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Policy Proposals for Regulating the Short-Term Rental Market: Towards a Balanced Housing Market in Brussels

Dr. Petrus te Braak, Prof. Pieter-Paul Verhaeghe

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Brussels Institute for Social and Population Studies, Vrije Universiteit Brussel,
Pleinlaan 5, 1050 Brussels, Belgium
Website: brispo.research.vub.be

1. Introduction

In the past ten years, the landscape of tourism and urban living in the Brussels Capital Region (BCR) has been profoundly altered by the remarkable growth of shared short-term rentals. A surge in short-term rental properties, prominently featured on peer-to-peer platforms like Airbnb, HomeAway, Booking, Expedia, and Tripadvisor has been observed. This peer-to-peer short-term rental market offers both opportunities and drawbacks: Local residents might earn an (additional) income through property capitalisation, and it might give room to tourism diversification to less exposed areas, which offers benefits for local businesses in those areas (Alyakoob & Rahman, 2019). Moreover, for tourists, it might have the advantage of a wider selection of accommodations for visitors at competitive prices, and authentic local experiences outside traditional tourist areas (Zervas et al., 2017). However, challenges arise from the dominance of professional hosts with multiple properties, leading to potential issues like removing housing from the local long-term market and increasing housing prices (Ayouba et al., 2020; Garcia-López et al., 2020), while it is also argued to impact traditional hospitality services (Zervas et al., 2017). In addition, short-term rentals are often associated by local residents with issues such as increased noise levels, and the risk of eroding local identity (Petruzzi et al., 2020).

For these reasons, the Air-BRU research project, funded by Innoviris under grant 2019-PRB-10, investigated the impact of the peer-to-peer short-term rental market in the BCR. More specifically, the project was dedicated to a comprehensive examination of the inequalities arising from this burgeoning market. Specifically, it focused on four key research questions: 1) the diversity in the types of providers offering short-term rentals, 2) the disparate residential distribution of these rentals across Brussels' neighbourhoods, 3) the occurrence of discrimination against tourists on peer-to-peer rental platforms and the potential for an inadequate supply of such rentals for certain categories of tourists, and 4) the gentrifying impact that the expanding market of shared short-term rentals may have on local residents, particularly concerning the availability and affordability of long-term rental dwellings and the potential for displacing inhabitants.

Furthermore, the project extends to assess the impact of the COVID-19 pandemic on the short-term rental sector in the BCR and its subsequent effects on the local population. An important goal of this project is to develop evidence-based policy recommendations to address these issues of inequality. To achieve this, the research utilises unique data collection methods, including web scraping from short-term rental platforms, tourism websites, and rental housing websites. These are then correlated with detailed administrative data and complemented by field experiments such as correspondence tests to investigate digital discrimination. Other innovative features of this research include detailed spatial analyses, an integrated examination of the locations, providers, and clients of shared short-term rentals, and advanced quantitative analyses of potential gentrifying effects, utilising unique spatial-temporal micro-data on rental dwellings within the BCR.

In this contribution, we delve into evidence-based policy recommendations to better regulate the short-term rental market in the BCR specifically. Initially, we will provide a comprehensive summary of the findings from our project, relating these insights to potential policy measures. Subsequently, we present a range of policy options. For each proposed measure, we will detail the methodology for its implementation and discuss findings from other studies reviewed during our literature review. This will include insights drawn from policy-evaluating research conducted in other cities to illustrate the potential impacts of these measures. The report concludes with a reflection on which measures, or combination thereof, could be implemented in the BCR market specifically. Considering the specific situation of the short-term rental market in the BCR, we aim to retain as many benefits of the short-term rental market as possible while mitigating its most significant negative effects.

This will involve careful consideration of the unique characteristics of the short-term rental market in the BCR that will be outlined in the following section.

2. Summarising the key findings of the project studies

2.1. Diverse types of providers of short-term rental

In our study, Endrich et al. (2022), we explored the varied landscape of short-term rental providers in Brussels. We have identified and classified short-term rental hosts into four key categories: 1) professionals, 2) investors, 3) occasionals, and 4) sharers. Building on previous research, this categorisation challenges the traditional and simplified distinction between professional versus non-professional hosts (Deboosere et al., 2019; Gil & Sequera, 2022; Gyódi, 2019). It is based on the number of listings, availability length (in line with Ayouba et al. (2020) we define this as 120 days per year or more), and dwelling type (entire house or room/rooms within a house). This distinction and its underlying rationale will be summarised and depicted in the accompanying grey box for clarity and easy reference.

The spatial distribution of Airbnb providers in Brussels: different drivers for different types of hosts?

Marek Endrich, Pieter-Paul Verhaeghe, Rafael Costa, Lena Imeraj and Sylvie Gadeyne

Abstract

Purpose – *The purpose of this study is to compare the spatial distribution of different types of Airbnb hosts – based on a novel typology – and to investigate their association with neighbourhood characteristics in Brussels.*

Design/methodology/approach – *This study describes the location of Airbnb dwellings across the types of hosts and use spatial tests to compare their distributions to the traditional hospitality industry. With regression models, this study examines the relationship between the provision of Airbnb listings and neighbourhood indicators.*

Findings – *While different types of hosts offer their listings in the same urban space, they also cover different areas and exhibit different clustering processes. Their locations are associated with structural, socio-economic and demographic neighbourhood characteristics that vary across the types and provide support for the new typology.*

Research limitations/implications – *This study focuses on the type of Airbnb hosts and their listings in one year, 2019. It would be worthwhile to apply the typology to other cities and to observe how the distributions change over time, including the period of the COVID-19 pandemic.*

Originality/value – *To the best of the authors' knowledge, this paper is the first to suggest a finer typology of Airbnb hosts than the regular distinction into professional and non-professional types and reveals how hosts differ in the location of their Airbnbs.*

Keywords *Brussels, Tourism, Spatial analysis, Airbnb, Sharing economy*

Paper type *Research paper*

Marek Endrich and Pieter-Paul Verhaeghe both are based at Interface Demography, Vrije Universiteit Brussel, Brussels, Belgium. Rafael Costa is based at Interface Demography, Vrije Universiteit Brussel, Brussels, Belgium and Netherlands Interdisciplinary Demographic Institute (NIDI)-KNAW/University of Groningen, The Hague, The Netherlands. Lena Imeraj is based at the Department of Geography, Vrije Universiteit Brussel, Brussel, Belgium. Sylvie Gadeyne is based at Interface Demography, Vrije Universiteit Brussel, Brussels, Belgium.

1. Introduction

During the past decade, Airbnb has become a major player in the tourism market as a provider of short-term rentals in Brussels, as in many cities in Europe and around the world (Adamiak, 2019). The rise of Airbnb in Brussels was favoured by the steady increase of tourism and by the presence of European and international institutions (EU, NATO) and related organisations (NGOs, lobbying firms) which traditionally attract international professionals and students.

As part of the peer-to-peer economy, Airbnb might offer valuable economic opportunities for the city's inhabitants and interesting touristic experiences for visitors. Residents can share their homes and capitalise on their property, while tourism might diversify to neighbourhoods that had little exposure before and local businesses can benefit (Alyakoob and Rahman, 2021). Visitors can choose from a larger selection in accommodations at lower prices (Zervas et al., 2017) and gain the opportunity to make "authentic" experiences outside the traditional touristic neighbourhoods and infrastructure.

