were granted the right to buy dwellings in Poland, especially after the country joined the EU. The rise in house prices affected particularly the value of properties located in the central city.

The national policies designed to support investment in housing during the 1990s had a significant impact on residential suburbanization as well. The provision of building tax allowances permitted tax deductions from the costs of investments in housing construction or purchase, thus stimulating the single-family sector of new housing development. This policy provided a temporary surge in housing construction; but, after the policy achieved its intended effect, it was discontinued and building

activity declined. The boom of mortgage financing, which has taken place since 2004, has led to substantial decreases of interest rates and increased availability of mortgage financing, thus triggering another wave of accelerated housing construction (Martyniuk-Pęczek, 2005).

A great part of this new residential development has taken place in the urban periphery, as investments in the city center have been delayed as a result of uncertainty about property ownership – a legacy of the land nationalization carried out in 1945. This situation certainly plays a key role in shaping real estate developers' preferences for investing in suburban areas, where such problems do not exist and development restrictions are minimal (Mantey, 2007). Currently, only around 10 percent of the suburban areas have adopted local development plans (Nowakowski, 2002).

Recent technological advances, which have induced the replacement of physical flows with information flows, have fostered the proliferation of small enterprises. This process, in turn, has fueled the trend of spatial decentralization. IT firms have been drawn to the suburbs of Warsaw by lower land prices, lower taxes, tax allowances, and higher transport accessibility. An additional factor stimulating the decentralization of smaller businesses and their move to the suburban periphery is their inability to compete with larger companies, the majority of which still prefer central locations in the capital city.

Social and cultural factors

The return to a market-based economy in Poland fueled the process of income differentiation, concentrating a significant share of the generated wealth in the hands of a growing middle class. The rising affluence of this segment of the population in the metropolitan area of the Polish capital has been a key factor in the acceleration of residential suburbanization. Surveys of public opinion have indicated the growing popularity of single-family detached dwellings, which had become the most desirable housing option for 83 percent of the Poles at the turn of the century (Kaltenberg-Kwiatkowska, 2005). The opportunity to live in closer contact with nature has been frequently cited as one of the most alluring qualities of suburban living (Chmielewski, 2002). Two of the most important criteria pointed out by residents who moved to the suburbs are pleasant environments (72 percent) and tranquility (67 percent), while lower land prices and lower building costs rank as lower motivators for seeking suburban residence (Mantey, 2009).

Another reason for the acceleration of housing development in the suburban zone has been the chronic shortage of housing supply in Warsaw, which was estimated at 100,000 units in 2002. The housing

demand is not likely to be met soon, as only 10,000 to 16,000 new units have been supplied annually on the market since the end of the 1990s (Statistical Office in Warsaw, n.d.).

The difficulties of housing supply in the city are further compounded by the lack of spatial plans regulating real estate investments in many parts of Warsaw.³ Haphazard development has resulted in substantial deterioration of the quality of life in many urban neighborhoods; such phenomena are linked to increased noise and air pollution, escalating traffic congestion, mounting parking problems, diminished opportunities for social interaction, and the like (Lechman, 2005). The decline in the environmental quality of inner-city areas, coupled with the commercialization of the city center, has pushed residential uses to the metropolitan periphery, where the construction of new shopping centers has increased suburban residents' access to goods and services.

The postsocialist suburbanization of Warsaw has been facilitated by a massive increase in automobile ownership in the metropolitan area. During the period 1990–2005, the rate of motorization increased from 281 to 737 automobiles per 1,000 residents of the Polish capital. Interestingly, while the metropolitan transportation system is becoming more and more congested, the suburban dwellers rank distance from Warsaw as a relatively less important criterion in their choice of residential location (Mantey, 2009). The need to travel longer distances is offset by other factors – such as preference for low-density living environments, access to open green space, ability to purchase larger homes, the ease of accommodating households with more than one car, the decentralization of jobs and services, and the possibility of working from home. So far, discontent with suburban living has been minimal and rare; but a number of cases of households relocating back to the city for a variety of reasons have already been registered.

Political and legal factors

In the case of Warsaw, political and legal factors play a specific and important role in the spread of suburbanization. The massive privatization of housing and the withdrawal of restrictions on property ownership in the early 1990s created a dynamic real estate market, which was strengthened by the Act on Spatial Planning and Development adopted in 1994. This legislation emphasized the protection of private property rights, giving greater freedom to investors who operated in the arena of spatial development (Martyniuk-Pęczek, 2005). The new act granted local councils almost exclusive powers in matters related to the regulation of spatial development. Subsequently, the conversion of agricultural lands for urban uses gained the enthusiastic support of local authorities as a main source of

revenue for the municipal governments and their constituent population of vested landowners (Chmielewski, 2002).

The traditional weakness of local spatial planning in Poland, combined with the recent liberalization of spatial management, which is unparalleled among European countries, has provided a fertile environment for the spread of suburbanization in the metropolitan areas of the whole country (Nowakowski, 2002). In the context of a legislative framework emphasizing private property rights, the lack of local spatial development plans gave a free reign to developers to “colonize” the most attractive areas in the vicinity of Warsaw. This permissive regime continued for the most part of the transition period. Until 2003, for instance, local governments could not, on any grounds, deny building permit requests for the construction of detached houses on properties equal to or larger than 1 hectare of arable land. Under pressure from land owners, local governments often drew local development plans in a rather sketchy manner, mostly as general plans for the undeveloped areas, directing growth alongside roads and sometimes in environmentally sensitive areas and avoiding interventions in the existing property structure. This logic of planning has been inexorably manifested in patterns of increasing territorial fragmentation (Chmielewski, 2005). The fragmentation of the urban and suburban landscapes in and around Warsaw has been aided by the lack of a metropolitan spatial development plan, which is still in its infant stages of development. This lag in adopting a shared vision designed to regulate the growth of the metropolis has prevented the utilization of green belts and other growth control mechanisms as a strategy for combating sprawl (Kozłowski, 2006).

The Impacts of Suburbanization

Spatial consequences

The main spatial consequence of urban decentralization in the WMA during the transition period is undoubtedly its ongoing transformation from a radial concentric structure into a dispersed spatial one. Deficiencies in the system of postsocialist urban planning have resulted in chaotic patterns of development (Kozłowski, 2006). On the one hand, a number of mono-functional zones have been created that are devoid of any sense of spatial hierarchy, clearly defined borders, or meaningful public spaces and force residents to resort to the use of cars as the only viable mode of transportation. On the other hand, new commercial nodes in the shape of large suburban shopping centers are closely linked to the regional transportation network, neglecting issues related to neighborhood scale and needs (Kochanowska, 2005).

Investments in the development of social infrastructure, such as educational and health care facilities, are largely lacking in the newly suburbanizing areas, as are public spaces such as parks, squares, and plazas. The overwhelming majority of service functions are overtaken by the out-of-town shopping malls, while education and medical services are sought in the nearest towns or in Warsaw (Mantey, 2009).

The suburban towns – which, compared to rural areas, are developing even more dynamically in terms of new residential construction – have not managed to establish themselves as service centers competitive to Warsaw. The growth of their potential is still restrained by the prevailing patterns of dispersed suburbanization, which have diffused new development throughout the metropolitan periphery. As none of those suburban centers can accumulate the needed critical mass, conclusions about the establishment of a new, polycentric metropolitan structure in the WMA are still quite premature (Nowosielska, 2000).

Economic consequences

During the second half of the 1990s, most of the new suburban residential development consisted of relatively large houses (averaging between 300 and 400 m²) built on large parcels of land (over 1,000 m²). Since the turn of the millennium, the rise in land prices has polarized the patterns of suburban housing development (Gruszecka, 2005). The construction of detached houses on large parcels was concentrated in the vicinity of the forested areas, because of local laws that regulated minimal parcel size in such areas, which had been established before the transition period. On the other hand, the economic reality of rapidly rising property prices forced the majority of new residents to scale down their expectations by targeting either new housing on smaller lots near the boundary of Warsaw or larger and more affordable residential properties located significantly further away.

The flow of population into suburban areas has made land prices go up and has overloaded the limited capacity of the existing infrastructure. The explosion in automobile traffic has not been followed by comparable improvements in road infrastructure or by further development of the public transport networks. An attempt has been made to integrate private and public transport in Warsaw through the construction of a new park-and-ride system, but the facilities are not fully utilized, partly due to their inconvenient location. The proportion of car commuters within the WMA has increased to 60 percent, and commuting times have increased too. The average daily traffic on each of the 21 exit roads of the WMA is 3.6 times greater than the average traffic on the national trunk roads (Giergowicz and Szrajber, 2006).

The high level of car dependence in the suburbs is reflected in the fact that only 20 percent of the suburban households use public transport. In 82 percent of the households with children, transportation to school is provided by personal automobiles. Overall, 76 percent of the households residing in suburban areas have reported that they use the car even for the smallest daily purchases (Mantey, 2009).

Suburbanization has to a great extent undermined the prospects of agricultural farming as a viable business within the WMA. The profits from land sales exceed by far any income that farmers could generate from the use of their land for agricultural production. However, the supply of building parcels available on the market already exceeds current demand (Strzelecki and Kucińska, 2006). For local governments, especially those situated alongside the main regional arterials, suburbanization has brought higher revenues from taxes; but expenses have risen as well – primarily those related to the development and maintenance of infrastructure, which still falls behind the population growth in those areas.

The decentralization of employment has progressed more slowly than that of population in the WMA. While in 2006 46 percent of the metropolitan population lived in the suburban zone, only 35 percent of the business establishments were located there. The advantage of Warsaw as a preferred place for doing business is underscored by the fact that the average unemployment rate in the suburban zone remains higher (8 percent). By comparison, the unemployment rate in the capital was only 3 percent in December 2007 (Statistical Office in Warsaw, n.d.).

Ecological consequences

Among the various ecological consequences of suburban sprawl in the WMA, the most visible ones are the disappearance of agricultural land due to its conversion for urban uses and the invasion of development into environmentally valuable areas. During the period 1994–2004, over 27,000 hectares of agricultural land were turned to other uses within the territory of the WMA (Strzelecki and Kucińska, 2006). This area is equivalent to more than half of Warsaw city's territory, which occupies 51,700 hectares. The most significant changes in terms of land use conversion occurred in the southwestern quadrant of the metropolitan area, for reasons that were pointed out earlier (and see Gutry-Korycka, Zegar, and Ostrowski, 2005).

Suburbanization has induced intensive processes of landscape synanthropization⁴ in the metropolitan periphery. And, while in some parts, which have been placed under protection, processes of renaturation and reduction of fragmentation have begun to take place, in large segments

of the WMA the degradation of the natural landscape continues unabated (Solon, 2005). The loss of open space in the suburban zone has become a main concern for the residents of the city of Warsaw, where the amount of available recreational areas has been significantly reduced.

As a result of poorly developed sewage systems, in many suburban areas the expansion of new development has deteriorated existing plant cover, reduced soil resistance, and increased water pollution. A notorious example is provided by the municipality of Prażmów, located in the southern part of the WMA, which has assigned vast areas of land for residential development, particularly near the Chojnowski Park, without any sanitary sewer system being in place.

The speed of residential development in environmentally sensitive areas is becoming a cause of great public concern. Developers in Warsaw's metropolitan area aggressively market the location of those projects situated in the vicinity of natural areas – such as the Kampinoski National Park in the northwestern part of the WMA and other regional parks and natural reserves within the metropolitan territory. Development on parcels in forested areas is exceptionally harmful to the ecology of the region, yet such practices are widespread, most notably in the Magdalenka village, located in the southwestern parts of the metropolis.

Social consequences

Suburbanization has induced changes in the social structure of Warsaw's suburban zone. During the postsocialist years, in a marked departure from the patterns of metropolitan growth during the socialist period, the rates of population growth in suburban rural areas have exceeded those recorded for urban areas, although the latter are still better equipped with basic facilities and services. The consequences of the trade-off between the advantages of suburban living and the loss of urban conveniences are vividly felt by the new suburban dwellers. While over 90 percent of them report to be satisfied with their residence, as many as 70 percent point out the negative aspects of living in the suburbs and link them to inadequate technical infrastructure – poorly developed public transport, insufficient sewage and gas networks, lack of street lights, and so on (Lisowski and Mikulski, 2005). Thus, while dreams are being fulfilled, this has required significant compromises from suburban residents, and on a daily basis.

Key indicators of the social transformations that take place in suburban areas are the proportion of households employed in farming and the percentage of people with higher education. Between 1988 and 2002, the most dynamic changes along those criteria were observed in Zone 1, which registered an annual decrease rate of 4.8 percent in

farmers' households; and this was paralleled by an annual increase of 10.3 percent in the number of people with higher education (Tables 8.1 and 8.3). Such changes gradually diminished with distance from the central city; on average they were twice lower in remote zones than in areas adjacent to the city of Warsaw.

The village of Nadarzyn, located at the southwestern corner of the WMA, is a clear example of the dramatic changes that have taken place in the social composition of the rapidly suburbanizing territories of the capital region. This community has become highly differentiated in socioeconomic status. While the original inhabitants were mainly farmers, blue-collar workers, and unemployed, the new immigrant population consists primarily of couples with higher and secondary education (55 and 40 percent respectively), managers and specialists (36 percent), private entrepreneurs (16 percent), public workers (25 percent), and pensioners (10 percent) (Lisowski and Mikulski, 2005).

The influx of residents with similar social characteristics is typical of many other suburban districts in the metropolitan area. The average head of household settling in one of the 16 suburban villages southwest of Warsaw is a person below 45 years of age, with higher education and with two children, who commutes to work. The average number of cars in these households is 1.8, and in 60 percent of the households each member of the family has a car. In these scattered settlements the car has become an indispensable means of transport for the newly arriving middle-income residents. This creates a sense of spatial isolation among the suburban youths and young mothers without access to a private vehicle (Mantey, 2009).

Rapid suburbanization has become a source of conflict between the locals and the newcomers, especially in relation to development priorities. The difference between the needs of the new arrivals and those of the original residents poses new challenges for the local authorities. While the newcomers place an emphasis on the provision of better facilities for sport and recreation, the old-timers – who do not view favorably the influx of new residents from substantially more affluent socioeconomic backgrounds than their own – are more interested in the development of full-range local infrastructure and services (Mantey, 2009). Older people – as the majority of the original population in these settlements tends to be – and couples with children attach greater importance to neighborhood qualities than to regional accessibility (Lisowski and Mikulski, 2005). Tensions between old and new residents brew high when it comes to their alternative visions of the future identity of their settlements – such as are exemplified by recent attempts of new settlers to change the name of existing villages (e.g. Wólka Kozodawska near Piaseczno) on the grounds that the original names would be too

peasant-like and provincial (Mantey, 2009). And, while the new residents can raise the social prestige of a village (e.g. Czarny Las near Grodzisk Mazowiecki), they may contribute to the disappearance of traditional social bonds established in the community. As the local population gradually adopts elements from the lifestyles of the newcomers, in time this threatens the continuation of long-established daily practices and rituals – such as frequent visits to the neighbors. This weakening of traditional social bonds does not have only local significance; it may seriously impede the future chances of establishing effective metropolitan governance.

Urban research has pointed to suburbanization as one of the main factors that deter from the creation of social capital (Putnam, 2000), and suburban development during the transition period in Warsaw seems to confirm this conclusion. Members of the middle class here, as in many other places throughout the world, have placed an emphasis on the need for safety and privacy by establishing such protected environments in isolated homesteads or gated communities. The containment of collective experiences and social interactions outside of one's home to privately controlled environments – such as shopping centers, health clubs, multiplexes and golf courses – threatens to erode the vitality of the public realm. More frequently, the shopping mall becomes the only alternative to true public space for the majority of suburban residents (Ledwoń, 2005).

Management of Metropolitan Growth

According to the plans adopted during the last decade by municipalities in the WMA, an oversupply of land exceeding four times the area of the city of Warsaw has been designated for future development within the metropolitan periphery. These areas of future growth are concentrated along the main corridors that lead out of the metropolis and in the vicinity of environmentally valuable lands, 70 percent of them being clustered in the south and southwest of the WMA (Strzelecki and Kucińska, 2006). The patterns of future growth embedded in the existing plans provide support for current spatial development practices, which are fostering urban sprawl. The wasteful use of land, the spatial mismatch between jobs and housing that leads to longer commutes, the environmental degradation – these are all too familiar consequences of such patterns of development. However, surveys of public opinion indicate that 80 to 90 percent of the suburban residents disagree with the idea of imposing limitations to growth (Grochowski, Pieniążek, and Wilk, 2005), even if the inadequacy of the existing local infrastructure and the problems it causes are escalating. The perceived benefits of suburban living for the

residents of these areas appear to cloud public awareness of the negative impacts of suburbanization. Decentralization in the form of sprawl is seen as a natural and spontaneous adaptation of the local communities to structural changes in the metropolis – an adaptation facilitated by a weak public management system (Bogart, 2006).

The lack of coordinated management approaches to the spatial development of metropolitan areas in Poland is rightfully seen by many urban scholars as a main factor that contributes to the proliferation of urban sprawl in the country. The establishment of effective urban growth management is impeded by the fragmentation of the administrative units, the financial limitations of municipal budgets, which put pressure on local authorities to attract new investments, and the absence of a transparent decision-making political process. The multilevel system of overlapping municipal, county, and regional governments has made the delimitation of metropolitan area responsibilities a difficult proposition. During the transition period, the various attempts to coordinate government responsibilities within the metropolitan area could be described as a combination of policies ranging from passive “do nothing” attitudes to the aggressive incorporation of peripheral territories (Swianiewicz and Lackowska, 2007). Only one suburban municipality, the town of *Wesoła*, agreed after consultations with local residents to be annexed by Warsaw.⁵

In Poland as in most other Eastern European states, the period of transition to a market-based economy and to democratic forms of government was accompanied by a strong push for privatization, decentralization, and deregulation. Thus, during the 1990s, any actions promoting the concept of regional planning, or even any basic coordination of local government activities, were perceived as an attempt to restore “the past.” The Warsaw Metropolis Association, a nongovernmental organization (NGO) established in 2000, has spearheaded attempts to promote coordinated metropolitan-wide initiatives, but its marginal presence in the media and the lack of strong leadership are clear proof of its lack of political clout. The association was initially created by several suburban and central-city district governments. It was joined by the city of Warsaw only in 2006.

