

# ACTA GEOGRAPHICA SLOVENICA

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*Front cover photography:* Alpine environment has witnessed changes in discharge regimes that depend on the changes in precipitation and temperature regimes, land use and human influence (photograph: Matej Lipar).

*Fotografija na naslovnici:* Pretočni režimi se v alpskih pokrajinah spreminjajo zaradi sprememb v padavinskem in temperaturnem režimu ter sprememb rabe zemljišč in človeških vplivov (fotografija: Matej Lipar).

# SUBURBANIZATION AND MIGRATION IN POLISH METROPOLITAN AREAS DURING POLITICAL TRANSITION

Jadwiga Gałka, Anna Warych-Juras



JADWIGA GAŁKA

Suburbanization in the Kraków Metropolitan Area.

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## **Suburbanization and migration in Polish metropolitan areas during political transition**

**ABSTRACT:** This article presents the development of suburbanization processes that occurred in Polish metropolitan areas during the political transition from communism. We analyze data on population and migration for municipalities in seven metropolitan areas from 1995 to 2012. Our results show that the suburban development phase was strongly associated with cities' size and level of economic development. The article concludes that the outflow of the urban population to the suburbs started earliest in centers that had successfully undergone the transition period.

**KEY WORDS:** suburbanization, population migration, metropolitan areas, internal migration, Poland

## **Suburbanizacija in migracije na poljskih metropolitanskih območjih med politično tranzicijo**

**POVZETEK:** V članku avtorici obravnavata razvoj suburbanizacijskih procesov na poljskih metropolitanskih območjih med politično tranzicijo iz komunizma. Analizirata podatke o prebivalstvu in migracijah v občinah na sedmih metropolitanskih območjih med letoma 1995 in 2012. Rezultati kažejo, da je bila faza razvoja predmestij močno povezana z velikostjo mest in stopnjo njihovega gospodarskega razvoja. Avtorici ugotavljata, da se je odseljevanje mestnega prebivalstva v predmestja najprej začelo v središčih, ki so uspešno prestala obdobje politične tranzicije.

**KLJUČNE BESEDE:** suburbanizacija, preseljevanje prebivalstva, metropolitanska območja, notranje migracije, Poljska

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## 1 Introduction

The political transition from communism that started in 1989 contributed to demographic and economic changes in Poland. Cities, which at that time became a less attractive destination for the rural population, were the main area of these changes. The demographic changes that occurred in Polish cities were mostly caused by suburbanization (Zborowski, Soja and Łobodzińska 2012; Szajewska 2013). Thus, we sought to better understand the role of the suburbanization process in these changes in all metropolitan areas in Poland. We wished to determine whether all Polish metropolitan areas suffered from an outflow of population, or whether there are differences in the spatial development of the suburbanization process in metropolitan areas.

Previous research has shown that, as in the case of western Europe and the United States, the early beginnings of suburbanization in post-communist countries can be traced back to the interwar period. The first suburban communities emerged on the outskirts of Tallinn, Prague, and Warsaw (Tammaru 2001; Sýkora and Ouředníček 2007; Lisowski and Grochowski 2008). The key driver of suburban development at the time was the expansion of railway infrastructure, which made the suburbs more accessible. Suburbanization virtually came to a halt during the postwar communist era in most countries of central Europe. There were some exceptions; for example, in Slovenia suburbanization was most pronounced in the 1970s and 1980s. This was an effect of polycentric development processes, which were supported by the political elites in 1960s and set the path for accelerated suburbanization in Slovenia at that time (Uršič 2004; Uršič 2012; Pichler-Milanović 2014). In other Eastern Bloc countries, communist governments began to control internal migration via limits on the number of residential registration permits issued for cities as well as by constructing large new housing complexes on the outskirts of cities (Enyedi 1998). Suburbanization only began to take root in post-communist countries during the transition period in the early 1990s (Tammaru 2001). The rate of suburbanization increased substantially during the second half of the 1990s.

