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# Migration aspects of the urbanization in post-socialism: Bratislava case

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#### **Abstract**

Urbanization development in the fundamentally transformed post-socialist Central European area is expected to display a similarly deep change. This paper attempts to provide a brief review of the basic features concerning modern population change history including the late socialism, the early and the mature post-socialism. In context of the contemporary insights on urbanization this should define an advantageous starting point for potential construction of a reliable migration segment in population prognosis for Bratislava. This population change analysis recognizes the metropolitan core – administrative capital city and two different suburban proxies – the suburban county existing until 1995 and post-1996 Bratislava region.

**Key words:** urbanization, population growth, migration, Bratislava.

## 1. Introduction

The two incomplete decades of the Central-European post-socialism represent, in temporal sense, above forty percent of the socialism itself in modern history of the regional human society development. A remarkable mass of changes was initiated, gradually processed and, in certain parts, finished all across the deep and shallow mechanisms driving social and economic life in European area that suffered from the post-war ideological experiment. Urbanization is a high-complex scientific category integrating various tangible activities within society. Understanding of the urbanization in socialism and post-socialist transition is a central topic in literature that mushroomed across internal and external literature since the end of 1980s. It is in general recognized that transition from postsocialism has restored primacy of market forces, which in turn redirected long-lasting opposition of socialism against societal and spatial divide again to more natural levels. Reemerged concentration patterns in economic activity and hierarchy result in measurable wealth disparities. Musil (2001) argues that urbanization trajectory under socialism differed from that under capitalism mostly in early phases but later started to converge. Empirically, the differences increase towards micro-scale. In both, the industrialization has led to concentration of human activity and population motivated by the cost reduction within industrial-urban society. Conversely to the fact that socialism repeated the capitalist model, macro-scale modifications appeared. Suburbanization and metropolitanization didn't have similar important roles in settlement structures creation. One of the potential answers presents already Enyedi (1992): the spatial forms of urban development emerged in Central Europe as a consequence of general industrialization, urban planning and the strength of informal society, which continued to express traditional urban values. Similarly to societal polarization, the post-socialism affected settlement system hierarchies, although less heavily. Simultaneous post-industrialization has moved the human capital intensive activities in several clusters. Public and private management and highprofit business services have been increasingly concentrated to a limited number of centers best

disposed for these functions implemented with a key role played by the incoming FDI. Regional development research in Slovak Republic permanently observes a non-disputable primacy of the metropolitan area. But main inspiration for this study relates to the realization phase of an urban simulation model construction, in which population growth acts as a key driving variable. Bratislava still lacks a legitimate population change trend analysis and population projections existing (Vaňo 2004) show a serious amount of discordance with only simple time series outline. Review of the urbanization in the Bratislava area linking the phases during and before post-socialism seems to be good base in search for relationship between the globally recognized theory and local experience. According to the evidence available in statistical data on population change, we will consider the significance of a hypothetical post-1989 break in this sense.

## 2. Study area, methods and data

The metropolitan area around the urbanization core of the Slovak capital city is located at the South-West state border with Austria, Hungary and Czech Republic in a minor distance. An ancient pre-urban core occupies a region's strategic location in between traditional major state-power centers of Vienna and Budapest. In spite of its eccentric intra-national location, Bratislava continued administration of Slovak territory in fact since 1918 and evolved in country's dominating primate city (426.1 thousand, 7.9 percent of the 2006 population). The shape of Bratislava in current borders dates back to the last annexation in the year 1971, since Bratislava integrates seventeen districts grouped in five counties. The earliest data suitable for retrospection are those available in archive materials no earlier than for 1970. The suburban ring of Bratislava semi-encircling the city from the North, North-East and East could be practically defined in three distinct ways. Ideal case exploits the communitylevel data and composes the functional urban region exactly as appears according to territorial relationships (Bezák 2000). After careful consideration, the functional urban region will be for purposes of this study approximated by two statistical units. Between the years 1970 and 1995 the county of Bratislava—country (virtually 68.6 percent of functional urban region's 2001 population) will stand in for suburban ring. During the following decade an aggregation of the counties of Malacky, Pezinok and Senec (76.8 percent of the region) will be used instead.

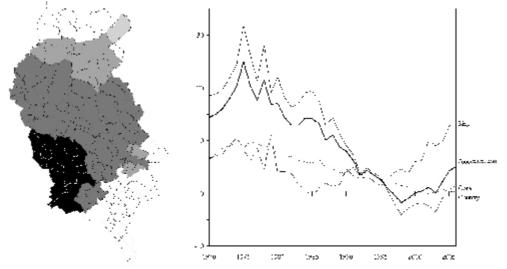
Hypothetically, the transition should leave a clear footprint in shape of population dynamics in the spatial framework defined, although it will be modified in 1995. Our methodology will be composed intentionally from the simplest exploratory toolbox suitable. The source database contains annual mid-year population, number of live-births and deaths, number of immigrants and emigrants and their source/destination decomposition among the four territorial units corresponding to (1) the city (post-1971 Bratislava city); (2) the suburban ring (Bratislava-country; agglomeration of Malacky, Pezinok, and Senec since 1996); (3) the hinterland country complementary to the national territory and (5) external sources and destinations (including Czech territory during the whole period). Crude rates per 1,000 inhabitants will be outlined annually for natural, migration and total population change. The results will be analyzed graphically and interpreted. Databases were created from the published statistical resources (FSO 1978; SOSR 1973-2007). County-level migration exchange data were excerpted from the national population change archives available annually except the year problematic post-federation year 1994.