The relationships between the central city and the suburban municipalities have been marked by suspicion on both sides. According to a poll from 2004, the majority of suburban government representatives recognized the positive influence of Warsaw on the development of WMA’s satellite municipalities (Fuhrmann, Grochowski, Pieniążek, Wilk, and Zegar, 2006), but only 45 percent of them conceded that local socioeconomic development depends to a considerable degree on relations with Warsaw. Only 19 of the 35 municipalities that cooperated or attempted to cooperate with Warsaw assessed the impact of such cooperation as definitely positive.⁶

The ambiguous attitude of municipalities within the WMA toward metropolitan cooperation is a result of their desire to reap the benefits of their location in the vicinity of the capital city while also taking advantage of the subsidies they receive for the provision of public services that are financed largely from tax revenues generated in Warsaw. The competing interests of suburban municipalities, coupled with the dominant position of Warsaw as the unrivaled center of the metropolis, have made the concept of intergovernmental cooperation an extremely difficult proposition for the local officials to embrace (Zegar, 2003).

The lack of coordination in the delivery of public services has fueled the already existing tensions between suburban municipalities and the central-city government. Suburban authorities have been rather reluctant to compensate the city of Warsaw for expenses accrued in the provision of infrastructure and services to the peripheral areas. Such attitude has led to the curtailing of bus services to some suburban communities (the periodical closing of regional bus stops in the Jabłonna municipality is a case in point).

The evidence accumulated in the last decade indicates that the voluntary cooperation among municipal governments in the metropolitan area of Warsaw is not producing effective results. The reasons are manifold, but a key factor is that there is more confrontation than trust among local governments. The situation is exacerbated by the weak support that comes from the upper tiers of governments and by a pervasive shortage of political leadership (Swaniewicz and Lackowska, 2007). Taking a pragmatic attitude to cooperation is hindered also by differences in the political orientation of local governments. The local political arena is most intensely contested in the city of Warsaw, which was served by eight mayors with different political affiliations during the period 1990–2007.

An idea that is recently gaining momentum as a strategy for improving government coordination in the metro area is to establish a metropolitan-wide *poviat* (county government), which should also become a statistical unit at the NUTS 3 level. Such a unit of government would be better positioned to address the complexity of the issues related to metropolitan spatial and strategic planning, infrastructure development, and public service provision. The establishment of a metropolitan *poviat* presents serious organizational challenges related to issues of political leadership, the division of responsibilities within a system of self-government, and the procurement of financial resources to maintain its operation. Under the proposed two-tier government structure comprised of municipalities and metropolitan *poviats*, social services would be provided mostly by municipalities and development functions would be managed under the purview of a directly elected metropolitan council (Swaniewicz and Lackowska, 2007).

It is expected that the need to improve the effectiveness of local governments in appropriating EU's structural and cohesion funding will draw the attention of state authorities to the need for carrying out metropolitan governance reform. In the end of 2007, the Council of the Polish Metropolises Union, an NGO founded in 1990, made an appeal to the Polish government for approving legislative changes needed to initiate such reforms. The appeal emphasized the importance of establishing metropolitan government structures for the effective management of spatial and financial planning and for the development of an integrated approach to urban transport, the protection of agricultural lands, and the preservation of open space in metropolitan areas. Gathering public support in the next few years will be critical for the success of this new approach to the challenges of metropolitan growth in postsocialist Poland.

Conclusions

The accelerated processes of suburbanization in the Warsaw metropolitan area during the postsocialist period do not appear to have undermined the economic and social vitality of the Polish capital. Overall, between 1988 and 2002, the central city has managed to increase slightly its population, while the rates of growth in the suburban periphery were maintained at a moderate pace. The sustained continuation of suburban growth has, however, begun to leave its mark on the balance of metropolitan growth. Thus, between 2002 and 2006, an annual population decline of 0.2 percent was reported in the areas of the central city located west of the Vistula River, while the entire western suburban area of the WMA has experienced a population growth of 1.2 percent.⁷

The changes in the spatial structure of suburban areas are much more evident now than in the past, due to the entry of new active subjects on the development scene. During the past decade, a rising number of affluent households, developers, and other private investors have provided a strong push for the creation of a more dispersed metropolitan form. As the contours of a new spatial order are beginning to emerge, the conflicts between two citizen groups with opposite values are highlighted. On the one side are those citizens with a particular stake in the improvement of their individual quality of life (either through economic gains or through the benefits of residence in locations of greater environmental quality); on the other side are those citizens who defend the principles of social responsibility and sustainable development through the promotion of particular spatial order. Among the general populace, however, public awareness of the negative impacts of urban sprawl seems to be rather low and the appeals of urban planners, environmentalists,

or politicians to curb the spread of suburbanization are treated as unjustified. Public attitudes toward a stronger government intervention are measured by the fact that 40 percent of the country's citizens strongly believe in the right of owners to determine the best use of their property (CBOS, 2005).

The process of suburbanization in the WMA seems to be unfolding in a more spontaneous and chaotic manner than in many other European cities. The occurrence of such a phenomenon is supported by the presence of significant land resources available for new development, by local governments' aggressive pursuit of new private investments under loose local development regulations, and by the lack of coordination of urban management and planning initiatives at the metropolitan level. These conditions have generated a haphazard pattern of development, dominated by a scatteration of housing functions, underdeveloped network of technical and social services, and a general environmental degradation of the natural landscape.

The patterns of Warsaw's metropolitan growth have highlighted the obvious deficiencies of the postsocialist planning system, and many urban planners have begun to lament the loss of authority once granted to them by the former political system, which at least allowed them to better protect the open spaces surrounding the capital (Chmielewski, 2005; Gruszecka, 2005). It is clear, however, that finding answers for the challenges posed by metropolitan growth in the postsocialist era requires forward thinking and a political will – which are currently in short supply.

Notes

- 1 This territory includes 7,600 km² of rural areas and 1,200 km² of urban areas.
- 2 During the 1995–2006 period, the number of commercial companies with foreign capital participation increased at a rate of 13.9 percent per year in the western part of the suburban area and of 8 percent in the areas east of Vistula River.
- 3 Only 17 percent of the total city area is covered by such plans.
- 4 Synanthropization is a term describing the process of transformation of elements in the natural environment under human impact, for instance the replacement of plant species with new ones, which are better adjusted to the new environmental conditions.
- 5 Recently the possibility of annexation of three other suburban municipalities has been considered.
- 6 The difficulties of forging metropolitan bonds and identity are not limited to the institutional sector. According to another public opinion poll, prepared by the Warsaw Metropolis Association in 2007, 78 percent of Warsaw's

residents identified themselves with the metropolitan area while only 55 percent of the suburban residents agreed with the statement that they identified themselves with the metropolitan area. The same poll indicated that merely 3 percent of Warsaw's residents and 20 percent of those living in the peripheral zone of the WMA consider the areas outside the former Warsaw voivodeship to be part of the metropolitan area.

- 7 The population growth rates between 2002 and 2006 were balanced in the eastern part of the WMA, with a moderate 0.9 percent annual increase reported on the right bank of the central city and in the eastern suburban areas.

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Postsocialist Suburbanization Patterns and Dynamics *A Comparative Perspective*

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In this chapter we summarize the main features of postsocialist suburbanization on the basis of the evidence presented in our seven cases studies. We highlight the commonalities of the phenomenon as they relate to its historical evolution, growth dynamics and trends, and spatial patterns. We discuss further the presence of intraregional variations and review a set of key factors that account for differences in the patterns and processes of suburbanization across Central and East European (CEE) metropolitan areas.

Metropolitan Growth Patterns and Trends before 1989

Pre-socialist suburbanization

Metropolitan areas began to emerge in CEE toward the beginning of the twentieth century, marking a period of accelerated industrialization and the growth of capital cities as the administrative and economic hubs of the newly established nation states in the region. Prior to World War II, most of the urban growth was concentrated in cities, which enlarged their areas through incremental extensions of their existing urban fabric. The growth patterns outside of the urban core reflected three different streams of development. The first one was represented by the expansion of existing towns and villages in the metropolitan periphery, which was due to the influx of job-seeking low-income migrants from the

rural interior. The second type of growth was represented by a limited number of upper- and middle-income suburbs, while the third one was composed of scattered clusters of garden plots with modest cottages (also known as dachas).

Of these three streams of growth in the metropolitan periphery, the dominant one was the first. The initial waves of settlers to the periphery of urban areas in CEE were fueled not by the flight of affluent residents to the urban fringes (a typical characteristic of the early stages of suburbanization in the Anglo-Saxon world), but by rural to urban migration, in which newcomers located in towns and villages within commuting distance from the central city. This stream of low-income migrants to the metropolitan fringes continued through the second half of the twentieth century, albeit at a much slower pace, as a consistent component of urbanization during the socialist and postsocialist periods.

Suburbs, centered on the bourgeois utopian ideal of creating sheltered environments secluded from the ills of urban life (Fishman, 1987), were less prevalent in Central Europe and were present to an even lesser extent in Eastern European cities. These suburbs were represented by new, affluent communities developing beyond the city boundaries, in areas of superior environmental quality and with good transport connections. The countryside and woodlands surrounding Prague, Budapest, Moscow, and Sofia offered cleaner air and a retreat from the hustle and bustle of capital cities. Some of these new communities were located fairly close to the urban edge, often as direct extensions of the existing urban fabric. Such garden suburbs were quite limited in numbers, primarily due to the fact that the size of cities in CEE and the width of their upper-class urban strata were fairly limited at the time. With the notable exception of Prague and Budapest, urban life in these largely agrarian societies was fairly quaint at the beginning of the twentieth century and therefore still considered superior and desirable by the social elite.

The other form of early suburban development in CEE – the dacha settlements – is a unique phenomenon that originated in the late-1800s and spread throughout the region in the following century, driven by the desire of urban residents to maintain a personal connection with nature in an increasingly alienating urban world. These settlements were used for seasonal and weekend recreation and they ranged from garden plots with small structures for seasonal habitation, often clustered at the urban edges, to recreational dachas in more remote and isolated natural settings. In some countries these properties acquired distinct social connotations. In pre-revolutionary Russia, for instance, many members of Moscow's elite obtained such properties in the heavily wooded areas west of the city (see Chapter 4).

Overall, the early stages of suburban development in what would become later the Eastern Bloc countries had a distinctly different character by comparison to suburbanization in the industrialized countries of the western world. In the emerging CEE metropolitan areas suburbanization was less intensive, the growth outside of the metropolitan core being dominated by an influx of low-skilled labor from the rural interior to the periphery of the largest cities. In that respect, suburbanization in CEE was more similar to the growth of metropolitan areas in Latin America (Griffin and Ford, 1980) and in some other Central and Western European countries than to the experience of the Anglo-Saxon world. Upscale garden communities were present, but in much smaller quantities than in metropolitan areas in the West. The main reasons for this distinctly different path of suburbanization were the relatively narrow strata of the middle and upper classes and the modest level of industrialization and urbanization that characterized CEE countries at the time. Cities in these regions of Europe were smaller, poorer, less dense, less congested, and less polluted than metropolitan areas in the West. Hence most CEE cities were less exposed to the negative externalities of industrial and urban growth that fueled suburbanization in the advanced industrial societies. It should be noted, however, that considerable differences in the levels of urbanization and industrial development existed not just between cities in the west and east of Europe, but across cities in CEE as well. The higher levels of suburbanization in early twentieth-century Budapest and Prague by comparison to those in Sofia or Tallinn highlight still further the linkages between industrialization, urbanization, and suburbanization.

Metropolitan growth under socialism

After the establishment of communist rule in CEE, the growth of metropolitan areas continued, spurred by the economic development policies of the socialist regime, which aimed at a more regionally balanced urbanization. Following an initial period of postwar reconstruction, the growth of metropolitan areas became dominated by the construction of massive socialist housing estates and industrial zones at the urban edges (Figure 1.1). While the relatively modest pre-socialist growth of upper middle-class suburbs came to an abrupt halt, the growth of peripheral communities fueled by the influx of lower income migrants from the provinces, which underlined metropolitan growth in the pre-socialist period, continued – although at a slower pace. The spread of dacha settlements intensified, particularly in the closing decades of the socialist era.

The stream of migrants from towns and villages to the main CEE metropolises continued during the socialist era due to a combination

of several key policies pursued by the communist regimes. First, as we pointed out in the introductory chapter of this book, the priority placed on industrialization and the concentration of economic investments in and around cities created a huge demand for labor in these locations, drawing many migrants from rural areas to the growing industrial hubs (French and Hamilton, 1979). An additional impetus for the swelling of these migration flows was provided by the collectivization of agricultural land and the agglomeration and mechanization of agricultural production, which pushed many rural residents out of their villages and toward the urban hubs of the new socialist economy.

The most radical reconceptualization of the patterns of urban growth during the socialist period took place in the 1960s and 1970s, leading to the emergence of an entirely new type of urban environments: the socialist housing estate. The intellectual inspiration for the design of these new communities could be traced back to the 1920s and 1930s and to the ambitious urban schemes pushed forward by modernist architects and urban planners at the time. Urban growth, in their vision, was to be accommodated in new zones located at the edges of existing cities, which offered residents direct access to ample open space and a range of urban services (Mumford, 2000).

Given the ideological affinity between the modernist principles of urban planning, which espoused the efficiencies of communal habitation, and the communist principles of social organization, the construction of large housing estates at the urban edge (and, to a lesser extent, the construction of new towns beyond that edge) was adopted as a major strategy of urban growth during the socialist era. By the late 1960s and early 1970s, as soon as the authorities established an effective system of mass delivery of housing (one based on industrial production processes), the socialist cities of CEE began to swell with new peripheral districts that exhibited both urban and suburban characteristics. On the one hand, the socialist housing estates were conceived as massive urban extensions rather than independent, self-contained communities. They were mostly contiguous with the urban fabric and developed at high urban densities, demarcating a sharp boundary from the surrounding rural landscapes. On the other hand, they were primarily dormitory communities located at the edges of the compact city and their urban form was distinctly different from the traditional urban fabric. These housing estates were built as master-planned communities featuring extensive areas of open space, and their urban pattern and mix of activities were much more coarse than the fine-grained urban fabric of traditional city quarters. Thus, while the socialist housing estates exhibited many urban attributes in terms of density and building typology, they featured a number of typically suburban characteristics as well;

these were related to their peripheral location and emphasis on residential uses. The abrupt and complete abandonment of these housing development schemes as a primary mode of urban growth after 1989 was one of the clearest signals that the postsocialist city would follow a radically different model of urban expansion.

In spite of the massive housing construction programs of the socialist regime, the system of housing provision failed to satisfy an escalating demand for urban dwellings. With the lion share of public resources dedicated to industrialization, the socialist governments apportioned less than adequate resources to meet a rapidly growing urban population's demands for housing and services, thus forcing many newcomers to settle in towns and villages of the metropolitan periphery (Murray and Szelenyi, 1984). Beside the failure of the socialist system of housing production to meet demand in cities, the chronic disinvestment in inner-city neighborhoods provided additional impetus for migrants to seek housing in peripheral communities of the metropolitan areas. Another policy, adopted by many socialist countries in the 1950s, was to impose legal restrictions on the right to reside in cities. These attempts to curb migration flows by imposing severe administrative controls on the acquisition or loss of residency status had little effect on stemming the flow of rural migrants toward the urban centers. The combination of severe housing shortages with restrictions on establishing city residency channeled many migrants to a belt of smaller settlements that encircled the metropolitan labor markets.

A special stream of suburbanization, albeit fairly limited in its scope within the larger context of urban growth during the socialist period, was the partial conversion of dachas to permanent residences. Over the course of the years, these properties became more than a recreational asset. Starting from the late 1970s and through the 1980s, a number of the original cottages were converted to simple dwellings for weekend or seasonal habitation, and new structures were built on the garden plots to satisfy those needs. Budapest was one of the first metropolitan areas that set in motion this type of transformation, spurred as it was by the relaxation of development controls in line with the effort of the Hungarian government to expand the private sector of the housing market (see Chapter 2). The infusion of stronger residential functions stimulated the expansion of dacha settlements throughout the Eastern Bloc countries. By the end of the 1980s, for instance, Moscow's garden and forest colonies contained close to 1 million summer cottages, which extended along the Russian capital's radial suburban railway lines (see Chapter 4). However, inadequate infrastructure, lack of public services, and restrictions on the size of permitted structures limited to a great extent the appeal of the dacha zones as areas for permanent residence.

The main factor that impacted suburbanization in the socialist years – and this is also one that accounted for significant variations of the phenomenon across the former Eastern Bloc countries – was the way in which each socialist state defined the boundaries of individual property rights and economic freedoms. While the primacy of the state as the main owner of assets was clearly established in all spheres of the socialist economy, considerable variations existed among the socialist countries in the level of restrictions imposed over private property rights. In this, as in many other areas, the Soviet Union defined the fundamentalist extreme. One of the first acts of the Bolshevik government, as soon as it ascended to power in 1917, was to issue a decree that abolished the private ownership of land. The Bolshevik regime proceeded by carrying out a sweeping nationalization of assets, which included all residential properties deemed to exceed a minimal set of household standards defined by the government. Similar radical reforms were subsequently carried out in all territories from the fold of the Soviet Union; but they were implemented with less rigor in the CEE countries that retained their status as sovereign states. In Bulgaria, for instance, while the bulk of urban and agricultural land was nationalized, the majority of residential property owners did not lose title to their holdings. In Poland, nationalization was applied only to some urban land, while the agricultural sector retained its structure, which was based on small-scale family farming. In this respect Yugoslavia and Poland defined the other end of the spectrum: a relatively looser state control over individual freedoms, which allowed the survival of small private enterprises – and even the continuation of some traditional religious practices.

The variations among CEE socialist countries in the level of restrictions exercised by the state over private property rights and private economic activity had a direct impact on the rates of growth in metropolitan peripheries. Countries with more liberal economic policies – such as Poland, Hungary, and Yugoslavia – exhibited higher growth in suburban territories due to the fact that their land and property markets were less constrained, thus supporting the existence of a more active private sector within the construction industry. Yugoslavia was at the forefront of a small number of Eastern Bloc countries that attempted to reform the socialist economic system by introducing some market-based principles during the 1970s and 1980s. Hungary followed soon along this path. The loosening of restrictions exercised by these states over private property rights allowed some households to construct houses for their personal use beyond the urban edge. New housing policies, adopted by the Hungarian government in the early 1980s, provided greater financial support for the private construction sector. By that time, the suburban population of Budapest already exceeded that of the capital city (see

Chapter 2). In Slovenia the construction of self-built, owner-occupied, single-family houses in suburban and rural areas was even more strongly supported by socialist housing policies. As a result, by the late 1980s the rate of population growth in metropolitan Ljubljana began to slow down due to accelerated suburbanization beyond the metropolitan boundaries (see Chapter 3). This type of suburbanization was, however, limited to the experience of a few Eastern Bloc countries and did not have a significant presence in the rest of the region.