Suburbanization is rapidly taking place in large urban centers such as Prague and Brno in the Czech Republic (Sýkora 1999; Ouředníček 2007), Tallinn, Estonia (Tammaru 2005; Borén and Gentile 2007; Leetmaa and Tammaru 2007), and Budapest, Hungary (Kok and Kovács 1999; Brown et al. 2005; Nagy 2005). Cities in the former East Germany show signs of population shifts to the suburban zone, which is one of the reasons for the depopulation of central cities (Lötscher 2005; Kujath 2005).

Previous Polish research indicates that the transition influenced suburban development in Poland. The process initially started in large cities: Gdańsk, Warsaw, and Poznań (Gałka and Warych-Juras 2011). The literature contains few comparative studies that could show stages of suburbanization in all metropolitan areas. There is also lack of studies to show what the role of suburbanization is in demographic changes in Polish metropolitan areas during the transition.

This article presents the development of suburbanization in Polish metropolitan areas during the political transition (i.e., 1990 to 2012). It first analyses the level of demographic changes in Polish metropolitan areas from 1995 to 2012. It then shows the level of advancement of suburbanization in Polish metropolitan areas in 1995 and then in 2012. The conclusions are presented in the last part of the article.

## 2 Methods

The basis for the analysis is statistical data from the Central Statistical Office of Poland. We analyze data on population and migration for urban and rural municipalities in seven metropolitan areas delimited by Gorzelak, Jałowiecki and Smetkowski (2009; Figure 1) from 1995 to 2012. The data provided information mainly on directions of internal population flows (from urban to rural areas, etc.). As a measurement of the scale of suburbanization, the following indices were used: population dynamics, inflow of urban population per 1,000 inhabitants, and net migration per 1,000 inhabitants in 1995 and 2012.