Despite these advantages, Airbnb has faced a backlash by local inhabitants and politicians and has become target of regulatory constraints. Much of this criticism relates to a rise in

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Typology of short-term rental hosts: Professionals, Investors, Occasionals, and Sharers

Professionals – Defined by having three or more listings. These hosts are akin to commercial companies in the traditional housing market. They offer a professional level of service and are likely to have their properties available for rent for more than 120 days per year. Their operations are similar to real estate firms, indicating a high level of professionalism in the short-term rental market.

Investors – These hosts typically rent out either one property for periods exceeding 120 days annually or two properties at the same time. They represent a diverse group, ranging from expatriates renting out their homes while abroad to affluent families engaging in buy-to-let investments or second residences. These hosts may prefer the short-term rental market over traditional rental markets due to its flexibility and potential for higher economic returns.

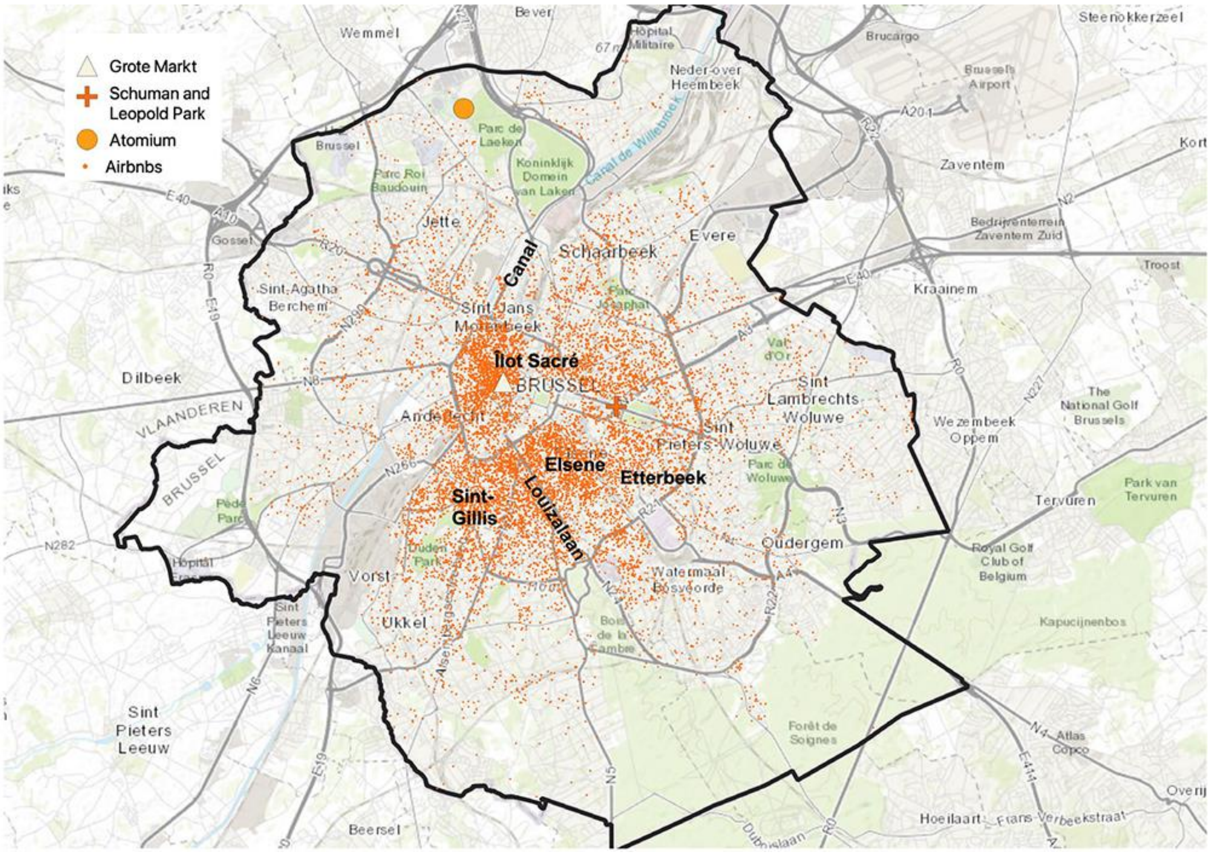
Occasionals – Characterised by renting out a single property (entire place) for short durations of less than 120 days per year, such as during holidays or business trips. These hosts typically live in the dwelling they rent out and are in line with the original concept of Airbnb as part of the sharing economy. Their involvement in Airbnb is sporadic and usually not their primary source of income.

Sharers – This category consists of hosts who rent out a single room in their dwelling. Sharers might have different socio-demographic backgrounds compared to those renting out entire places. This type of hosting is also closely aligned with the foundational philosophy of Airbnb as a sharing economy platform, where individuals share part of their living space with travellers.

2.2. The residential distribution of short-term rentals within the BCR

The study (Endrich et al., 2022) also investigates the disparate residential distribution of these rentals across Brussels' neighbourhoods. In line with previous findings in other cities (Eugenio-Martin et al., 2019; Gyódi, 2019; Ioannides et al., 2019; Morales-Pérez et al., 2022), the findings in Brussels reveal that short-term rental on Airbnb are predominantly located in the Îlot-Sacré and, by extension, in the Pentagone area in the municipality of Brussels, the neighbourhoods around the European institutions such as Schuman and the Leopold Park, as well as in the 'hipster' districts of Elsene and Sint-Gillis (see Figure 1).

Figure 1. Spatial distribution of Airbnb listings in the BCR



Spatial analyses and relative assessments per 100 households for each host type, reveal that professional and investor hosts predominantly cluster in central areas of Brussels, near touristic attractions and in economically prosperous zones, including high-end shopping streets, as depicted in Figure 2. In contrast, occasional and sharer hosts exhibit a more dispersed distribution. Sharers are notably prevalent in younger, 'hipster' neighbourhoods, while occasional hosts are spread more broadly.

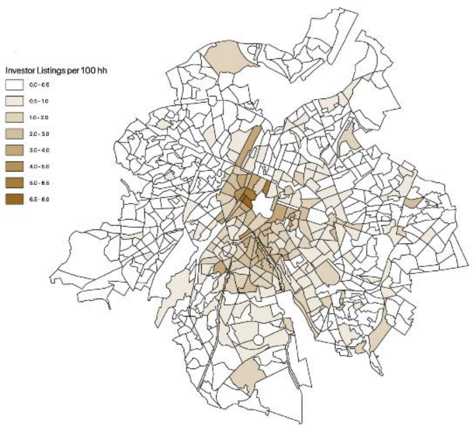
The study finds that the location choices of these host types are closely linked to various demographic and socio-economic neighbourhood characteristics. For instance, professional and investor Airbnb's are more common in areas with lower unemployment rates. Conversely, occasional and sharer hosts are less frequent in neighbourhoods with a high prevalence of single-person households and families with children. Sharers are particularly common in areas with a younger demographic (18-29 years) and a significant presence of EU nationals. In contrast, professionals and investors are less likely in areas with a higher percentage of elderly residents. Moreover, neighbourhoods with a substantial North African population tend to have fewer Airbnb's managed by sharers and professionals, while those with many Turkish residents see fewer investor-owned Airbnb's. These divergent patterns underscore the need for differentiated strategies in regulating and supporting various host types to foster sustainable tourism and housing in Brussels. It is unpreferable to adopt a 'one-size-fits-all' approach without considering the differences between various types of hosts.

