



## The Impact of Airbnb on Long-Term Rental Housing: The Case of Ljubljana

Polona Obrč

City of Ljubljana Public Housing Fund, Ljubljana, Slovenia

[polona.obrc@gmail.com](mailto:polona.obrc@gmail.com)

Boštjan Kerbler (corresponding author)

Urban Planning Institute of the Republic of Slovenia, Ljubljana, Slovenia

Department of Infrastructure and Real Estate Management, European Faculty of Law,  
New University, Ljubljana, Slovenia

[bostjan.kerbler@uirsi.si](mailto:bostjan.kerbler@uirsi.si)

**Abstract:** *Airbnb has become a fixture in the development of global cities. It especially impacts cities' residential characteristics. The company works with the concept of the sharing economy, the essence of which is the exchange of services or goods between individuals who set the rules of operation without generating profits, but together generate more revenue. It insists that it does not represent a form of direct competition with other urban accommodation services and that it merely seeks to expand the tourism market. Nonetheless, this article proceeds from the assumption that Airbnb is influencing and transforming the housing market of the cities it operates in. It focuses on Ljubljana, which until 2019 had a record number of international arrivals and overnight stays. The findings confirm that short-term Airbnb rentals have affected the long-term rental market in Ljubljana. They also show that a very large share of rentals through Airbnb take place in the grey economy. However, the analysis of cases from selected European cities showed that, in addition to the drawbacks described, Airbnb also has positive effects on the development of cities. It is therefore necessary to accept and adapt appropriately to this global phenomenon through specific measures, such as those proposed in the conclusion for Ljubljana.*

**Keywords:** short-term rental market; vacation rentals; sharing economy; tourism; Ljubljana.



## Introduction

Ljubljana is the capital of Slovenia and as such is the largest rental housing market in the country, with 38% of all rentals recorded nationwide (Geodetska uprava Republike Slovenije 2018), and 27.8% of private rentals in the country (Statistični urad Republike Slovenije 2019). Data from the Slovenian Statistical Office show that in 2018 there were 10,630 housing units rented out in Ljubljana and that 26,488 or 10.2% of all Ljubljana residents lived in rented housing. The number of housing units rented out privately was 3,564. Private owners who decide to rent their property have two options: they can rent it out long-term or opt for short-term vacation rentals. The Rental Real-Estate Market Report issued by the Slovenian Surveying and Mapping Authority shows that the number of rentals for at least six months or an indefinite term (i.e., long-term) has been falling since 2015. This trend is believed to result from lessors switching to more lucrative short-term rentals for tourists on online platforms such as Airbnb. This is also confirmed by the data provided by the Slovenian Statistical Office (Statistični urad Republike Slovenije 2019). Even though the share of occupied housing increased by 2.5% from 2011 to 2018, the share of long-term rentals during that same period fell by 1%.

On the other hand, in 2019, Slovenian tourism reached record numbers for the sixth year in a row. According to the Slovenian Statistical Office (Statistični urad Republike Slovenije 2020), over 400,000 international tourists visited Ljubljana in 2019, and since then the numbers have been growing every year, reaching over one million in 2020. The number of overnight stays increased even more (by 2.7 times): from 790,000 to just under 2.2 million. International tourists who want to spend the night in Ljubljana can choose from several options. They can opt for a hotel or similar accommodation or select private accommodation. Until 2020, private accommodation was primarily offered through Airbnb.

The survey<sup>1</sup> whose findings are presented here therefore examined whether short-term Airbnb rentals for tourists affect the long-term rental market in Ljubljana. The assumption was that short-term rentals cover the same housing stock that owners previously rented out long-term, which means that the long-term rental housing stock is declining to the benefit of the short-term rental stock. A second assumption was that short-term Airbnb rentals typically take place to a large degree in the grey economy. The survey also explored the main reasons for owners deciding to rent out their property long-term or short-term.

---

<sup>1</sup> Conducted in mid-2019; that is, before the COVID-19 pandemic.