# 3. Bratislava area and its modern population dynamics

According to total change rates in relationship with basic features of the theories of stages and differential urbanization, Bratislava region displays a population dynamics history on one hand by no means missing internal logic and contiguity but on other hand not corresponding to the model expectations, in particular those Van den Berg's. While a model core city should be a unit forerunning

its agglomeration, in Bratislava these develop almost simultaneously with total variance expanding above and below the whole. Instead, the ring is the real forerunner. Its steady trend corresponds to the rest of the unit with a trend turn more than a decade before the city and its agglomeration. Half of the period between points of maximum and minimum is 24 years. Therefore, hypothetically it could be expected that current growth in the ring of Bratislava might be terminated around the year 2010. If the future is really acquiring a balance-oriented development between the city and the suburbs, similar culmination might be expected another 10-15 years later for the city. Reliability of such based prognostic efforts is undoubtedly questionable, but what gives us permission to speculate in this direction is the fact that deformations of socialism must have a tendency to be removed from consequence behavior same as from the background mechanisms in whole society. The urbanization process changing metropolitan area since the 1990s will probably transform the dynamics interpreted here into something more standard. The cyclical pattern is individual, specific, although its general foundations were not disputed by that. Ouředníček (2007) adds that theory can not describe development of individual agglomeration, but can differentiate between individual processes changing the settlement system. Prevalence of a process depends mostly on the structure of society and the residential preferences of particular social groups.

Figure 1: The functional urban region (a) the core city of Bratislava and suburban ring proxies – the county of Bratislava-country for 1970-1995 and the self-administration region with the counties of Malacky, Pezinok and Senec for 1996-2006 including the outlying segment of Záhorie military zone; (b) total increase rates in the period 1970-2006 per 1,000 persons.



Sources: Federal Statistical Office 1978; Statistical Office of the Slovak Republic 1973-2007.

Overall constellation of the trends has created a situation with theoretically unexpected sequence of absolute and relative centralizations and decentralizations. After a standard AC phase we observe a short RC together forming the first urbanization stage; however, with the ring in loss. Following AD-RD sequence indicates that suburbanization was missing in the cycle. Later shift in a RD phase pushes the case study area even further from the model thanks to the ascending ring instead of the city. A new AC phase could resemble reurbanization, but again the trajectories' position is kept reversed. Another interpretation may uncover more if agglomeration trends are omitted and our attention is concentrated on its two segments. And things become a little clearer. While the whole period ending in 1995 and peaking in the mid-1970s has been driven by the core city, since 1996 something similar is emerging but, conversely, piloted by the ring. One question, however, remains unanswered. Will the core city growth be diminished in effect similar to that of the ring in the early

1970s? Future market agglomeration diseconomies in place of past centrally planned agglomeration economies can in the end play roles not as distant in this light as we may expect. Current size of the real-estate market in this city must be sensitively perceived through the fact that anyhow large the information advantage of its players appears it is still limited and reflecting recent market balance.

Specific situation of the Bratislava cycle under review can be generalized as a combination of four major distinctions disappearing in time: (1) asymmetry between the city and the ring variations with their minor peaks much higher compensated in next reversed cycle; (2) simultaneity between the city and the ring trajectories; (3) upwards shift of trajectories resulting in a non-significant decrease-stages typical for both segments of agglomeration; (4) location of polarization turn close before the bottom instead of peak of the cycle. If these could be addressed to other big cities in the unique region of post-socialism is a question of further research, but it appears so.

#### 4. Conclusion

Socialism clearly made the urban development specific with uncommon concentration of activities in the cities instead of a more balanced growth between the two segments of metropolitan regions. On other side, socialism and its successor evidently did not have means of absolute control above this high-complex system witnessing a remarkable amount of inertia. Current demographic regimes are also in Western Europe and other countries of the developed world very different from that of three-four decades ago and are continually evolving. At the same time, settlement systems have altered in spatial structure, notably in terms of the emergence of polycentric urban configurations. Sýkora and Čermák (1998) remind that former convergence of movements from city centers and rings towards socialist zones was exchanged for new order, in which rings are receiving population from other areas of agglomerations. The moves towards suburbs are environmentally-motivated, initiated by the desire to adapt the housing and neighborhood situation to the aspirations of wealthy household. The change of job is not or less important as a reason. Job motives, however, are important for households moving into the agglomeration from elsewhere (Kok and Kovács 1998; Podolák and Bezák 2006). The years 1989 or 1993 were very important in shaping of the presence and future of this society, but with surprisingly minor influence on population change aspect of metropolitan urbanization. Background mechanisms still in progress, market factors and external impulses including the 2004 European Union membership will; however, determine how the trends will be shaped several years or decades later in the future. Results of this study indicate strong correspondence to findings of Kontuly and Tammaru (2006) in Estonian settlement system. Urbanization remains dominant in interregional migration (Podolák and Bezák 2006), while suburbanization dominates redistribution within the metropolis. This interpretation fulfills the expectations of the city life-cycle and indicates that correspondence with differential urbanization model and patterns experienced by other capitalist countries before should be conceivable.

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