While not directly supporting suburbanization, some of the CEE socialist countries engaged more actively in strategies of urban decentralization. In the early 1960s, planners in the Soviet Union adopted the concept of developing new satellite towns, which was advanced for the first time by Ebenezer Howard at the end of the 1800s (Howard, 1902) and later served as an inspiration for Abercrombie's plan for Greater London (Abercrombie, 1945). In the Soviet interpretation of the idea, the emphasis was placed on the growth of highly specialized towns in the outer periphery of Moscow (Khauke, 1960). The implementation of the concept was limited to the Soviet capital, with only a limited number of new towns built outside of the USSR; but different decentralization strategies were employed in a number of other CEE socialist states. In the late 1960s the Polish government experimented with a policy of relocating jobs outside the capital city while placing restrictions on the construction of new housing in Warsaw (see Chapter 8). Whereas this policy was not aimed at promoting suburbanization but rather at achieving a more balanced development of the country's regions, this spatial development strategy set a precedent for the dispersal of activities beyond the established metropolitan centers into less developed territories. In an unusual deviation from the housing policies dominant in the Eastern Bloc in the 1960s and 1970s, the Slovenian government provided subsidies for the construction and maintenance of owner-occupied single-family dwellings in Ljubljana's suburban and exurban periphery, thus spurring the growth of suburbs in these territories (see Chapter 3). The plan was to transfer the main burden of housing provision from the public to the private sector and from the urban centers to the rural interior, concentrating government's responsibility on the delivery of infrastructure and services in underdeveloped territories targeted for growth. This strategy of urban decentralization was pursued on several fronts, including that of the introduction of principles of self-government in 1974, which devolved planning powers from the central to the local governments. Estonia was another example of a country deviating from the dominant model of socialist urbanization; this was due to the special role assigned by the Kremlin government to this country as a major agricultural producer within the Soviet Union.

Following this mandate, the Estonian government invested heavily in improvements of the living conditions in rural areas, thus effectively stemming (even if not completely reversing) the trend of population movement from the countryside to the urban centers (see Chapter 7).

In spite of the consequences – both intended and unintended – of various state policies supporting the dispersal of urban activities during the socialist era, the overall development policies and the legal framework in communist CEE societies impeded effectively the growth of suburbs. This was a result of the strong level of state control over property rights and economic activity, which in turn limited the operation of land and property markets, restricted the production of housing by the private sector, and channeled – through a system of centralized planning – the allocation of public resources to the development of high-density housing estates at the urban outskirts.

A key prerequisite for suburbanization is the ability to convert non-urbanized land to urban uses. In most urban contexts, this process is facilitated through the operation of suburban land markets, where land is traded for such purposes within an existing legal framework of property laws and development regulations. The collectivization of agricultural land in the CEE communist states, which took place in the late 1940s and early 1950s, precluded the development of suburban land markets, as the majority of land outside city boundaries was held in various forms of public ownership (state, municipal, or cooperative). Not surprisingly, Poland and Yugoslavia, which were the exceptions to this policy and abandoned collectivization in the 1950s, were the two countries that experienced the highest rates of suburbanization during the socialist years. In all of the communist CEE states, development on private land outside of city boundaries was strictly regulated. Private properties that fell within existing towns or villages – which were of modest, standardized size, rarely exceeding 0.1 ha – could be developed by the owners to meet their own housing needs, either in the form of a single-family home or as a small multi-family cooperative. Speculative development of such properties was prohibited. Private properties outside of settlement boundaries, on the other hand, were grouped in clusters of garden plots on which only the erection of dachas – structures of limited size, for part-time or seasonal habitation – was permitted.

Aside from the strict state control over property rights and the production of housing, the other key factor limiting suburbanization during the socialist period was the system of centralized planning, which curtailed the power of local governments, particularly in smaller settlements of the metropolitan periphery, to determine their own development policies. Decisions about the spatial allocation of resources were made at

the national level and the majority of public investments were directed to cities that were designated as administrative or industrial centers of national importance. In accordance with this policy, with very few exceptions, national authorities allocated minimal investments in housing subsidies, communal infrastructure, and services outside of existing urban boundaries, thus further limiting the growth of the suburbs.

While these general policies constraining suburbanization were adopted by all European communist states, their implementation varied from country to country. The distinct deviations in Yugoslavia and Hungary from the principal socialist policies pursued in general outline by the other CEE countries clearly underscore the impact that laws and regulations adopted at state level exerted on the processes of suburbanization during the socialist period. Such experiments and innovations with alternative forms of socialism were intended to loosen the rigid grip imposed by the communist doctrine of tight state control over private property rights and economic initiatives, and hence they lowered the barriers for the dispersal of urban functions. These innovations were an early precursor of the tidal wave of societal change that swept through CEE in the early 1990s.

Postsocialist Suburbanization

General characteristics and trends

The profound social, economic, and political transformation of CEE societies following the collapse of the communist regime initiated a process of sweeping sociospatial adjustments in the fabric and shape of post-socialist cities (Stanilov, 2007b; Sýkora, 2009; Sýkora and Bouzarovski, 2012). While the construction of housing estates at the edges of the compact city came to a grinding halt in the first years of the transition period, a key process in the restructuring of metropolitan space was the diffusion of urban activities beyond the urban core on an unprecedented scale. Three notable characteristics in the evolution of suburbanization emerged during the postsocialist years.

First, suburbs began to grow much more rapidly than their metropolitan cores, accommodating most of the new development. This was not just a feature that distinguished a few cities in the former socialist countries, but a universal process that impacted the growth of metropolitan areas throughout postsocialist Europe during the transition years, as most of the critical factors that had impeded suburbanization in the socialist era were either weakened or completely removed. Thus cities in the former Eastern Bloc countries joined a process of accelerated

urban decentralization, which by the turn of the millennium became a defining characteristic of metropolitan areas in the region, just as it did in many of the other large urban agglomerations around the globe (Stanilov and Scheer, 2003; Bruegmann, 2006).

Second, metropolitan growth in the postsocialist years has been led by a different set of forces compared to growth in the previous periods. The swelling of peripheral settlements and the extension of the urban edge through high-density housing estates were superseded by a wave of suburban growth powered by the relocation of upper- and middle-class families from the urban core to the suburban outskirts. While the migration of residents from the provincial periphery to the edges of metropolitan areas continued (albeit at a slower rate than during the socialist years), the flight of upper- and middle-income population from central cities to metropolitan edges became a new and defining factor of postsocialist suburbanization, which was much more in line with the familiar model of suburbanization in the capitalist West.

Third, suburbs began to grow in a highly fragmented and dispersed spatial pattern – a pattern bearing all the typical characteristics of urban sprawl. In addition to the proverbial suburban detached houses, which began to spring up throughout the metropolitan periphery, suburbs acquired a richer mixture of dwelling types (featuring row houses and flats) as well as a hodgepodge of commercial, industrial, and office uses. All of this explosive growth was taking place in a haphazard manner, with very little forethought given to the potentially negative impacts of suburban sprawl.

The growth of settlements in the metropolitan periphery continued to be an influential factor during the postsocialist decades, but in a manner quite different from that of the preceding period. This time, the economic growth of the largest metropolitan areas was energized not by state-run public programs but by globalization forces that channeled a flow of private investments to the largest cities of the emerging CEE markets (Stanilov, 2007a). The new labor demand generated by such investments was not in the industrial sector but in the service and construction ones, and there was a particularly sharp increase in the producer and business services. This demand attracted a pool of migrants, many of them young and well educated, who were coming not just from depopulated rural areas, as had been the case during the socialist years, but from smaller cities and towns as well. In a trickle-down process of neighborhood change, many of the newcomers from the provinces found accommodation in the socialist housing estates. This was due to the outflow of middle- and upper-income households from these areas to more attractive urban and suburban locations.

Residential suburbanization The rapid growth of suburban areas in the postsocialist years was fuelled primarily by the sharp rise in the number of residents moving from the central city to its outskirts and beyond. This type of residential decentralization, virtually nonexistent during the socialist era, quickly developed on a massive scale from the late 1990s onwards. The flight of the more prosperous urban dwellers from the city to the metropolitan outskirts dramatically changed the landscape of the previously sleepy satellite communities, as a constellation of large new houses began to encircle the towns and villages of the metropolitan periphery. Increasingly, however, a number of suburban developments began to appear on greenfield sites, some in the middle of agricultural fields, with little connection to the available infrastructure and service networks.

The processes of residential suburbanization described above began to take shape initially during the first half of the 1990s. The phenomenon manifested itself through the sporadic appearance of scattered detached single-family housing located at the edges of towns and villages in the metropolitan hinterland and through the conversion of some dacha properties from seasonal to permanent use. Most residential growth came in the form of homes built by individual owners with the aid of small contractors. This development pattern reflected the highly fragmented nature of a rapidly growing private building sector comprised primarily of small, family-owned construction firms, which did not have the financial and logistic capacity to manage large projects (Buckley and Tsenkova, 2001). Some of the dacha areas, usually those located close to existing settlements that offered the possibility of extending necessary technical infrastructure, underwent dynamic transformations. In these instances, owners were allowed to convert existing properties or to build new structures for permanent living. Furthermore, the territories around the dacha settlements attracted clusters of new single-family housing, a process most clearly pronounced in the southwestern parts of Moscow and on the southern edges of Sofia.

The second half of the 1990s marked the appearance of the first medium and large-scale residential developments in the suburbs of post-socialist CEE. Most of these projects were financed initially by individual local investors; but, toward the end of the 1990s, the suburban housing construction sector was tested by a number of institutional and international players. Unlike the suburban growth in the early 1990s, which was concentrated in towns, villages, and dacha settlements, the new large-scale projects were built on greenfield sites at the edges of the metropolitan core, in some more remote suburban and rural areas.

The first years of the new millennium were marked by the boom of large-scale residential developments. This was a result of strong economic

growth, which followed the successful restructuring of most postsocialist European economies in the 1990s, and of a related increase in the demand for suburban living, which came from a growing number of middle-class households. The consolidation of the building sector into larger firms that were able to manage large-scale projects, paralleled by the increased interest of investors in such development schemes, reflected the new market realities and made possible the boom in constructing entire new residential communities at the metropolitan fringes. The most salient feature of these development schemes is the prominence given to their design characteristics, which is intended to present these settlements as an alternative to the existing urban environments. Thus the idea of building new communities on greenfields has come full circle, going back to the original nineteenth-century conception of these garden suburbs as exclusive sanctuaries for the affluent members of society. These new master-planned communities, which are still quite limited in number by comparison to the prevailing mode of suburban developments, are driven primarily by individual developers' pursuits of market opportunities and foster a highly fragmented patchwork of isolated developments that dot the postsocialist suburban landscapes.

The growing number of middle-class families entering the suburban housing market during the first years of the new millennium brought significant changes in the predominant stock of suburban residential development. Smaller dwellings in row houses or walk-up apartments became a popular alternative to the detached single-family house. This type of developments tended to be concentrated closer to the central city, targeting mostly young families that relied on the network of existing urban facilities for access to education and child care. An additional factor in the diversification of options for suburban housing with higher density dwellings was the rise in land and property prices, which were set on a sharp upward swing since the turn of the millennium. This forced the majority of buyers on the suburban market to scale down their expectations and opt either for a dwelling in a multi-family building, a modest-sized house on a smaller lot near the city, or a larger and more affordable residential property located at significantly greater distance from the central city.

This trend for smaller and denser housing located closer to the metropolitan center characterized the suburban boom of the middle of the decade 2000–2010. It continued to fuel the suburban housing market until the onset of the global financial and economic crisis in 2008. Since then, as a result of the ensuing economic recession and credit squeeze, housing production in the postsocialist CEE cities fell dramatically to levels substantially below the ones observed since the late 1990s. While in Prague the suburban areas retained substantial parts of new housing

construction, in most cities of the CEE, such as Budapest, Warsaw, Sofia, and Moscow, the majority of the new dwellings built after 2008 are located within central-city boundaries. Residential construction in the suburbs has dropped down to levels much lower than the late 1990s ones. The impact of the crisis on slowing down suburban growth is confirmed by the experience of other parts of the world, particularly in the advanced capitalist societies, where the crisis originated.¹

Nonresidential suburbanization The decentralization of commercial activities in the postsocialist period paralleled the processes of residential suburbanization taking place in CEE after 1989 in the sense that, in its initial stages during the 1990s, commercial suburbanization was characterized by small-scale developments in the urban periphery that were financed by individual investors of relatively modest means. Just like residential development, by the end of the 1990s commercial suburbanization became dominated by large-scale projects backed in large part by prominent international investors. The significantly condensed time-frame of both residential and nonresidential suburban decentralization is a distinguishing feature of postsocialist suburbanization, in contrast with the experience of suburbanization in countries of the West.

The early instances of postsocialist commercial decentralization were loose clusters of small-scale business and service establishments, which began to appear in the first half of the 1990s along main arterial roads radiating out of the major cities – a pattern observed in many other regions of the world and known as ribbon development. Nonresidential suburbanization in the former Eastern Bloc countries, however, started in earnest toward the end of the 1990s, with the realization of the first large-scale suburban and edge-of-town retail and warehousing schemes (Sýkora, 1998; Pommois, 2004). The anticipated entry of a core group of former Eastern Bloc countries into the European Union served as an additional factor for boosting consumer and investor confidence, charting a promising future for the success of such development schemes.

Within a span of a few years around the turn of the millennium, hypermarkets, malls, DIY superstores, outlet villages, and big box discount centers sprung up around the postsocialist metropolitan cores, offering completely new ways of defining the shopping experience for the CEE consumers, long deprived as they had been of such opportunities. By the turn of the millennium many of the former socialist capitals managed to double their shopping center space. This impressive accomplishment was to a certain extent a result of the inadequate amount of retail establishments provided during the socialist era, but even more so a testimony of the break-neck rate at which this segment of the real estate market was developing, driven in large part by the

influx of foreign capital into the emerging economies of the region. The combination of pent-up demand with the increase in household incomes offered a fertile ground for the implementation of an array of retail schemes perfected over the years in the west, most of them with an orientation toward suburban markets (Grab and Dybic, 2006).

The decentralization of office activities in the former Eastern Bloc countries begun relatively late compared to the suburbanization of residential and retail uses (Sýkora, 1998, 2007). During the 1990s the demand for office space was satisfied within the urban core. As development opportunities in the core started to dry out and land values drastically ballooned, new office buildings began to spring up along main boulevards farther and farther out from the metropolitan center. This was a strategy particularly relevant for businesses with large office space needs. The new millennium saw the emergence of the first office parks built at the edges of CEE capitals such as Moscow, Prague, and Sofia.

The majority of these new retail and office establishments were clustered in locations with highest accessibility, being typically found near the intersections of ring roads with major radial transport corridors. Government commitments to improvements in road and transit service capacity in peripheral and outer city locations served as an additional impetus for the dispersal of commercial functions to these areas (see Chapter 10). This process sometimes coincided with the goals of urban planning initiatives geared toward decentralization (as in the cases of Prague and Ljubljana), but often the location of such developments was driven purely by market-based considerations (characteristically in the cases of Moscow, Warsaw, Budapest, and Sofia).

It should be noted that, unlike postsocialist residential suburbanization, retail and office decentralization has been largely constrained to the edges of the compact metropolitan cores. Many of these new commercial developments were conceived as part of the first generation of postsocialist master plans designed to promote the emergence of polycentric urban structures. The emergence of these secondary nodes at the edges of compact urban cores, however, has aided indirectly the spread of population to the metropolitan periphery as they have offered suburban residents easier access to jobs, shopping, and services. The low accessibility of more remote peripheral areas has served as one of the main limiting factors for the wider dispersal of retail and office functions, the other one being the continuing reliance of these establishments on the pool of urban labor and customers. Since the beginning of the economic crisis in 2008, retail and office completions have declined dramatically across CEE. By 2011 such developments reached all-time lows in many countries of the region, reflecting the sharp drop in demand and a subsequent high bump in vacancy

rates, particularly in the suburban segments of the market (Colliers International, 2011).

A new phenomenon in the process of postsocialist commercial decentralization, which emerged as a trend that to some extent counterbalanced the impetus for suburbanization toward 2005, was the growing share of commercial investments targeting brownfield sites. As land prices skyrocketed during the booming first years of the millenium, developers turned their attention to underutilized land within the existing urban fabric. Cities in postsocialist CEE offered an abundance of such opportunities due to the disproportionately high amount of land allocated for industrial uses by the communist regimes. The regeneration of brownfield sites was pioneered in Budapest, starting in the late 1990s (Kiss, 2004); Prague, Ljubljana, Tallinn, and Moscow followed soon afterwards. Such developments targeted initially the most valuable properties located close to the city cores, but later expanded outwards along the main transportation axes. Similar in fate to the residential suburban development, construction on brownfield sites dramatically subsided as funding for such projects dried up during the post-2008 economic crisis.

The decentralization of industrial uses since the early 1990s has been a less novel feature of postsocialist suburbanization, due primarily to the longer historical tradition in the region of locating industrial premises at the edges of urban areas. In a notable deviation from this pattern, new industrial developments in the postsocialist decades were built in smaller clusters farther out, beyond the edges of the compact city. Another distinguishing characteristic of postsocialist industrial developments is that they have become uncoupled from the rail corridors. The switch of industries from rail to road as a main mode of freight transport has led to the dispersal and reclustering of such uses in looser constellations formed along major regional routes. This new spatial pattern is also reflective of the predominance of light industrial, warehousing, and logistics centers, which have comprised the bulk of suburban industrial development. Particularly notable is the emergence of such clusters around airports – a new feature of the metropolitan suburban landscapes, and one signifying the integration of postsocialist economies into the global markets and the emergence of new suburban employment centers as part of a larger process of metropolitan spatial restructuring.

Transformations of metropolitan spatial structure

The postsocialist CEE metropolitan areas have expanded considerably in geographic size as a result of intensive suburbanization, and the new patterns of decentralized development have begun to articulate a new spatial order.

