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FINAL ESSAY

The Impact of Short-Term Rentals on European Cities: A Study of Existing Policies and Recommendations for Future Strategies

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Abstract

This study examines the impact of short-term rentals (STRs), specifically focusing on Airbnb, on urban housing markets, demographic shifts, and regulatory responses in Barcelona. Building on previous studies that have highlighted the correlation between STR growth and housing market inflation, this analysis seeks to quantify the growth of STRs over the past fifteen years and evaluate their effects on property sales, rental prices, and population distribution within the city's districts. The findings indicate a significant rise in Airbnb listings, driving inflationary pressures in both the sales and rental markets, particularly before regulatory interventions were introduced. The study underscores the effectiveness of policies like the Special Tourist Accommodation Plan (PEUAT), which mitigated the adverse effects of STRs by restricting new tourist licenses and enforcing minimum rental periods. A comparative analysis with Milan, where regulations remain lenient, highlights the critical role of robust regulatory frameworks in curbing the negative externalities of the STR market while balancing economic benefits and housing affordability.

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1 The phenomenon of over-tourism and the impact of short-term rentals

1.1 Tourism economy

1.1.1 The role of tourism in economic growth

Tourism has long been recognized as a crucial driver of economic growth, particularly for cities and regions that encounter barriers to alternative economic development due to limited financial and human capital or those experiencing deindustrialization [1]. The tourism sector, encompassing a range of sub-sectors, is often highlighted as a key source of employment for low-skilled workers who may struggle to find opportunities in more specialized industries [2]. Moreover, Williams and Shaw [3] argue that tourism contributes to a net redistribution of wealth from wealthier to less affluent regions by facilitating direct spending, generating employment, and stimulating local industries. This sector also promotes infrastructure development and attracts investment, further bracing economic growth in underdeveloped areas. In addition to economic benefits, tourism enhances cultural exchange and knowledge transfer, thereby improving human capital and fostering entrepreneurial capabilities in these regions [3].

Consequently, tourism promotion is often identified in the literature as a relatively straightforward strategy for stimulating economic growth in regions and countries that are economically disadvantaged but possess rich natural or cultural assets [4]. However, the literature also emphasizes the potential for unintended consequences in later stages of development. Bianchi and de Man [5] call for a critical examination of how the expansion of tourism activity can impact the natural, social, and cultural resources that initially make a destination attractive, raising concerns about the sustainability and long-term competitiveness of tourism-dependent regions.

1.1.2 The challenges of overtourism

Overtourism, defined as the excessive concentration of tourists in a specific destination, poses significant challenges across social, environmental, and economic dimensions. The unregulated and rapid expansion of tourism can lead to the depletion of natural resources, increased levels of pollution, and the erosion of cultural heritage [6]. These impacts ultimately degrade the attributes that make a destination attractive to visitors. In Europe, overtourism has emerged as a critical issue, particularly in cities such as Barcelona or Venice, where residents have increasingly expressed their displeasure. The overwhelming influx of tourists has placed immense pressure on local infrastructure, inflated housing costs, and disrupted daily life. In response, local populations have engaged in various forms of protest, including public demonstrations, hunger strikes, and the display of fake "closed due to overcrowding" signs ¹. These escalating tensions underscore the urgent need for sustainable tourism strategies that equitably address the needs of both visitors and local communities.

Sustainable tourism development is often evaluated at the destination level or even within specific neighborhoods, with studies predominantly qualitative and rooted in disciplines like geography, sociology, and anthropology. However, the literature is broad and multidisciplinary, reflecting the field's complexity. The intricate linkages between tourism and various economic and social processes make it difficult to isolate tourism as an independent phenomenon, complicating efforts to measure and model its impacts accurately. A notable example of this complexity is the rise of short-term vacation rentals, which have shifted a substantial share of housing supply from residential use to tourism, blurring the lines between the housing market and the visitor economy. In 2017 Mordue [7] hypothesized a close connection between the growth of the visitor economy and housing market dynamics, illustrating the challenges in distinguishing tourism's economic impacts from those of other sectors and highlighting the need for more sophisticated models to capture these interrelated processes.

1.2 The rise of short-term rentals

1.2.1 A new hosting paradigm

Short-Term Rental (STR) describes furnished self-contained apartments or houses that are rented for short periods of time. These rentals offer travelers more personalized and often more affordable accommodation options than traditional hotels. STRs are an offshoot of the corporate housing market and are also offered by private owners and investors via online platforms such as *Airbnb* ² and *Vrbo* ³. During the summer of 2016, more than 16 million people used Airbnb during their holidays and business trips across Europe, representing an increase of 70% compared with 2015 [8].

¹CNN: <https://edition.cnn.com/2024/07/08/travel/barcelona-tourism-protests-scli-intl/index.html>

²<https://www.airbnb.com>

³<https://www.vrbo.com>

In the past, tourism and housing stability were often considered separately, as tourists primarily utilized hotels and other forms of collective accommodation, and homestays were relatively rare. Under these conditions, it was logical to treat tourism growth and housing stability as distinct issues, analyzing the impact of tourism primarily through the indirect effects on rent distribution in urban areas. However, the rise of STRs has fundamentally altered this dynamic, blurring the boundaries between tourism and residential housing markets [9].

The recent boost in STRs is a prominent manifestation of the *sharing economy*, which capitalizes on the underutilization of assets such as homes, vehicles, or skills by connecting owners with those in need. This concept is closely entangled with the *platform economy*, which encompasses the broader digital infrastructure that enables these exchanges by serving as intermediaries. An example of this dynamic is the relationship between hosts and guests facilitated by platforms like Airbnb. As a host, the process begins by creating an account and listing the property, including details like location, amenities, and pricing. The host can set availability dates and house rules, and once the listing is live, potential guests can book their stay ⁴.

The growing popularity of platforms like Airbnb and Vrbo has led to a significant shift, with private residences increasingly serving as temporary accommodations for tourists. This shift necessitates a more integrated analytical approach, as it was shown that the proliferation of STRs has direct implications for housing stability, rent prices, and urban planning [9, 10, 11].

1.2.2 Airbnbisation of cities

The convenience and flexibility of short-term rentals make them attractive to tourists and business travelers alike. However, the proliferation of short-term rentals can affect those in the area who are looking for long-term rentals. STRs have become a significant driver of urban transformation, contributing to the phenomenon of *touristification* in many cities [8]. Touristification refers to the process by which urban areas, particularly historic city centers, and culturally significant neighborhoods, are transformed to serve primarily tourists rather than local residents. This phenomenon has gained significant traction in recent years, driven by the expansion of low-cost travel options, the rise of peer-to-peer accommodation platforms like Airbnb, and the broader global trend of cities positioning themselves as major tourist destinations [8].

As tourism increasingly becomes a central economic driver, cities across the globe have witnessed profound changes in their social, spatial, and economic landscapes. In many European cities, for example, the influx of tourists has led to the rapid touristification of historic downtown quarters. This transformation is largely driven by the growth of the (in)formal tourism accommodation sector, which often results in the conversion of residential properties into short-term rentals [8]. While this can boost local economies, it also creates significant challenges, such as rising property prices, the displacement of long-term residents, and the erosion of traditional community life [10, 11, 12].

Touristification is closely linked to the concept of gentrification, with many scholars arguing that tourism can act as a catalyst for gentrification, particularly in areas that were previously marginalized or economically disadvantaged. This process, often referred to as "tourism gentrification," involves the displacement of lower-income residents and the transformation of neighborhoods into enclaves for affluent tourists and new, wealthier residents [8]. The resulting socio-spatial dynamics can lead to tensions between locals and tourists, as the original character and function of neighborhoods are altered to serve the tourism industry.

Moreover, touristification is not limited to local impacts; it is also tied to broader processes of transnational gentrification. This occurs when global capital flows into urban real estate markets, often driven by investors seeking to capitalize on the lucrative tourism sector. As a result, urban spaces are increasingly commodified, with historic and cultural sites being marketed as attractions for international tourists. This trend can heighten inequalities, as the benefits of tourism are unevenly distributed, often favoring transnational elites and large corporations over local communities.

According to Sequera and Nofre (2018) [8], the proliferation of these rentals has intensified debates around the limits of gentrification. While they create economic opportunities for property owners and boost local economies through increased tourism, short-term rentals also aggravate housing shortages and inflate property prices, displacing long-term residents and altering the social fabric of neighborhoods.

1.2.3 Long-term impacts

The proliferation of short-term rentals, driven by platforms such as Airbnb, has significantly influenced urban environments and their residents. Numerous studies in the literature have sought to evaluate and quantify the long-term effects of this growing phenomenon of touristification on cities.