The survey was field between 30 June and 30 July 2019. Several methods were used to answer the research question and confirm the hypotheses. The greatest limitation was the fact that no information on the number of active Airbnb hosts in Ljubljana could be obtained from the Airbnb website. The data on the number of hosts providing short-term Airbnb rentals for tourists were therefore obtained from AirDNA, which is payable, but the number of active Airbnb hosts was already retrieved during the first search on this platform, which was sufficient for the needs of the survey. However, this database does not contain information on whether these hosts are registered. These data were obtained from the Register of Accommodation Providers set up by the Slovenian Agency for Public Legal Records and Related Services (AJPES) on 1 December 2017. Because this register also contains email addresses, online questionnaires could be emailed to registered short-term rental providers. Owners that provide long-term rentals were randomly selected through the online portals on which they offer long-term rentals. Because they provide a telephone number with their ads, it was possible to survey them by telephone. If they refused to provide answers by telephone, a link to the online questionnaire was emailed to them if they expressed interest in participating in the survey.

## Results

According to Stušek (2016), on 16 September 2016 Airbnb had 1,290 property listings in Ljubljana, offering 1,643 rooms and a total of 3,026 beds. Most service providers (88%) were not officially registered. AirDNA data on the number of active hosts in Ljubljana were similar: in June 2019, there were 1,614 active Airbnb hosts in Ljubljana. However, the number of registered vacation-rental hosts in Ljubljana in that same month was smaller than the number of active Airbnb hosts. According to the Register of Accommodation Providers, there were only 134 registered hosts in Ljubljana in June 2019 (Agencija Republike Slovenije za javnopravne evidence in storitve 2019). Hence it can be concluded that the share of unregistered providers that rent out their property on Airbnb is nearly 92%. This confirms the hypothesis that the grey economy is a significant problem associated with short-term Airbnb rentals.

All registered short-term vacation-rental hosts in Ljubljana were contacted to participate in the survey. The response rate was 44.7% (sixty respondents). As many as 93% reported that they rented their properties out through Airbnb. This confirmed that the right target group was included in the survey. Of the 150 owners providing long-term rentals that were called, sixty-eight or 45.3% were willing to participate in the online or telephone survey. The response rates for both were high, which can be attributed to the topical subject of the survey and the increase in Airbnb rentals. They could also be optimistically ascribed to a desire on the part of respondents to have the situation in this area regulated.

Based on the assumption that short-term Airbnb rentals cover the same housing stock that is being used for long-term rentals, the registered hosts were asked whether they had ever provided long-term rentals before the arrival of Airbnb. The results showed that over two-thirds (67%) of registered hosts had rented out their apartments long-term before deciding to provide short-term vacation rentals.

The registered hosts were also asked why they had decided to provide short-term rentals. Based on the current rental market, it was assumed that the hosts provide short-term rentals to make more money, which was confirmed by two-thirds (65%) of the respondents.



The owners that provide short-term rentals were also asked under what conditions they would rent out their property long-term. As anticipated, a large share of respondents (50%) reported they would be willing to do so if it generated the same income. However, for a full 33% the most important condition would be the provision of government support for regular rent payments and evicting tenants when a lease expires, and a further 10% would be highly motivated by suitable tax incentives for legal long-term rentals.

Property owners that provide long-term rentals were asked whether they ever used Airbnb to rent their apartments. The results showed that 75% of them had never provided short-term rentals. Among all the respondents (including those who had already provided short-term rentals), 47% reported that non-tourist tenants tended to take better care of the apartment, while 43% stated that one of the main reasons they provided long-term rentals was that they could choose who the tenants were. Half of the respondents also reported that under no condition would they rent out their property short-term.

## Discussion

The survey clearly showed that short-term Airbnb rentals affect the long-term rental market in Ljubljana. Short-term rentals cover the same housing stock that owners previously rented out long-term, which means that the long-term housing stock is declining. This confirms the finding by the Slovenian Mapping and Surveying Authority that from 2015 onward the number of rentals for at least six months or an indefinite term had been decreasing because lessors were switching to more lucrative short-term rentals to tourists on online platforms such as Airbnb. This means that with the existing legislation Airbnb is reducing the housing stock that could be used for long-term rentals, which increases the rents. This is confirmed by data from the Slovenian Mapping and Surveying Authority (Geodetska uprava Republike Slovenije 2018), which show that the average rent in Ljubljana increased from EUR 6.70 per square metre in 2016 to EUR 6.90 per square metre in 2017. However, this also includes non-profit rents. Market rents are significantly higher, amounting to EUR 10 or more per square metre in Ljubljana (depending on the size, location, and furnishings). It is the market rents that have increased the most since 2014. According to real-estate experts (cf. Pušnik 2018a), the rent for a 20 to 30 m<sup>2</sup> studio apartment ranged from EUR 350 to 360 a month in 2017, but in 2018 it had already increased to EUR 380 to 400. Rents have increased the most in downtown Ljubljana: compared to the EUR 500 to 550 required to rent a one-bedroom apartment in the city centre in 2017, a year later the rent ranged from EUR 750 up to a staggering EUR 900 (Pušnik 2018b). The greatest demand for rentals is in the summer, which experts believe (cf. Žurnal 2018) is related to the tourist season and the demand for short-term rentals. This is consistent with the findings of other researchers (see Gurran and Phibbs 2017) that short-term rentals to tourists have the strongest negative impact on long-term rentals – specifically, on monthly rents. In areas with a high frequency of Airbnb rentals, these rents continue to rise and may even exceed the critical threshold beyond which most tenants will not or cannot rent long-term.