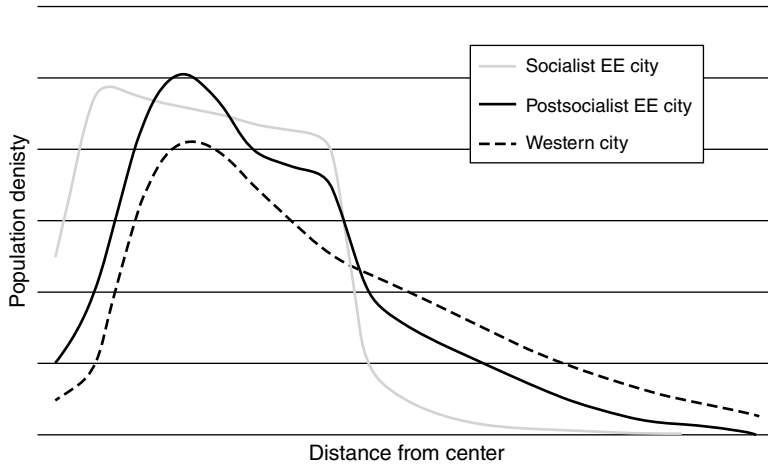


Figure 9.1 Diagram of population density gradients in socialist, postsocialist, and western cities. Source: the authors.

The intensification of commercial uses in city centers and the decentralization of residential functions have changed the population density curve of the postsocialist metropolitan areas in such a way that this curve has begun to converge with those of cities in advanced capitalist societies. During the socialist era, the density distribution of the capitalist and socialist cities differed significantly (Figure 9.1). First, in the socialist city this curve was rather flat. It rose quickly from the center, decreased gradually with distance, and dropped sharply at the city's edge. The quick initial rise of the curve reflects the small size of the socialist city center, devoid as it was of the multitude of commercial activities that characterize the cores of capitalist metropolitan areas. The flatness of the curve, on the other side, mirrors the relatively even distribution of population within the territory of the socialist city. Densities at the city edge remained very high, due to the concentration of large socialist housing estates in the urban periphery. These densities would have been even higher, were it not for (1) the presence of former villages engulfed by urban growth and (2) an abundance of industrial and green wedges inserted in accordance with principles of socialist urban planning. The second distinguishing feature of the density curve of socialist cities is that the overall density tends to be higher than the average density of western cities (Bertaud and Renaud, 1997). This tendency is a reflection of the smaller dwelling unit sizes, the higher occupancy rates per unit, and the higher densities of the new socialist housing estates built in CEE

cities during the 1970s and 1980s. The third unique characteristic of the socialist city's density curve, and perhaps the most defining one, is its abrupt drop at the urban edge – a reflection of the tight government control over land development and of the official policy of accommodating urban growth through high-density urban extensions.

In the years of the postsocialist transition, all the distinguishing features of the density curve – that is, all the features that represented the distribution of population in the socialist city – were altered significantly (Bertaud, 2006). The intensification of the city center through retail and office uses has resulted in the formation of central business districts comparable in size with those found in advanced capitalist societies. The pressures of accommodating this commercial expansion in city centers have hollowed out the urban core of residential functions. The overall densities of the CEE postsocialist cities have also decreased, due to a combination of factors such as the dispersal of residents beyond the urban boundaries, the general decrease in household size (less crowding as a result of intergenerational sharing of housing), the larger size of newly built dwelling units, and the redevelopment of residential properties to commercial uses due to the diversification of activities in previously homogeneous residential districts. Finally and most notably, the sharp edge of the socialist city has been eroded, as the slope of the density gradient outside the urban boundaries has been adjusted to reflect an increase in suburban population. The clustering of higher density housing – composed of low to mid-rise multi-family buildings and row houses – in suburban communities located closer to the city's edges reflects the preference of young middle-class families for continuing to use the educational, social, and cultural services available in the central city. More distant suburban developments are marked by lower density developments with a higher degree of formal urban homogeneity; these characteristics are due to the predominance of the single-family detached house as a preferred housing option in those areas. Overall, the density curve of the postsocialist city has changed in a way that mirrors the logic of market-driven development. This logic is captured in the classic bid-rent model and in turn reflects a decrease in both densities and land values with distance from the city center (Alonso, 1964).

Another major adjustment in the urban spatial structure of the postsocialist city is the emergence of differential rates of growth that characterize the dynamics of urban change within metropolitan areas. The pattern of concentration of development activities in certain parts of the metropolitan fabric is a reflection of market potential that derives from key locational characteristics related to accessibility and environmental quality. Thus, while certain areas have attracted the majority of post-1989

investments, others have desperately lagged behind. In this context, postsocialist governments have been notoriously ineffective in addressing the needs of the disadvantaged communities. Rather than offering measures to counterbalance market-driven development trends, official government policies have concentrated on facilitating the flow of investments to the most attractive locations, thus exacerbating existing spatial inequalities (Hirt and Stanilov, 2009). Greenfield development has been preferred to the reuse of brownfields and to the regeneration of housing estates and declining residential quarters, thus supporting suburban expansion. On a metropolitan-wide scale, this uneven pattern of market-led development has been reflected in the growth of suburbs being faster than that of inner-city areas and in the formation of distinct growth sectors, corridors, and nodes within the metropolitan fabric.

A critical factor shaping these new patterns of metropolitan growth is regional accessibility in national and cross-national contexts. The rapid growth of the southwestern quadrant of metropolitan Warsaw, of the southeastern quadrants of metropolitan Prague and Sofia, of the southwestern and southeastern quadrants of metropolitan Budapest, and of the southwestern and northwestern quadrants of Moscow reflects the spatial patterns of the main economic connections of these capitals at national and international levels. This sectoral growth is anchored into major expressways that serve as backbones of the growth corridors, which attract an assortment of office, retail, and industrial enterprises stretching from the core of the central city to the far reaches of the exurban periphery. In many cases these growth sectors and corridors feature swaths of affluent suburbs located in nearby areas that are distinguished by the high quality of their natural environment. The slow growth sections of the metropolitan fabric, on the other hand, most often lack such attractive natural qualities. Here is where one can find the vestiges of the socialist industrial past and a constellation of working-class commuter towns and villages that have remained by and large unchanged during the postsocialist years.

These patterns of growth indicate that the processes of sociospatial differentiation characteristic of the evolution of CEE postsocialist cities have a strong influence on structuring the physical and social fabric of their suburbs as well. Inner-city areas are not the exclusive domain for issues of environmental justice; and, while the problems might not be as acute or as visible in the suburbs as they are in the city, they tend to become worse for some residents in the suburban periphery. The policies of urban regeneration, which have targeted a growing number of brownfield sites within cities, are rarely extended to include derelict industrial areas in the suburbs. Such suburban sites do not attract investors because of the high costs of environmental cleanup in relation to

their perceived development potential. These suburban communities are often treated as dumping grounds for the waste generated in central cities, as they lack the political resources required to block decisions frequently made by municipal authorities to locate metropolitan waste facilities in the proximity of disadvantaged communities or to remedy the inability of local suburban governments to provide waste collection and prevent practices of “roadside” waste dumping (see Strakansky, 2010). While low-income communities in the suburban periphery struggle to cope with environmental challenges inherited from the past or arising in the present, the rapidly growing and affluent suburbs have become main contributors to environmental degradation due to the fact that such communities are frequently located in the most fragile environmental areas and are often heavily dependent on cars as a main mode of transport. The negative consequences of such developments are often experienced by lower income communities that are most exposed to forces of environmental injustice.

The transformation from socialist to capitalist socioeconomic order and its impacts on urban space need to be considered in the context of the broader processes of contemporary transformation of urban areas around the world – processes related to the transition of metropolitan areas from monocentric to polycentric spatial structures. This transition has characterized the evolution of North American cities since the 1970s (Vance, 1977; Muller, 1981; Soja, 2000) and is becoming a defining feature of contemporary urban growth around the globe (Jenks, Kozak, and Takkanon, 2008). It reflects deeper societal shifts, driven by changes in production and resource utilization that are underlined by technological innovations. In this light, metropolitan areas in the former Eastern Bloc countries appear to have taken the first steps toward breaking out of the mold of the compact city form; and they’ve been doing this through a process of intensive decentralization of all types of urban activities, which are being pushed to the metropolitan periphery.

So far, the ongoing transformation of metropolitan spatial structures in the postsocialist CEE countries is distinguished by three main characteristics: (1) the core cities of metropolitan areas have remained compact and strong; (2) the formation of subcenters outside of the metropolitan core, in a hierarchical network, is not fully articulated; and (3) the predominant pattern of suburban growth remains sprawl. These characteristics depict a process of spatial restructuring which is still in its incipient stages. Yet, while the contours of the emerging polycentric metropolitan structures in postsocialist Europe are still quite blurry, it has become clear that the decentralization of urban activities in the region has induced levels of urban sprawl surpassing those observed in most Western European metropolitan areas (EEA, 2006).

Comparison of Suburbanization across the CEE Region

Methodological issues

The task of performing a comparative analysis of suburbanization across the region of the former Eastern Bloc countries poses considerable methodological problems. In the descriptive analysis presented in our case studies we applied a common definition of suburbanization – as a process of metropolitan growth taking place outside of the urban core and leading to an increase in population, housing, and jobs in these territories. The key issue in this definition (as in any other definition of suburbanization) is where to draw the boundary between the urban core and the suburban periphery. In the majority of our cases, this distinction is based on administrative boundaries, but the delineation of central cities and metropolitan areas varies widely across the CEE region. The current demarcation of these territorial units has been a result of a mixture of various local government systems and historical circumstances specific to each national context. In some cases, such as Tallinn and Ljubljana, the central city's boundaries are quite tightly drawn around the extent of the compactly built-up urban fabric. In these cases all urban extensions (even those that are contiguous with the compact city and have typically urban densities) fall by default in the suburban category, just by virtue of being located outside of the central city's boundary. In other cases, such as Prague, Budapest, and Sofia, the territory of the city is stretched far beyond the extent of the compact urban fabric, to encompass substantial amounts of land in less developed peripheral areas. Most of these territories were annexed to the central cities in socialist times, to secure land for future urban expansion (French and Hamilton, 1979). In the postsocialist period, these land reserves have accommodated significant amounts of typically suburban development, composed primarily of single-family detached housing and big box retail. Yet, following the simple definition of urban and suburban growth as relative to central-city boundaries, in the cases where central cities are "overbounded" these developments would register as urban growth, despite their suburban formal characteristics.

The lack of a consistent and systematic definition of metropolitan area boundaries presents similar methodological challenges, impeding our ability to carry out robust comparative analyses.² Some metropolitan areas stretch out at considerable distances from the central city, while others are more tightly drawn. In some cases metropolitan areas are not officially adopted as territorial units, and the delineation of such boundaries is open to interpretation. In the case of Moscow, for instance, we used the boundaries of Moscow Oblast as a proxy for Moscow's metropolitan area,

mindful of the fact that this Oblast covers over 45,000 km² that include 80 large and mid-sized towns. Unfortunately the lack of comparable data across all of our case studies prevented us from employing more rigorous methods for defining the spatial extent of suburbanization. Data on commuting patterns, for instance, which is commonly used in urban analysis to define the levels of spatial interaction between territorial units in a region, were available only for a couple of CEE metropolitan areas.

In view of these considerations, the findings of the comparative analysis presented in this volume should be interpreted with caution. In addition to the difficulties of applying a consistent method of measuring the extent of suburbanization across the case studies, a group of seven cases is too small to allow for generalizations to be drawn with statistical confidence. Moreover, even within such a small group, there are considerable variations among the cases. The exploration of such differences with the aim of determining causal relationships and the significance of individual factors requires detailed statistical analysis, which is beyond the scope of our book. However, the case studies present sufficient evidence for us to be able to outline the presence of certain generalities in the dynamics of the suburban phenomenon in the seven metropolitan areas of our choice; and we offer these generalities below, by way of summarizing our observations. These summaries are indicative of the broad trends of postsocialist urban growth and could serve as a basis for identifying key similarities and differences in the unfolding of the phenomenon across the CEE region.

Metropolitan growth trends

The most important and clearly defined trend identified from the data presented in our case studies is that population growth in six of the seven metropolitan areas has been much stronger in the suburbs than in the central cities; the exception is Moscow. This is a solid confirmation that suburbanization has been the key component of metropolitan growth in the postsocialist period. This conclusion holds true in terms of both relative and absolute growth. When measured as relative growth (percentage change from 1991 to 2011), in six of our case studies (excluding Moscow) the population of the suburbs has grown by an average of 38 percent, whereas the population of the central cities has registered an average decline of 3 percent. The strongest relative suburban growth is registered in Prague (57 percent); Budapest, Warsaw, and Ljubljana follow, with a relative population increase that averages 40 percent; and after them comes Sofia, with 33 percent. Surprisingly, Tallinn – a metropolitan area that has received a lot of attention where suburbanization is concerned – comes in last, with 17 percent (see Table 9.1 and Figure 9.2).

Table 9.1 Population growth in central cities, suburbs, and metropolitan areas, 1991–2011.

	City			Suburbs			Metro		
	1991	2011	1991–2011	1991	2011	1990–2011	1991	2011	1991–2011
Budapest	2,016,458	1,733,685	-14.0%	567,177	817,562	44.1%	2,583,635	2,551,247	-1.3%
Ljubljana	272,650	272,220	-0.2%	191,152	260,993	36.5%	463,802	533,213	15.0%
Prague	1,214,174	1,272,690	4.8%	168,916	265,304	57.1%	1,383,090	1,537,994	11.2%
Sofia	1,014,322	1,058,025	4.3%	175,804	233,566	32.9%	1,190,126	1,291,591	8.5%
Tallinn	476,591	402,075	-15.6%	128,824	150,568	16.9%	605,415	552,643	-8.7%
Warsaw	1,655,272	1,716,855	3.7%	761,065	1,068,145	40.3%	2,416,337	2,785,000	15.3%
average 6			-2.8%			38.0%			6.7%
Moscow	8,967,232	11,503,501	28.3%	6,693,623	7,095,120	6.0%	15,660,855	18,598,621	18.8%

Source: data from national census statistics.

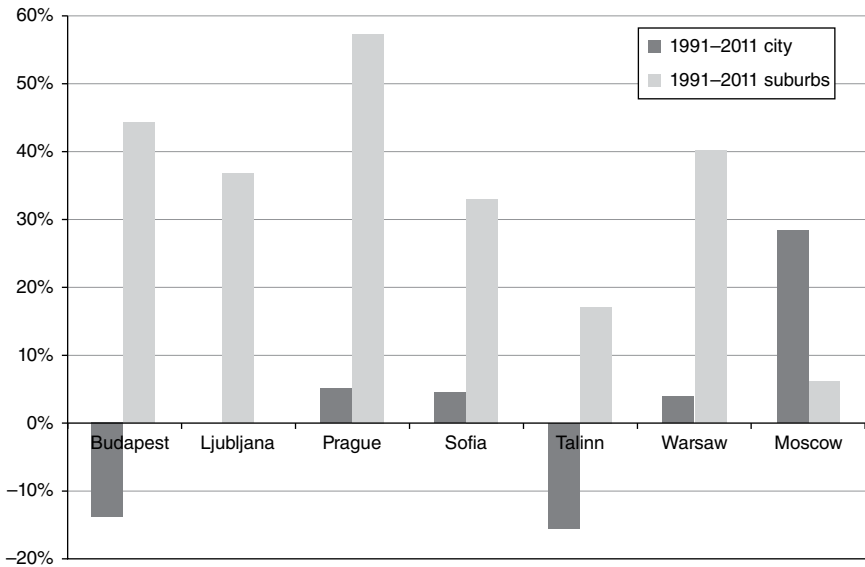


Figure 9.2 Relative growth of urban and suburban population, 1991–2011.
Source: data from national census statistics.

This strong trend toward suburbanization is also displayed by the data on absolute growth. Warsaw and Budapest experienced the highest absolute increases in the number of residents, each adding over a quarter of a million suburbanites to their metropolitan population since 1991. The leading position of these two metropolitan areas is related to their size: they are larger than Prague, Sofia, and Ljubljana, each one of which added between 50,000 and 100,000 to its number of suburban residents. Tallinn ranks last in this order, having increased its suburban population by roughly 25,000 residents. Regardless of minor shifts in the ranking order that are generated by the methods of measuring population change, we should underscore that, in terms of both relative and absolute growth, suburban areas have by far outperformed central cities: the suburbs of the six metro areas (excluding Moscow) have gained a total of over 800,000 residents – a figure that stands in contrast to the combined net population loss of nearly 200,000 in these same central cities over the period 1991–2011.

The growth of the suburbs in the two postsocialist decades is impressive; but let us look now at the contrasting phenomenon we just outlined. With the exception of Moscow, all the central cities in our case studies have either lost population since 1991 or added very little to what they already had. While Prague, Sofia, and Warsaw registered a modest

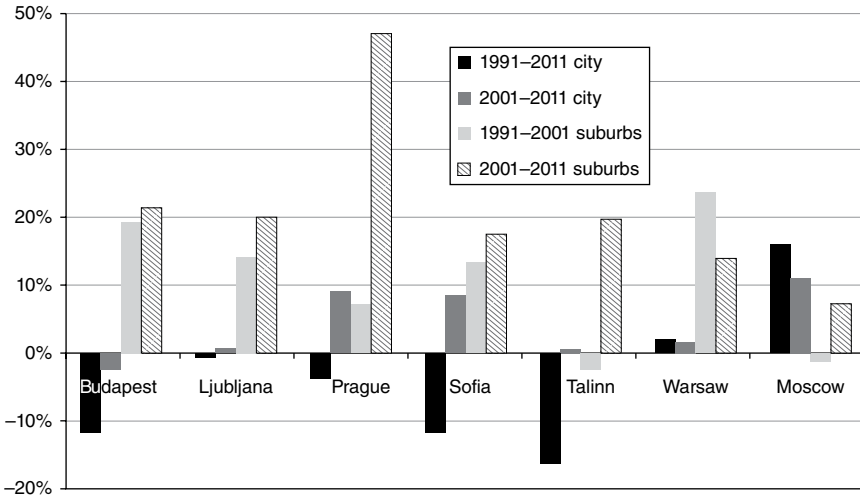


Figure 9.3 Relative growth of urban and suburban population by decade, 1991–2001 and 2001–2011.

Source: data from national census statistics.

growth of about 4 percent during the 20-year period following the collapse of the communist regime and Ljubljana came close to no growth, Budapest and Tallinn lost approximately 15 percent of their urban residents. A more detailed look at population change in the central cities reveals, however, two different dynamics as characterizing the first and the second decade of the postsocialist period. While five central cities registered a net population decline during the 1990s (Budapest, Ljubljana, Prague, Sofia, and Tallinn), four of them (all but Budapest) reversed this trend by achieving a positive growth in the subsequent decade (Figure 9.3). The city of Budapest came in fact very close to accomplishing a similar feat in the years after the turn of the millennium, when it reduced its population losses from close to a quarter million in the 1990s to merely 45,000 for the next decade. Indeed, the latest data show that the Hungarian capital is already in a positive territory, effectively expanding its population since 2009 (see Chapter 2).