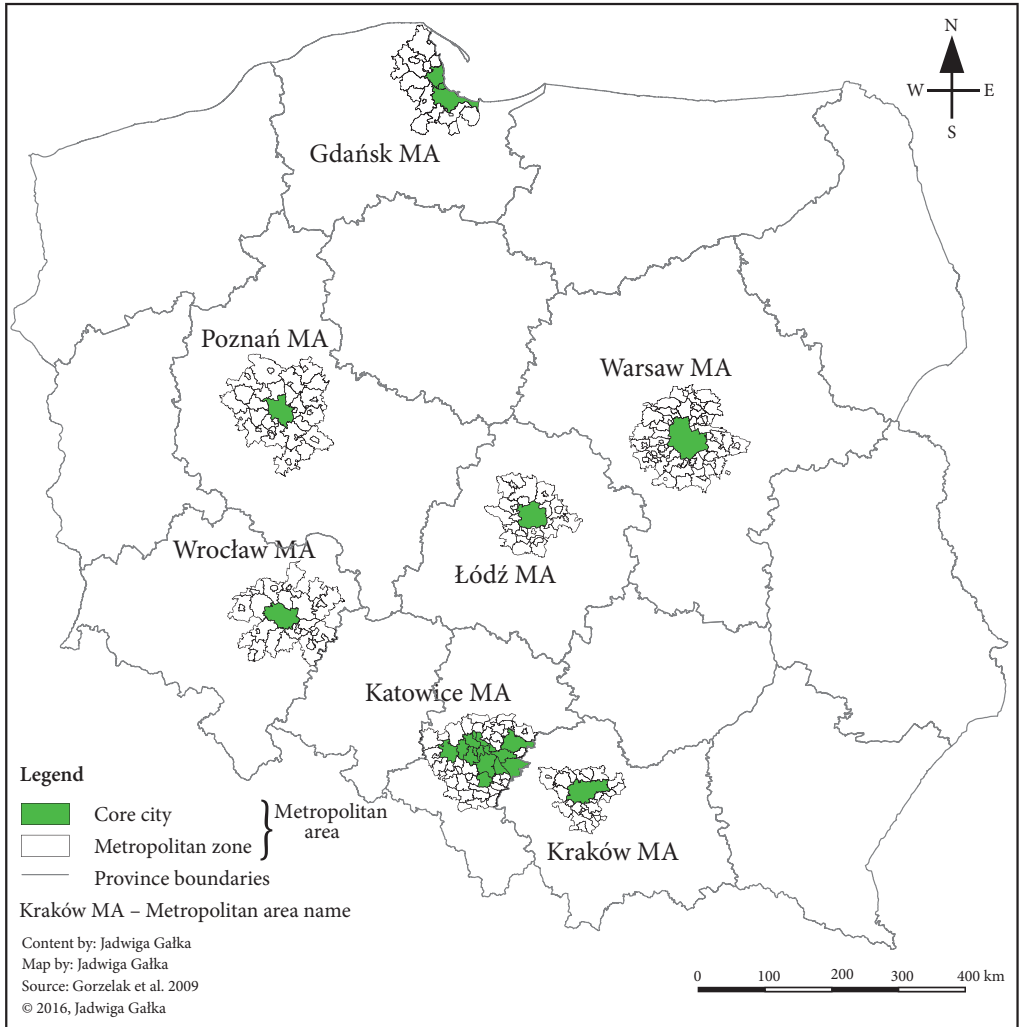


Figure 1: Polish metropolitan areas (based on Gorzelak Jałowicki and Smetkowski 2009).

### 3 Results and discussion

#### 3.1 Demographic changes in Polish metropolitan areas from 1995 to 2012

Differences in the suburbanization rate in Poland are usually associated with the history of the development of a given city or group of cities. Population dynamics from 1995 to 2012 varied substantially among regions (Figure 2). Suburban zones systematically gained population at the expense of central cities. There were, however, two exceptions: Warsaw and Kraków. Although suburbanization processes did take place in both metropolitan areas, the population of each urban center still managed to grow from 1995 to 2012.

Warsaw’s continuing demographic growth is a byproduct of the city’s substantial economic potential. The city has a higher-order service sector that helps it function as a capital city. Warsaw’s many educational and research institutions drive the city’s potential for innovation and stimulate a job market that attracts people from across Poland, including a number of companies with foreign capital and business

