# Justyna Tanas<sup>1</sup> DEVELOPMENT OF HOUSING CONSTRUCTION IN POZNAN AND ITS SUBURBS AS THE REFLECTION OF SUBURBANIZATION PROCESSES

The process of suburbanization is one of the features shared by contemporary European cities and their suburban areas. This process is mainly reflected in the outflow of population, both from central areas of the biggest cities and from large-panel housing estates located in the peripheral city districts to suburban zones, with single-family housing development. This paper shows the advance of the suburbanization process. To this end, we have analysed the number of permits to build houses and buildings used for business activity as well as the number of apartments completed in 1995–2010. As a field of the given study we have chosen Poznan and its suburbs – one of the most dynamically developing conurbations in Poland. The results of the research show that it is the communes directly neighbouring Poznan that feature the most advanced degree of suburbanization. Keywords: suburbanization; Poznan agglomeration; housing construction.

# Юстина Танас

# РОЗВИТОК ЖИТЛОВОГО БУДІВНИЦТВА У ПОЗНАНІ ТА ПЕРЕДМІСТЯХ ЯК ВІДОБРАЖЕННЯ ПРОЦЕСІВ СУБУРБАНІЗАЦІЇ

У статті показано, як субурбанізація стала ключовою рисою сучасних європейських міст та передмість. Даний процес у першу чергу пов'язаний з переселенням із центральних частин великих міст та багатоквартирних будинків у приміську зону та приватні будинки. Динаміку розвитку субурбанізації показано шляхом аналізу кількості отриманих дозволів на будівництво житлових будинків та споруд комерційного призначення протягом 1995—2010 років. Місто Познань та його передмістя були обрані тому, що це польське місто розвивається надзвичайно стрімко. Результати аналізу показали, що процеси субурбанізації найбільш помітні у передмістях, що безпосередньо межують з м. Познань. Ключові слова: субурбанізація; Познанська агломерація; житлове будівництво. Рис. 7. Літ. 12.

# Юстина Танас РАЗВИТИЕ ЖИЛИЩНОГО СТРОИТЕЛЬСТВА В ПОЗНАНИ И ПРИГОРОДАХ КАК ОТОБРАЖЕНИЕ ПРОЦЕССОВ СУБУРБАНИЗАЦИИ

В статье показано, как субурбанизация стала ключевой чертой современных европейских городов и их пригородов. Этот процесс в первую очередь связан с переселением из центральных частей больших городов и многоквартирных домов в пригородную зону и частные дома. Динамика развития субурбанизации показана посредством анализа количества полученных разрешений на строительство жилых домов и коммерческих сооружений в течение 1995—2010 годов. Город Познань и его пригороды выбраны потому, что это один из наиболее стремительно развивающихся городов современной Польши. Результаты анализа показали, что процессы субурбанизации наиболее заметны в пригородах в непосредственной близости к Познани.

Ключевые слова: субурбанизация; Познаньская агломерация; жилищное строительство.

## Introduction

Dynamic economic development triggered by political transformations in Poland contributed to a different nature of urbanization processes as compared to

<sup>&</sup>lt;sup>1</sup> PhD, Department of Investment and Real Estate, Poznan University of Economics, Poland.

Western Europe. Urbanization processes in Poland have entered the phase of suburbanization a lot earlier, but it was not until 1989 that they adopted the form characteristic of Western Europe and the USA in the 1950s. In the period of political transformations in Poland we could observe the outflow of population, both from central areas of the biggest cities and from large-panel housing estates located in the peripheral city districts to suburban zones, with new single-family housing developments. Wealthier groups migrate from deteriorating central districts to city outskirts, from which they can easily commute to work in the centre every day. At the same time, suburban areas offer much better living conditions than their previous place of living. The density of population in city centres is falling, while it is growing in suburbs, with the positive balance of migration of the whole conurbation. The intensification of construction traffic in the peripheral parts of cities and in the suburbs makes the border between the city and its external zone slowly disappear. Agricultural land is being converted into industrial, warehousing, retail, residential and sports areas.

The above features are characteristic of the complex process of suburbanization. This process is reflected, among other things, in the accumulation of economic and residential capital in suburban zones of central urban areas. The number of building permits and completed apartments in suburban areas are, along with population migration, the measures for suburbanization.