As anticipated, more income is the most frequent reason given for the decision to offer short-term rentals. Hence, if the same (final) income could be generated (through government measures) from long-term and short-term housing rentals, fewer hosts would decide to rent their properties to tourists and more would (again) start providing long-term rentals. By implementing the proposed measure, as much as two-thirds of the housing rented out on Airbnb



could (hypothetically) become part of the long-term housing stock and surely at least half of the owners that use Airbnb would decide to provide long-term rentals, considering that they claimed to be willing to do so if it generated the same income. A further third of all short-term rental housing would become part of the long-term rental stock if the government provided guarantees for regular rent payments and enforcing evictions after a lease expires. For as many as 33% of hosts or lessors, this would be the primary condition for deciding to provide long-term rentals. Another important factor for them is the ability to use their property immediately if they are not renting it to a new tenant; the government could therefore adopt measures to ensure lessors can use their property freely when a lease expires. As the survey showed, tax relief for licensed long-term rentals would be an additional incentive.

Unlicensed rentals, which the respondents drew attention to, are a problem not only in the case of long-term but also (and primarily) in the case of short-term rentals. The survey results confirmed the hypothesis that an exceptionally high percentage of short-term Airbnb rentals occur in the grey economy. Despite the stricter control exercised by the Slovenian tax authorities since 2017 and the call for everyone who had rented or continued to rent their properties illegally to tourists to officially register their services and pay taxes on them (see Finančna uprava Republike Slovenije 2019), the effects of these measures have been insufficient. It is very difficult to enforce proper control, and therefore other, potentially more effective measures need to be adopted. The simplest solution for Airbnb rentals may be to follow the example of Barcelona, where a special team was set up to ‘comb the streets’ for unlicensed properties. In addition, a website was created where residents can report illegal tourist apartments (see Vazquez et al. 2019), and computer tracking software was developed to search listings on Airbnb. After identifying the unlicensed properties, Airbnb was asked to remove them from its listings. These measures were effective, but in Ljubljana it would make more sense to first reach an agreement with Airbnb, where it must be taken into account that any proposed solution is not in this platform’s interest and it is merely a necessary compromise for its management. However, the case of Barcelona showed that it is worth trying. In 2018, the city reached an agreement with Airbnb, on which basis the city authorities can access listings data through the host ID numbers and thus determine whether the linked properties are licensed (Tun 2019). In this way, the city developed an effective system of control and sanctions against violators. This type of cooperation between the city authorities and Airbnb is a much more appropriate way of seeking to reduce the number of short-term vacation rentals taking place in the grey economy than prohibiting Airbnb rentals altogether, which is also highlighted by other researchers (e.g., Kaplan and Nadler 2017; Wilhelm 2018). This has also been shown in the case of Berlin, where a law was adopted in 2014 prohibiting the misuse of living space (Germ. *Zweckentfremdungsverbot-Gesetz*), dubbed by Berliners as the ‘anti-Airbnb law’. This law was based on the principle that apartments are primarily meant to be lived in. After a two-year preparatory period, the law came into effect in 2016, only to be annulled in 2018 in response to opposition from owners who wanted to rent their properties to tourists (see Zeilhofer et al. 2017; Tun 2019).