Figure 2. Density of Airbnb listings in the BCR per 100 households by host type

Full sample (a)

Professionals (b)

Investors (c)

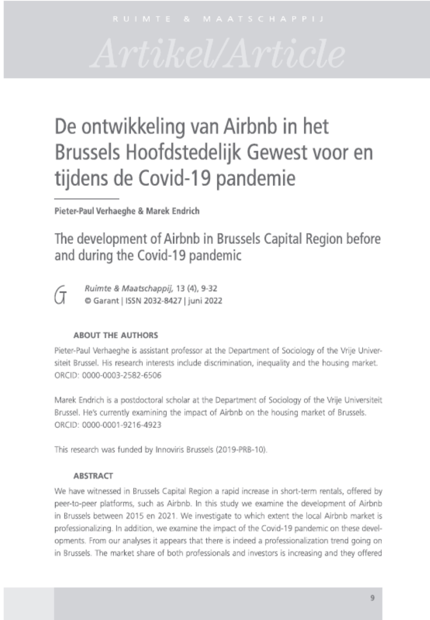


Occasionals (d)

Sharers (e)

2.3. Airbnb in the BCR: A quantitative description by host type

Subsequently, in Verhaeghe & Endrich (2022), we describe that, prior to the COVID-19 pandemic, Airbnb in Brussels witnessed a significant growth trajectory, with a notable increase in offerings from 2015 to 2017 and stabilisation thereafter. In 2015, 6,611 properties were listed by 5,364 hosts, which then escalated to approximately 12,500 active listings annually, with around 9,000 fluctuating hosts. This overall growth masked considerable variability in the evolution of Airbnb listings by host type. Up to 2017, all host types saw an increase in listings, but post-2018, a divergence emerged: professional hosts continued to grow, while occasional hosts stagnated, and sharers and especially investors saw a decline. The proportion of listings by professional hosts steadily increased from about 11.7% in 2015 to 20.1% in 2019, indicating a trend towards professionalisation. In contrast, occasional hosts maintained a stable share of around 20%, while sharers and investors lost ground. The share of sharers dropped from 34.2% to 31.8%, and investors from 33.9% to 27.7%. Consequently, the combined share of professional categories (professionals and investors) rose from 45.5% to 47.8%, with a shift towards larger market players.



RUIMTE & MAATSCHAPPIJ

Artikel/Article

De ontwikkeling van Airbnb in het Brussels Hoofdstedelijk Gewest voor en tijdens de Covid-19 pandemie

Pieter-Paul Verhaeghe & Marek Endrich

The development of Airbnb in Brussels Capital Region before and during the Covid-19 pandemic

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ABOUT THE AUTHORS

Pieter-Paul Verhaeghe is assistant professor at the Department of Sociology of the Vrije Universiteit Brussel. His research interests include discrimination, inequality and the housing market. ORCID: 0000-0003-2582-6506

Marek Endrich is a postdoctoral scholar at the Department of Sociology of the Vrije Universiteit Brussel. He's currently examining the impact of Airbnb on the housing market of Brussels. ORCID: 0000-0001-9216-4923

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ABSTRACT

We have witnessed in Brussels Capital Region a rapid increase in short-term rentals, offered by peer-to-peer platforms, such as Airbnb. In this study we examine the development of Airbnb in Brussels between 2015 en 2021. We investigate to which extent the local Airbnb market is professionalizing. In addition, we examine the impact of the Covid-19 pandemic on these developments. From our analyses it appears that there is indeed a professionalization trend going on in Brussels. The market share of both professionals and investors is increasing and they offered

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An analysis of Airbnb host categories in Brussels revealed distinct characteristics in their advertisements. Professionals, for example, charged the highest average nightly rates and accommodated the largest number of guests, likely reflecting the size and location of their properties. In contrast, occasional hosts typically offered more rooms per listing, indicating a tendency to rent out entire houses. Consequently, in the Brussels Airbnb market, financial earnings vary by host category, with averages calculated between 2015 und 2021: Professional hosts, typically active in central or tourist areas, charge the highest average prices at €100 per night, followed by investors, occasional hosts, and sharers. This price variation can be attributed to location or property features. Sharers, offering a room in a shared house, charge around €49 per night. Revenue reflects the number of booking days: professionals average €6,078 per year, investors €4,844, and occasional hosts and sharers significantly less. The onset of the COVID-19 pandemic in early 2020 led to a drastic decline in tourism and a steep drop in demand for tourist accommodations. This downturn disproportionately affected investors and sharers, with a delayed reaction observed among professional hosts. Despite the pandemic, the market share of professional listings continued to rise, while that of sharers declined, and investors and occasional hosts remained stable. This trend suggests that the pandemic further entrenched the professionalisation of Airbnb in Brussels rather than reversing it.

2.4. Gentrifying effects of shared short-term rentals on housing dynamics in the BCR

In Verhaeghe, Endrich and te Braak (2023a, 2023b), we investigated the gentrifying impact of the expanding market of shared short-term rentals on residents in the BCR, focusing on the availability and affordability of long-term rental dwellings and potential displacement of inhabitants. Between 2015 and 2020, the density of Airbnb listings in Brussels increased, peaking around 2.3 listings per 100 households before declining due to the COVID-19 pandemic. By 2019, approximately 5,000 properties were effectively removed from Brussels' local housing market, equating to about 1% of the total housing stock in Airbnb-attractive areas. This removal of properties from the long-term market has led to increased rents for residents and made fewer properties available to local residents (see also Ayouba et al., 2020; Garcia-López et al., 2020). During this period, average monthly rental prices per bedroom rose from €365 in 2016 to €460 in 2018, then decreased to €428 in 2020. The average sale price of houses also showed a consistent rise. However, the distribution of Airbnb listings and housing prices varied across Brussels' neighbourhoods.


Airbnb fait-il grimper les loyers en Région de Bruxelles-Capitale?

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Prof. Pieter-Paul Verhaeghe
Dr. Marek Endrich, Dr. Petrus te Braak
Vakgroep Sociologie - Vrije Universiteit Brussel

Previously, in this contribution, we showed that Airbnb's are predominantly concentrated in central Brussels, the European quarter, and gentrified areas in Elsene and Sint-Gillis, while high long-term rental prices are less centralised but higher along the south-eastern axis from the centre. The highest rental prices in 2018 were in Elsene, Brussels, Etterbeek, and Ukkel, while the lowest were found in Sint-Agatha-Berchem, Anderlecht, Jette, Koekelberg, and Sint-Jans-Molenbeek. Although most municipalities saw rent increases from 2016 to 2018, Sint-Jans-Molenbeek experienced a decrease, and from 2018 to 2020, all municipalities saw price decreases, most notably in the more expensive municipalities.

A positive correlation was found between the rise in Airbnb density and the increase in average rental prices per bedroom in a neighbourhood, indicating that an increase in Airbnb supply is associated with higher rental prices. This correlation remains even after controlling for unchanging neighbourhood characteristics, number of bedrooms, and type of rental property, as well as economic factors in the neighbourhood. This suggests that Airbnb's presence contributes to rising rental prices, irrespective of whether the listings are from professional or non-professional hosts. However, no significant correlation was found between Airbnb density and house sale prices.

During the COVID-19 pandemic, despite a decrease in Airbnb offerings and average rental prices, there was no significant correlation between these declines. The results indicate that while Airbnb's presence correlates with increased rental prices, the reduction in Airbnb listings during the pandemic did not have a significant lowering effect on rental prices. This lack of correlation could be due to a delay in the market's response or Airbnb hosts' expectations regarding the pandemic's duration.

The study concludes that Airbnb's growth has contributed to increased rental prices in Brussels, aligning with previous international research. However, it did not significantly affect house sale prices, nor did changes during the COVID-19 period. The findings highlight the importance of considering Airbnb's impact on the long-term rental market and the potential gentrifying effects, particularly in tourist-popular areas.