⁴<https://www.airbnb.it/resources/hosting-homes/a/how-to-become-a-host-on-airbnb-490?>

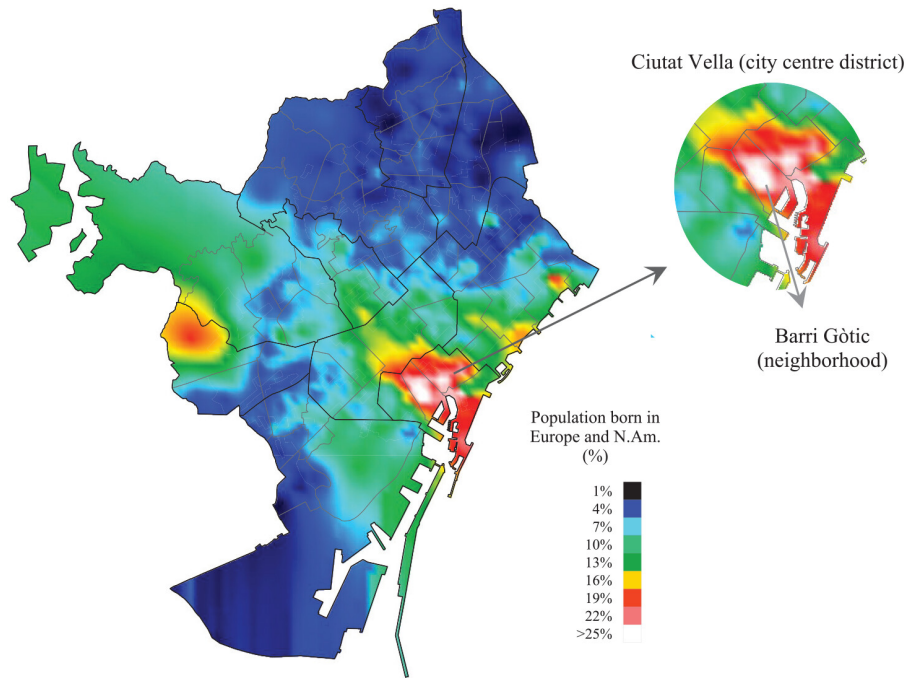


Figure 1: Proportion of population born in Europe and North America by census tract (1068 · units) [12].
Source: *Population Register, January 2017*.

In their 2019 study, Cocola and Lopez [12] investigated the impact of Airbnb on gentrification in Barcelona, focusing on demographic changes across the city’s neighborhoods. They specifically examined the role of migrants from advanced economies as agents of gentrification. The study found that lifestyle opportunities, rather than employment prospects, are the primary drivers attracting transnational migrants to Barcelona. These migrants, who are often economically privileged, become dominant consumers in the housing market, leading to the displacement of long-term residents. Over time, these migrants have become spatially concentrated in tourist-dense enclaves, where they predominantly interact with other transnational mobile populations. Consequently, centrally located neighborhoods are increasingly appropriated by foreign visitors and migrants, who are advantaged in the global division of labor. This shift has led to a growing sense of exclusion among local residents, who feel increasingly marginalized in their own communities. The spatial distribution of transnational migrants in Barcelona, as illustrated in Figure 1, underscores the uneven concentration of individuals born in Europe and North America across the city’s neighborhoods. The map indicates a pronounced clustering of these migrants in central districts, particularly in the Ciutat Vella and Barri Gòtic areas, which are known for their tourist appeal.

Cocola et al. [13] conducted a comprehensive study on the socio-spatial impacts of urban tourism in Barcelona, Lisbon, and Seville. Their research highlights the significant effects tourism exerts on housing market dynamics and neighborhood life in these cities. They observed that residential neighborhoods have increasingly transformed into spaces primarily dedicated to entertainment and consumption for visitors. This shift has led to daily pressures that substantially undermine the quality of life for local residents. A key consequence of this transformation is ‘commercial gentrification,’ characterized by changes in retail facilities to cater to tourists’ demands. The rising land values associated with tourism also impact commercial properties, leading to the displacement of local businesses that cannot compete with large corporations and franchises for space. Despite the proliferation of bars and restaurants in tourist areas, residents frequently report a lack of accessible and affordable places for casual socialization, such as having a drink or snack. The orientation of these businesses toward visitors not only alienates residents but also results in products and services that are often unaffordable for them. Additionally, the increase in establishments catering to tourists is correlated with a decline in the quality of food offered, further diminishing the local gastronomic landscape. The commercialization of these neighborhoods also erodes the social fabric, as residents lose traditional meeting places integral to their community life. Local stores, once crucial for fostering social encounters among community members, particularly the elderly, have been replaced by retail outlets targeting tourists. This retail shift has led to the erosion of everyday practices and relationships that are vital for the resilience of local communities. Moreover, the influx of tourists exacerbates overcrowding and disrupts local mobility, posing particular challenges for the elderly, children, and

residents with mobility difficulties. The overcrowding of public spaces is especially problematic in historic cities, where narrow streets and limited social spaces are ill-equipped to handle large numbers of transient visitors. In all three cities studied, residents have described the continuous flow of tourists as a relentless "tsunami" that they must navigate or avoid. Interviews with elderly residents reveal that many feel compelled to isolate themselves at home due to the dangers posed by overcrowded and congested streets.

The phenomenon of labor casualization, characterized by the shift from permanent, full-time employment to temporary, part-time, or freelance work, is a defining feature of the platform economy. Stabrowski (2017) [14] examines the impact of Airbnb on urban micro-entrepreneurialism by studying the socio-economic and spatial effects of Airbnb on housing in New York City. The study argues that platforms like Airbnb have fundamentally altered social property relations, creating new socio-material assemblages that commodify housing and transform socio-spatial dynamics in urban areas. Airbnb's rise has significantly contributed to labor casualization, particularly by promoting the use of non-unionized, flexible labor in sectors traditionally governed by stricter regulations, such as the hotel industry. This shift undermines established labor standards and the job security typically associated with unionized workforces. The increasing professionalization of the Airbnb sector has led to the emergence of a specialized "ecosystem" of startups offering services like cleaning, property management, and profile management for Airbnb hosts. These services are frequently provided by temporary, non-unionized workers, further entrenching labor casualization within the hospitality industry. Many Airbnb hosts, particularly those managing multiple listings or aiming for high turnover, increasingly rely on casual labor to manage their properties. This reliance on temporary, flexible labor contributes to the broader trend of labor casualization, where workers experience diminished job security, fewer benefits, and more precarious working conditions. Kambouri [15] explores the phenomenon of feminized labor within the context of Airbnb and platform capitalism, emphasizing that much of the labor associated with Airbnb hosting is feminized. This feminization refers to work that is domestic, caring, and emotional tasks traditionally associated with women and often undervalued in the broader economy [15]. These tasks include cleaning, managing social interactions with guests, and providing care-like services, which are seen as extensions of traditional female roles within the household. Kambouri's study also investigates how the feminization of labor intersects with race and class. Women of color and migrant women are disproportionately represented in these precarious, feminized roles, highlighting the compounded vulnerabilities they face as they navigate both gendered expectations and racialized labor markets within the gig economy. The paper critiques how the feminization of labor within platforms like Airbnb reinforces traditional gender norms. By framing the labor involved in hosting as a "natural" extension of women's domestic roles, these platforms perpetuate the notion that such work is inherently feminine, thereby reinforcing the gendered division of labor. Kambouri's analysis underscores the need to critically examine the socio-economic implications of labor casualization within the platform economy, particularly as it relates to gender, race, and class. The casualization of labor not only undermines traditional labor protections but also perpetuates existing inequalities, making it a pressing issue for policymakers and scholars alike.

1.3 Regulations

1.3.1 The complexity of short-term rentals regulations

The rapid proliferation of short-term rentals in recent years has prompted many cities grappling with over-tourism to implement ad-hoc regulations. Regulating short-term rentals presents a complex challenge, as these regulations must align with existing norms and regulatory frameworks governed by various levels of government [16]. Local regulations must consider and comply with regional, national, and European norms, creating a multifaceted governance landscape that necessitates collaboration across government tiers [16]. This complexity is further compounded by political factors. Different levels of government often have divergent perceptions, interests, and objectives, influenced by varying ideological frameworks and political affiliations. These differences frequently lead to protracted negotiations and, at times, disputes [16]. Within each governmental tier, a delicate balance must be struck between competing interests: regulations must protect public interests, particularly in terms of housing accessibility and affordability, while also respecting the legitimate interests of private operators and property owners [16]. Additionally, the economic dimension of the issue is significant. Governments must navigate the challenge of alleviating the pressures associated with short-term rentals without unduly restricting the economic benefits the industry provides to various stakeholders, including homeowners, managing hosts, ancillary service providers, and tax authorities. In cities heavily reliant on tourism, the interests supporting touristification are particularly strong, and there is a prevalent view that regulating short-term rentals may be perceived as anti-growth [17]. Enforcing short-term rental regulations presents another significant challenge. A primary issue is the difficulty in enforcement due to the lack of direct access to detailed data on online transactions or the ability to remove or block non-compliant listings. This creates a substantial enforcement burden, making it either prohibitively difficult or extremely costly to monitor compliance. A pronounced asym-

metry arises, not only due to the scale of digital platforms but also because these platforms exclusively control the essential tools needed for market oversight [18]. This "data power" [19] exerts considerable influence over regulatory governance. Public authorities are often reliant on these platforms, which frequently become key partners in the design and enforcement of regulations and urban governance more broadly, exerting significant influence over the process. The public-private relationships that emerge in this context can lead to ambiguities and, at times, regulatory failures. Many cities have initially implemented limits and regulations only to later recognize the critical role of platforms in enforcing these measures. Even when explicit agreements or obligations are established, the data shared by platforms is often incomplete and lacks transparency, further complicating effective regulatory enforcement [16].