## Conclusion

A decrease in the supply of long-term rental housing in Ljubljana has led to an increase in long-term rental prices, which, based on the survey conducted, can be attributed to the increase in short-term rentals, especially for tourists, via various online platforms such as Airbnb. Airbnb has thus greatly changed the housing market in cities around the globe, including Ljubljana. Its



impacts on cities can be both positive (e.g. the development of tourism) and negative (e.g. the transformation of the rental market and the development of the grey economy). However, the survey showed that negative effects can be mitigated and turned into positive ones. First, more effective control mechanisms for short-term rentals should be established and actual data on short-term and long-term rentals should be collected to reduce the grey economy to a minimum. This alone, however, is not sufficient. The government should also adopt specific measures to stimulate lessors to favour long-term rentals over short-term ones. These measures could include the following: 1) equalising long-term and short-term rental income; 2) providing guarantees for regular rent payments for long-term leases and enforcing the eviction of tenants after a lease has expired; 3) providing guarantees that owners can make free use of their property after a lease has expired; and 4) suitable tax incentives for licensed long-term rentals. Some of the proposed measures are feasible and could be implemented by establishing the public rental management service envisaged in the 2015–2025 National Housing Programme Resolution (*Official Gazette of the Republic of Slovenia*, no. 92/15) and the (new) housing bill, which was issued for public discussion in October 2019<sup>2</sup> (Ministrstvo za okolje in prostor 2019). According to these two documents, housing owners would release their properties to the public rental management service for medium- or long-term management. The rents would be lower than market rents, but they would provide regular long-term income to the owners, who would also be free of all transactions connected with the rental property's management and maintenance, as well as the key risks and responsibilities, such as tenants defaulting on rent, the need to search for new tenants, (the costs attached to) apartments being left vacant, and the need to cover operation costs and the costs of maintenance of common areas, which are covered/paid for by the management service. Once a lease expired, the owner would receive the property back in its original condition, with no tenants or encumbrances (Ministrstvo za okolje in prostor 2019). Tax relief is also envisaged as a way of encouraging owners to provide long-term rentals via the public rental management service, but at the time of the public discussion on the bill forms of relief had not yet been finalised or agreed with the Ministry of Finance. However, tax relief could definitely motivate Airbnb hosts to start offering long-term instead of short-term rentals. According to Gerbec and Starček (2018), the best-practice example from Luxembourg shows that the introduction of a high, 50% tax deduction on net rental income was the main factor that encouraged owners to provide long-term rentals via a public rental service.

Consequently, even if the measures expected to accompany the establishment of a public rental management service were to initially attract only a small portion of vacation rental hosts, their positive experience could also motivate others that rent their properties out on Airbnb – or plan to do so – to start offering long-term rentals. The fact is that properties will continue to be rented out on Airbnb even after that, but the proposed measures within the public rental management service could gradually help increase the share of long-term rental housing stock or at least to maintain it at the same level. Through this, the problem associated with unlicensed short-term rentals could also begin to be gradually resolved. However, given the currently high percentage of unlicensed rentals, this problem would not be solved just by establishing a public rental service. With rapid growth in international arrivals and overnight stays, owners will surely continue to provide vacation rentals and rent their properties illegally. Therefore, other measures targeting the Airbnb transactions in the grey economy should also be adopted. Examples from other European cities show that the best measure is to establish an effective

---

<sup>2</sup> The law had not yet been adopted at the time of writing this article.



monitoring system and introducing strict sanctions against violators. Cooperation between city authorities and Airbnb is highly recommended in this process. These examples also show that restricting or even prohibiting Airbnb rentals does not yield the desired effects.

Airbnb has thus become a constant in the new economic urban context, and it is necessary to accept it and adapt to it appropriately (see Santolli 2017). Despite their drawbacks, short-term rentals on Airbnb may also have positive effects. According to some researchers (e.g., Zale 2017; Llop 2017), short-term rentals are one of the key components in the sharing economy that facilitate the development of tourism and hence the economic development of cities, including Ljubljana.