2.5. Ethnic discrimination on peer-to-peer rental platforms

In Verhaeghe, Martiniello et al. (2023), we delved into the occurrence of discrimination against tourists on peer-to-peer rental platforms, with a focus on Airbnb's hosts in the Brussels Capital Region. The analysis involves 1,043 correspondence tests to compare hosts' reactions to guests of Belgian, Moroccan, and Polish origin, aiming to assess if Airbnb's 2016 anti-discrimination directive has impacted ethnic discrimination levels. Results indicate significant discrimination against guests of Moroccan origin but not against Polish guests. Moroccan guests face a 6.9% lower acceptance rate compared to Belgian guests, while the acceptance rate does not differ for Polish guests. This pattern of discrimination is more pronounced among professional hosts, who show a 14.7% lower acceptance rate for Moroccan guests, compared to non-professional hosts who exhibit no significant discrimination.

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Ethnic discrimination on the shared short-term rental market of Airbnb: evidence from a correspondence study in Belgium

Pieter-Paul Verhaeghe [*,1], Billie Martiniello [2], Marek Endrich [3], Lisa Van Landschoot [4]

Department of Sociology, Vrije Universiteit Brussel, Belgium

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ABSTRACT

Although studies have shown ethnic discrimination in the sharing economy, there is surprisingly little research about discrimination on Airbnb. As the first correspondence study after the anti-discrimination directive launched by Airbnb in 2016, we examine to which extent there is still ethnic discrimination against guests on Airbnb. We conducted 1043 correspondence tests on the Airbnb platform in Belgium during the Covid-summer of 2021. Guests with Moroccan-sounding names have 6.9% lower acceptance rates than those with Belgian-sounding names, while there is no discrimination against guests of Polish origin. Non-professional Airbnb hosts tend to discriminate much less than professional hosts. The ethnic difference in acceptance rates between Belgian and Moroccan guests accrues to 14.7% among professional hosts, while there is no discrimination by non-professional hosts. Moreover, revealing the vaccination status of the guest does not impact the level of discrimination. These findings suggest that the anti-discrimination policy of Airbnb is insufficient.

1. Introduction

Ethnic discrimination refers to the unequal and adverse treatment of people on the basis of their ethnic origin (Quillian, 2006). Although discrimination is legally forbidden, numerous studies have shown that there is still systematic discrimination against ethnic minorities on the long-term rental housing market (Flage, 2018; Auspurg et al., 2019; Quillian et al., 2020). Research about ethnic discrimination in the access to shared short-term rentals – such as Airbnb or HomeAway – is, however, limited to only a handful studies (e.g. Edelman et al., 2017; Cui et al., 2020). This scarcity is striking, given the spectacular growth of these shared short-term property rentals in many tourist destinations during the past decade. Moreover, several scholars claim that the design of shared short-rental digital platforms creates opportunities for 'digital discrimination' because it entails personal selection (Cheng and Foley, 2018; Lutz and Newlands, 2018).

The aim of this study is to examine ethnic discrimination in the access to the shared short-term rental market of Airbnb by means of correspondence tests. This field experimental technique is considered as the 'golden standard' to measure discriminatory behavior in the field (Gaddis, 2018; Verhaeghe, 2022). We contribute to current hospitality and tourism research on the sharing economy in three ways. Firstly, previous correspondence studies have investigated ethnic discrimination against tourists with African-American names on the Airbnb platform in the United States (Edelman et al., 2017; Cui et al., 2020). To the best of our knowledge, this study is the first that examines – with field experimental tests – ethnic discrimination on the Airbnb platform outside the United States and after the anti-discrimination directive launched by Airbnb in 2016. We conducted 1043 correspondence tests to assess ethnic discrimination against tourists with Moroccan and Polish names in Brussels Capital Region, the head capital of both Belgium and the European Union. Both groups represent large ethnic minorities groups in Europe but differ greatly with respect to their visible signals of ethnic and religious background (Bade, 2003). Moreover, we evaluate the effectiveness of the Instant book function on Airbnb to mitigate the Instant book function. Secondly, we differentiate between professional and non-professional Airbnb hosts as we hypothesize that the types of hosts differ in their behavior towards ethnic minorities. Finally, as the

[*] Corresponding author.
E-mail address: Pieter-Paul.Verhaeghe@vub.be (P.-P. Verhaeghe).
[1] ORCID code: 0000-0003-2582-6506
[2] ORCID code: 0000-0001-8882-671X
[3] ORCID code: 0000-0001-9216-4923
[4] ORCID code: 0000-0002-7076-1847

Comparing ethnic differences in hosts' response rates and the relative frequency of reactions by the guest's ethnic origin, reveal that professional hosts are more likely to respond positively to booking requests in general. However, the acceptance rates for Moroccan guests are significantly lower, driven by both more negative reactions and non-responses. This trend is less evident among non-professional hosts. Additionally, revealing a guest's vaccination status did not significantly impact the level of acceptance rates or ethnic discrimination.
The study additionally examines the effect of Airbnb's Instant Book function on discrimination. While the use of this function is not mandatory for horsts, approximately one-third of Brussels hosts used it in 2021. Our findings indicate that the Instant Book function is very effective to tackle discrimination, as no discrimination was observed among hosts who enabled this function.

The study concludes that there is still substantial discrimination against Moroccan guests on Airbnb, despite Airbnb's anti-discrimination directive from 2016. It also suggests that professional hosts are more likely to discriminate than non-professional hosts, potentially due to selection effects. Much of this discrimination problem could be addressed by making the Instant Book function obligatory.

The findings underscore the complexity of addressing discrimination in the peer-to-peer rental market and highlight the potential for an inadequate supply of rentals for certain categories of tourists, particularly those from minority ethnic backgrounds.

3. Overview of key policy measures and their implementation

In this section, we delve into the available evidence-based policy measures that could be implemented to regulate the short-term rental market. Fortunately, there is a wealth of policy-evaluative research available specifically for this area, while for many other social issues, we often must rely on policy-preparatory research. This allows for a comprehensive understanding of the effects of policy measures on aspects like the short-term rental market for tourists, as well as the income implications for short-term rental providers. Additionally, the impact of these measures on housing prices is frequently examined, providing a broader perspective on the policies.

However, a notable challenge is the difficulty in isolating the effects of individual policy measures. Often, multiple policy measures are implemented simultaneously under 'Home Sharing Ordinances' (HSOs), complicating the attribution of consequences to specific measures. In the following section, we will describe each policy measure in detail (see the box below for a summary of the policy measures that will be discussed in detail), including its context (location and time of implementation), and where possible, delve deeper into the effects of these measures on the supply side of the short-term rental market, the potential income for providers, and the impact on the housing market.

Overview of proposed policy measures for regulating the short-term rental market

1. Mandatory registration for short-term rental properties – Before being permitted to offer short-term rentals, operators and properties must be registered.

2. Restricting multiple listings per host – Limiting each host to a single address, this policy restricts hosts to offering only one property on short-term rental platforms.

3. Short-term rental bans – This involves prohibiting or restricting new registrations for short-term rentals in certain areas.

4. Limiting the number of listing days – This measure sets a cap on the number of days per year a property can be rented out.

5. Tax agreements and enforcement in short-term rental platforms – Agreements between cities and rental platforms facilitate the enforcement of various taxes.

6. Implementing higher and directive taxes – Aimed at deterring the conversion of properties into short-term rentals, this approach reduces the benefits of conversion. Suggested methods include linear and convex taxation systems.

7. Tackling digital discrimination – Discussed measures include mandating the 'Instant Booking' function, stimulating reviews, anonymising names, and pictures during the initial booking phase, testing on discriminatory behaviour, and banning discriminatory hosts from platforms.