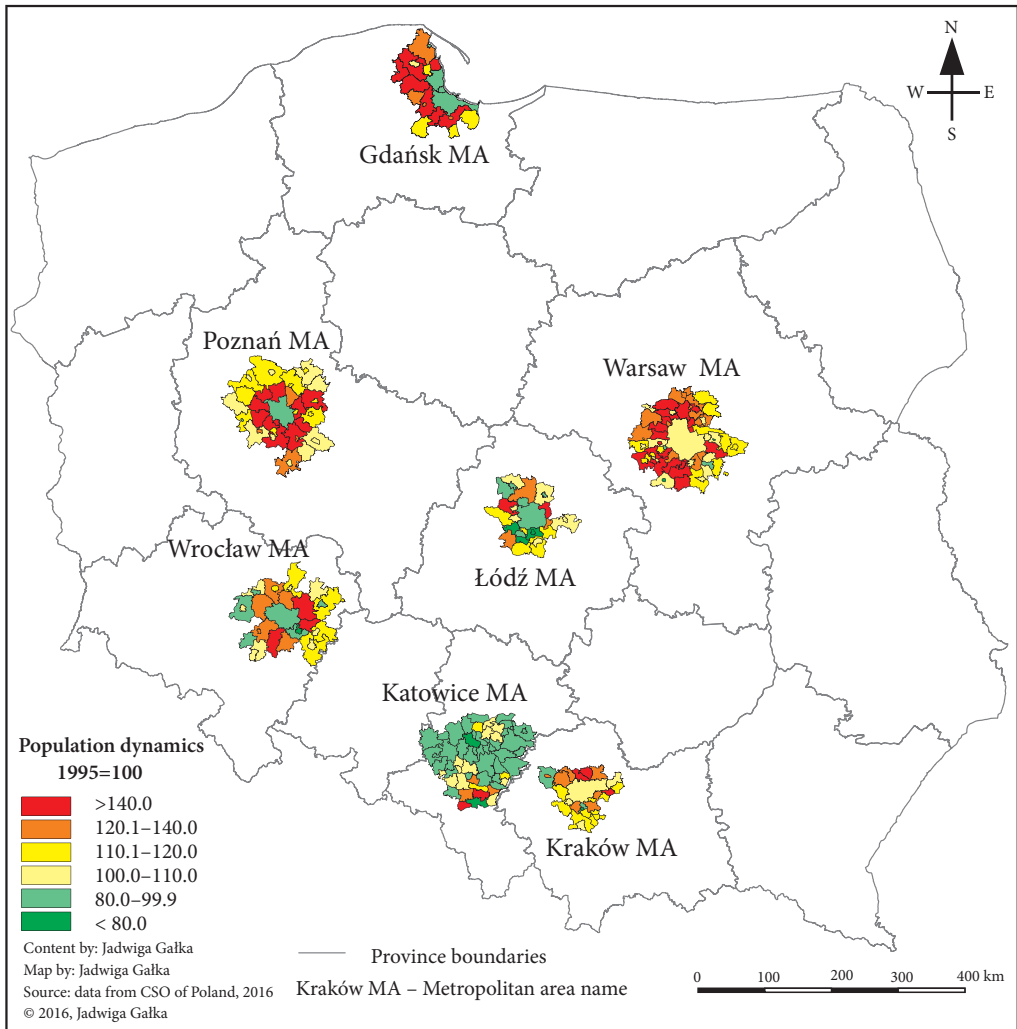


Figure 2: Population dynamics in Polish metropolitan areas from 1995 to 2012 (Source: Central Statistical Office of Poland).

services centers (Markowski and Marszał 2006). The population of Warsaw increased by 75,000 from 1995 to 2012. Kraków, on the other hand, gained only 1,000 new inhabitants despite being an important center of learning and research as well as a major tourist center. Creative occupations, which tend to concentrate in city centers, have helped Kraków create more attractive jobs and have helped attract new inhabitants to Kraków (Warych-Juras and Gałka 2008).

### 3.2 Regional differences in suburbanization processes in Polish metropolitan areas

Suburbanization in various Polish metropolitan areas exhibits a number of similar characteristics. Suburban areas change in terms of their physical appearance, function, and social structure. New manufacturing and service industries emerge. New types of architecture and street patterns can be observed. Affluent enclaves form amid low-income population groups. Such enclaves usually consist of single-family homes, duplexes, and row houses (Lisowski and Grochowski 2008).



New social and economic trends became clearly apparent during the second half of the 1990s in Poland. Suburbanization accelerated in three Polish metropolitan areas in particular: Warsaw, Poznań, and Gdańsk (Figure 3a). The influx of population to municipalities adjacent to the three cities often exceeded 20%. In the case of other metropolitan areas, the rate of migration from core cities to their suburban zones was decidedly smaller and did not exceed 15%.

In terms of economic development, Warsaw, Poznań, and Gdańsk already outperformed other central cities in Poland in 1995. The influx of foreign investment to the three cities further exacerbated the growing divide between Poland's top economic performers and bottom economic performers. Furthermore, other metropolitan areas began to experience serious problems with unemployment associated with the decline of heavy industry (in the Silesian Metropolitan Area; Runge and Runge 2006) as well as light industry (in the Łódź Metropolitan Area).