## References

- Agencija Republike Slovenije za javnopravne evidence in storitve 2019. *Register nastanitvenih obratov*. Retrieved June 1, 2019, from <https://www.ajpes.si>.
- Finančna uprava Republike Slovenije 2019. *Oddajam stanovanje preko Airbnb in Bookinga*. Retrieved November 11, 2019, from <https://www.fu.gov.si>.
- Geodetska uprava Republike Slovenije 2018. *Poročilo o najemnem trgu nepremičnin za leti 2016 in 2017*. Ljubljana. Retrieved November 11, 2019, from [https://www.e-prostor.gov.si/fileadmin/etn/Porocila/Porocilo\\_najemni\\_trg\\_2017.pdf](https://www.e-prostor.gov.si/fileadmin/etn/Porocila/Porocilo_najemni_trg_2017.pdf).
- Gerbec, F., S. Starček 2018. 'Strokovne podlage za zakonsko ureditev organizacije in delovanja javne najemniške službe.' Pp. 97–107 in: Udovič, B. (ed.) *Zbornik referatov, 29. tradicionalni posvet Poslovanje z nepremičninami*. Ljubljana: Gospodarska zbornica Slovenije, Zbornica za poslovanje z nepremičninami.
- Gurran N., P. Phibbs 2017. 'When Tourists Move In. How Should Urban Planners Respond to Airbnb?' *Journal of the American Planning Association* 83 (1): 80–93. DOI: [10.1080/01944363.2016.1249011](https://doi.org/10.1080/01944363.2016.1249011).
- Kaplan, A. R., L. M. Nadler 2017. 'Airbnb: A Case Study in Occupancy Regulation and Taxation.' *Chicago Unbound* 82 (1): 103–115.
- Llop, N. L. 2017. 'A Policy Approach to the Impact of Tourist Dwellings in Condominiums and Neighbourhoods in Barcelona.' *Urban Research & Practice* 10 (1): 120–129. DOI: [10.1080/17535069.2017.1250522](https://doi.org/10.1080/17535069.2017.1250522).
- Ministrstvo za okolje in prostor 2019. *Osnutek Stanovanjskega zakona*. Retrieved November 2, 2019, from <https://e-uprava.gov.si/drzava-in-druzba/e-demokracija/predlogi-predpisov/predlog-predpisa.html?id=10740>.
- Pušnik, M. 2018a. 'Tržne najemnine v prestolnici v nebo.' *Delo* September 4. Retrieved November 2, 2019, from <https://www.delo.si/lokalno/ljubljana-in-okolica/trzne-najemnine-v-prestolnici-v-nebo/>.
- Pušnik, M. 2018b. 'Kako je Airbnb pretresel najemniški trg v prestolnici.' *Delo* July 3. Retrieved November 2, 2019, from <https://www.delo.si/lokalno/ljubljana-in-okolica/kako-je-airbnb-pretresel-najemniski-trg-v-prestolnici/>.
- Resolucija o nacionalnem stanovanjskem programu 2015–2025. *Official Gazette of the Republic of Slovenia*, no. 92/15. Ljubljana.
- Santolli, J. B. 2017. 'Winning the Battle, Losing the War: European Cities Fight Airbnb.' *The George Washington International Law Review* 49 (3): 673–709.
- Statistični urad Republike Slovenije 2019. *Najemna stanovanja po vrsti najema, Ljubljana*. Retrieved June 1, 2019, from <https://pxweb.stat.si/SiStat>.





Statistični urad Republike Slovenije 2020. *Prenočitvene zmogljivosti, prihodi in prenočitve turistov, Ljubljana*. Retrieved August 1, 2020, from <https://pxweb.stat.si/SiStat>.

Stušek, P. 2016. *Vpliv Airbnb ponudbe na zasedenost zmogljivosti v Ljubljani*. Ljubljana: Univerza v Ljubljani, Ekonomska fakulteta.

Tun, Z. T. 2019. *Top Cities Where Airbnb Is Legal or Illegal*. Retrieved January 6, 2019, from <https://www.investopedia.com>.

Vazquez, C., G. Rodriguez-Pina, C. Blanchar, L. Bohroquez 2019. 'The Battle against Vacation Rentals Spreads beyond Madrid.' *El Pais* April 1.

Wilhelm C. A. 2018. 'Sharing Is Caring: Regulating Rather than Prohibiting Home Sharing in Wisconsin.' *Marquette Law Review* 101 (3): 822–861.

Zale, K. 2017. 'When Everything Is Small: The Regulatory Challenge of Scale in the Sharing Economy.' *San Diego Law Review* 53 (4): 949–1016.

Zeilhofer, N., I. Zobavnik, J. Blažič 2017. *Oddajanje nepremičnin turistom: primerjalni pregled (PP)*. Ljubljana: Državni zbor, Raziskovalno-dokumentacijski sektor.

Žurnal, I. H. 2018. 'Najemnine v Ljubljani poletele, stanovanja oddajo praktično takoj.' *Žurnal* October 21.