3.1. Mandatory registration for short-term rental properties

The cornerstone of all policy measures addressing the short-term rental market is the implementation of a comprehensive registration system. This system not only forms the foundation for upcoming policy initiatives but is also pivotal for monitoring market evolutions and facilitating policy evaluation research in the future. By gathering detailed information, this registration system enables authorities to track market trends, assess the impact of policies, and adapt strategies to ensure a balanced and sustainable short-term rental market. It is important to note that digital platforms, such as Airbnb, have historically shared data with governments only in limited cases. Furthermore, upcoming European policy[1] is set to mandate the sharing of such data.

In the BCR, the operation of tourist accommodation activities in short-term rental properties is dependent on their registration under the 'Ordonnantie betreffende het toeristisch verblijf'[2] (French: 'Ordonnance relative à l'hébergement touristique'[3]) dated 8 May 2014. A new draft ordinance[4], which also mandates the registration of short-term rental properties, was presented to the Brussels-Capital Parliament during the 2023-2024 regular session on 6 October 2023. To secure registration, operators must adhere to various requirements such as urban planning compliance, adherence to fire safety norms, maintaining a clean criminal record for operators or managers, avoiding outstanding administrative fines, not breaching specific legal conditions, preventing bankruptcy, ensuring proper ownership or rights over the establishment, and meeting the operational conditions of their chosen category. During the application process, operators are required to obtain a registration number by declaring their desired category and the relevant conditions. The assigned registration number is indefinite and uniquely associated with the establishment and its operator, and notably, it is not transferable to either other establishments or new owners. This already implemented obligation serves as a cornerstone for the implementation of additional policy measures in the BCR.

Studies in cities like Berlin (Duso et al., 2020) and Lisbon and Porto (Franco & Santos, 2021) have examined the impact of such regulatory requirements. Crucial details often include whether the property is a primary or secondary residence, its address, and postal code. Depending on policy requirements, additional information like rental periods, number of rental days, property type (rented or owned), parts of the property being rented, and its size may be essential. For the registration process, depending on the property type, documents such as rental agreements, residence certificates, landlord consents, justification for the application with relevant evidence, and proof of ownership might be necessary for the effective implementation of policy measures.

The policy measure itself has its own consequences for the supply of short-term rentals. As argued by Duso et al. (2020), a mandatory registration created an added complication for hosts, especially among those who occasionally rented out their homes. While it was still legally allowed, the necessity to acquire a permit for a registration number presented an extra challenge. For numerous – especially smaller – hosts, this additional obligation proved to be excessively burdensome, resulting in them choosing to delist their properties from the platform, disadvantaging hosts who benefited from occasionally hosting on Airbnb but did not actually remove apartments from the long-term rental market. At the same time, this administrative step appears to be feasible for more professional hosts.

[1] https://data.consilium.europa.eu/doc/document/ST-6522-2023-INIT/en/pdf
[2] https://www.ejustice.just.fgov.be/eli/ordonnantie/2014/05/08/2014031471/staatsblad
[3] https://www.ejustice.just.fgov.be/eli/ordonnance/2014/05/08/2014031471/moniteur
[4] http://www.weblex.irisnet.be/data/crb/doc/2023-24/148541/images.pdf?fbclid=IwAR3CqGXv56-n-diTce42oUv91KCbLkATlEZMDc1OdtLDMZTR0xleI-bz6xA

3.2. Restrictions multiple listings per host

Restricting multiple listings per host, also called the 'One Host, One Home' (OHOH) policy is an initiative designed to regulate the short-term rental market. This policy limits each individual host to a single address, thereby restricting hosts to offer only one property on the short-term rental market platform. The primary aim of this measure is to curb the practices of professional hosts who operate multiple listings, thereby influencing the supply side of the market while leaving demand largely unaffected.

In the United States, several cities, including New York City, San Francisco, Portland, and Chicago, have implemented the OHOH policy, which has been closely examined by researchers such as Chen et al. (2023) and Farhoodi (2021) for its market effects. The enactment of the OHOH policy has led to a substantial decline in the number of properties offered by professional hosts, alongside an increase in the availability of listings from non-professional hosts, thus maintaining a stable overall supply on Airbnb (Chen et al., 2023). This increase has afforded non-professional hosts more opportunity to actively participate in the Airbnb market, subsequently heightening competition within this group.

However, the studies have also highlighted potential drawbacks of the OHOH measure. The policy might result in a reduced supply of bookings and earnings in lower-income neighbourhoods while benefitting regular hosts in more affluent districts (Farhoodi, 2021). Consequently, this has led to a decrease in tourist visits to these areas, potentially impacting local businesses and markets adversely. Additionally, the policy benefits hosts in high-income neighbourhoods, as they face less competition and can earn more surplus. This can lead to an unequal distribution of benefits, favouring hosts in wealthier areas over those in low-income neighbourhoods. It is, however, less likely that such an effect would occur in the BCR, since most of the listings of professional and investing hosts are located in non-low-income areas (see Figure 2).

Regarding rental prices, the impact of OHOH reflected that those properties in high-demand areas could lead to higher nightly rates compared to those in less sought-after neighbourhoods. Nonetheless, hosts in lower-income areas, often experiencing higher booking rates, benefited from their enhanced access to the Airbnb market. The unintended consequence of restricting professional hosts has been a potential shift of benefits towards those in wealthier areas, while reducing bookings and added value in less affluent neighbourhoods.

3.3. Short-term rental bans

A short-term rental ban is a policy measure designed to regulate the growth, availability and operation of properties listed on short-term rental platforms. This measure typically involves the prohibition or restriction of new registrations for short-term rentals in certain designated areas. To implement the ban, it is mandatory for landlords to obtain a license to list their properties on Airbnb and other home-sharing platforms. Non-compliance with this regulation results in fines, and platforms are required to actively check the license numbers. The impact of this measure has already been properly evaluated in three cities: Lisbon, Berlin and New York City (Manhattan).

In 2018, Lisbon, introduced a pioneering zoning regulation aimed at better regulating the short-term rental market (Batalha et al., 2022; Gonçalves et al., 2022). This regulation specifically targeted the registration of *new* short-term rental properties, prohibiting them in certain areas of the city. The focus was primarily on entire dwellings listed on Airbnb, with individual rooms (sharers) being excluded from this restriction. In the context of the Short-Term Rental Ban implemented in cities like Lisbon and Porto, an important variant or add-on to this policy is the way licenses for short-term rentals are managed: in these cities, the short-term rental license is tied to the individual rather than the property. In the case of a property licence, a license expires when the property is sold. This aspect of the policy is critical as it facilitates ease of movement from the short-term rental market to the residential market after a property is sold. While this feature stands somewhat apart from the primary objective of the Short-Term Rental Ban, which is to limit new short-term rental registrations, it is closely linked to the broader consequences of the ban as discussed priorly. By binding the license to individuals, the policy inadvertently creates a dynamic market environment, where properties can transition back to long-term residential use more fluidly upon sale. The implementation of this policy in Lisbon and Porto led to immediate and notable reactions among property owners. Anticipating the enforcement of the new regulation, there was a significant surge in the registration of properties in the areas that were to be banned. This rush reflected a proactive approach by Airbnb hosts to align with the upcoming changes, illustrating the immediate impact of the policy on the short-term rental market.