1.3.2 The variety of regulatory approaches in European cities

Regulatory approaches adopted in European cities differ in many respects. Von Briel and Dolnicar [20] make a distinction between 'end-run' cities, which had existing regulations that required upgrading (often to impose stricter controls), and 'gap' cities, which needed to establish a regulatory framework from scratch. In both scenarios, the expansion of short-term rentals occurred in an environment largely devoid of adequate policy, representing a classic example of platforms effectively creating a new market. While this market theoretically existed, it was previously latent and largely invisible. Addressing these voids and managing the resulting regulatory ruptures is a complex and ongoing challenge.

The regulatory approaches to short-term rentals in European cities exhibit considerable diversity, both in terms of the level of stringency and the specific objectives they seek to achieve. While some cities, such as Rome, Florence, Venice, and Athens, have adopted a relatively laissez-faire stance with minimal restrictions, others, including Amsterdam, Barcelona, London, and Paris, have implemented more stringent regulations. These stricter measures are often designed to address particular local challenges, such as preserving the character of residential neighborhoods, maintaining affordable housing, and mitigating urban nuisances. The variation in regulatory stringency is typically aligned with the unique needs and priorities of each city. For instance, some cities prioritize fiscal objectives, whereas others focus on mitigating social or environmental impacts, such as gentrification, housing shortages, and escalating rental prices [16].

The types of restrictions and regulations implemented across European cities vary significantly. Gianluca Bei [16] conducted a comprehensive analysis, categorizing the regulatory instruments adopted by 16 major European cities—Amsterdam, Barcelona, Berlin, Brussels, Copenhagen, London, Madrid, Paris, Vienna, Athens, Edinburgh, Florence, Lisbon, Porto, Rome, and Venice—that are most frequently targeted by tourists and the main restrictions and regulations can be schematized subsequently:

- **Registration requirement.** Most cities require short-term rental hosts to obtain a registration number, which is often displayed on the listing.
- **Authorization Requirement.** In many cities, hosts must obtain specific authorization to operate a short-term rental. This can include approval from landlords, condominium associations, homeowners' associations, or insurers.
- **Time-Caps.** Cities like Amsterdam, Berlin, Brussels, Copenhagen, London, and Paris limit the number of days a property can be rented out as a short-term rental, typically ranging from 30 to 120 days per year.
- **Residence Obligation.** The cities involved are Amsterdam, Berlin, Copenhagen, Paris, and Vienna. In these cities, hosts may be required to reside in the property for a specified period (primary residence requirement) or only rent out part of their home.
- **Zonal Restrictions.** The cities involved are Amsterdam, Barcelona, Berlin, London, Madrid, Vienna, Lisbon and Porto. These cities apply zoning laws that limit short-term rentals in specific areas, particularly in central or touristic neighborhoods, to control over-tourism or preserve residential neighborhoods.
- **Cooperation with Platforms.** The cities involved are Amsterdam, Barcelona, Brussels, London, Madrid, Paris, and Vienna. These cities have agreements with platforms like Airbnb to block illegal listings, share data, or collect taxes directly from the platform.

Figure 2 shows a timeline of how the degree of stringency of short-term rental regulation changed in those cities, based on the timing of the adoption of different restrictions [16]. Amsterdam, Paris, London, and Berlin were among the first to introduce regulations between 2014 and 2016. These cities likely recognized the impact of short-term rentals on housing markets and tourism early on. By 2017-2018, more cities, including

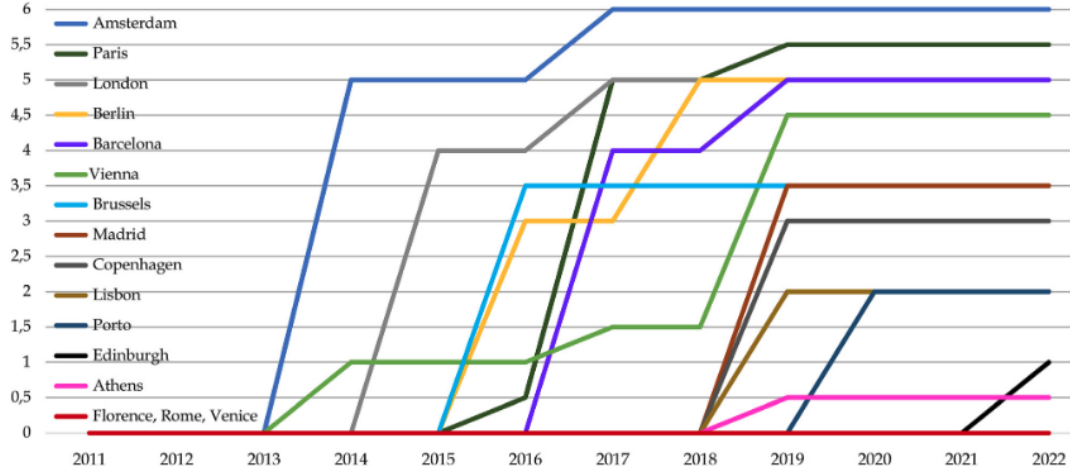


Figure 2: Degree of stringency of short-term rental regulation in 16 European cities, 2011–2022 [16].

Barcelona, Vienna, and Brussels, introduced measures. This period marks a significant increase in regulatory activity, possibly due to the growing concerns about housing affordability and neighborhood disruption. From 2019 onwards, additional cities like Madrid, Lisbon, and Porto joined in implementing regulations. The trend suggests that cities across Europe have become more proactive in managing short-term rentals.

1.3.3 The effects of short-term rental regulations

Regulating short-term rentals is a relatively new and complex issue, with research pointing out the difficulties in enforcing these regulations, especially given the elusive nature of the phenomenon. Empirical studies on the effects and outcomes of these regulations are relatively rare, often focusing on single cities and providing partial evidence. For instance, studies on New Orleans and Bordeaux show that local regulations have mixed effects, with some positive outcomes being temporary or localized. Comparative assessments, like the one by Koster et al. (2021) [21], provide a broader perspective by comparing multiple cities. These studies generally find that regulations tend to reduce the supply of short-term rentals and impact housing prices and rents, but the results vary by location. In the U.S., studies generally show that regulations have been effective in reducing the supply of short-term rentals and have had some success in other areas, such as reducing nonpayment-related foreclosures. However, the evidence is mixed, and the effectiveness of regulations in other areas, such as limiting the conversion of residential apartments into short-term rentals, remains uncertain [16].

In his study, Gianluca Bei [16] identified a significant divergence between the regulatory landscapes of U.S. and European contexts, with European cities encountering more intricate, multi-layered regulatory challenges. European studies on short-term rental regulations are comparatively fewer and often concentrate on the initial impacts of these regulations, such as the reduction in the number of hosts managing multiple listings. Bei's comparative analysis of regulatory effects across 16 European cities accounted for various factors that might be influenced by such regulations, providing a comprehensive overview of the regulatory landscape.

A primary consequence of short-term rental regulations is the reduction in the overall number of rental listings on platforms like Airbnb. This reduction is critical, as the proliferation of short-term rentals typically diminishes the availability of long-term housing, thereby escalating rental prices and decreasing housing affordability. Regulatory measures that limit the number of rental days per property or impose specific licensing requirements have demonstrably reduced the total number of listings, thereby easing some of the pressure on housing markets. For instance, the introduction of such regulations resulted in a significant reduction in listings, with cities like Amsterdam and Berlin experiencing a decrease of nearly 30% in the number of entire apartments available for short-term rental [16].

Additionally, short-term rental regulations have markedly influenced the professionalization of the market. In many urban areas, a substantial share of short-term rentals is operated by professional hosts or companies managing multiple properties. Regulations frequently target this trend by enforcing stricter licensing requirements and capping the number of properties a single host can manage. This approach has led to a notable decline in the number of professional hosts, which is crucial for maintaining the original intent of home-sharing platforms—enabling ordinary homeowners to rent out their properties occasionally rather than allowing commercial enterprises to dominate the market [16].

The spatial concentration of short-term rentals within specific urban areas has also been a major focus of regulatory efforts. In numerous cities, short-term rentals are densely clustered in central, tourist-heavy neighborhoods, exacerbating issues such as gentrification and the displacement of long-term residents. While some regulatory strategies, like zoning restrictions, have aimed to distribute short-term rentals more evenly across cities, the success of these measures in altering the geographic distribution of rentals has been mixed. Evidence suggests that although these regulations can reduce the overall number of short-term rentals, they have had limited success in significantly changing their spatial concentration within urban areas [16].