While some cities (Budapest, Ljubljana, Prague, and Sofia) have recovered the population losses they suffered in the 1990s and others (Warsaw, and especially Moscow) have added substantial numbers of new residents throughout the transition years, it is perhaps too soon to declare the dawn of an urban Renaissance in postsocialist CEE on the scale of similar processes that have taken place in some regions of Western Europe and North America since the 1990s. As our next chapter indicates, the

growth of European postsocialist central cities during the first decade of the new millennium can hardly be attributed to coherent public policies aimed at urban regeneration, even if there are instances of such interventions in cities like Tallinn, Budapest and Prague, and even if on the whole such objectives have begun to gain traction (Chapter 10). Neither can the growth of central cities in and around the first decade of the twenty-first century be ascribed to a rise in consumer interest in urban living due to life-style choices, concerns about the negative impacts of sprawl, or desire to achieve greater resource efficiency. The relatively weak influence of these factors on the patterns of urban growth in the former Eastern Bloc countries is underscored by the massive expansion of the suburbs in these metropolitan areas between 2000 and 2008. Suburbs were the key growth areas during the 1990s, and they continued to grow at an even faster pace after 2000, hugely surpassing the modest gains in central-city population recorded in the last decade (Figure 9.3).

The recent growth of the central cities included in our analysis should be interpreted in the context of overall metropolitan growth and should be related to the general upswing of the postsocialist economies after the turn of the millennium. The largest metropolitan areas in CEE have been the engines of postsocialist economic growth, concentrating the lion share of capital investments (Stanilov, 2007a; United Nations, undated) and drawing steady flows of job-seeking migrants from the provincial territories. Some of these migrants have settled in the more affordable urban quarters (primarily in socialist housing estates and working-class neighborhoods), thus partially offsetting the outflow of upper- and middle-class residents to the suburbs.

Moscow's success in terms of directing most of the growth of the past two decades within its city boundaries is unique in our group of cases and deserves special attention. A main reason for it is the sheer size of Moscow city's territory and the availability of developable land within it – a result of a series of annexations that took place during the Soviet era. These land reserves accommodated thousands of new dwelling units in the post-Soviet years, accounting for a third of Moscow's present housing stock. Another factor that contributed to the faster growth of the Russian capital vis-à-vis that of the other capital cities in CEE is the unparalleled power of Moscow City's government to influence the patterns of urban growth through the large amount of land and assets that the city has retained in its ownership (Golubchikov, 2004). Finally, an additional factor contributing to Moscow's relatively low suburban growth in proportion to the growth of the city is that the official statistics significantly underrepresent the increase of population in Moscow's Oblast. This misrepresentation is due to the fact that many suburban residents are not officially registered in the Oblast (see Chapter 4).

A large proportion of owners of residential properties in Moscow's suburbs have purchased these dwellings as second homes or as investment during the booming real estate market of the early years of this century, while maintaining an official address in the city of Moscow, in another region of Russia, or in one of the former republics of the Soviet Union. Another sizable proportion of suburban residents in the Oblast is made up of undocumented migrants, whose presence is inadequately captured in census statistics.

Suburbanization growth rates and growth factors

While suburbanization has been a defining characteristic of metropolitan growth in the postsocialist years, different metropolitan areas have undergone decentralization at different rates. This finding warrants examination. Why did some metropolitan areas become suburban faster than others? Is it possible to draw some insights from the data presented in the case studies? The vast body of urban literature explores a wide array of factors impacting the rate of suburbanization. Most frequently cited among these are: (1) historical evolution (which captures the influences of past processes and trends on the present); (2) metropolitan growth rate (suburbanization being a typical characteristic of urban areas of fast growth); (3) settlement size (larger settlements being more prone to suburbanization than smaller ones); (4) economic wellbeing (upswings in the economy being associated with higher consumption of resources); and (5) public policy (which is related to the specific regimes of regulation and control over land development). We offer below a general assessment of the influence of the first four factors on the suburbanization rates registered in the seven metropolitan areas reviewed in this book. This assessment uses three measures of suburban growth: (1) the percentage of metropolitan population residing in suburban areas (calculated by dividing the suburban population by the total metropolitan population); (2) the relative growth of the suburban population from 1991 to 2011 (calculated by dividing the change in the suburban population by the suburban population in 1991); and (3) the proportional increase of the suburban population from 1991 to 2011 (calculated by subtracting the values of measure 1 for 2011 and 1991). We consider the impact of public policy to be the most significant factor in terms of its influence on suburbanization. Therefore we discuss it in detail in the final chapter.

Of the first four factors we listed above, historical evolution is the one that has the strongest correlation with the rates of postsocialist suburbanization. Comparing the results of our first measure of suburbanization reveals that, with the exception of Moscow, the metropolitan areas

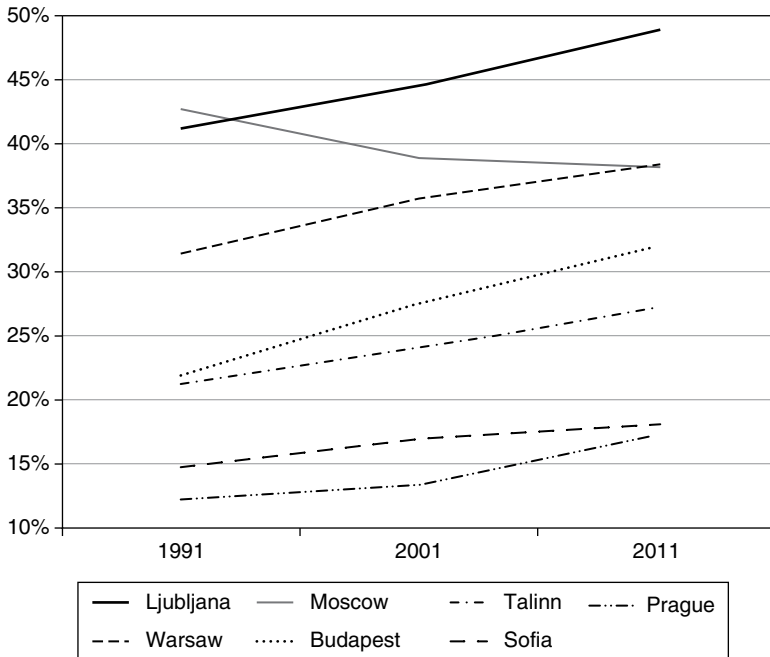


Figure 9.4 Proportion of metropolitan population residing outside central cities, 1991, 2001, and 2011. Source: data from national census statistics.

that had the highest proportion of suburban population in 2011 were the ones that also had, in 1991, the highest proportion of population residing outside of the central cities (Figure 9.4). Ljubljana and Budapest maintained their position at the top, the highest proportion of their metropolitan population residing in suburban territories throughout the postsocialist period (Table 9.2). However, when we look at the relative increase in the number of people who lived in suburban territories from 1991 to 2011 (our second measure), the correlation between past and present is less clear. Prague, which ranked last in 1991 in terms of its share of population residing outside of the urban core, shows the highest relative suburban growth rates between 1991 and 2011. Yet the linkages between past and present emerge again more clearly when we use the third measure of suburbanization – the change in the percentage of metropolitan population living in the suburbs from 1991 to 2011. If we exclude Moscow (for the reasons explained above), the top three metropolitan areas with a population that resided outside of central cities during the socialist period rank highest on that count during the

Table 9.2 Suburban population in proportion to the metropolitan population, 1991 and 2011.

	<i>Suburban population</i>		<i>Suburban growth</i>		<i>Suburban % of metro</i>	
	<i>1991</i>		<i>2011</i>		<i>change 1991 to 2011</i>	
	<i>% of metro</i>	<i>% of metro rank</i>	<i>% of 1991</i>	<i>rank</i>	<i>%</i>	<i>rank</i>
Moscow	42.7%	38.1% 3	6.0%	7	-4.6%	7
Ljubljana	41.2%	48.9% 1	36.5%	4	7.7%	2
Warsaw	31.5%	38.4% 2	40.3%	3	6.9%	3
Budapest	22.0%	32.0% 4	44.1%	2	10.1%	1
Tallinn	21.3%	27.2% 5	16.9%	6	6.0%	4
Sofia	14.8%	18.1% 6	32.9%	5	3.3%	6
Prague	12.2%	17.3% 7	57.1%	1	5.0%	5

Source: data from national census statistics.

postsocialist decades as well. This finding is rather surprising, given the little attention paid in urban literature to the role of the urban form inherited from the socialist city on the growth patterns of the postsocialist period. Yet the data provide strong support for the influence of urban legacies related to past settlement patterns. Metropolitan areas with higher shares of population residing outside of the urban core at the end of the socialist years, such as Ljubljana and Budapest, maintained their position throughout the postsocialist period (Table 9.2).

Metropolitan growth rate does not seem to correlate very strongly with suburban growth in the postsocialist context. In general, faster growing metropolitan areas – such as Moscow, Warsaw, and Prague – tend to show higher percentages of suburban population in 2011. This observation roughly corresponds with the western experience, according to which waves of suburban growth mirror fluctuations in the growth rate of metropolitan areas (Frey and Speare, 1988; Bruegmann, 2006). In periods of fast growth, more development is directed toward outlying areas where there is less competition for space and land values do not appreciate as fast as in cities. However, this relationship between metropolitan growth rates and suburbanization does not seem very strong in the postsocialist CEE and does not hold true for all our case studies. The metropolitan area of Budapest, for instance, experienced a 1 percent net population decline from 1991 to 2011, yet it registered the second

Table 9.3 Metropolitan growth and suburbanization, 1991–2011.

	<i>Metro growth</i>		<i>Suburban population</i>			<i>Suburban growth</i>		<i>Suburban % of metro</i>	
	<i>1991–2011</i>		<i>2011</i>			<i>1991–2011</i>		<i>change 1991 to 2011</i>	
	<i>% of 1991</i>	<i>% of metro</i>	<i>rank</i>	<i>% of 1991</i>	<i>rank</i>	<i>%</i>	<i>rank</i>	<i>%</i>	<i>rank</i>
Moscow	18.8%	38.1%	3	6.0%	7	–4.6%	7		
Warsaw	15.3%	38.4%	2	40.3%	3	6.9%	3		
Ljubljana	15.0%	48.9%	1	36.5%	4	7.7%	2		
Prague	11.2%	17.3%	7	57.1%	1	5.0%	5		
Sofia	8.5%	18.1%	6	32.9%	5	3.3%	6		
Budapest	–1.3%	32.0%	4	44.1%	2	10.1%	1		
Tallinn	–8.7%	27.2%	5	16.9%	6	6.0%	4		

Source: data from national census statistics.

fastest rate of suburbanization, increasing the number of its suburban residents by 44 percent. Within our group of cases, on the other hand, the fastest growing metropolitan area of Moscow recorded the slowest pace of suburbanization. While Moscow's metropolitan population grew by a record 19 percent from 1991 to 2011, Moscow's Oblast registered only a 6 percent increase in its population (Table 9.3).

This relatively weak correlation between suburbanization and metropolitan growth is one of the most distinguishing characteristics of urban growth in postsocialist CEE cities. However, we need to consider the rather different growth dynamics of the two postsocialist decades 1990–2000 and 2000–2010. All seven metropolitan areas experienced healthy metropolitan growth in the early years of the new millennium – from 4 percent in Budapest to 14 percent in Prague. In contrast, during the 1990s the dynamics of metropolitan growth in the CEE region were much more complex. Only three metro areas added population (Ljubljana, Warsaw, and Moscow); two experienced modest population decline (Sofia and Prague); and two suffered heavy population losses (Budapest and Tallinn) (Figure 9.5). The different metropolitan growth dynamics of the two decades are reflected in their respective rates of suburbanization. The trend observed during the second decade of the postsocialist period has been consistent with the findings of studies of western suburbanization: as metropolitan areas grew faster so did their suburbs (Figure 9.6). However, it is important to

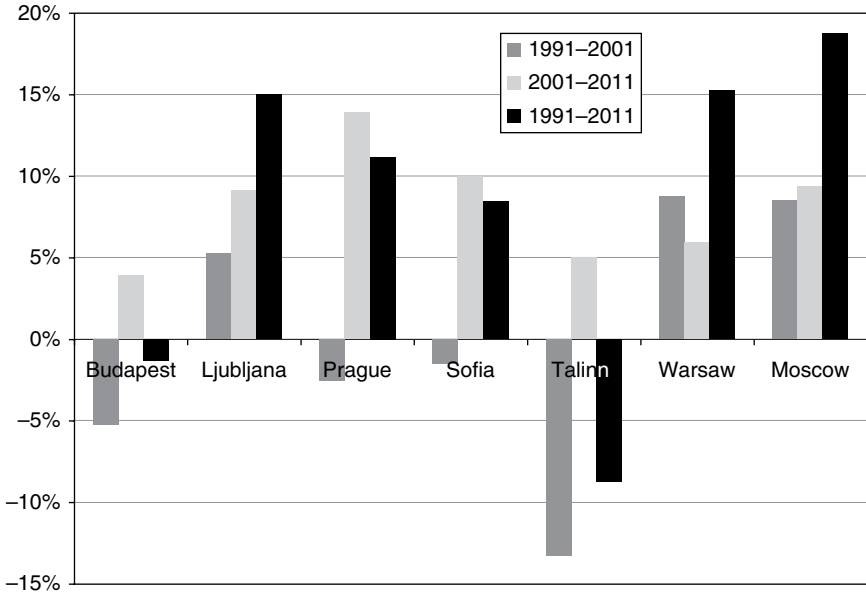


Figure 9.5 Metropolitan growth by decade, 1991-2001 and 2001-2011. Source: data from national census statistics.

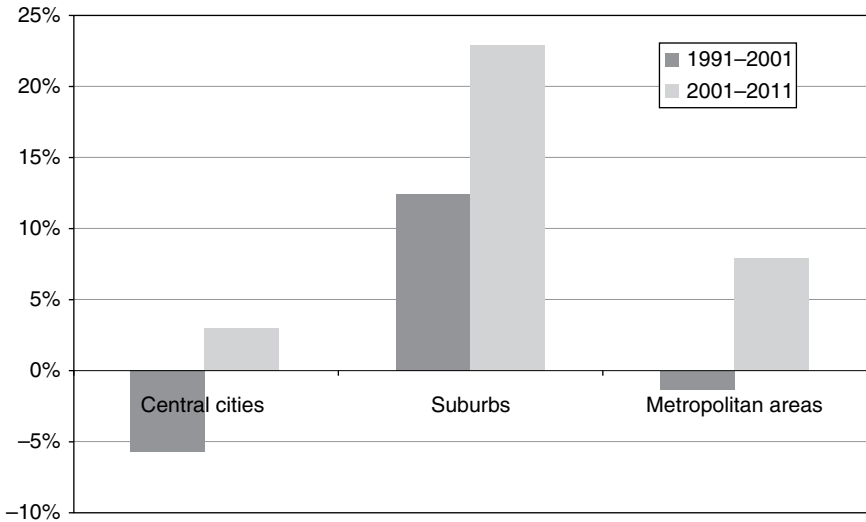


Figure 9.6 Growth of central cities, suburbs, and metropolitan areas by decade for all case studies (excluding Moscow), 1991-2001 and 2001-2011. Source: data from national census statistics.

note that suburbs in the 1990s grew substantially as well. This growth is particularly impressive as, unlike the growth of the next decade, it took place in shrinking or stagnant metropolitan regions and under conditions determined by this state.³

The fact that Budapest has the lowest and Moscow the highest rate of metropolitan growth, while all other five metropolitan areas are between these two, calls attention to the connection between suburbanization and settlement size. The general notion here is that larger metropolitan areas attract more growth, which requires more land, which in turn is more readily found in the periphery. Larger urban areas also tend to be denser and to exhibit more of the negative aspects of urban life – aspects linked to overcrowding, traffic congestion, pollution, alienation, etc. – hence they provide more impetus for suburbanization. In the post-socialist CEE urban context, this relationship between metropolitan size and suburbanization is confirmed by the fact that within each country it is the largest metropolitan areas that have the most dynamic land and property markets and experience the most intensive suburbanization. When we compare metropolitan areas across national borders, however, the strength of these linkages to suburbanization rates is not very clear. The metropolitan area of Prague, which has the fastest growing suburbs (it recorded a 57 percent relative increase of its suburban population between 1991 and 2011), is in the middle of the group of our seven cities in terms of metropolitan population size. Moscow and Tallinn, on the other hand, which are at the upper and lower ends of the ranking in terms of metropolitan size, show the slowest relative growth rates for their suburban population. If, however, we exclude Moscow and Ljubljana as outliers on the basis of their size, the remaining five cities display a very strong relationship between metropolitan size and increase in the proportion of metropolitan population living in the suburbs (Table 9.4).

Another key factor that is well known, from the literature, to affect the rates of suburbanization is the economic affluence of the metropolitan population. In the context of western societies, where suburbanization has been the dominant mode of growth, the phenomenon has very strong connotations of class, being associated with the flight of upper-income households from inner cities to the suburban periphery (Adams, Fleeter, Kim, Freeman, and Cho, 1996). The greater affluence of the population is reflected in higher rates of consumption – including the consumption of space, which leads to higher rates of suburbanization (Manson, Howland, and Peterson, 1984). This factor appears to have a strong influence on suburbanization in postsocialist CEE as well. As a general trend, the trajectory of suburban growth in our seven case studies mirrors closely the rise in the countries' gross domestic product (GDP) output (Figure 9.7). Suburbanization in the former Eastern Bloc

Table 9.4 Metropolitan size and suburbanization, 1991–2011.

	<i>Metro population</i>	<i>Suburban population</i>		<i>Suburban growth</i>		<i>Suburban % of metro</i>	
	<i>2011</i>	<i>2011</i>		<i>1991–2011</i>		<i>change 1991 to 2011</i>	
	<i>Total</i>	<i>% of metro</i>	<i>Rank</i>	<i>% of 1991</i>	<i>rank</i>	<i>%</i>	<i>rank</i>
Moscow	15,660,855	38.1%	3	6.0%	7	-4.6%	7
Budapest	2,583,635	32.0%	4	44.1%	2	10.1%	1
Warsaw	2,416,337	38.4%	2	40.3%	3	6.9%	3
Prague	1,383,090	17.3%	7	57.1%	1	5.0%	5
Sofia	1,190,126	18.1%	6	32.9%	5	3.3%	6
Tallinn	605,415	27.2%	5	16.9%	6	6.0%	4
Ljubljana	463,802	48.9%	1	36.5%	4	7.7%	2

Source: data from national census statistics.