In this paper, we present the degree of this process advancement in the above context. To this end, we analysed:

 the number of permits to build residential buildings (single- and multi-family ones) and buildings used for business as well as the number of apartments completed in 1995–2010,

- the number of completed apartments (with the division into the total number of apartments, individual apartments, and apartments for sale and rent) in 1995-2010.

The study was located in Poznan and its suburbs – one of the most dynamically developing conurbations in Poland. In literature, the Poznan conurbation is usually defined as the city of Poznan and the surrounding Poznanski district (17 communes) (Swianiewicz, Klimska, 2005; Beim, 2007; Kaczmarek, 2008; Parysek, 2008a). It was decided to adopt the same scope of conurbation in this research.

## 1. The concept of suburbanization and the indications of this process

Nowadays, suburbanization is the common feature of European cities and their suburban zones, both those from the so-called old Europe and from most post-communist countries.

The existing body of literature provides numerous definitions of suburbanization (Berg, 1981; Klaassen, 1988; Zagozdzon, 1988; Champion, 2001; Zuziak, 2005). In the spatial dimension, suburbanization refers to dynamic growth and intensified development of the peripheral areas of cities and their suburban zones, expressed in the so-called "urban sprawl". This phenomenon first of all manifests itself in the changes in land use and in the intensification of the development of the city's external area, especially along exit roads, as well as in the migration of population into these areas (Parysek, 2008b).

The phenomenon of suburbanization may be treated in multiple ways, such as: the urbanization of suburban zones, migration of population and business organisations to suburban zones, the phase in the development of the conurbation, in which the size of population in city external zones grows faster than in the central city (at the advanced stage we witness a drop in the number of inhabitants of the central city or we observe urban sprawl, i.e. the spontaneous, uncontrolled urbanization of suburban zone (Lisowski, Grochowski, 2007).

M. Sant and P. Simon believe it is the outcome of two factors. From the macrosocial and economic perspective, suburbanization is the result of changes in the circulation of capital of institutions and companies. Capital attracts profits to suburban zones. It provides favourable conditions for business operations as compared to the central city (prices for land, tax reliefs, transport access). In the microsocial, demand and consumption view – suburbanization is the result of changes in individual decisions of people seeking specific environment conditions for a place of living (Sant, Simon, 1993; as cited by Lisowski, 2005).

In literature, suburbanization is discussed in 3 basic spatial contexts:

- within the administrative borders of central urban areas,

 beyond the borders of the central urban area, within the framework of the socalled close suburban area – defined as external suburbanization,

- beyond close suburban areas, within the framework of far suburban areas (urban area, urban-rural fringe), dominated by extensive forms of land use and rural landscapes (Lorens, 2005).

# 2. The analysis of the number of building permits in Poznan and its suburbs

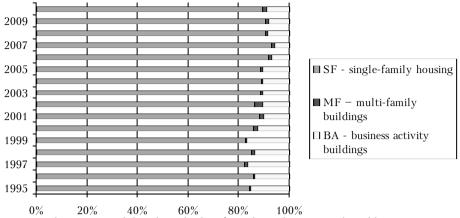
Our analysis of the building permits number is based on the data supplied by the Architecture and Building Department of the District Governor's Office in Poznan (the number of building permits in the communes of Poznanski district) and the Urban Planning and Architecture Department of Poznan City Hall (the number of building permits in Poznan).

In the first 5 years covered by our study, we observed a general increase in the number of building permits issued in Poznanski district (from 1032 in 1995 to 2016 in 1999). In the following 4 years the opposite trend was the case – the number of issued permits fell. From 2004 the number rose again to reach the maximum level in 2007 - 3166. In the whole period under study, the total number of building permit decisions was 29637. In the city of Poznan, the number of building permit decisions (1373) was the biggest in 1997. In the next few years, the number of issued permits steadily fell (with the exception of 2007 and 2008).

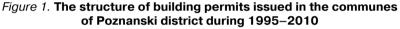
Figure 1 presents the detailed structure of building permits issued in particular years.

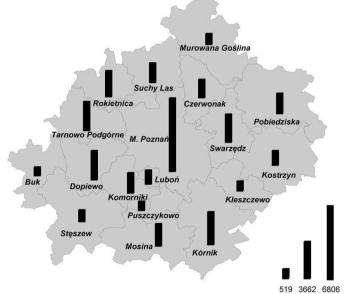
In the period covered by our analysis, the issued building permits manly concerned single-family housing construction. Decisions on this type of buildings represented from 82% to almost 92% of all the issued permits. The share of permits concerning multi-family buildings fluctuated from 0.5% to 1.5% (except for 2002, when it reached 3.1%). There was a steady decrease in the number of permits concerning buildings used for business activity.