Despite this initial rise in activity, the short-term effects on the Airbnb market itself were surprisingly minimal. A study, which covered listings in Lisbon from April 2018 to September 2019, indicated that the number of Airbnb listings and rental prices remained relatively stable in the short-term following the implementation of the ban. This stability suggested that the immediate impact of the regulation on the short-term rental market was limited. Additionally, for hosts, particularly those operating multiple listings, the policy necessitated a shift in strategy, as it limited the ability to expand their operations within the regulated neighbourhoods.

In Lisbon, the regulation had a significant delayed impact on Lisbon's real estate market. There was an average decrease in property prices by 9%, a notable change that reflects the broader market's response to the new regulatory environment. This decrease in property prices points to the considerable influence that such regulations can have on the real estate sector over a longer period. While the immediate effects on rental platforms might be minimal, the long-term implications, particularly on the real estate market, can be substantial. Such measures can alter the dynamics of both the rental and real estate markets, underlining the need for careful consideration and analysis when implementing similar regulations in other cities or regions. When such a ban was implemented, as observed in a specific case study, it was under the conditions of a rapidly expanding short-term rental market, which was perceived to impact the local housing and real estate sectors negatively. The policy in Lisbon specifically targeted entire dwellings, aiming to control the proliferation of properties being used exclusively for short-term tourist rentals.

In Berlin, starting from May 2014, a similar set of rules was implemented to regulate the use of apartments for short-term rental purposes, particularly aimed at ensuring a sufficient supply of housing in areas at risk (Duso et al., 2020). This set was updated in 2018. The regulation declared a ban on the misuse of apartments for purposes other than long-term rental. Under these rules, individuals seeking to list their properties for short-term rental are required to obtain a permit issued by the district in which the apartment is located. Additionally, hosts must display a registration number on their listings to demonstrate compliance with the regulation. Residents are allowed to rent out their primary residences, provided that the status of the apartment as their main residence remains unaffected. Furthermore, the regulation permits residents to permanently rent out parts of their apartments, with the condition that these parts constitute less than 50% of the total living space. This provision ensures that the primary function of the residence as a long-term living space is preserved. For secondary residences, the rules are slightly different. They qualify for a permit for short-term accommodation, but with a restriction that they can only be used as such for no more than 90 days per year. This limitation is set to prevent secondary residences from being converted into full-time short-term rental properties, thus contributing to the preservation of housing stock for long-term residents.

These implementations significantly impacted the availability of properties on Airbnb in Berlin. Specifically, there was a marked decrease in the number of entire homes listed on the platform, particularly affecting listings that were available for most of the year. This reduction in listings was observed to have a direct effect on housing prices in the city. In terms of the impact on Airbnb, the policy reforms resulted in a decrease in the average number of entire homes listed on the platform by eight to ten listings per square kilometre. The first policy reform, which aimed to restrict the misuse of regular apartments for short-term rentals, also significantly reduced the average number of days per year that listings were available for booking. The subsequent reform in August 2018, requiring hosts to display a registration number, led to a further drop in listings (see also earlier). The effect on the housing market was measurable. The study found that for each additional entire home, monthly rents increased by at least seven cents per square meter. This effect was predominantly driven by listings that were available for booking for larger parts of the year. Moreover, there was substantial effect heterogeneity across different districts. Districts with a lower density of short-term rental listings experienced larger marginal rent increases per property. Conversely, districts with a higher short-term rental density, which saw a larger decrease in the number of listings due to the policy, likely experienced a larger slowdown in rent increases.

Jia and Wagman (2020) investigated the impact of a complete ban on renting out entire homes for periods of less than 30 days in Manhattan. They found that after enforcing this ban, the number of entire-home listings in Manhattan decreased, while prices and occupancies of remaining listings increased, suggesting that illegal supply was withdrawn from the market. Interestingly, private-room listings, a less enforced category, saw the opposite effect, indicating that some illegal entire-home listings re-entered the market as private rooms. Additionally, the long-term rental market for properties renting more than 30 days experienced negative effects on rents, implying that some entire-home listings withdrawn from the short-term rental market re-entered on the regular long-term rental market (see also Koster et al. (2021) for an illustration of this argument). Jia and Wagman (2020) suggest that taxing the short-term rental market might be a more effective regulatory approach than outright bans, as it could reduce illegal operations without the same incentives for illegal suppliers to re-enter the market under less enforced categories.

3.4. Limiting the number of listing days

This regulation sets a maximum on the number of days per year a property can be rented out to tourists. The introduction of these restrictions typically requires landlords to register and track their rental days, enabling local authorities to better monitor and enforce compliance.

In practice, the implementation of a cap on the number of listing days for properties has been a measure adopted by various cities to regulate the impact of short-term rentals through platforms (Gauß et al., 2022). Often applied in urban areas with tight housing markets, this regulation sets a maximum on the number of days per year a property can be rented out to tourists. While literature indicates that it is particularly challenging to determine the consequences, specifically for the number of days listed, largely because such measures often coincide with other regulations (for instance, a ban on short-term rental for primary residences, expectations for hosts to be present during the rental period, and a prohibition on multiple properties per owner), it appears that from the supply side perspective, capping the number of days listed unsurprisingly leads to a reduction in offerings. Research by Gauß et al. (2022) reveals that listing days related to commercial properties decreased on average by 123 days, with reservation days declining by 99 days. This reduction can, however, not be solely attributed to the cap on the number of days listed, as similar other measures were implemented concurrently. For example, the relatively muted response of commercial hosts to the 2018 HSO tightening in Berlin may indicate that key aspects of the regulation (i.e., the registration requirement and the reservation day limit) do not represent significant (additional) challenges to commercial short-term rental activities. Duso et al (2020) demonstrate that capping the number of days (again, alongside other simultaneously imposed policy measures) not only reduced the number of listings in the city but also affected the average availability of listings on short-term rental platforms. A Danish study (Garz & Schneider, 2023), revealed that the likelihood of hosts renting out properties in violation of this cap decreased by about 1.0 percentage point, or 12.0%, after the implementation of the rule. However, the actual number of properties rented out for more than 70 days per year saw a moderate increase. This suggests challenges in enforcing the day cap, as the number of properties exceeding the threshold actually grew. The day cap's impact on the average number of relevant properties was found to be insignificant in Denmark.

3.5. Tax agreements and enforcement in short-term rental platforms

Tax agreements between cities and short-term rental platforms help enforcing various taxes, including sales, hotel, and transit taxes. Under these agreements, the platforms collect taxes directly from renters at the point of sale, significantly enhancing tax compliance, potentially to 100%. Currently, as authorities cannot easily trace online transactions and must rely on hosts to self-report their income, short-term rental platforms have a competitive advantage over traditional hospitality business.

Since 2014, Airbnb has entered into over 275 tax agreements in the US (Bibler et al., 2019), along with an agreement in Denmark (Garz & Schneider, 2023). Additionally, the EU Council Directive 2021/514[5], known as DAC7 and set to take effect in 2023/24, requires platforms to disclose sales and service information to member states, compelling short-term rental platforms to report host earnings to local tax agencies.

A US study (Bibler et al., 2019) shows that an enforcement of a 10% tax has been shown to decrease host earnings by 2.4% and increase renter costs by 7.6%, while reducing nights booked by 3.6%. These changes indicate a significant rise in tax compliance, with an estimated increase in revenue of at least $69 per property-month, or $155,000 per jurisdiction-month.