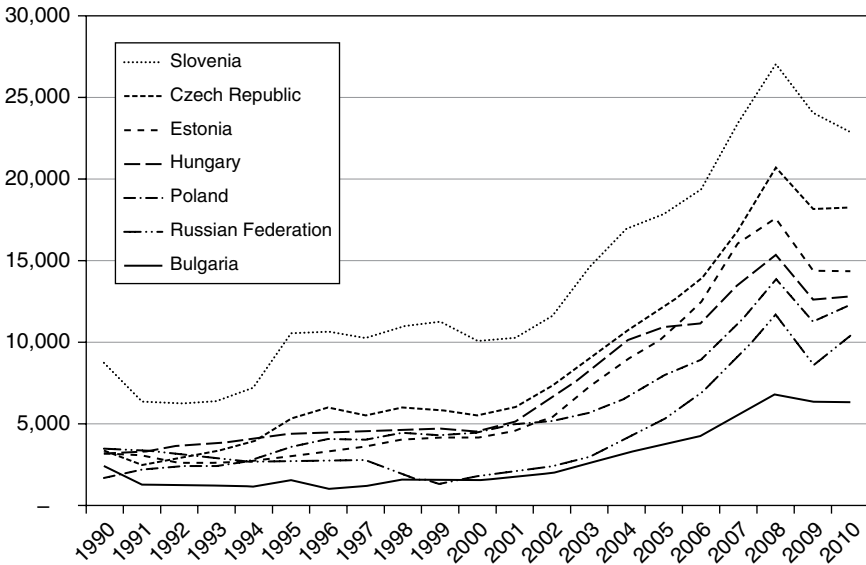


Figure 9.7 National GDP per capita, 1990–2010. Source: data from the World Bank.

Table 9.5 GDP and suburbanization, 1991–2011.

	<i>GDP</i>		<i>Suburban population</i>		<i>Suburban growth</i>		<i>Suburban % of metro</i>	
	<i>2010</i>		<i>2011</i>		<i>1991–2011</i>		<i>change 1991 to 2011</i>	
	<i>\$ per capita</i>		<i>% of metro</i>	<i>Rank</i>	<i>% of 1991</i>	<i>rank</i>	<i>%</i>	<i>Rank</i>
Slovenia	22,893		48.9%	1	36.5%	4	7.7%	2
Czech Republic	18,254		17.3%	7	57.1%	1	5.0%	5
Estonia	14,341		27.2%	5	16.9%	6	6.0%	4
Hungary	12,863		32.0%	4	44.1%	2	10.1%	1
Poland	12,294		38.4%	2	40.3%	3	6.9%	3
Russian Federation	10,440		38.1%	3	6.0%	7	−4.6%	7
Bulgaria	6,333		18.1%	6	32.9%	5	3.3%	6

Source: data from World Bank and national census statistics.

countries began with the general recovery of postsocialist economies in the mid-1990s, exploded from the turn of the millennium to 2008, and sharply declined with the onslaught of the post-2008 economic crisis. However, this relationship between economic performance and suburbanization does not find strong support when we compare the ranking of the countries by GDP per capita with the level of suburbanization in their capital metropolitan areas. The relationship seems to be confirmed only at the top (Ljubljana) and at the bottom (Moscow and Sofia). But none of the four measures of suburbanization that we used indicates any discernible pattern relative to national GDP for the cities populating the middle of the economic output table (Table 9.5).

Summary of similarities and differences

Our exploration of the trajectory of suburban growth in seven CEE capitals since the fall of the communist regime shows remarkable similarities in the patterns and processes that characterize this phenomenon across the region. In our group of cities, Moscow stands out as the only metropolitan area that deviates from the remaining six in certain aspects – a finding that is not unexpected, given Moscow’s substantial differences from the other cities grouped here – both in sheer size

and in the trajectory of the socioeconomic reforms followed by Russia since the early 1990s. The suburban boom experienced throughout the former Eastern Bloc countries is a common feature of the larger processes of urban spatial restructuring driven by the dramatic political, economic, and social transformations that took place in the region during the transition period. Thus the commonalities of the phenomenon of suburbanization exhibited in our case studies are not surprising given their shared past and the common platform of socioeconomic reforms adopted by the former socialist countries after the fall of the communist regimes. Three broad and widely shared characteristics describe the dynamics of suburban growth in the last two decades.

The first and most important characteristic of metropolitan growth during the postsocialist period is that suburbs have grown fast while central cities have either declined or gained only slightly in population. Between 1991 and 2011, the suburbs of the six capital cities (excluding Moscow) added a total of 803,200 residents, which accounts for an average increase of 38 percent, while the total population of the six central cities declined by 193,917 residents, which results in an average decrease of 2.8 percent.

The second commonality is that the rate of suburbanization has accelerated during the second decade of the transition period. In all metropolitan areas except Warsaw, the population of the suburbs increased faster, on average doubling the rate of growth from 10.5 percent increase in the 1990s to 20.7 percent increase in the new millennium. The second decade of the transition period marks also a turnaround for the central cities, four of which switched from negative to positive growth, while the city of Budapest sharply reduced its population losses.

The third commonality of postsocialist suburbanization emerging from our analysis is the timeframe within which these processes unfolded in each metropolitan area, which allows for a general periodization of the phenomenon in four distinct stages (Table 9.6). The initial stage starts from the collapse of the communist regimes in CEE and spans the first half of the 1990s. It is defined by the abrupt end of government-built urban extensions in the form of housing estates and by a latent period of postsocialist suburbanization, represented by the first modest small-scale experiments with residential and industrial development at the edges of existing peripheral communities. The next period, covering the second half of the 1990s, is marked by the emergence of suburbanization as a significant component of metropolitan growth, fueled by the recovery of the national economies in the region. The emphasis during this period is on residential development, with a notable increase in the scale of some developer-built speculative schemes and a greater level of geographic dispersal in relation to the central city. The concluding

Table 9.6 Stages of postsocialist suburbanization.

	<i>Duration</i>	<i>Rate of growth</i>	<i>Scale of development</i>	<i>Content</i>	<i>Predominant growth patterns</i>
1. Latent suburbanization	1990–1995	slow	small	residential industrial	clustering around existing peripheral communities
2. Suburban acceleration	1995–2000	accelerating	emergence and rise of large-scale	residential commercial industrial	diffusion and scattering
3. Suburban boom	2000–2007	fast	dominance of large-scale projects	residential commercial office industrial	formation of growth nodes and corridors
4. Suburban contraction	2008–	slow	medium infill	primarily residential	centralization

Source: the authors.

years of the decade witness also the scatteration into suburban territory of a growing number of commercial developments of various types and sizes. The third period marks the years of the suburban boom, which lasts from the beginning of the new millennium to the onset of the global financial and economic crisis in 2008. The suburbs are not only growing during this stage, but they are diversifying by including – in addition to single-family housing – a mixture of new residential building types, which target a broader segment of the metropolitan population, and particularly young middle-class families. These dwellings are offered in higher-density developments clustered closer to the central city. The presence of nonresidential activities is increasing as well, as is the scale of these development schemes. During this stage the amorphous scatteration of suburban development is gradually beginning to articulate a new spatial structure, which arises from a system of newly emerging growth nodes and corridors. The fourth stage of postsocialist suburbanization is defined by a sharp drop of overall construction activities in the backdrop of a severe and prolonged economic recession. With a few exceptions that occur most notably in Prague, new housing is primarily offered within the central city in denser multi-family mixed-use infill developments. Building construction in the suburbs is largely limited to the completion of projects started in the previous period, during the booming years.

Our analysis of the spatial dynamics of patterns and processes of suburbanization in the seven metropolitan areas presented here reveals that, within the three broad generalities of postsocialist suburbanization described above, a number of variations and differences exist. Each one of our cities of choice exhibits unique features related to specificities of past urbanization and socioeconomic contexts. Budapest, for instance, is the only metropolis in our group that has sustained a steady and strong suburban growth while it lost substantial numbers of urban residents from the early 1980s to the present. A similarly steady suburban growth, dating back to the late socialist period, characterizes Ljubljana. However, unlike Budapest, the Slovenian capital did not incur major population losses. Warsaw is the third metropolitan area with consistently high suburbanization rates during the postsocialist years. In this respect it is similar to Budapest and Ljubljana; but Warsaw also managed to increase its urban population both during the first and during the second decade of the transition period. The Polish capital is also unique by being the only metropolitan area in our group that registered stronger suburban growth in the 1990s than in the subsequent decade. Prague stands out for the record-breaking pace of its suburbanization from 2000 on, which (on average) doubles the rate of all the other metro areas. At the same time the Czech capital registered the strongest

growth of urban population in our group of cities, the increase in urban residents surpassing population gains in the suburbs. The dynamics of Sofia's metropolitan growth mimic those of Prague in terms of metropolitan and urban growth, but the gains in suburban population are significantly more modest here. Tallinn is the only metropolitan area besides Moscow where the suburban population has declined during the 1990s. This happened on a background of urban contraction: the Estonian capital lost over 15 percent of its urban population during this first decade of the transition period. In this respect Tallinn stands in sharp contrast to Moscow, whose distinctive path we have highlighted already on several occasions. Here we should only point out that in the 1990s, while the other metropolitan areas were bleeding out urban population, the Russian capital city increased by nearly 1.5 million residents. And it was about to add another million in the following decade.

While specific and distinct regional characteristics underscore the uniqueness of the suburban dynamics in each one of the metropolitan areas we studied, we need to stress the commonality of the unfolding of suburbanization during the postsocialist years. The main deviations from the general trajectory of suburbanization across our case studies are in the rate and timing of suburbanization. The former Eastern Bloc countries entered each of the four periods of postsocialist suburbanization at slightly different times. These differences in timing reflect primarily the speed and success with which they adopted and implemented political and economic reforms after the fall of the communist regime, thus creating conditions for postsocialist suburbanization. But the time lag between the different countries does not exceed a few years. For instance, while Budapest, Prague, Ljubljana and Warsaw entered the second period of suburban acceleration toward the mid-1990s, for Sofia and Tallinn this period started toward the end of the 1990s.

Even more important than the time at which each metropolitan area entered each phase are the differential rates of suburbanization observed across our seven case studies. These differences can be related to a number of contributing factors, including metropolitan growth and metropolitan size, but the ones most strongly linked with the rate of urban decentralization are the conditions created by pre-1989 spatial development patterns and the post-1989 public policies related to urban growth.

There were considerable variations among the socialist countries in their levels of centralization of power and in the limitations they imposed on property rights, and these variations subsequently shaped the particular socialist planning regimes. The two ends of the spectrum were Russia – which combined extreme levels of centralized control with severe restrictions on property rights – and Slovenia – an early adopter of reforms aimed

at decentralizing power and at introducing market-based principles. These considerable variations in urban development contexts created the conditions for socialist suburbanization, which in turn determined the starting position for the explosion of postsocialist suburbanization in each country. Yet the most critical factor that influenced the rates of suburbanization in each metropolitan area since the early 1990s has been the body of public policies adopted by each country during the period of transition. The significance of these policies on postsocialist suburbanization could not be overstated. It deserves a detailed analysis, which we offer in the final chapter of our book.

Notes

- 1 In the US, for instance, the “great recession” has drawn many people back from the suburbs to the cities in search of employment (Mather, Pollard, and Jacobsen, 2011).
- 2 The problems deriving from the lack of a consistent definition of metropolitan boundaries are illustrated by the fact that population statistics, even for the same metropolitan area, vary considerably depending on the source.
- 3 While the population of the six metropolitan areas (excluding Moscow) declined by 22,343 between 1991 and 2001 (largely as a result of the heavy population losses of 367,820 incurred in central cities), the suburbs grew by 345,477 residents.

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Managing Suburbanization in Postsocialist Europe

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In this chapter we summarize and discuss the impact of public policies and planning at national, regional, and local levels of governance on the spread of postsocialist suburbanization. Using the evidence presented in the case studies, we highlight similarities and differences in the ways in which the patterns of urban growth have been influenced by the policy choices made by the postsocialist government bodies, and we stress the governments' universal acceptance of suburbanization as an integral and inevitable process of urban growth under the conditions of capitalism. The chapter concludes by casting a glance at the likely future scenarios for metropolitan growth in the region and linking the possible trajectories of suburbanization to the ways in which societies in Central and Eastern Europe (CEE) will address key issues that arise from challenges that are specific to the region and from global challenges facing the planet at the dawn of the new millennium.

Managing Urban Growth in the Postsocialist Era

One of the most remarkable features of postsocialist suburbanization is that the spread of the phenomenon throughout CEE unfolded in a regulatory environment characterized by minimal planning constraints. In fact the decentralization of urban functions during the transition period took place with the active support of public policies adopted at

all levels of government. To some extent, the context within which the diffusion of population, jobs, and services gained momentum in the former socialist countries is reminiscent of the historical circumstances in which suburbanization proliferated in Western Europe during the postwar decades. In both cases suburbanization was seen as a natural process of urban growth propelled by economies that were successfully recovering after a traumatic event; this recovery was leading to steady increases in personal wealth and happened in paralleled with the rising influence of North American cultural norms and standards of consumption. As in the case of Western Europe, the realization of the need to curb urban sprawl made its way into the public policy arena only after the negative consequences of such development patterns became all too apparent. For the most part of the transition period, suburbanization was viewed by public authorities in the former socialist countries as an inevitable process and as a welcome sign that their cities were becoming more like the urban areas in the rest of the developed world (Hirt, 2007; Stanilov, 2007).

The fact that, even with the experience of western countries clearly in sight, all the postsocialist countries, without a single exception, failed to foresee, comprehend, and address the challenges posed by uncontrolled suburbanization lends support to our argument (presented in Chapter 1) that such policy choices were embedded in the deep-seated ideological constructs that lay at the base of the transformation of CEE societies after the collapse of the communist regime. The transformation from totalitarian to democratic societies was anchored firmly in neoliberalism, which rose to prominence in the West during the 1980s and became the dominant ideological platform, replacing the old communist doctrine in CEE during the early 1990s. In this section we retrace the national, regional, and local development policies and practices that have exerted the greatest influence on the patterns and processes of postsocialist suburbanization.

National policies and planning

In the past 50 years urban scholars have investigated a wide range of factors that influence the patterns of metropolitan growth, highlighting the role of market and economic forces (Mills, 1972; Brueckner and Fansler, 1983), transportation and information technologies (Warner, 1978; Muller, 1981; Castells, 1989), globalization processes (Sassen, 1995; Harvey, 2001), class and racial relations (Goldsmith, 1997; van Kempen, 2007), individual preferences (Hirschorn, 2000; Fuguitt and Zuiches, 1975), local politics (Logan and Molotch, 1987; Davies, 2002), and local planning practices (Levine, 1999; Pendall, 1999). Among these

various factors, national policies have received disproportionately little attention, given the magnitude of their impact (Jackson, 1987; Macleod and Jones, 2011); and they have received even less consideration in the postsocialist European urban contexts (Stanilov, 2007). Yet what transpires clearly from the analysis of our seven case studies is that, in both the socialist and the postsocialist periods, public policies formulated at the national level have played the most critical role in the processes of urbanization and suburbanization.

As we pointed out in Chapter 1, the course of suburbanization has been influenced first and foremost by policies aimed at the transformation of CEE societies from socialist to capitalist socioeconomic systems. The deep processes of restructuring initiated after the collapse of the communist regimes in CEE were anchored in three reform imperatives that called for the privatization of state assets, the deregulation of economic activities, and the decentralization of political power. All three of these key areas of social reform provided critical impetus for a rapid postsocialist suburbanization.

The first and most important issue on the reform agenda pursued by the new post-1989 national governments was privatization. Of paramount significance for jump-starting the processes of intensive suburbanization in the postsocialist years was the privatization of land, which allowed the establishment of land markets where properties could be traded freely – a condition that did not exist during the communist period. Of particular importance for postsocialist suburbanization was the restitution and privatization of agricultural lands in the periphery of cities. The value of such properties increased multifold in the course of several years, particularly in areas with good development potential based on the property's accessibility and environmental characteristics. The rush of investors purchasing such agricultural properties in the vicinity of urban centers was driven by the assumption that restrictions on their development would be lifted in due course. This line of reasoning was justified by the rising importance of the property rights agenda, by the liberalization of prices, and by the emphasis placed on deregulation.

The second critical component of postsocialist reform – deregulation – was aimed at the creation of a free market economy. In the urban arena the deregulation imperative was translated into a general relaxation of development controls, which extended to the conversion of agricultural land to urban uses. New legislation passed in most of the former socialist countries in Europe during the 1990s allowed such conversions to be realized with relative ease, subject to the developer's initiative. The privatization of land and the simplification of legal procedures for the conversion of land to urban uses has fueled the proliferation of urban sprawl in postsocialist CEE.¹ Deregulation has also allowed the construction of

housing on former dacha properties, thus aiding the processes of residential decentralization. In general, coupled with the adoption of new legislation aimed at advancing individual property rights, deregulation has facilitated the emergence of a much more flexible, market-driven approach to urban planning, which favored investors' interests over those of the general public (Balchin, Sýkora, and Bull, 1999; Sýkora, 2006). This entrepreneurial style of urban management has been embraced particularly by suburban municipalities, which have capitalized (quite literally) on the devolution of power from central to local authorities.

The third pillar of postsocialist reform – the decentralization of political power, which passed from state to local governments – has proven to be a most critical factor of postsocialist suburbanization. The essence of the process, which began in the early 1990s, was to grant the lower levels of government more power to manage their local affairs – including the right to regulate land development (Nedovic-Budic, 2001). The drastic reduction of state subsidies and the greater financial autonomy granted to local governments encouraged suburban municipal authorities to make the most of their resources. Under these conditions, providing incentives for land development became the most common revenue-generating strategy. We address specifically the role of local governments in fostering suburbanization later in this chapter, but it is important to underscore that their behavior was in large part conditioned by structural transition policies aimed at transferring power (and responsibilities) from the state down to local authorities. Another notable component of the postsocialist decentralization policy has been the break up of large administrative territories into smaller independent units, which has created further fragmentation of the CEE metropolitan landscapes. Today metropolitan Budapest encompasses 80 independent settlements. Moscow Oblast features about 80 large and mid-sized towns, 36 districts and an equal number of administratively independent cities. The metropolitan area of Warsaw includes 38 other cities and towns, and 76 municipalities. Even the relatively small metropolitan area of Tallinn features 23 suburban municipalities. On this account, Prague holds the record among the former socialist European capitals with over 200 independent municipalities within its metropolitan territory. Another important consequence of the decentralization of political power – its passing from state to local municipalities – has been the weakening of regional authorities. The top-down devolution of power during the transition period bypassed this level of government, curtailing regional governments' authorities over spatial and development planning.