The first stage of suburbanization, which occurred in the mid-1990s, was primarily based on the flow of population from central cities to municipalities adjacent to central cities. The choice of migration destination was based on good transportation networks and attractive natural environments (e.g., the municipalities of Nadarzyn, Milanówek, Piaseczno, and Łomianki near Warsaw). This trend can be observed in various western, central, and eastern European cities (White 1981; Mieszkowski and Mills 1993; Grochowski, Pieniążek and Wilk 2005; Solarek 2005; Mantey 2013; Mihai, Nistor and Simion 2015) In the »Tri-City« (Gdańsk, Sopot, and Gdynia), population flows from the urban core were directed toward selected municipalities (e.g., Pruszcz Gdański). The rate of population exchange between the three cities was rather low because of the unique nature of the region (Parysek 2005).

Weak suburbanization processes were also observed in the Kraków and Wrocław metropolitan areas (Figure 3a). The economies of the two cities were less robust, which naturally translated into lower incomes for their inhabitants. The municipalities of choice for new suburbanites were usually those with good transportation networks and a robust home construction sector.

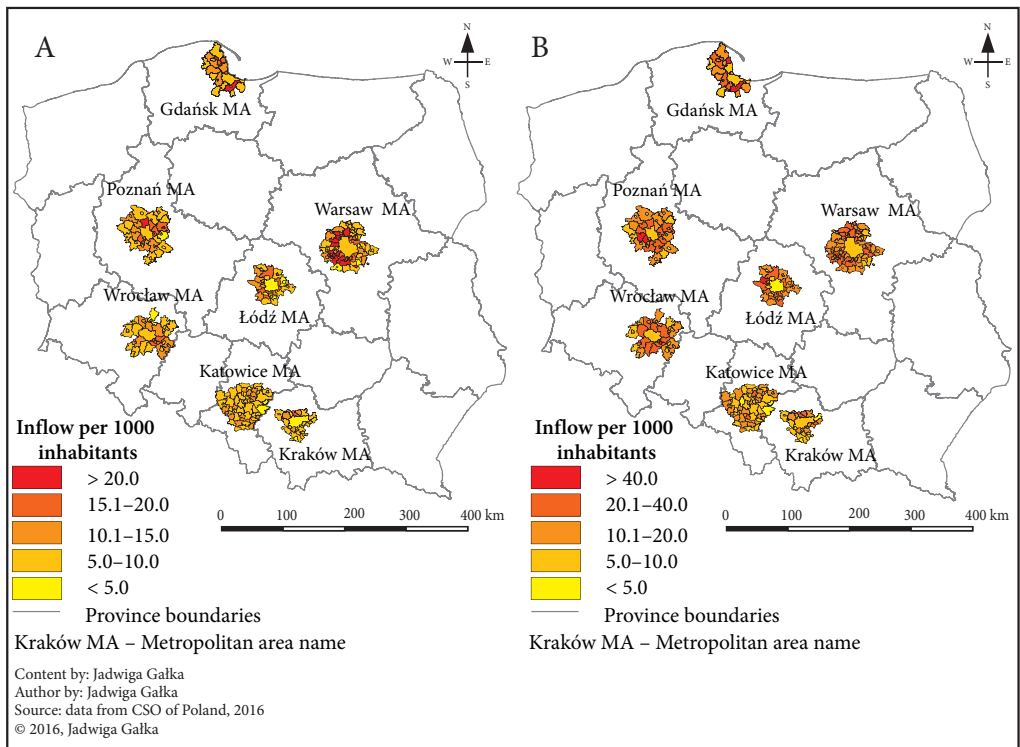


Figure 3: Inflow of urban population in Polish metropolitan areas a) 1995, b) 2012 (data from the Central Statistical Office of Poland).

The first stage of suburbanization in Poland was characterized by central cities with positive net population inflows (Figure 4a).