In Denmark (Garz & Schneider, 2023), the 2018 data-sharing agreement between the government and Airbnb led to a 14% decrease in listing propensity and an 11% increase in listing prices. This suggests a higher detection probability of tax evasion, making it unprofitable for some hosts to rent out their properties. The data shows that single property hosts largely mirrored the aggregate results: a portion exited the platform, while the remaining increased their listing prices and experienced a significant decline in booked days. In contrast, multi-property hosts, particularly those with three or more properties, increased their prices but did not exit the platform. Instead, they expanded the availability of their properties, likely to offset the costs of higher tax enforcement. This behaviour suggests a stronger commercialisation of short-term rental activities, especially among hosts using the platform primarily for business purposes. The data-sharing agreement also led to differential effects in low- and high-penetration areas: hosts in low-penetration areas expanded their listing days, while those in high-penetration areas made their properties less available.

These regulatory changes and tax agreements have significantly influenced the behaviour of hosts, impacting tax compliance, and altering market dynamics. The increase in listing prices and the shift in rental supply patterns reflect the broader impact of these changes on the short-term rental market.

[5] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021L0514

3.6. Implementing higher and directive taxes

Implementing higher and directive taxes is frequently suggested to deter the conversion of properties into short-term rentals, as it aims to reduce the benefits from the conversion. Multiple tax systems are suggested, like a linear taxation as well as a convex tax. The linear tax is a uniform rate applied to all listings, akin to a hotel occupancy tax. The novel convex tax, on the other hand, is more progressive, imposing higher taxes on expensive units while offering relief for more affordable ones. This approach aims to deter the conversion of high-value properties into short-term rentals, a key concern in cities struggling with housing affordability.

Li et al. (2022) utilised structural models to investigate property owners' decisions regarding the switch to peer-to-peer platforms, as an alternative to traditional long-term rental markets. Their research focused on how linear and convex taxes in the US might influence these decisions. With the exponential rise of short-term rental listings (over 6 million worldwide as of March 2019), city regulators in locations such as Los Angeles and San Francisco have enacted various policies to counteract the potential shift of properties from long-term to short-term rentals. These initiatives are driven primarily by the imperative to preserve affordable housing in cities grappling with tight housing markets.

To address the issue of rental supply cannibalisation while retaining the benefits of market expansion, the authors propose the implementation of a convex tax. This tax structure is designed to impose a higher financial burden on luxury or high-value units listed on platforms, effectively making it less profitable for owners of these properties to switch to short-term rentals. By targeting more expensive units, the convex tax aims to discourage the conversion of high-value properties into listings, which are often the primary contributors to the depletion of affordable long-term rental stock.

The effectiveness of this tax model in addressing social inequality lies in its progressive nature. Luxury unit owners, who are typically more economically advantaged, are subjected to higher tax rates. This not only helps in preserving the availability of more affordable housing but also ensures that the additional income generated through platforms is not disproportionately skewed towards wealthier individuals. In essence, the convex tax redistributes the economic benefits of short-term rentals, reducing the incentive for wealthy property owners to monopolise the market, and thereby alleviating social inequality. Li et al.'s analysis concludes that this form of taxation outperforms other policies in simultaneously minimising the negative impact of short-term rental platforms on long-term rental supply and addressing issues of social inequality in the housing market.

3.7. Tackling digital discrimination

To counteract the occurrence of discrimination against tourists on peer-to-peer rental platforms and the potential for an inadequate supply of such rentals for certain categories of tourists, we will discuss several measures to combat discrimination in the short-term rental market. In line with previous research (e.g., Bunel et al., 2021; Cui et al., 2020; Edelman et al., 2017), we described earlier that some Airbnb hosts in the BCR discriminate against guests of Moroccan origin (Verhaeghe, Martiniello et al., 2023). This conflicts with both the community philosophy and anti-discrimination policy of the Airbnb company, which condemns discrimination and racism. At the same time, we demonstrated that Airbnb's anti-discrimination directive from 2016 is insufficient to tackle ethnic discrimination on the platform. More is needed to eradicate this illegitimate behaviour of hosts. In the light of this, we discuss four evidence-based policy measures to tackle digital discrimination on the short-term rental market.

A first strategy, based on our own study, is to oblige the 'Instant Booking' function on the platform. This function allows hosts to offer their homes to be booked immediately without their prior approval of a specific guest. Our study showed that the Instant Booking function is effective to mitigate discrimination. Unsurprisingly, there was no significant discrimination anymore among hosts that enabled this function.

A second strategy is to disclose more abundant and reliable information about guests and hosts to tackle discrimination (e.g., Cui et al., 2020; Laouénan & Rathelot, 2022). This recommendation is based on the theory of statistical discrimination (Arrow, 1971; Phelps, 1972), which states that people discriminate because of a lack of detailed information about candidates. Empirical research about this strategy is limited with respect to Airbnb, but Laouénan and Rathelot (2020) showed that positive reviews attenuate discrimination against Airbnb hosts. Moreover, Cui and her colleagues (2020) showed that not only positive, but also blank and even nonpositive reviews reduce racial discrimination against guests. Self-claimed information – provided by guests – on tidiness and friendliness to the contrary did not diminish discrimination, because it could not be verified by hosts. On digital platforms it appears that only personal information verified by reputation and review systems is considered as trustworthy. In a recent study, Kas and her colleagues (2022) warn, however, that ethnic minorities are less likely to obtain positive ratings in the first place because their booking requests are less likely to be accepted or their services are less likely to be booked due to discrimination. Moreover, if they get reviews, they might also be ethnically biased.

A third strategy is to automatically anonymise the names and pictures of both guests and hosts during the initial book phase (Luca & Svirsky, 2020). Names signal the ethnic origin of candidates, next to other characteristics (Martiniello & Verhaeghe, 2022) and could trigger conscious or unconscious discrimination. To date, there are no studies about the effectiveness of anonymising on short-term rental platforms, but research about anonymising resumes on the labour market shows that it is effective to reduce ethnic and gender discrimination in hiring during the first phase of the selection process (e.g., Blommaert & Coenders, 2023; Krause et al., 2012). In the same vein, we expect that there is a similar positive effect on digital platforms. Airbnb is experimenting already with this strategy in some states in the US, among which Oregon.[6]

A final strategy is banning discriminatory hosts from peer-to-peer rental platform (Luca & Svirsky, 2020). Depending on the specific level and nature of discrimination, hosts could first get a warning before being permanently banned from the platform. Systematically monitoring short-term rental hosts on their potentially discriminatory behaviour gives the advantage that you could reward hosts who do not discriminate with a label. Such a positive reward for not discriminating could also encourage professional hosts to put in place procedures to remedy discriminatory practices. However, before one could ban a host, one should have clear and convincing evidence that this particular host demonstrates discriminatory behaviour. The field experimental technique of correspondence tests is very suited for this aim because it measures discriminatory behaviour in the field and establishes causal relationships between the ethnic origin of candidates and the reaction of hosts (Fix & Struyk, 1993). According to a recent methodological paper (Verhaeghe & Van Der Bracht, 2020) one must perform at least ten tests per agent to reliably discern discrimination from a random pattern of unequal treatment at the individual level. An alternative technique would be that platforms use their big data on guests and hosts and monitors to which groups of guests are less likely to be accepted by particular hosts. The advantage would that this methodology would generate more observations compared to correspondence tests. It is, however, uncertain whether platforms have data on the ethnic origin of guests and whether it could use these data from an ethical and privacy perspective.

[6] https://news.airbnb.com/update-for-guests-who-are-oregon-residents/

4. Policy recommendations

The Air-BRU research project, funded by Innoviris under grant 2019-PRB-10, delved into the peer-to-peer short-term rental market's impact in the Brussels Capital Region (BCR). These include the diversity of providers in the short-term rental sector, the varied residential distribution of these rentals across Brussels' neighbourhoods, instances of discrimination against tourists on peer-to-peer rental platforms, and the potential gentrifying impact of the expanding shared short-term rental market on local residents, particularly in terms of long-term rental dwelling availability, affordability, and the risk of displacing inhabitants. In this contribution, *Policy Proposals for Regulating the Short-Term Rental Market in the Brussels Capital Region*, our aim is to identify measures or combinations thereof that could be specifically implemented in the BCR market, balancing the retention of the market's benefits while mitigating its significant negative effects. This involves considering the unique characteristics of the BCR's short-term rental market.