Figure 2 presents the total number of permits to build single-family houses issued in the communes of Poznanski district and in the city of Poznan in the years 1995–2010.



*Source:* Author's own work based on the data from the Architecture and Building Department of the District Governor's Office in Poznan.



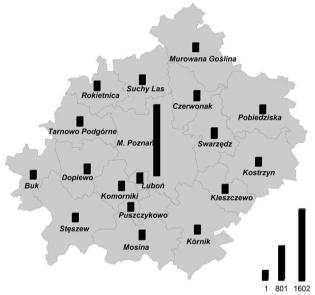


*Source:* Author's own work based on the data from the Architecture and Building Department of the District Governor's Office in Poznan and from the Urban Planning and Architecture Department of Poznan City Hall.

# *Figure 2.* Permits to build single-family houses issued in the communes of Poznanski district and in the city of Poznan in the years 1995–2010

The biggest number of building permits was issued in the communes directly neighbouring Poznan (Kornik, Dopiewo, Tarnowo Podgorne, Swarzedz and Rokietnica). Fewer permits were issued in the communes of Mosina, Komorniki, Pobiedziska, Suchy Las and Czerwonak. The lowest number of permits was issued in Buk, Puszczykowo, Kleszczewo, Murowana Goslina and Steszew. In the period under study, the number of permits to build single-family houses issued in the analysed communes fluctuated. In general, there were increases in 1997–2001 and 2003–20007, while in the other years we witnessed the opposite trend – the number of profits fell. Such a tendency could be observed particularly in the communes of Suchy Las, Czerwonak, Mosina, Komorniki, Swarzedz, Steszew, Pobiedziska and Murowana Goslina. On the other hand, the communes of Rokietnica, Tarnowo Podgorne, Dopiewo and Kornik saw an upward trend for the phenomenon under study for almost the whole of the analysed period – the figure was steadily growing from 1995 up to 2007. Only in the last 3 years of the analysis did the number of issued permits started to decrease.

Figure 3 presents the number of building permits for multi-family buildings issued in the communes of Poznanski district and in the city of Poznan in the years 1995–2010.



*Source:* Author's own work based on the data from the Architecture and Building Department of the District Governor's Office in Poznan and from the Urban Planning and Architecture Department of Poznan City Hall.

#### *Figure 3.* The number of building permits for multi-family buildings issued in the communes of Poznanski district and in the city of Poznan in the years 1995–2010

The number of issued permits to build multiple-family buildings was significantly smaller than in the case of single-family houses. In the whole district, the biggest number of permits was issued in 2002 - 43 decisions and in 2007 - 36 decisions. The smallest number of permits was issued in 1995, 1999, 2003 and 2004. Over 85% of the issued permits concerning multi-family buildings referred to the area of 9 communes (Swarzedz - 49, Lubon - 44, Czerwonak - 37, Dopiewo - 30, Suchy Las - 27, Rokietnica - 27, Mosina - 25, Tarnowo Podgorne - 20, Komorniki - 19). In the communes of Steszew, Buk and Kostrzyn this type of housing construction did not develop to a comparable degree.

Figure 4 presents the number of permits for buildings used for business activity issued in the communes of Poznanski district and in the city of Poznan in the years 1995–2010.



*Source:* Author's own work based on the data from the Architecture and Building Department of the District Governor's Office in Poznan and from the Urban Planning and Architecture Department of Poznan City Hall.

## *Figure 4.* The number of permits for buildings used for business activity issued in the communes of the Poznanski district and in the city of Poznan in the years 1995–2010

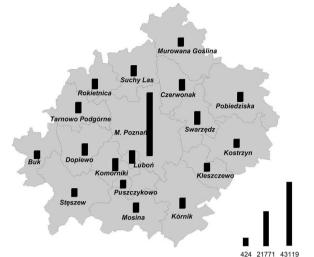
In the period under study, the total of 3198 permits for buildings used for business activity were issued in Poznanski district. The figure for the city of Poznan was 2047. Of all communes, the biggest number of permits to build business facilities was issued in Tarnowo Podgorne (almost 19% of the total number), Swarzedz (12.5%), Suchy Las (over 8%), and Komorniki (7.5%), while Kleszczewo (1.2% of the total), Puszczykowo (1.6%) and Rokietnica (2.6%) were at the bottom of the list.