2 Methods

2.1 Context of the analysis

The primary objective of this study is to quantitatively assess the growth and current scale of platform-based rental markets, focusing specifically on the evolution over the past fifteen years. The research centers on Airbnb, which is indisputably the largest player in the short-term rental market. This decision is driven by Airbnb’s dominant market share and its pioneering role in shaping the short-term rental landscape. Furthermore, the choice to focus on a single platform, rather than a cross-platform analysis, addresses a critical methodological challenge: the issue of double counting. Many landlords list their properties on multiple platforms simultaneously, leading to potential inaccuracies when aggregating data across different services. Airbnb’s presence surged dramatically from 2014 to this day, displaying an exponential growth [22]. The pandemic years introduced a significant, albeit temporary, disruption to the growth trajectory of Airbnb, reflecting broader global trends in travel and tourism. Despite this, Airbnb has continued to solidify its position as a leading platform in the short-term rental market, recovering quickly post-pandemic.

To accurately depict the phenomenon, we chose to analyze the impact of short-term rental in Barcelona. In fact, the Spanish city is one of the most popular destinations in Airbnb [23], ranking 6th worldwide. In Barcelona, Airbnb has a remarkable market penetration, as 6.84% of the total rented units are included in the website listings, a record-breaking figure on a global scale. This level of penetration suggests a significant shift in the city’s rental market, with a growing preference among property owners for short-term rentals over traditional long-term leases. This is largely driven by the substantial economic incentives associated with short-term rentals. Figure 3 [8] illustrates that the financial appeal of Airbnb is evident: a property listed on Airbnb can achieve the equivalent of a month’s rent in the long-term market in just ten days. In fact, the average Airbnb price/day in 2015 was €71, while the discounted daily amount for long-term rental was just €11.

In addition to examining the impact of short-term rentals in Barcelona, this study expands its analysis by incorporating Milan as a comparative case. Milan, while not as extensively regulated as Barcelona, has experienced a rapid increase in short-term rental activity, driven in part by its status as a major international hub for business, fashion, and design. By comparing the two cities, we aim to highlight the divergent effects of regulatory frameworks on the short-term rental market and housing affordability. Whereas Barcelona’s stringent regulations, such as the Special Tourist Accommodation Plan (PEUAT), have been instrumental in curbing the expansion of short-term rentals, Milan has adopted a more laissez-faire approach, with minimal local intervention. This comparison provides valuable insights into how varying governmental policies influence the dynamics of the short-term rental market, helping to anticipate potential over-tourism trends and offering evidence-based policy recommendations. By utilizing data-driven analysis, this study aims to enhance policy-makers’ decision-making processes, ensuring that regulatory approaches are both effective and adaptable to the evolving challenges posed by short-term rentals.

	Barcelona	New York	Los Angeles	Paris
Airbnb Listings	16,951	45,260	30,000	35,000
as % of total units	2.06	1.31	0.86	2.56
as % of rented units	6.84	1.92	1.56	4.97
Average Airbnb price/day (€)	71	131	114	81
Long-term rent/day (€)	11	59	75	37
Days/month for same revenue	10	14	20	14

Figure 3: Airbnb market share across selected cities (2015)

2.2 Data collection

One of the key data sources utilized in this study is InsideAirbnb.com ⁵, an independent website scraping data from the original Airbnb website on a quarterly basis. It includes data from a vast amount of cities worldwide, storing information about guest reviews and listings in separate files. There are 75 data points for each listing, encompassing information on the host, room and neighborhood characteristics, availability and maximum number of nights, chronological information about the host's registration date, and the unit's listing date among many others. However, there are notable limitations to the data provided by InsideAirbnb. The platform openly publishes only the most recent collected data, corresponding to the last quarter in which data was scraped. This practice significantly hinders the ability to conduct a thorough historical analysis, as it precludes the possibility of comparing data over time. For example, researchers are unable to directly track the evolution of Airbnb prices over recent years or compare these trends with changes in long-term rental prices. Despite these constraints, InsideAirbnb remains the sole open-source solution that offers data about the short-term rental market.

The scarcity of data availability on this matter has been a pressing issue, sparking considerable debate and concern among policymakers and researchers. In response to these challenges, various European cities have begun to coordinate their efforts through initiatives like the European Cities Alliance on Short-Term Holiday Rentals. This intercity organization, which is comprised of many European cities and metropolitan areas, faces shared issues brought about by the steady rise of the STR market. The organization stems from Eurocities ⁶, a European network of over 200 cities representing more than 150 million people across 38 countries. Eurocities brings together local governments to discuss about common challenges and projects concerning their urban environments, spanning across a broad range of themes and fostering change through advocacy and projects. In an effort to draw attention to the problem, the European Cities Alliance is a lobbying organization advocating for further and more stringent STR regulation at a European level. In a letter ⁷ to the European Commission in July 2022, the Alliance stressed the need for amendments to the Digital Services Act (DSA) ⁸, a critical regulation addressing important issues regarding the effects of online platforms in urban housing, as well as advancements in preserving digital rights of citizens, and most importantly publicly accessing data gathered by online platforms at the service of research and knowledge.

These changes attested to the introduction of obligations for these platforms to share the data they have access to with public authorities when they are requested to do so, as the cooperation from the STR rental platform has been bland. Effective enforcement of this obligation would allow for the control of illegal listings more thoroughly and diminish the pressure on affordable local housing markets.

2.3 Key indicators

This study undertakes a comparative analysis to investigate the influence of the short-term rental (STR) market, specifically Airbnb, on the housing market in Barcelona. To achieve this, data on Airbnb listings is juxtaposed with a range of demographic and economic indicators. The main source for comparative data is Ajuntament de Barcelona ⁹, where the municipality of Barcelona releases open-source data at a metropolitan and regional geographical scope. In particular, the following evolutionary datasets were included in our analysis:

- **Average Sales Price of Real Estate ($\text{€}/m^2$):** This indicator tracks the change in property sales prices. It provides insights into how the proliferation of STRs has influenced the real estate market, particularly in terms of property inflation and housing affordability.
- **Average Rental Price of Real Estate ($\text{€}/m^2$):** This tracks the changes in long-term rental prices. Given the rise of STRs, the rental market has experienced significant shifts. The comparison of rental prices before and after the introduction of STR regulations is critical to understanding how these platforms affect long-term residents (sourced from Kaggle ¹⁰).
- **Demographic Indicators:** This includes data on the number of residents across districts, allowing the study to track population movements. The objective is to examine whether the STR market has caused displacement in central districts or affected the demographic composition of different neighborhoods.

⁵<https://insideairbnb.com>

⁶<https://eurocities.eu>

⁷http://urban-intergroup.eu/wp-content/files_mf/europeancitiesalliance.sthr.iaa.pdf

⁸https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act_en

⁹https://ajuntament.barcelona.cat/estadistica/castella/Estadistiques_per_temes/

¹⁰<https://www.kaggle.com/code/marshuu/barcelona-rent-prices-2014-2022/input>

The city of Barcelona is administratively divided into 10 districts, each of which has its own counselors appointed by the municipality. The subdivision into districts is pivotal to our analysis, as the bulk of Airbnb activity is condensed around the central districts. By focusing on these districts, we are able to draw more accurate comparisons between the areas with the highest STR activity and those with less market penetration. Consequently, for each variable of interest included in the analysis, data for the central and most touristy districts were compared with the remaining areas of the city.

In Milan, the same key indicators were analyzed to assess the influence of short-term rentals (STR) on the housing market. The primary data sources for Milan include Idealista for property sales and rental prices and Statista for demographic and tourism-related information. This data allows for a comparative analysis of the trends in real estate and population changes similar to those observed in Barcelona, with a focus on the rapid growth of Milan’s tourism sector and the corresponding rise in STR activity.

2.4 Research questions

We performed a cross-sectional comparison of these key indicators with information about Airbnb listings to answer the following research questions:

- **RQ1: How has the short-term rental market evolved in Barcelona in recent years?** We analyze the rise in popularity of Airbnb in Barcelona in the last 15 years, by analyzing the number of yearly reviews.
- **RQ2: Has the short-term rental market impacted sales and long-term rental prices?** We test whether the disruptive effects of STR on the rise of housing prices are visible in Barcelona. We investigate whether there is a difference in the effect on sales prices and long-term rental prices.
- **RQ3: Has the short-term rental market influenced the demographic distribution across the city?** We verify whether STR has caused a displacement of residents from the central neighborhoods, obliging lower-income households to move away from the central districts for the unsustainable rate of growth of prices.
- **RQ4: Have policies and governmental intervention managed to contrast the negative externalities of the short-term rental market in the city?** Repeated regulatory efforts have adopted a stringent approach towards rental platforms in Barcelona. We check whether such endeavors have successfully contrasted the negative consequences of STR.
- **RQ5: How does the heavy regulation approach pursued in Barcelona compare to Milan, where no strong regulation has been drafted?** To contextualize Barcelona’s regulatory framework, the study compares it with Milan, a city where local authorities have not adopted significant measures to regulate the STR market. This comparison allows for an analysis of how different governmental approaches lead to varying outcomes in terms of STR market influence, housing affordability, and urban development. In Milan, only minimal national regulations have been applied, offering a contrasting case study to Barcelona’s more aggressive stance.