The establishment of the strategic framework for the transition to capitalism, which was centered on the neoliberal principles of privatization,

liberalization, deregulation, and decentralization, set the tone for the formulation of subsequent public policies and programs. A common feature of CEE postsocialist state governments has been their reluctance to establish national urban development strategies. The presumption shared among state authorities across the region has been that, with the decentralization of power, municipalities should manage their own development affairs. Yet this philosophy of pushing decision-making responsibilities down the government hierarchy has contributed to an absence of coherent national policies in key areas of development. The lack of concrete national programs and plans for urban growth management, urban regeneration, housing renovation, brownfield redevelopment, and infrastructure improvement has precipitated the processes of inner-city decline and has thus indirectly fostered suburban expansion.

It should be noted that the integration of postsocialist CEE countries into the European Union has had a mixed effect on the formulation of national urban policies and on the processes of suburbanization. On the positive side, EU mandates for funding appropriation have emphasized the need to reform metropolitan governance and have required harmonization of environmental policies and regulations in line with EU standards. Postsocialist governments, at all levels, have received much needed guidance in promoting the ideas of sustainable development, and many of the policy documents adopted since the early years of the millenium are framed to address such concerns. However, there are very few examples in which principles of sustainability have served as a basis for passing new national laws and regulations aimed at achieving specific sustainable development goals in the realm of urban development. In the absence of concrete policy directives and implementation instruments, the ideas embedded in the strategic EU policy documents have been left open for interpretation by local authorities – an approach which has not always produced the intended results.

The absence of national urban growth strategy or of a coherent set of urban development policies was characteristic for the transition period and constituted a policy in itself. Under these circumstances, suburbanization was buttressed by a number of economic development policies adopted at state levels. The priority placed on enticing large foreign investors is a good example of the impact of such national development strategies. During the 1990s, most CEE states created special laws, agencies, and a number of incentives (including tax breaks, streamlined approval procedures, and the establishment of special enterprise zones) designed to attract investors to newly developed industrial zones, most of which were located in suburban and exurban areas. Moreover, foreign developers of big box retail and other large-scale suburban schemes were given the green light by the postsocialist governments just

at a time when the implementation of such developments was getting more and more constrained by the anti-sprawl regulation adopted in a growing number of Western European countries (ICSC, 2002).

Further support for the intensification of postsocialist suburbanization was provided by national infrastructure development policies. State priorities during the transition period emphasized the implementation of big infrastructure projects that favored the development of transnational corridors, expressways, and beltways. These infrastructure projects were pushed forward in large part by the ease with which they could secure funding through the financial channels of the EU and other major international agencies. These improvements of the main road networks increased accessibility to the periphery of large cities, giving a huge impetus to the forces of suburbanization. In addition, the concentration of public resources on the implementation of such big infrastructure projects has diverted funding from other areas that also competed for government subsidies, including public transportation and housing, urban regeneration, and environmental protection, which in turn encouraged further suburbanization.

Lacking a set of coherent national policies and guidelines for sustainable spatial development and urban growth management, local governments embraced an economic development agenda that channeled growth to new territories, with little regard for sociospatial and environmental consequences. Yet, after the suburban boom of the early and middle years of the first decade after the turn of the millennium, the negative consequences of uncontrolled growth began to emerge as an area of increasing public concern. Feeling the pressure for more active engagement, some postsocialist CEE state governments have begun to adopt new strategies aimed at addressing the problems of uncoordinated development and urban sprawl.

Since around 2005, a number of new legislative initiatives have been put forward in some of the former Eastern Bloc countries with the aim of improving the existent systems of spatial planning. Slovenia has been at the forefront of such developments, adopting in short succession several major legislative acts intended to strengthen the coordination and enforcement of planning activities (Chapter 3). In the highly fragmented postsocialist metropolitan landscapes, the lack of coordination of spatial development among suburban municipalities has become a well-recognized weakness of the systems of territorial governance. Several CEE governments have focused their efforts on setting up the legal framework required to enable the adoption of metropolitan-wide planning approaches. In 2005 the Hungarian parliament passed the Act on Spatial Planning in the Agglomeration of Budapest, which revoked the exclusive planning rights of the settlements around Budapest. The

Act requires broad consultations for the approval of land use decisions as a guarantee that the interest of all municipalities within the region is represented (see Chapter 2).

A number of postsocialist countries in CEE have made strides toward adopting national spatial development strategies. In 1999 Poland was the first postsocialist country to adopt a Concept on National Spatial Development, which heavily emphasized the principles of polycentric growth and the need for restraining development overspill into the metropolitan hinterlands (see Chapter 8). In 2004 the Slovenian government adopted a Spatial Development Strategy, devoting special attention to the management of dispersed settlement patterns and emphasizing the densification and revitalization of existing communities (see Chapter 3). The national Spatial Development Policy of the Czech Republic, which was approved in 2009 and set national priorities for sustainable development, listed the need to curb uncontrolled suburbanization as one of its goals (see Chapter 5). In Estonia, a national strategy called “Estonia 2010” advanced the idea of a growth based on the extension of existing settlements in order to curb the dispersal of activities into suburban territories (see Chapter 7). These are relatively new initiatives, underscoring the realization that the problems of urban growth should be addressed strategically, at a national level, and that new legal and institutional arrangements need to be made to allow spatial planning to take place at the appropriate spatial scale, which most often surpasses tightly drawn local boundaries.

Mid-tier governments

All of the case studies included in this book point to the fact that the status of the intermediate level of government, including county and regional authorities, was significantly weakened in the process of decentralization through which political power passed from state to local governments in the early to mid-1990s. During the socialist years, these administrative structures served primarily control functions, being mainly responsible for overseeing the local implementation of policies formulated at the state level. Regional and county plans were drawn up by centralized institutions, which were directly accountable to state authorities, with some input provided by regional governments. After the demise of the communist regime, regional and county governments were stripped of their regulatory functions, granting almost complete freedom of decision-making to local authorities. During the early 1990s anti-communist sentiments ran high in postsocialist CEE, and any actions that promoted a vertical organization of decision making, or even a horizontal coordination of local government activities, were

perceived as attempts to restore the ways of the old regime. The role of regional and county governments was reformulated in accordance with such attitudes. Later, in preparation for accession to the European Union toward the end of the 1990s, candidate countries had to rebuild and strengthen their regional tier of government as a prerequisite for receiving EU structural funds.

The first function that regional and county governments were required to perform was to carry out national policies at a regional and county level. This function was emphasized in the EU-driven adjustments made to the administrative systems of the countries that were applying for EU membership; but it was significantly undermined by the devolution of power to local governments. The decentralization of administrative powers not only transferred most of the control functions from the regional to the local level, but it assigned powers to local authorities that regional governments never had – most importantly, the autonomy to prepare and adopt as laws their own spatial development policies and plans.

After the postsocialist administrative reforms, regional and county authorities were required to adopt plans for the development of their territories; but these plans were drawn, in essence, as economic development programs with weak spatial development components. Most of the regional plans lacked a clear assessment of how well they linked to existing local master or strategic plans. Most of all, they had little legal power, serving only as advisory documents that informed the overall development of local plans. In reality, given the redistribution of the decision-making power that emphasized the importance of local governments, municipal authorities have felt very little pressure to comply with ideas put forward in regional- and county-level plans, opting to follow their own development priorities instead. This has undermined the influence of regional and metropolitan plans to the extent that they failed, on a regional scale, to guide key aspects of spatial development. Thus, for instance, none of the three growth poles that have emerged in metropolitan Budapest after 1990 could be considered a result of planned regional growth (see Chapter 2). Similar is the case of the *Průhonice-Čestlice* regional retail center in the southeast of Prague, which has emerged not as an element of a regional development plan, but as a local market-driven initiative (see Chapter 5). Finally, while development in some metropolitan areas has been at least partially influenced by regional planning initiatives, other city regions, such as Warsaw, are still lacking basic guidance in the form of officially adopted, metropolitan-wide spatial development plans (Chapter 8).

The advance of suburbanization and the recent decline in investments has heightened competition among local governments within

metropolitan areas. In this context, regional and county governments have attempted to serve as facilitators of dialogue and interaction among local governments within their jurisdiction. Yet the efforts made by mid-tier governments in this capacity have been constrained by a lack of political will for cooperation among local administrators – an attitude rooted in their fear of relinquishing newly acquired powers over development decisions. This mistrust in the upper echelons of government has been sustained by some regional authorities' practice of circumventing consultation with local governments altogether and of negotiating the approval of large-scale development initiatives directly with investors, as has been the case in Moscow Oblast (see Chapter 4).

While regional and county governments have had very limited success in advancing intergovernmental cooperation, local governments have increasingly come to realize the benefits of wider planning coordination at a metropolitan level. This change in attitude has resulted on the one hand from the difficulties experienced by suburban municipalities in providing services to their fast-growing populations; and, on the other, from the realization that many problems of urban growth, such as transportation and air pollution, could be successfully addressed only through regional cooperation. In an attempt to improve their capacity to deal with such problems, municipal governments in Tallinn and Warsaw have begun to form voluntary associations (see Chapters 7 and 8). The evidence to date is that such organizations face significant challenges in establishing enduring cooperation networks. One of the few successful examples of metropolitan cooperation is the establishment of Prague's integrated transit system (PIT), which connects Prague with 299 municipalities in Central Bohemia by using a unified fare and ticketing system (see Chapter 5). However, confrontation – rather than cooperation – seems to persist as a main mode of interaction, and establishing trust has proven to be a rather difficult task, particularly in the context of a weak support from the upper tiers of government and a chronic shortage of political leadership. It has become clear that forging bonds of cooperation among local governments would require solid political and legal agreements, which could be established only within an appropriate legal framework.

A main challenge for the existing regional and county governments in their dealings with problems of metropolitan growth is the spatial mismatch between their jurisdictional territories and the boundaries of the rapidly expanding metropolitan areas. This discrepancy has brought into question the need to establish metropolitan planning authorities endowed with the necessary executive power to operate at the metropolitan level. The formation of metropolitan governments is part of an initiative in which opportunities for the development of

more democratic, bottom-up processes of territorial self-organization are negotiated within the newly established democratic system of governance. Experiments with such types of initiative have begun to bear fruit. In Ljubljana, a joint venture between the capital city government and the surrounding 25 municipalities has produced the first spatial development concept for Ljubljana's urban region (see Chapter 3). The idea of regional tax sharing as a basis for creating agglomeration associations has also been floated in political circles as an alternative to the inadequate systems of metropolitan governance that are in place now. So far this idea has not gained much traction, as local governments continue to be viewed as the main nexus of control over land development and provision of services within metropolitan boundaries.

Local development planning

In the context of weak national and regional planning, competition among local governments and market forces has become the dominant factor in the spatial distribution of investments through the metropolitan regions of postsocialist CEE. With the dismantling of the socialist, hierarchically organized system of planning and with the devolution of power to local governments, the powers of central-city authorities to regulate development within the larger metropolitan areas have been confined to the central city's administrative boundaries, giving free reign to authorities in the surrounding municipalities to control development on their territories. As a result of the growing political independence of local authorities, suburban municipalities in the metropolitan areas of Moscow, Budapest, Warsaw, and other major cities of the region have amassed resources that allow them to challenge the previous dominance of the central-city government in matters related to urban growth regulation.

Suburban authorities in metropolitan areas have become avid promoters of their locational advantages. Highlighting suburban assets such as cheap land, low costs of living, and favorable environmental conditions, they have become increasingly successful in attracting new residents and investors away from the overheated central-city markets. In the absence of a coherent national vision for urban growth, local authorities have embraced an economic development agenda, which has been exceptionally friendly to revenue-generating investment proposals at the expense of broader, long-term environmental and social concerns. With the intensification of competition among local authorities for attracting outside investments, social and ecological concerns have been pushed down on the list of government priorities.

Since the collapse of the communist regime, land use planning at the municipal level has been characterized by ad hoc political decisions,

investment-led approaches, and lack of a long-term strategic vision of the future. After the fairly short period of the booming years, the entrepreneurial style of planning based on the principle of enticing any type of investments has created a number of challenging problems. The oversupply of land provided by local authorities outside the central city has facilitated a patchy, highly fragmented spatial pattern of development, contributing to increases in automobile dependence, traffic congestion, and air pollution. The common practice of suburban authorities to strike gentlemen's agreements with investors by designating areas for development "on demand" has undermined efforts to protect valuable environmental resources. The sharp increase of residents and businesses in the suburbs has surpassed the ability of local authorities in these areas to provide an adequate level of services, a situation that has been exacerbated by the lack of intergovernmental cooperation in land development.

While postsocialist suburbanization has been fueled by the pro-growth policies of suburban local authorities, central-city governments have played a critical role in supporting the processes of decentralization as well. To begin with, they have not been particularly effective at developing clear strategies on how to mitigate the negative impacts of the outflow of population and economic assets from their territories. The low priority placed on urban regeneration is a primary example of such deficiency of foresight; but, perhaps even more importantly, some central-city governments have adopted policies specifically aimed at the decentralization of urban activities as a main goal of their development plans (as happened in Ljubljana and Sofia), while all of them unreservedly embraced the idea of polycentric development as a main goal.

The fervor with which urban decentralization was pursued in the early post-1989 years was hardly surprising given that suburbanization was perceived as an essential feature of cities in the advanced capitalist countries, and hence as a key characteristic that the former socialist cities striving for integration with the West should acquire. Yet the enthusiasm with which the processes of urban decentralization were embraced by the overwhelming majority of planning professionals in the postsocialist countries is surprising, considering that a good part of them should have been aware of the anti-sprawl debate, which by that time dominated planning literature in the West. Notwithstanding the evidence for the negative impacts of suburbanization, most master plans developed for CEE cities in the second half of the 1990s accepted the decentralization of urban functions as a natural component of urban development under market conditions. Critical questions regarding the impacts of such policy were rejected on the grounds that the former socialist cities are too dense and offer very limited choices in terms of housing options

by comparison to cities in the West and that a certain degree of deconcentration is both desirable and required for achieving a new, multi-nodal metropolitan spatial structure. Such a spatial transformation was considered more efficient and in line with the concept of polycentricity advanced in the European Spatial Development Perspective.

While the idea of articulating a polycentric spatial structure was well justified given the heavy concentration, during the communist era, of service and office functions in the centers of the former socialist cities, the emergence of secondary nodes has been an uneven and slow process, undermined by the inability of the adopted plans to control development in other parts of the metropolitan area. In addition, many of the new secondary centers were planted at the very edge of the urban core, so that opportunities to insert them into the existing urban fabric were overlooked. The edge-of-city centers have made access to jobs, shopping, and services a lot easier for residents in the metropolitan periphery. Under these circumstances, the pursuit of polycentricity reinforced decentralization trends without the benefit of articulating a clear and more efficient metropolitan spatial structure.

An important aspect of the acceleration of suburbanization, which took hold in metropolitan areas of postsocialist CEE toward the end of the 1990s, was that the process diffused a great amount of development to the expanding urban periphery, bypassing many urban areas in dire need of investments. In their acceptance of market forces as a dominant agent of change, postsocialist planners assigned a high priority to fostering urban growth, directing the majority of public and private resources to the development of shopping centers, office parks, and the high-class road infrastructure required to connect them; hence the maintenance and upgrade of inner-city communities was assigned a very low priority. None of the postsocialist master plans of the first generation, adopted in the late 1990s, identified the need for investment in established urban communities as an area of public concern. Most planners operated on the assumption that the market would channel private investments to these areas; yet such investments have been highly selective, directed toward certain communities that exhibited a set of desired locational and environmental characteristics. The decline of many other inner-city areas due to sustained lack of public and private investments, coupled with the commercialization of the city center, pushed many residents to the metropolitan periphery.

By 2005 suburbanization in the largest postsocialist metropolitan areas of CEE reached such proportions that the negative impacts of the uncontrolled dispersal of urban functions became evident even to the most fervent proponents of market-driven development. The case for higher levels of regulation was advanced by a number of interest groups

such as developers, community leaders, and environmental activists. The influx of better educated, more politically astute upper- and middle-income residents to the suburbs has put pressure on local governments to improve infrastructure, provide greater levels of services, and protect community assets such as parks and open space. However, public input into the decision-making process that should lead to the formulation of local plans and policies has been limited in its scope, given the discrepancy among the interests of old and new residents and their clashing visions about the future of these suburban communities. In addition, the issues pressed forward by local residents remain rather parochial and show little regard for the broader consequences of local decisions on the development of the broader metropolitan region. The mentality of many middle-class residents who have relocated from the city to the suburbs is often dominated by strong beliefs in the sanctity of individual freedom and by general distrust of any formal structures of cooperation beyond those required to address local development matters.

The main resistance to the continuing expansion of suburbs has come not from local opposition to current development practices, but from advocates of the broader public interests, particularly those concerned with environmental impacts of sprawl related to the degradation of natural areas and the disappearance of open space. Social and economic issues related to the diffusion of investments from the urban core to the periphery have been less prominent as a topic of public debate but have begun to surface in some professional discussions and media publications.

Reflecting this change in public attitude, the second generation of postsocialist master plans for central cities and metropolitan cores, whose preparation was initiated around the turn of the millennium, began to acknowledge and to address more directly the challenges of rampant suburbanization. This shift in tone has been influenced to a great extent by the introduction of the sustainability agenda, mainly through European policy guidelines. Issues such as inner-city decline, loss of urban vitality and community identity, and sustainable urban growth have entered the planning vocabulary and made their way into policy documents.

In some metropolitan areas where urban regeneration has become an officially adopted policy of the central cities' master plans, such strategies have begun to bear fruit. The implementation of regeneration policies in most postsocialist European countries still awaits the development of effective policy instruments, yet some strides forward along this path have already been made. Urban rehabilitation programs introduced at the beginning of the millennium in Budapest have

resulted in a steady growth of newly constructed dwellings inside the city boundaries (see Chapter 2). The renewal and upgrading of the older housing stock in Ljubljana in recent years has been induced by different forms of public–private partnerships that utilize renewal subsidies and equity loans (see Chapter 3).

Recently, planners in the former Eastern Bloc countries have begun to employ a broader arsenal of regulatory mechanisms in order to cope with the challenges of postsocialist suburbanization (Hirt and Stanilov, 2009). Some municipalities have considered the introduction of impact fees, but resistance from developers and lack of broad political support for the implementation of appropriate measures have limited the adoption of such ideas. A much more successful policy is now the outsourcing of infrastructure costs by transferring those public expenses to private developers. The pursuit of this strategy has favored large-scale investors over small-scale developers because of their ability to absorb such costs. As a result, the policy has supported more orderly growth by eliminating the proliferation of small-scale, scattered developments in areas that lack adequate infrastructure. The survival of small-scale developers has been put under additional strain by the recent financial and economic crisis, solidifying the dominance of large-scale investors in the suburban development scene.