### 3. The analysis of apartments completed in Poznan and its suburbs

In the following part of our paper, we examine the number of completed new apartments. The analysis was based on the Bank of Local Data of the Main Statistical Office. This data is published with the division into apartments in a housing cooperative, company apartments, council apartments, social rental apartments, apartments for sale or rent, and individual apartments. In the study, we examined the total number of apartments, the number of apartments in individual construction, and the number of apartments for sale or rent, which were completed (they represented the vast majority).

Figure 5 presents the total number of apartments completed in the communes of the Poznanski district and in the city of Poznan during 1995–2010.

АКТУАЛЬНІ ПРОБЛЕМИ ЕКОНОМІКИ №6(156), 2014

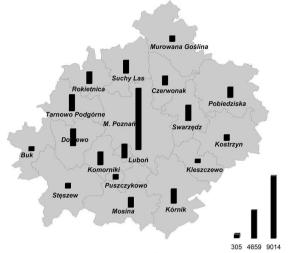


Source: Author's own work based on the data from the Main Statistical Office. Figure 5. The total number of apartments completed in the communes of Poznanski district and in the city of Poznan in the years 1995–2010

The number of apartments completed in Poznanski district increased every year (with the exception of the last 2 years under analysis). The growth was the most significant in the years 2008-2010 (by 4535, 3972 and 3803 respectively). In Poznan, the biggest number of apartments was completed in 2007 - 3986, 2009 - 3551, 2005 - 3375 and 2008 - 3343. In the first 5 years of the period under study, the number of completed apartments in Poznan was over 2 bigger than in Poznanski district. In the next 5 years, however, we observed a reverse trend – from 2008 it was the Poznanski district that saw more new apartments completed. The analysis of the number of apartments completed in particular communes shows that the biggest number of them was built in the communes of Swarzedz, Lubon, Komorniki, Dopiewo, Czerwonak and Tarnowo Podgorne. The fewest apartments were completed in the communes of Buk, Puszczykowo, Steszew and Kleszczewo.

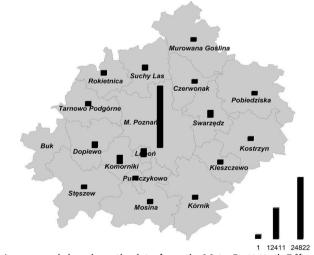
Figure 6 presents the number of apartments in individual construction completed in the communes of Poznanski district and in the city of Poznan during 1995–2010.

The apartments built by individual investors constituted the majority of newly built apartments in Poznanski district (depending on a year – from over 50% to as much as 85%). In Poznan, such apartments accounted for 13-35% of the total (with the exception of 2003, when individual apartments constituted 43% of the total). The biggest number of apartments in individual construction was built in Dopiewo, Swarzedz, Tarnowo Podgorne, Kornik, Lubon, Suchy Las and Komorniki. The fewest of them were built in Kleszczewo, Buk, Pobiedziska, Steszew and Murowana Goslina. In the period under study, we could observe the growth in the number of completed individual apartments (1995–2008). Only in the last 2 years did the number start to fall slowly. In Poznan, the number of new apartments rose to 2003, which saw the largest number of newly completed apartments steadily fell.



Source: Author's own work based on the data from the Main Statistical Office. Figure 6. The number of apartments in individual construction completed in the communes of Poznanski district and in the city of Poznan in the years 1995–2010

Figure 7 presents the number of completed apartments for sale or rent in the years 1995–2010.



Source: Author's own work based on the data from the Main Statistical Office. Figure 7. The number of completed apartments for sale or rent in the communes of Poznanski district and in the city of Poznan in the years 1995–2010

In the period under study, apartments for sale or rent were built for the first time in 1998 in Suchy Las and Swarzedz, followed by Suchy Las and Kornik in 1999. In the next years, the number of apartments for sale and rent built in Poznanski district was gradually increasing. Their share in the total number of new apartments rose from

АКТУАЛЬНІ ПРОБЛЕМИ ЕКОНОМІКИ №6(156), 2014

The biggest number of apartments for sale or rent was built in Komorniki, Lubon, Swarzedz and Dopiewo (2089, 1936, 1450 and 975 respectively), which accounted for almost 73% of the number of such apartments built in the area of Poznanski district. The fewest apartments of this type were built in Puszczykowo and Murowana Goslina (1), Pobiedziska (29), Steszew (50) and Czerwonak (3). Not a single apartment for sale or rent was built in the commune of Buk.