3 Analysis and Results

3.1 RQ1: Evolution of STR in Barcelona

The first goal of the analysis is to assess the growth of the Airbnb market in Barcelona in recent years. A reliable proxy for the number of stays is the amount of reviews each property has, as according to Airbnb 72% of guests leave a review. Notably, this estimation is a lower bound of the actual number of bookings that have occurred, but it gives an important baseline for measurement. We analyzed the quantity of reviews per year starting from 2010, as Airbnb started spreading in Barcelona at around that time. In figure 4, it is shown that the number of yearly reviews has surged drastically year after year, going from virtually no reviews in 2010 when the platform had yet to develop to a staggering 20000 reviews in 2023. The growth has been rapid and steady since the beginning, with the only exception of 2020 and 2021, when the reviews plummeted due to Covid-19 restrictions.

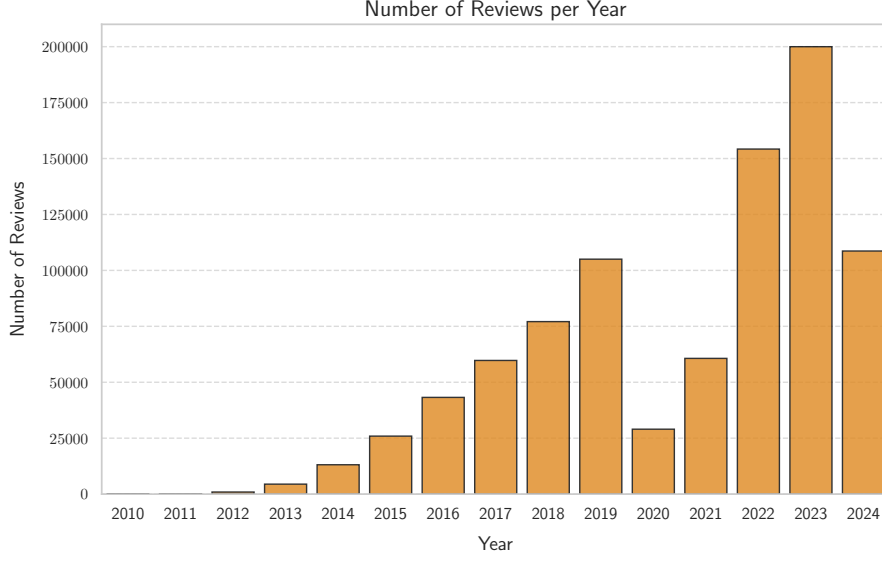


Figure 4: Airbnb yearly reviews in Barcelona

3.2 RQ2: Impact on sales and rental market

Previous works have extensively highlighted that STR market has had an inflationary effect on sales and long-term rental markets in Barcelona[8] until 2017. We aim to extend the temporal analysis using the most updated data available and to check whether the previous findings still hold. In order to do so, information about sales and rental prices (in €/m²) were gathered respectively from the municipality open data and Idealista ¹¹ listings. The data from *Ajuntament de Barcelona* are yearly averages by district updated until 2023, while the rental dataset includes individual listings until 2022. Figure 5 shows that the increasing pattern ceases after 2017. For both sales and rental market, the most recently recorded prices are largely unchanged from their levels in 2017. This stark contrast with the previous results is potentially justified by some restrictive policies that have been introduced in 2017, such as the Special Tourist Accomodation Plan (PEUAT) ¹².

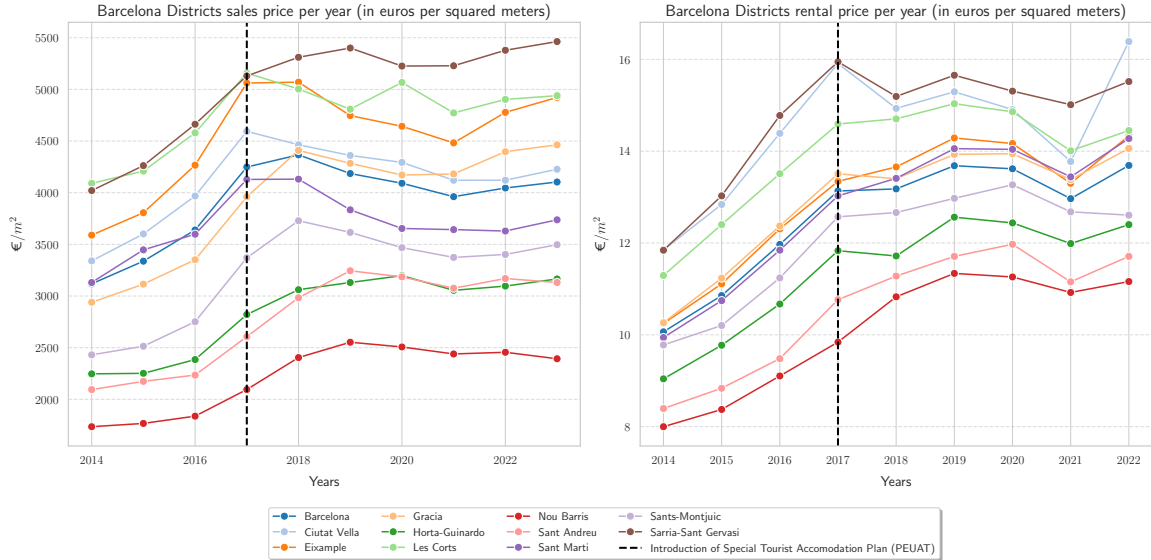


Figure 5: Barcelona sales prices across districts

The PEUAT controls the opening of shared houses, tourist apartments, and youth hostels in addition to tourist lodging facilities. This law was created in response to the necessity of balancing the city's tourism

¹¹<https://www.idealista.com/>

¹²<https://ajuntament.barcelona.cat/pla-allotjaments-turistics/en>

accommodations with a sustainable urban model that upholds the fundamental rights of locals and enhances their standard of living. Apart from providing accommodations for visitors, the initiative also intends to control short-term stays in nearby student houses. The impact of the regulation is clearly visible in Figure 6. The trend drastically drops after 2017, as shown by the red dotted line. This is particularly visible for the sales market, for which the trend changes from positive to negative slope as a consequence of the measure, while in the long-term rental market the prices still increase after 2017, although at a much lower pace.

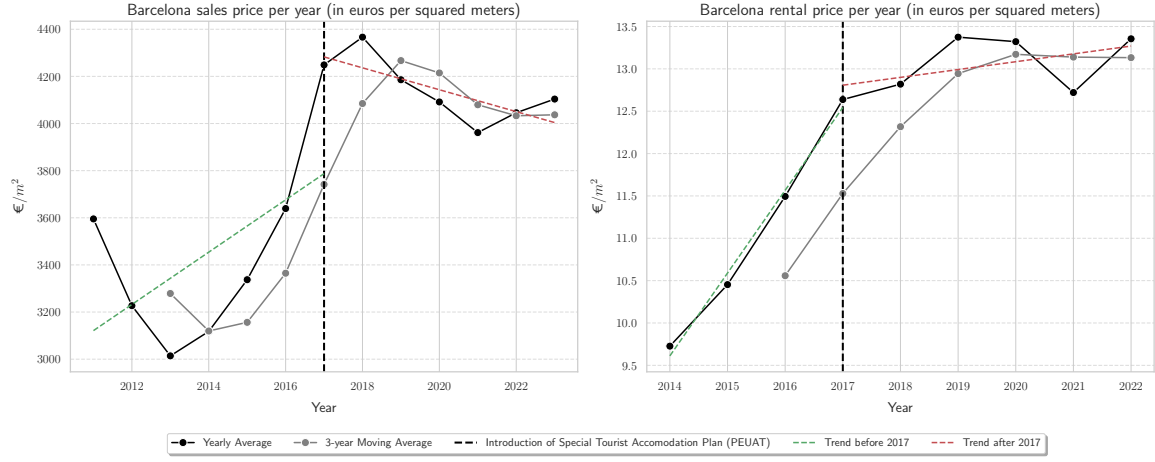


Figure 6: Barcelona sales and rental prices

The PEUAT regulation applies restrictions in an uneven manner across the city, which is split into four categories ("*zonas específicas*") according to their touristic relevance, as displayed by Figure 7. Each one is distinguished by the way that lodging for tourists is distributed throughout its boundaries, the proportion of available tourist spots to the population of current residents, the range and circumstances in which specific uses are permitted, the effect that these activities have on public spaces, the existence of tourist attractions, and the physical features of the urban fabric of the area.