Table 1. Population migration in Polish metropolitan areas in 1995 and 2012 (data from the Central Statistical Office of Poland).

| Metropolitan areas     | Inflow<br>(per 1,000 inhabitants) |      | Inflow from other cities<br>(per 1,000 inhabitants) |      | Net migration<br>(per 1,000 inhabitants) |      | Population<br>dynamics |
|------------------------|-----------------------------------|------|---|------|--|------|------------------------|
|                        | 1995                              | 2012 | 1995  | 2012 | 1995                                     | 2012 |                        |
| Łódź                   | 4.9                               | 5.2  | 2.8   | 3.2  | 0.2                                      | -2.1 | 87.6                   |
| Łódź suburban zone     | 14.2                              | 15.1 | 9.6   | 12.2 | 2.9                                      | 5.1  | 98.9                   |
| Warsaw                 | 7.1                               | 11.4 | 4.7   | 8.0  | 1.3                                      | 3.2  | 105.1                  |
| Warsaw suburban zone   | 19.7                              | 23.1 | 14.1  | 17.4 | 7.1                                      | 10.6 | 123.6                  |
| Kraków                 | 7.2                               | 8.9  | 3.8   | 5.6  | 1.5                                      | 0.6  | 102.1                  |
| Kraków suburban zone   | 11.7                              | 16.8 | 7.5   | 13.1 | 3.7                                      | 9.5  | 115.0                  |
| Poznań                 | 8.3                               | 9.5  | 5.7   | 6.1  | 1.2                                      | -4.3 | 94.8                   |
| Poznań suburban zone   | 15.9                              | 23.7 | 10.1  | 18.1 | 3.3                                      | 11.8 | 128.2                  |
| Katowice               | 8.9                               | 7.8  | 6.3   | 6.6  | 0.7                                      | -2.8 | 88.1                   |
| Katowice suburban zone | 11.3                              | 13.0 | 8.1   | 10.8 | 2.2                                      | 2.0  | 100.1                  |
| Wrocław                | 8.5                               | 10.6 | 5.5   | 7.2  | 2.2                                      | 1.0  | 98.4                   |
| Wrocław suburban zone  | 13.4                              | 22.2 | 8.2   | 17.1 | 0.2                                      | 11.2 | 110.8                  |
| Gdańsk                 | 13.6                              | 10.1 | 11.6  | 7.5  | 0  | -0.8 | 98.6                   |
| Gdańsk suburban zone   | 14.5                              | 24.7 | 10.0  | 19.5 | 4.1                                      | 13.0 | 134.4                  |