In the light of the above data we may formulate the following observations:

 in the period under study, the number of issued permits to build single-family houses in the communes of Poznanski district increased,

the growth in the number of issued building permits differs among particular communes,

- the biggest number of apartments was completed in the years 2008–2010,

- from 2008, the number of completed apartments in the district was higher than the number of apartments completed in Poznan,

- the number of permits concerning buildings used for business activity in Poznanski district was higher than the number of such permits issued in Poznan.

All the above considerations support the thesis that in the period under analysis suburbanization processes intensified in the communes neighbouring Poznan.

### Conclusion

Suburbanization is a complex process which over the last 20 years has intensified in the areas affected by big cities, including the zone under the influence of the city of Poznan.

The scale of this phenomenon is reflected in the number of issued permits to build single-family houses and, as a consequence, in the number of apartments completed in individual construction. The conducted analysis indicates that the following communes had the biggest number of issued building permits and completed apartments: Dopiewo, Tarnowo Podgorne, Swarzedz, Kornik, Lubon, Suchy Las, Komorniki and Rokietnica. Thus, looking at the process of suburbanization in the light of the above, we may notice that the process is at the most advanced stage in the communes directly neighbouring Poznan, while construction traffic is lower in more distant communes.

### **References:**

*Beim, M.* (2007). Modelowanie procesu suburbanizacji w aglomeracji poznanskiej z wykorzystaniem sztucznych sieci neuronowych i automatow komorkowych, praca doktorska,

Berg van den, L., Drewett, R., Klaassen, L.H., Rossi, A., Vijverberg, C.H.T. (1982). Urban Europe. A study of growth and decline, Pergamon Press, Oxford.

*Champion, T.* (2001). Urbanization, suburbanization, counterurbanization and reurbanization, w: Paddison, R. (red.) Handbook of urban studies, Sage Publications, London, s. 143–161.

Klaassen, L.H. (1988). Mysl i praktyka ekonomiczna a przestrzen, Wydawnictwo Uniwersytetu Lodzkiego, Lodz.

*Lisowski, A.* (2005). Janusowe oblicze suburbanizacji, w: Jazdzewska, I., (red.) XV Konwersatorium wiedzy o miescie, Wydawnictwo Uniwersytetu Lodzkiego, Lodz.

*Lisowski, A., Grochowski, M.* (2007). Procesy suburbanizacji. Uwarunkowania, formy i konsekwencje. Opracowanie przygotowane na zlecenie MRR, Warszawa. Lorens, P. (red.) (2005). Problem suburbanizacji, Biblioteka Urbanisty, nr 7, Urbanista, Warszawa.

*Parysek, J.J.* (2008a). Procesy suburbanizacyjne w aglomeracji poznanskiej w: Kaczmarek, T., Mizgajski, A., (red.). Powiat poznanski. Jakosc przestrzeni i jakosc zycia, Bogucki Wydawnictwo Naukowe, Poznan, s. 71–90.

*Parysek, J.J.* (2008b). Suburbanizacja i reurbanizacja: dwa bieguny polskiej urbanizacji, w: Parysek, J., J., Stryjakiewicz, T., Region spoleczno-ekonomiczny i rozwoj regionalny, Bogucki Wydawnictwo Naukowe, Poznan.

*Swianiewicz, P., Klimska, U.* (2005). Spoleczne i polityczne zroznicowanie aglomeracji w Polsce – waniliowe centrum, mozaika przedmiesc, Prace i Studia Geograficzne, t. 35, Warszawa, s. 45–70.

Zagozdzon, A. (1988). Siec osadnicza, zmiennosc i trwalosc, w: Jalowiecki B., Kaltenberg-Kwiatkowska E. (red.) Proces urbanizacji i przeksztalcenia miast w Polsce, Ossolineum, Wroclaw-Warszawa.

*Zuziak, Z.* (2005) Strefa podmiejska w architekturze miasta. W strone nowej architektoniki regionu Miejskiego, w: Lorens, P. (red.) Problem suburbanizacji, Biblioteka Urbanisty 7, Urbanista, Warszawa, s. 17–32.

Стаття надійшла до редакції 29.11.2013.