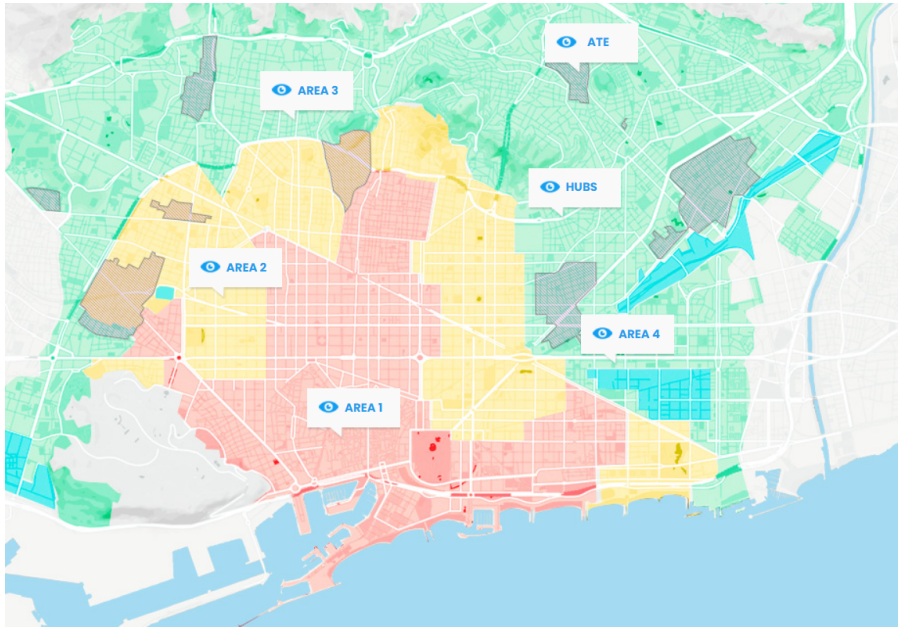


Figure 7: Specific zones according to PEUAT regulation

Central areas that are highly attractive to tourists are generally classified in the first zone (ZE1), while the most residential outskirts are labeled in the fourth zone (ZE4). The different scale of restrictions applied across the specific zones is compatible with the diverging reaction of the sales and rental market across the city districts. In fact, Figure 8 shows that the *Sant Andreu* has undergone the most dramatic in sales price. The

area lies entirely within ZE4 and is affected very little by the restrictions and their curbing effect. Similarly, for the long-term rental market, the *Nou Barris* district is located in the outskirts far from any touristic attractions and is located within ZE4. In this area the rental prices have grown the most in terms of percent change. Both of these findings are further indications that PEUAT successfully limited the impact of STR in Barcelona to a varying extent, depending on the specific zone the district was placed in.

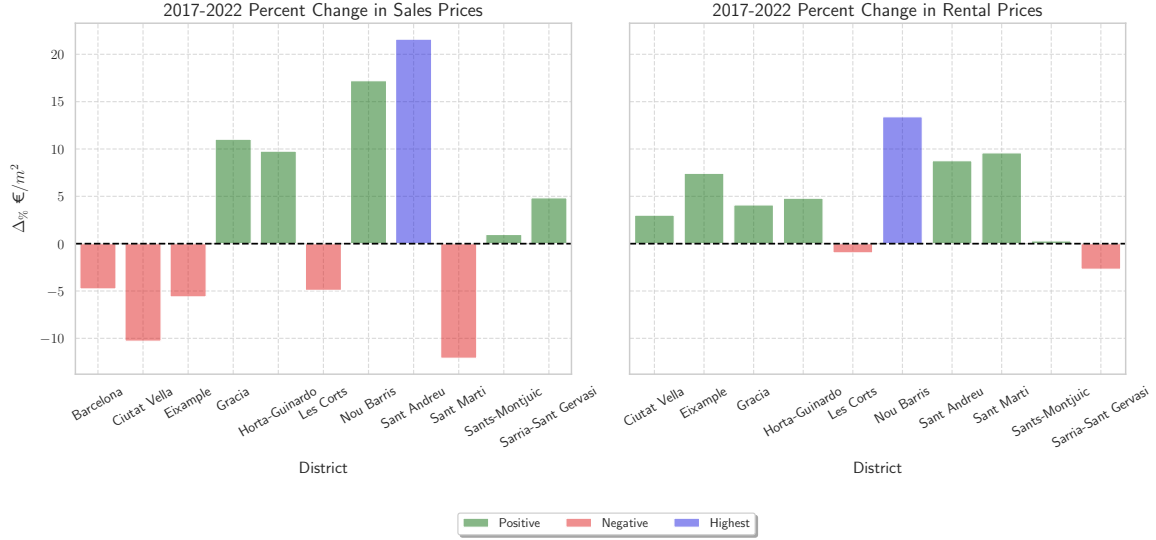


Figure 8: Percent change in sales and rental markets across districts

3.3 RQ3: Demographic impact

The patterns exhibited by each district can be quite distinct from one another, also in reaction to restrictive measures applied in an uneven way across the city. For this reason, we investigated whether locals have moved towards cheaper, external areas of the city as a response to the gentrification and touristic proliferation of the central districts. Firstly, we established which districts have a high Airbnb penetration, which we classified as High Airbnb Areas. Figure 9 shows that over half of the listings are concentrated in *Eixample* and *Ciutat Vella* districts.

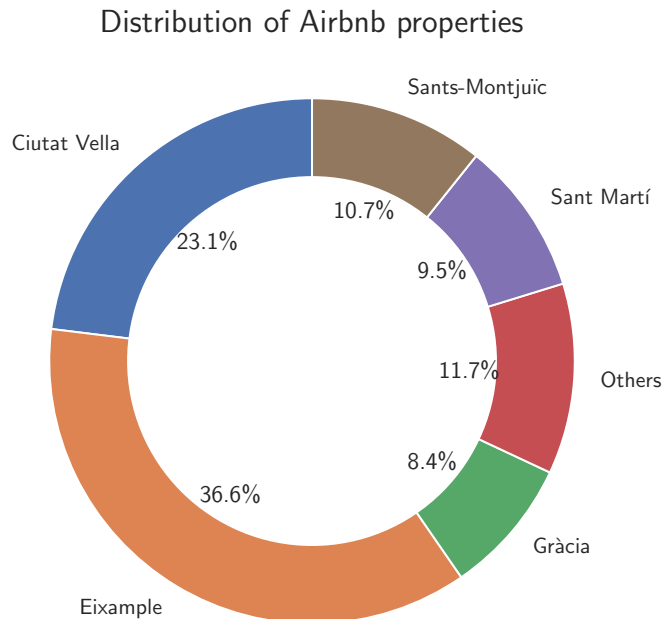


Figure 9: Distribution of Airbnb listings across districts

An analysis of population trends in high-Airbnb areas reveals that these districts generally exhibit slower growth in residential population compared to other parts of the city. This trend aligns with expectations, given the higher concentration of short-term rentals in these areas. However, a closer examination, as illustrated in Figure 10, indicates that the difference in population growth between high-Airbnb and low-Airbnb districts is narrower than might be anticipated based on the varying levels of Airbnb penetration. This observation suggests that the replacement of local residents by tourists—a common concern associated with the proliferation of short-term rentals—may not be as pronounced as initially feared. While it is often assumed that an increase in Airbnb listings would lead to a significant displacement of permanent residents, the data indicates that this replacement effect is relatively muted. Instead, the slower population growth in these areas may be more intricately linked to broader patterns of gentrification, a process that has historically been more intense in central urban areas compared to peripheral neighborhoods. Gentrification, characterized by the influx of higher-income individuals into traditionally lower-income neighborhoods, leading to rising property values and the displacement of long-standing residents, is not a new phenomenon. It has been a feature of urban development in central districts long before the advent of platforms like Airbnb. The central areas of cities often attract more investment and undergo more rapid changes due to their desirability, proximity to amenities, and economic opportunities. This longstanding pattern of gentrification could be contributing to the observed demographic trends in high-Airbnb areas, rather than the presence of Airbnb alone.

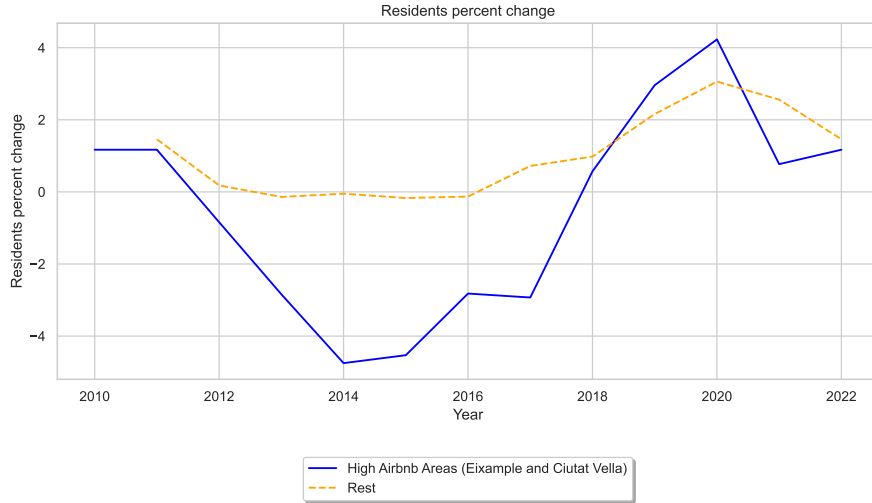


Figure 10: Residents percent change

3.4 RQ4: Effects of regulations

We have previously denoted extensive evidence supporting the effectiveness of the PEUAT measure introduced in 2017. This was not the only governmental action to tackle STR set in Barcelona. Since 2014, the municipality has stopped issuing new tourist licenses to curb short-term rentals growth. Consequently, after that date buying a property that already has a tourist license has been the only allowed way to host tourists. Figure 11 compares the trend of yearly new Airbnb hosts before and after such measures. Not only does the measure stop the steep increase of new hosts every year, but the amount starts to gradually drop after 2015.