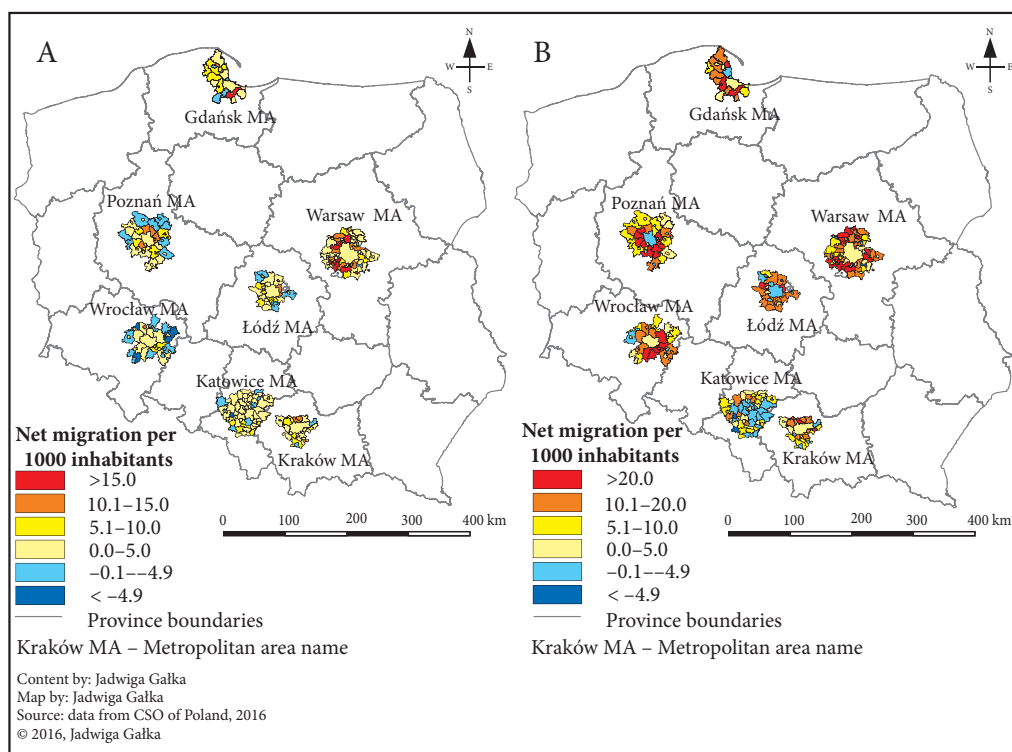


Figure 4: Net migration in Polish metropolitan areas: a) 1995, b) 2012 (data from the Central Statistical Office of Poland).

In 2012, suburbanization was not as dynamic as in 2007. The rate of inflow into the suburban zones of all metropolitan areas analyzed was lower (Table 1). The most severe decrease in population inflow was observed in centers where suburbanization started to develop earliest: the Łódź, Warsaw, and Poznań metropolitan areas. On the other hand, the Gdańsk, Wrocław, and Katowice metropolitan areas, despite the decrease in intensity of urban population inflow by 2.5 to 2.7 per mille points, still had high values of the ratio: above 15‰. In the case of the Kraków Metropolitan Area, the ratio of urban population inflow remained at a level of approximately 13‰. It is worth noting that the process of urban population inflow occurred in the first and second ring of municipalities surrounding the centers of Warsaw, Poznań, and Kraków (Figures 3b, 4b). These residents were also moving to municipalities less attractive in terms of natural values or transport accessibility. The slight weakening of suburbanization processes in Polish metropolitan areas noted in 2012 could be the result of the economic crisis that started at the end of 2008. The impact of the crisis was observed particularly in the construction industry, and not only in Poland but also in other central and eastern European countries; for example, Bulgaria, the Czech Republic, Estonia, Hungary, and Slovenia (Stanilov and Sýkora 2014). Difficulties in obtaining housing loans caused the decrease in sales of newly built dwellings. Furthermore, anxiety about job loss prevented some people from buying their own apartment and moving to a suburban zone (Tworek and Valouch 2011). However, a revival of the real estate market and internal migration might be expected within the next few years, when the economic situation becomes more stable.

Poland is unique in that its suburbanization processes are taking place alongside urbanization processes that continue to enhance the demographic and economic base of large cities. This point is clearly demonstrated by the net population change for Warsaw (+3.2‰), Kraków (+0.6‰), and Wrocław (1‰). Other major cities in Poland have lost population to their suburban zones (Table 1).

## 4 Conclusion

The dynamic development of suburban zones initiated by the transition in Poland is one of the stages of urban development. Today, suburbanization is the dominant force at work in Polish metropolitan areas, with each area developing at its own pace. The observed outflow of population from central cities to suburban zones took place most rapidly in urban centers that made a successful transition from a communist economy to a market-based economy. This was especially true of Warsaw, Poznań, and the »Tri-City« (Gdańsk, Sopot, and Gdynia). The Silesian Metropolitan Area, on the other hand, began to lose population following the transition both from its core cities and its suburban zones. In terms of the urban cycle model, it can be argued that the Silesian Metropolitan Area is currently in a deurbanization and deconcentration stage as a result of its sudden loss of population.

The main conclusion is that further suburban development in Polish metropolitan areas will depend on a variety of factors, not only on individual preferences of inhabitants, but also on real estate prices in cities and suburban zones, as well as availability of housing loans. Following the economic crisis in 2008, the banks adopted stricter criteria for providing housing loans, which made them accessible to only a limited number of people.

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