

Development and spatial structure of the short-term tourist rental phenomenon in Polish cities on the example of the Airbnb platform in Krakow and Lodz

Summary

This doctoral thesis examines the origins, development, structure, spatial distribution and detailed characteristics of the phenomenon of short-term tourist rentals offered by the Airbnb platform in Polish cities, using Krakow and Lodz as case studies. The inspiration for undertaking research into this phenomenon was the rapid growth of short-term rental platforms in recent years, in particular the Airbnb platform, which, just a few years after its launch in 2008, became the leading company in this service sector. The significant impact of Airbnb's activities on the social, spatial and economic aspects of urban functioning and on urban tourism, as identified in the literature and empirical research, coupled with the still limited number of studies on this phenomenon in Polish cities, led to this topic being considered important and topical.

The thesis consists of two parts: a theoretical section and a research and analytical section. It sets out eight cognitive objectives (of a descriptive and explanatory nature) as well as a methodological and an applied objective. The cognitive objectives of the study are:

1. To present the origins and development of the phenomenon of short-term tourist rentals facilitated via online platforms,
2. To determine the scale and dynamics of the development of the phenomenon under study in the largest Polish cities, as well as to identify the phases of its development,
3. To determine the impact of global events disrupting tourist traffic (the COVID-19 pandemic, Russia's invasion of Ukraine in 2022) on the development of the phenomenon under study,
4. To determine the size of the short-term rental platform Airbnb's offering and the dynamics of its development in Krakow and Lodz,
5. To determine the spatial distribution of listings available via the Airbnb platform in Krakow and Lodz and to identify its determinants,

6. To determine the structure of Airbnb listings (property type, additional services) and the characteristics of hosts in Krakow and Lodz,

7. To determine the utilisation rate of Airbnb listings in Krakow and Lodz and to identify the characteristics that determine it,

8. To identify similarities and differences in the size, growth dynamics, structure, spatial distribution and utilisation of Airbnb short-term rental listings in Krakow and Lodz.

The methodological aim of this study is to propose original research methods, outlining their advantages, disadvantages and potential applications for investigating the scale, growth dynamics, and spatial and typological structure of the short-term tourist rental phenomenon, as well as the level of uptake of such offers. The practical aim of this study, however, is to provide detailed knowledge regarding the operations of the short-term rental platform Airbnb, which can be utilised by the authorities of the cities under study to minimise the negative effects of this phenomenon in urban policy.

Four research hypotheses were formulated, all of which were confirmed in the course of the study. In this doctoral thesis, it was decided to employ several complementary research methods, which enabled the achievement of its objectives and the verification of the hypotheses put forward. Proprietary methods developed specifically for this study played an important role in data collection. Both quantitative and qualitative methods were employed. This procedure is sometimes referred to in the literature as triangulation (Denzin, 2012). The study was based on primary and secondary data.

In the first stage of the study, the desk research method was employed. As part of this method, several searches were conducted: a literature search, a search of data from the AirDNA website, and a search of EUROSTAT data. Additionally, to enrich the research material, a search of press publications was carried out.

To conduct the research in Krakow and Lodz, an extended search of Airbnb listings was carried out using a proprietary research tool, referred to as the proprietary listing search (AKO). In order to examine the use of Airbnb listings in Krakow and Lodz, a proprietary measurement of the daily volume of listings available on the Airbnb portal was carried out – hereinafter referred to as the listing volume measurement (PWO).

The analysis revealed that the phenomenon of short-term tourist rentals via the Airbnb platform in Poland's largest cities was disrupted during the COVID-19 pandemic, particularly

in those cities where it was most prevalent (Krakow and Warsaw); however, in the post-pandemic period, there was a rapid increase and a return to growth.

The research found that, despite significant differences in the scale of the phenomenon – over 5,200 listings were identified in Krakow, compared with six times fewer in Lodz – and in the timing of the first listings – the first listings appeared in Krakow in 2009 and in Lodz in 2012, the phenomenon developed rapidly in both cities.

An analysis of the precise locations of the offers identified using the AKO method revealed the same patterns in their spatial distribution. From the very outset of the phenomenon, a strong concentration in central districts was observed. In Krakow, in the historic District I (Old Town), particularly within the area bounded by the Planty Park, and in Lodz, within the metropolitan area in the immediate vicinity of the main Piotrkowska Street, which serves as the city centre. The analyses also revealed a concentration of Airbnb listings within a short distance of the areas and attractions with the highest tourist appeal, as well as the main railway stations.

An analysis of the structure of Airbnb listings (property type, additional services) and the characteristics of hosts in Krakow and Lodz revealed that there are many similarities between the two cities, although the details differ. An analysis of the characteristics of hosts offering accommodation revealed that their profile is similar in both cities. One distinguishing factor was their number.

To determine the level of usage of Airbnb listings in Krakow and Lodz, a proprietary measure of daily listing volume (PWO) was used. The data collected revealed that in both cities, the highest usage of listings occurred from Friday to Sunday – i.e. at weekends – during the summer (particularly during the school holidays), as well as during so-called long weekends. The relatively long measurement period also revealed that the highest usage of the service in both cities was recorded during events of supra-local, including international, significance, taking place on Fridays and Saturdays.