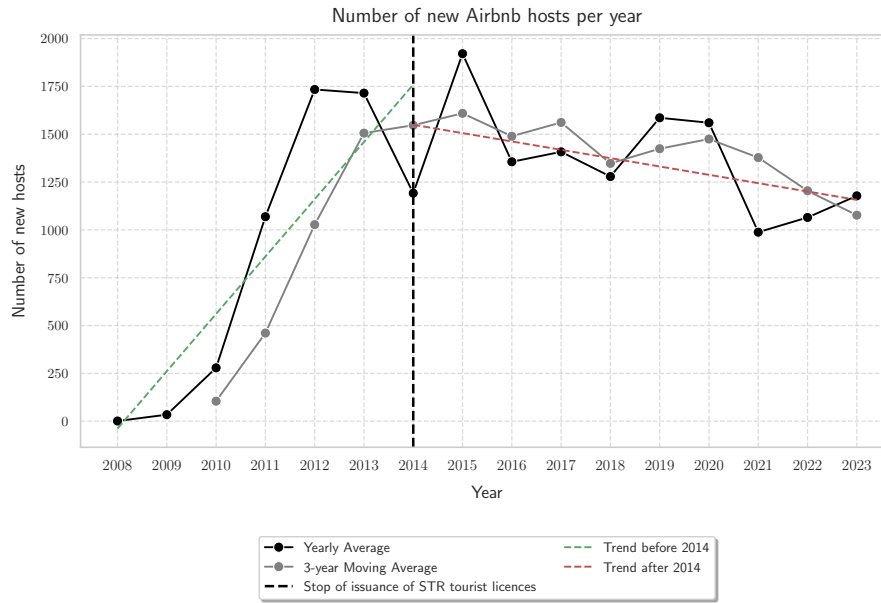


Figure 11: Yearly new Airbnb hosts

A strong additional curbing measure was introduced in August 2021, as the municipality decided to prevent hosts from renting out a room only for less than 31 days. This was a heavily discussed decision, as there were no previous cases of drastic bans to Airbnb and rental platforms. On this occasion, Barcelona paved the way for an even more stringent approach towards STR. The rationale behind this measure was to distinguish between short-term, tourist-focused rentals and longer-term accommodations, which are not considered touristic facilities anymore. By setting a minimum rental period of 31 days, the municipality sought to reduce the number of properties available for short-term stays, thereby curbing the negative externalities often linked to the STR market, such as housing shortages and increased rental prices for local residents. To assess the effectiveness of this regulation, we analyzed compliance among hosts by examining the minimum number of nights for which properties were available for rent, as shown in Figure 12. The data reveals a noticeable spike in listings with a minimum stay of 31 nights, suggesting that some hosts adjusted their offerings to comply with the new rule. However, despite this spike, the majority of listings remained available for rental periods of less than a full month, indicating widespread non-compliance with the regulation. This finding suggests that while the introduction of the 31-day minimum rental period was a bold step towards stricter regulation of the STR market, its enforcement has faced significant challenges. Many hosts continue to offer short-term rentals in defiance of the ban, which raises questions about the effectiveness of the policy and the mechanisms in place to ensure compliance. The persistence of listings with shorter rental periods highlights the difficulty of regulating a market as dynamic and decentralized as the STR sector, where enforcement can be complicated by the flexibility and anonymity afforded to hosts by online platforms.



3.5 RQ5: A comparative study with Milan

Milan, once overshadowed by cities like Rome, Florence, and Venice, has seen a dramatic rise in international tourism, particularly following Expo 2015. This event marked a turning point, propelling Milan into the global spotlight and transforming it into a major tourist destination. The city has since become known for its vibrant cultural scene, particularly events like Milan Fashion Week and Design Week, which draw millions of visitors annually. According to a 2022 Statista report ¹³, Milan's tourism sector is rapidly rebounding from the COVID-19 pandemic. The city was already experiencing growth before the pandemic, and this momentum is expected to continue, especially with the upcoming Milano-Cortina Winter Olympic Games in 2026. The report shows also that Milan is now the third most visited city in Italy, trailing only Rome and Venice, solidifying its position as a key player in the country's tourism industry.

3.5.1 Trends in the Short-Term Rental Market in Milan

The STR market in Milan has evolved significantly, mirroring the city's rise as a top tourist destination. Milan's STR market is characterized by short stays, averaging around two days, reflecting the city's attraction as a hub for events like fashion shows, design exhibitions, and business conferences. From Figure 13 it can be seen that the Airbnb activity of Milan is rapidly increasing, and in 2023 it surpassed Barcelona by 25% in the number of reviews and almost by 100% in the number of new registered hosts. This shift highlights not only Milan's increasing demand for short-term accommodations but also the lack of strong regulation for the STR market.

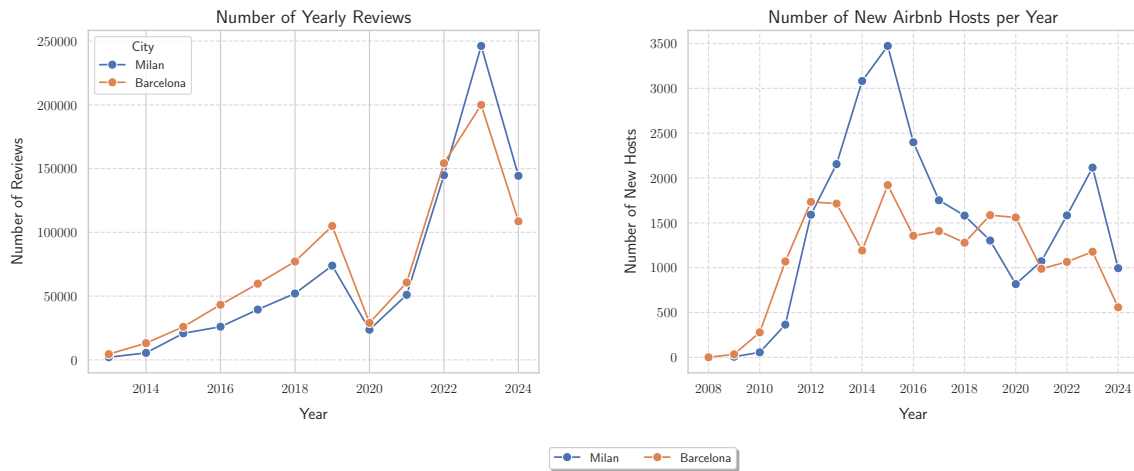


Figure 13: Airbnb yearly reviews in Milan vs. Barcelona

A notable trend in Milan's STR market is the strong dominance of entire home rentals. As shown in Figure 14, by August 2024, 85.4% of all STR listings in Milan were for entire homes, in contrast to Barcelona, where only 60% of listings were for entire homes and 39.3% were for private rooms (compared to just 13.6% in Milan). This preference for entire apartments reflects several structural, cultural, and regulatory characteristics unique to Milan's STR market.

¹³<https://www.statista.com/study/70562/tourism-in-milan/>

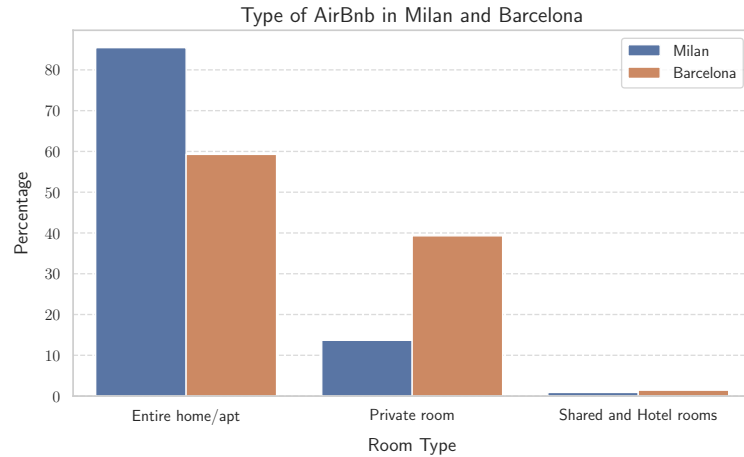


Figure 14: Airbnb room type distribution in Milan vs. Barcelona

Another significant trend is the rising cost of STRs ¹⁴. The median price per night for entire apartments has surged by over 50% in the past five years, making STR prices increasingly comparable to hotel rates. This sharp increase, far outpacing inflation, indicates a speculative trend driven by rising demand.