An effective policy for managing urban growth is the annexation of suburban territories to the central city. However, the application of such policies in the postsocialist period has been discontinued as a non-viable political choice. The recent substantial expansion of Moscow's territory is a rare exception, made possible by the unique power structures of the Russian political system (see Chapter 4). Lacking powers of annexation, local governments in the former socialist countries could resort to the adoption of metropolitan or regional tax-sharing schemes as a policy aimed at creating a more equitable distribution of resources and a budgetary union commensurate to the problems of metropolitan growth. Such changes in taxation and growth management policies would most likely become a subject of heated public debate, their adoption hinging upon the evolution of deeper processes of societal change after the turbulent transition period.

Looking Ahead

Over the last two decades the evolution of public policies related to suburbanization in postsocialist CEE has been marked by a clear shift from unconditional and enthusiastic embrace of decentralization toward greater control over the patterns of urban growth. However, whether or

not this trajectory would be stabilized as a long-term trend will depend on the evolution of key factors, which will influence suburbanization and the set of likely policy responses that these dynamics will provoke. In trying to account for the unique state of the current socioeconomic circumstances in CEE and to cast a glance ahead, at the future of suburbanization in this region, it is useful to take both a short-term and a long-term perspective.

The most influential factor shaping socioeconomic realities in post-socialist CEE in recent years has been the post-2008 economic crisis. Its extended duration is a strong indication that, at least in the short term, public policies will continue to be focused on the need to revive the economy – and particularly the construction industry, which historically has been the main force pulling economies out of crises and setting them on the path to recovery. However, the deployment of such strategy in the present situation is complicated by two factors. First, the high levels of construction in the pre-2008 years have produced a supply of floor space that exceeds the current demand. In consequence the construction sector is still struggling to recover – and it is not likely to be able to lead the rest of the economy out of the slump, as it has in the past. Second, the austerity measures adopted throughout Europe in hopes of bringing governments out of debt have severely curtailed public investments in the economy, thus further suppressing demand, including the need for more residential and commercial space. Finally, the lending practices of financial institutions have been revised and the flow of money to producers and consumers has been sharply reduced, which inhibits still further the demand for new construction.

The effects of the crisis on construction activities have been felt particularly strongly by the postsocialist economies of CEE, whose evolution in the transition period has been tightly linked with the construction industry. In general, the economies of the region have been much more volatile than those of the western countries, showing greater fluctuations in the economic cycles – a fact that has been duly reflected in the dynamics of construction activities (Figure 10.1). Real estate markets in the former Eastern Bloc countries are currently characterized by saturated demands for new housing, retail, office, and industrial construction, which is reflected in the sharp drop in construction activities, in a decrease in returns on real estate investments, and in rising vacancy rates (Colliers International, 2011). Yet the market prognosis is that, with an expected economic recovery, the postsocialist CEE countries will continue to show the fastest rates of growth on the continent, attracting significant shares of new investments from around the globe (CB Richard Ellis, 2011). The continuing growth of the economies of the region will lead to growing demands for commercial and industrial

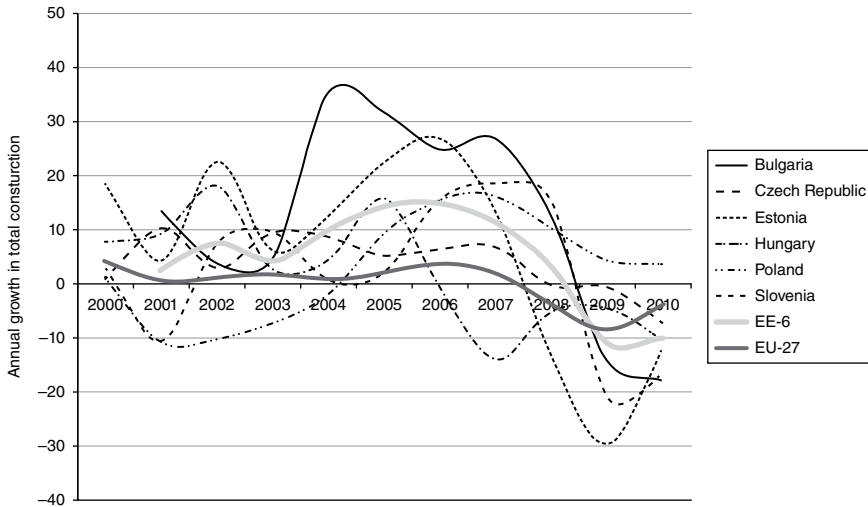


Figure 10.1 Annual growth, index of production for total construction, 2000–2010. Based on data from Eurostat, 2011.

space, while increases in household incomes will drive up the demand for new housing. While this projection appears to be overly optimistic, it should be stressed that dwelling unit supply during the boom years has not exceeded demand in the affordable housing sector. In this light, it is very likely that measures aimed at curbing new suburban development will be viewed as socially objectionable for their tendency to increase land and property prices. Efforts to constrain development in the metropolitan periphery are likely to be opposed not just by suburban landowners, developers, and affluent households seeking to move out of central cities, but by middle- and lower income families concerned about runaway housing cost. In view of this, it is rather doubtful that the postsocialist governments will introduce more stringent urban growth controls in the near future. In the absence of such policies, with the anticipated recovery of the economy, the largest part of housing construction in CEE urban areas would continue to take place outside of central cities, most investments being directed to the metropolitan peripheries.

Notwithstanding the short-term effects of the global economic crisis, several critical factors might play a significant and long-lasting role in limiting the spread of suburbanization in postsocialist CEE in the following decades. Such factors might be a revision of the political, economic, and social reforms adopted during the transition period under the dominant influence of neoliberal doctrine; a broad societal recognition of the need to prevent the depletion of nonrenewable energy and

natural resources; a similar consensus on the need to address the challenges of climate change; and, finally, the continuation of an ongoing demographic change that characterizes population dynamics in CEE. It should be stressed that the future realization of any of these factors is far from guaranteed; they are considered here not as certainties, but as most potent forces of change along the trajectory of suburban development, and they are relevant not just for CEE, but for many other countries in the world where the rise of suburbanization has presented significant societal challenges.

The first factor is related to the longevity of neoliberalism as the world's dominant ideological doctrine at the turn of the millennium. Since 2008, doubts that neoliberalism can continue to serve as a guide to social progress have deepened with the mounting evidence that dogmatic adherence to privatization and deregulation as a strategy for economic growth lies at the heart of the current global crisis. If the tenets of neoliberalism are exposed as misguided and become defunct, does this entail a revision of the dominant strategy for urban space management in postsocialist cities, where development has been guided by a strong emphasis on individual property rights over public welfare? A correction of this course of development would require a profound reassessment of the balance between public and private interests. Experience from the past indicates that such sweeping reversals of public policies are enacted only in response to severe social crises. It appears that a thorough revision of public policies in postsocialist Europe, as well as in other countries that have followed the tenets of the neoliberal doctrine, is likely to be instituted only as part of a global strategy required to address the challenges of the looming environmental and resource crisis.

The global depletion of nonrenewable energy and natural resources could serve as a critical constraint on suburbanization if the cost of energy and resources continues to rise. Given the forecasted increases in world population and rising standards of consumption per capita in the developing countries, the current practices of energy production from nonrenewable resources will not be able to keep pace with demand. The expected response should be a change in consumption patterns enforced both by market-led price increases and by the adoption of public policies aimed at minimizing the use of resources. In the area of urban development, such a reduction in the consumption of land, space, and energy would most likely lead to denser urban environments and to a sharp decline in suburban development. An alternative to the strategy of reducing consumption is offered by potential advances in technology – advances aimed at keeping energy and resource prices down.² Such technological solutions could dissipate the

pressures on supply that drive up energy costs, but they have certain limitations in addressing the challenges of suburbanization. In fact these technological improvements in energy production and consumption would most likely encourage further suburbanization, as both cars and houses would become more energy efficient and less polluting. Access to abundant, clean, cheap energy will support the further diffusion of urban activities, with the likely effects of increasing traffic congestion and sociospatial fragmentation.

The two competing strategies for dealing with the energy crisis are not mutually exclusive and would most likely be deployed simultaneously in the future, in order to achieve optimal results. In terms of their impact on suburbanization, however, they would have opposite effects: a reduction of consumption would restrain the diffusion of urban activities, while increases in efficiency would encourage greater consumption and dispersal. Therefore, in cases where both strategies are simultaneously deployed, it is difficult to predict their joint impact on suburbanization. But the idea of limiting consumption goes against the fundamental principles of capitalism. In the postsocialist political context, it seems unlikely that effective policies toward reducing consumption could be deployed, particularly when economic growth seems to be a long-term government priority. The adoption of technological innovations, on the other hand, has been a hallmark of postsocialist households in CEE. Given the unwillingness of postsocialist politicians to support initiatives considered adverse to the agenda of economic development, it is likely that the success or failure of new technologies regarding energy resources would be the only factor impacting the course of suburbanization in the region.

Linked directly to energy consumption is the other crisis that looms large over humanity at the beginning of the twenty-first century – climate change. Given the mounting evidence that human activity is a significant contributing factor to climate change (IPCC, 2013), our carbon footprint is likely to become a main measure by which our actions will be assessed in the future. A number of cities around the globe have already begun to adopt policies that discourage low-density suburban developments as an important strategy for reducing carbon emissions. National governments, on the other hand, have been much less resolute about making the link between urban development patterns and climate change. In this as in many other areas of policy development, state authorities in postsocialist CEE have followed the lead of the European Union, which has played a guiding role in developing new climate change regulations. Most of these have been oriented toward the reduction of greenhouse gas emission through technological innovations related to the development of alternative energy sources, increases in energy

efficiency, and investments in green technologies. These policies of climate change mitigation and adaptation are, however, only indirectly related to urban development and hence are open to a broad range of interpretations regarding their urban planning implications. While it is widely recognized that low-density suburban environments foster automobile dependence and hence generate greater levels of carbon emissions per capita, the rationale for placing a low priority on controlling development patterns as a climate change mitigation factor is supplied by the argument that developments in other areas – such as sources of alternative energy and energy-efficient technologies – have much greater potential to achieve an immediate and substantial reduction in carbon emissions (Echenique, Hargreaves, Mitchel, and Namdeo, 2012). In view of this, the mandate to address climate change is likely to have an even lesser impact on future suburbanization and growth management policies in postsocialist CEE than the challenges of a pending energy crisis.

Another major factor with long-term implications for the processes of urban growth and suburbanization is the demographic change that characterizes population dynamics in CEE. This crisis – defined by declining fertility rates, an aging population, and negative population growth – has become a typical trait of many postindustrial societies, but it has been particularly grave in the former socialist countries. Between 2000 and 2025, the population of the seven countries of our case studies is expected to decline between 5 and 15 percent (World Bank, 2007). In addition, it has been estimated that, over the next two decades, the fastest aging societies on earth will be those found in the former Eastern Bloc countries (United Nations, 2011).

The explosion of the postsocialist suburbs in the last couple of decades is a result of a particular type of urban decentralization, which has been fueled by the rise in the percentage of middle-class families with children. Given the grim projections for CEE as a region with the slowest demographic growth and fastest aging populations, there is little reason to believe that demographic change would be an important contributing factor in the processes of suburbanization in that region. Yet we should not forget that the rapid postsocialist suburbanization reviewed here unfolded in similar demographic conditions and that the demographic dynamics of CEE are in fact slightly improving. Since the turn of the millennium, the major postsocialist metropolitan areas in Europe have registered positive population growth and, as long as these urban centers continue to perform as hubs of economic power within their countries, there is little reason to believe that they will suffer population decline. Currently the economic migration of Central and Eastern Europeans to Western Europe has subsided after an initial wave following the accession of several former Eastern Bloc countries

to the EU. The negative impacts of this migration outflow have been mitigated to some degree by migration flows to the newly elected EU member states from non-EU Eastern European countries. In addition, immigration from developing countries to CEE is increasing and the region is becoming more attractive as a gateway to Europe at a time when Western European governments have begun to tighten immigration laws. This flow of immigrants will most likely be concentrated in lower cost urban enclaves within the larger metropolitan centers. If the experience of Western Europe and North America can serve as a guide, the influx of economic migrants to the urban centers is likely to boost the appeal of suburban areas as a preferred environment for many middle- and upper-income households.

On the other hand, the impact of aging on the dynamics of suburbanization in postsocialist Europe is likely to be more clearly pronounced and to reveal aging as a factor constraining the growth of suburbs. Most elderly residents prefer to live in smaller dwellings, in locations that offer better access to health and daily services; thus the elderly indicate a strong preference for urban environments. The tipping of the scales toward the older segments of the population would suggest that changes in the age structure of the postsocialist CEE countries would not be conducive to suburbanization. Overall, the impact of demographic change in the region is likely to be mixed. Demographic change may show a tendency to serve as a minor deterrent to further population decentralization.

In general, the balance of key factors that influence the dynamics of metropolitan growth in postsocialist CEE appears to be tipped in favor of continuing suburbanization. This indicates that the processes of urban decentralization would continue, albeit at more moderate rates compared to those witnessed during the booming first decade of the millennium. To a great extent, the dynamics of suburbanization would depend on how quickly the economies of the region could recover and on whether the adoption of current and future technological solutions could overcome the challenges posed by the threat of global resource and climate crisis. If the postsocialist countries of Europe succeed in achieving those goals, key constraints on suburbanization would be removed and the dramatic reshaping of cities in the region would continue, driven primarily by the impact of market forces and by residential preferences.

Conclusions

In this book we have made an attempt to illuminate the essential aspects of the phenomenon of postsocialist suburbanization by examining the experience of seven CEE metropolitan areas where the processes of

urban decentralization have been most clearly pronounced. The main findings that emerge from our analysis of postsocialist suburbanization could be summarized under three key headings.

The first one is related to the need to grasp the dimensions and significance of the phenomenon. The evidence presented in this book demonstrates that the postsocialist period marks a pivotal point in the evolution of cities in CEE. For the first time in the history of the region, suburbanization has become the dominant process of metropolitan growth, population increases in the suburbs surpassing the growth registered in central cities. This trend is observed in all of our case studies with the exception of Moscow. Yet, while the Russian capital constitutes a special case, it is far from unique in terms of the major forces and patterns that shape suburban development in the postsocialist years. The new patterns of metropolitan growth represent a departure from the previous historical periods not just in terms of the radical shift in the balance between urban and suburban development, but also in terms of altering the shape and form of metropolitan areas. Suburban sprawl, which was virtually unknown before the fall of the communist regime, has become a defining feature of the postsocialist metropolitan landscapes, where numerous fragmented clusters of new residential and commercial developments are spreading far beyond the boundaries of the compact urban cores.

This explosive growth of suburbs has had significant and complex consequences. New suburban developments have diversified the housing options and have increased the housing choices of middle- and upper-income households, offering a broad range of living environments by comparison to the fairly limited range of housing opportunities available in the socialist years. But, as in many other metropolitan regions of the globe that have been swept by a tidal wave of suburban expansion, this growth has come at a cost. In terms of the environmental, economic, and social consequences of suburbanization, the experience of the seven CEE metropolitan areas presented in our book confirms the knowledge gained from the analysis of contemporary suburbanization in other countries, where the dispersal of urban activities has been associated with increases in traffic congestion, environmental pollution, greater costs of infrastructure and service provision, and higher levels of sociospatial stratification.

The striking similarity of patterns, processes, and consequences that characterize the explosive growth of suburbanization throughout postsocialist CEE is a major thread running through our text and underscoring the unity of forces that fuel the phenomenon. This has allowed us to address the second issue, related to understanding the principal forces that account for the proliferation of suburbs during the postsocialist years, and to link these insights to the broader processes of urban

change in other parts of the globe. We interpret the rise of suburbanization as an outcome of the deeper processes of societal restructuring related to the transition from socialist to capitalist socioeconomic order. Our analysis of determinant forces (presented in the introductory part of the book) highlighted the significance of three key factors in postsocialist suburban expansion: (1) the deployment of neoliberal doctrines as a core ideological platform in the transition to capitalism; (2) the rise in economic affluence following the integration of the postsocialist CEE countries into the global economic circuits; and (3) the legacies of the socialist period of urbanization vis-à-vis the pent-up demand for alternative housing options – legacies that include the limited capacity of the built environment inherited from the socialist period to accommodate the spatial demands of the new, market-based economy. Against the background of similarities in patterns, processes, and forces observed across time and space, we related the main differences in the general trajectories of suburbanization within the region to the rate and timing of the phenomenon – both of which were imposed mostly by variations in the regulatory policies that set the balance between public and private interests. As a result, in some metropolitan areas particular suburbanization processes and trends were slightly delayed or were less pronounced, but the underlying processes and factors (and the general growth patterns that emerged as a result) remained the same throughout the region.

Our review of suburbanization reveals that the third key issue – the management of the phenomenon through public policies and urban planning – is the one most significant and most difficult to resolve. All postsocialist countries, without exception, failed to foresee and address the challenges posed by the uncontrolled dispersal of urban activities. The phenomenon occurred in a regulatory environment that had minimal planning constraints, and this is one of the most remarkable features of postsocialist suburbanization. This finding, let us repeat, supports our argument that the roots of suburbanization in CEE countries are those same deep-seated ideological constructs that lay at the base of the transformation of CEE societies after the collapse of the communist regime. The conclusion follows that, to be successful, any attempt to curb the continuation of urban sprawl would require a decisive approach to regulating the forces that have unleashed suburbanization during the transition period. Anything less than a national plan for coordinated metropolitan development – a plan embraced by regional and local governments and consolidated by strong public support and institutional backing from international organizations – is destined to fall short of this goal. This insight should be relevant as a guide for the development of urban growth management strategies not just in the former socialist countries of CEE, but in most regions of our quickly suburbanizing world.

Notes

- 1 In Poland, for instance, until recently, local governments could not deny building permit requests for the construction of detached houses on agricultural properties larger than 1 hectare (see Chapter 8). In Budapest it has been estimated that the amount of former agricultural territories zoned for urban development could accommodate 40 years of intensive urban growth (see Chapter 2).
- 2 These technological fixes include the use of alternative energy sources (wind, solar, biofuels, etc.), new methods of fossil fuel extraction (such as hydraulic fracturing), and a dramatic increase in energy efficiency by developing “smart” transport systems, infrastructure, construction materials, heating and cooling systems, and household appliances.

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