Our research indicates that Brussels' short-term rental market comprises approximately 12,500 active listings annually, managed by around 9,000 fluctuating hosts. We categorised the short-term rental market in Brussels into four distinct groups: professionals, investors, occasionals, and sharers. Our findings suggest that the latter two categories align more closely with the original philosophy of platforms like Airbnb and contribute the least to the market's negative aspects, particularly in terms of drawing away housing from the regular rental market, increasing rental prices and discrimination against ethnic minorities. Moreover, short-term rental platforms offer these groups an additional source of income. Geographically, professional hosts predominantly occupy the city centre, while occasionals and sharers are more common in peripheral neighbourhoods. This distribution is seen as beneficial, allowing less touristy areas of the BCR to enjoy the perks of increased tourism.

In response, we propose the introduction of a Home Sharing Ordinance in the BCR, designed to maximise benefits for sharers and occasionals while curbing the market's negative impacts by regulating the professional players. Recognising that there is no one-size-fits-all solution, and that each policy implementation carries additional consequences, we recommend a combination of several evidence-based measures.

1. Each policy should start by mandating the registration of short-term rental listings. This is already a requirement in the ordinance regulating the short-term rental market in the BCR, emphasising the significance of this step as a foundation for implementing further measures. Even acknowledging that this increases the administrative burden, which is most felt by occasional renters and sharers, it remains paramount. The importance of streamlining this process is underlined, especially considering the complexity identified in the preparation of the new ordinance. We advocate for a streamlined and transparent registration process to facilitate compliance by non-professional providers, ensuring the procedure remains as smooth as possible for all parties involved.

   The registration of short-term rental listings forms the foundation for implementing subsequent policy measures within the framework of the '*Ordonnantie betreffende het toeristisch verblijf*' (French: *'Ordonnance relative à l'hébergement touristique'*). The ordinance is currently under revision. The revised ordinance was presented in the Brussels-Capital Parliament during the regular session of 2023-2024 on 6 October 2023. Specifically, Article 5 of the ordinance dictates that the government defines the categories of tourist accommodation activities. These categories are determined based on various factors such as the type of accommodation unit, reception capacity, services and amenities offered, the impact on spatial planning and housing availability, and the social character of the tourist accommodation activity. For each category, including short-term rentals as discussed in this contribution, the region may impose operational conditions concerning service provisions, frequency of activity, equipment and furnishing, structure of the tourist accommodation establishment, specific safety and fire protection aspects, and the information provided to service recipients. In the context of Article 5 of the Ordinance, we propose the following evidence-based policy recommendations:

2. We recommend a One Host One Home policy, allowing providers to offer only one property for short-term rental, verified through legal property documents at registration. By limiting multiple listings per host, it will be possible to directly influence the short-term market supply. The supply may potentially shrink or grow more slowly, thereby strengthening the relative position of smaller, non-professional hosts in the market. This policy enables occasionals and sharers to continue their practices and generate some additional income, while optimising the use of Brussels dwellings, even when residents are elsewhere. It also allows investors to list their second residence, not used as a primary residence, for short-term rental.

3. Installing maximum rental periods tailored to type of hosts and neighbourhoods. To prevent these second homes from serving solely as investment objects, we propose setting a maximum rental period, with considerations for the unique situation in Brussels, especially around the European Institutions. More specifically, it may be considered to apply this maximum rental period only to hosts of entire homes, and not to sharers, who only open part of their home for the short-term rental market. We refrain from commenting on the maximum rental period, as there is no scientific consensus on the ideal length and the consequences of different length periods. However, we would like to emphasise considering that a substantial part of the short-term rental market in Brussels is located in the neighbourhoods around the European Institutions. Since especially European expats probably do not occupy their home for a slightly larger part of the year than other Brussels residents, it may be considered to accommodate occasionals from this group by setting a slightly more generous maximum rental period compared to other European cities.

4. Taxation. Considering the upcoming EU Council Directive 2021/514 (DAC7), we recommend obliging BCR's short-term rental platforms to enter into a tax agreement. This would substantially enhance tax compliance, and level the playing field with traditional hospitality businesses. Additionally, it makes the market more transparent, allowing guests of short-term rentals to have a better understanding of the total cost of their stays, and relieves hosts of the obligation and the struggle that comes with it, to calculate and collect taxes themselves, thus reducing their risk of being imposed a tax reassessment. Moreover, tax agreements open up the possibility to introduce taxes with a steering effect on the market. For this, we suggest the introduction of a convex tax. This tax structure is designed to impose a higher financial burden on luxury or high-value units listed on platforms, effectively making it less profitable for owners of these properties to switch to short-term rentals. By targeting more expensive units, the convex tax aims to discourage the conversion of high-value properties into listings, which are often the primary contributors to the depletion of affordable long-term rental stock. This not only helps in preserving the availability of more affordable housing but also ensures that the additional income generated through platforms is not disproportionately skewed towards wealthier individuals. In essence, the convex tax redistributes the economic benefits of short-term rentals, reducing the incentive for wealthy property owners to monopolise the market, and thereby alleviating social inequality.

5. We advise against a full ban on short-term rental listings, viewing it as a kind of nuclear option that could effectively restrict the short-term rental market. While it might serve as a useful tool to relieve neighbourhoods heavily impacted by short-term rental offerings, it also initiates a legal debate about

unequal treatment between neighbourhoods. When applied at the Brussels' municipal level, to address the argument of unequal treatment, it could still be considered too radical and imprecise a measure: our results demonstrate significant differences within Brussels' municipalities regarding the concentration of short-term rental listings and their negative consequences, which is also considered in the Ordinance. Furthermore, a ban would negate the positive effects of the short-term rental market, such as the additional income it generates for local residents, the stimulation it offers to Brussels' economy, and the potential positive effects it can bring to neighbourhoods with fewer traditional hospitality businesses, where the short-term market can specifically and disproportionately attract visitors. From this perspective, we see less merit in a full ban and prefer more specific measures that preserve the positive effects while addressing the negative consequences.

6. To tackle discrimination, we recommend the combination of three strategies. First, the government could encourage hosts to enable the Instant Booking function through information campaigns since this function has proven to be very effective in reducing digital discrimination. We do not recommend, however, that the Instant Booking function should be completely obliged, since it is sometimes considered to be crucial to communicate about mutual expectations and needs when booking a listing. Second, Brussels could oblige peer-to-peer platforms to automatically anonymise all names and pictures of hosts and guests during the initial booking phase, for all listings located in the BCR to tackle discrimination. Finally, if anonymising is not feasible, the housing inspection could extend their action radius to short-term rental listings to inspect the occurrence of discrimination.

We conclude with emphasising the importance of considering the implications of any Home Sharing Ordinances on both the short-term rental and regular housing market in Brussels. In this note, we have therefore conscientiously evaluated the consequences of such HSOs through policy-evaluating research. It is precisely through such research that we can map out as much as possible the positive and negative effects of HSOs. Specifically for Brussels, we strongly advocate for any policy measures in the short-term rental market to be accompanied by further policy-evaluating research, ensuring a thorough understanding of policy consequences. This approach is vital not only for Brussels but also for informing broader discussions elsewhere.

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