3.5.2 Impact on Sales and Rental Markets in Milan

The rapid expansion of Milan's STR market has significantly affected the city's housing market, particularly in terms of sales and rental prices. Following the resurgence of tourism post-Expo 2015 and the rise of platforms like Airbnb, Milan has experienced a sharp increase in property prices, similar to trends in other major European cities like Barcelona. One striking example, observable in Figure 15, is the rise in the average sale price per square meter, which jumped from €3,700 in January 2017 to nearly €5,350 in October 2023—a 44.6% increase in just six years. This growth far outpaces the 9.2% increase in average Italian salaries over the same period, highlighting the growing unaffordability of housing in Milan, driven largely by the lucrative STR market. Rental prices have also risen sharply as more properties are converted into STRs, reducing the supply of long-term rental units. This has made it increasingly difficult for local residents, especially those with average or below-average incomes, to find affordable housing. The growing STR market thus presents significant challenges for Milan's housing affordability and raises concerns about the displacement of local residents.

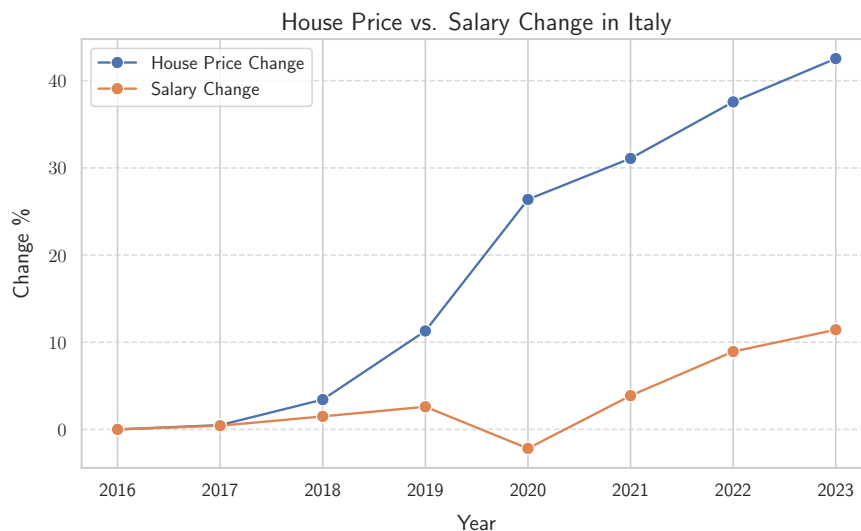


Figure 15: Percentage increase in house prices in Milan and salaries in Italy from 2017.

¹⁴<https://www.offtopiclab.org/airbnb-2023/>

3.5.3 Policies Related to Short-Term Rentals and Their Effects in Milan

In response to the growing STR market and its impact on housing affordability, Milan’s local government, led by Mayor Giuseppe Sala, has implemented several policies. A key initiative is the agreement between Airbnb and the Comune di Milano to promote rentals with an “agreed fee” (canone concordato). This policy is designed to offer rental rates lower than the market price, making housing more affordable for tenants while still providing incentives and tax benefits to landlords. This agreement represents a collaborative effort between the city and the STR platform to address housing affordability while still allowing property owners to benefit from the STR market. However, Milan’s regulatory approach remains less stringent than that of other European cities. On this topic, mayor Sala has also expressed a willingness to adopt more stringent measures, similar to those implemented in New York City, to further regulate the STR market. These potential measures could include limiting the number of apartments that can be offered for STRs, restricting the number of different people who can rent a single property, and requiring permits for short-term visitors. These regulations are intended to prevent the over-commercialization of residential properties and ensure that the STR market does not undermine the availability of long-term rental housing for residents. As Milan prepares for the 2026 Winter Olympic Games, the pressure on the housing market from STRs is likely to increase. The city’s future regulatory approach will be crucial in balancing the needs of the tourism industry with the housing needs of local residents.

3.5.4 Demographic Impact of STRs in Milan

The rapid growth of Milan’s STR market has also led to significant demographic changes, particularly in the city’s neighborhoods. The influx of tourists and the proliferation of STRs have altered the social and demographic fabric of many areas, extending beyond traditional tourist hotspots to more residential neighborhoods on the periphery. Neighborhoods like Giambellino, Corvetto, and areas along Viale Monza and Via Padova, once considered less attractive and more affordable, have seen significant increases in STR listings. This has driven up property values and rent prices, displacing long-term residents and altering the demographic composition of these areas. The STR market in Milan has also seen a shift towards professionalization, with a growing number of properties managed by agencies or individuals with multiple listings. By September 2023, about 20% of Airbnb listings in Milan were controlled by hosts managing at least ten properties. This commercial focus has further limited the availability of long-term rentals, contributing to the gentrification of various neighborhoods. While the growth of the STR market has boosted Milan’s economy and global appeal, it has also led to significant demographic and housing challenges. Balancing tourism with the needs of local residents remains a critical issue for the city as it continues to evolve.

4 Discussions

4.1 Impact on Housing Markets

- The proliferation of short-term rentals (STRs) such as Airbnb has markedly influenced housing markets in cities like Barcelona and Milan. In both cities, the rapid growth of STR listings has contributed to a sharp increase in property sales and rental prices, particularly in central districts with high tourist demand. This inflationary effect has been especially pronounced in popular tourist destinations where STR platforms create an opportunity for property owners to capitalize on short-term gains, thus reducing the availability of affordable long-term housing for residents.
- In Barcelona, the introduction of regulatory policies such as the Special Tourist Accommodation Plan (PEUAT) has successfully mitigated the steep price increases, particularly post-2017. This policy curbed the availability of new tourist accommodations in highly saturated areas, stabilizing property prices in some districts. Milan, however, with its more laissez-faire approach and minimal local regulations, continues to experience unchecked growth in the STR sector. The rising cost of both property sales and rentals indicates the urgency for regulatory intervention to prevent further market distortion and displacement of residents.

4.2 Demographic Shifts and Gentrification

- The expansion of the STR market has also accelerated demographic shifts in both cities. In Barcelona, districts such as Ciutat Vella and Eixample, known for their high concentration of Airbnb listings, have seen slower population growth compared to other areas. This trend reflects the displacement of long-term residents, many of whom have been pushed out by rising living costs and replaced by transient visitors

and wealthier newcomers. Gentrification, compounded by "touristification," is altering the urban fabric of these areas, where traditional communities are being eroded by the influx of tourism-driven businesses catering to short-term guests rather than local residents.

- Similarly, in Milan, neighborhoods that were once considered affordable, such as Giambellino and Corvetto, are experiencing gentrification. The increased presence of STRs in these areas has driven up property values and rental costs, displacing lower-income residents. The demographic impact is further exacerbated by the concentration of STR properties in central and peripheral areas, transforming the social dynamics of these neighborhoods and contributing to the homogenization of their commercial landscapes in favor of tourists over local communities.

4.3 Regulatory Approaches

- Barcelona has been at the forefront of implementing stringent regulations to control the STR market. The PEUAT, coupled with the ban on new tourist licenses and the enforcement of minimum rental periods, has proven effective in curbing the negative externalities associated with STR proliferation. These policies have helped to reduce the number of short-term rental listings and limit their impact on housing affordability and the displacement of residents, especially in the city's central districts.
- On the other hand, Milan's regulatory framework remains underdeveloped, relying primarily on agreements between the city and platforms like Airbnb, which have done little to control the expansion of STRs. The absence of robust regulations has allowed the market to grow unchecked, contributing to the housing affordability crisis and the continued gentrification of residential areas. The lack of a comprehensive regulatory response suggests that Milan could benefit from adopting stricter measures, similar to those in Barcelona, to prevent further market destabilization.

4.4 Effectiveness of Policies

- The effectiveness of Barcelona's policies has been mixed. While the introduction of regulations such as PEUAT has had a noticeable impact in slowing the growth of STRs, enforcement remains a challenge. Many hosts continue to bypass regulations by offering properties for short-term rental periods that violate the established minimum stay requirements. This non-compliance points to a gap between policy design and enforcement, suggesting that additional measures are necessary to ensure stricter adherence to the rules.
- The comparative analysis between Barcelona and Milan underscores the need for a balanced approach to regulating STRs. While tourism remains a key economic driver, particularly in cities that rely heavily on international visitors, it is crucial to implement policies that protect local residents from being priced out of their neighborhoods. Milan, in particular, must act swiftly to introduce stronger regulatory frameworks to control the growing STR market, especially as the city prepares for the upcoming Milano-Cortina Winter Olympic Games in 2026, which will further strain its housing market.

5 Conclusions

Barcelona's regulatory experience highlights the importance of implementing strong, targeted policies to mitigate the adverse effects of short-term rentals (STRs) on housing affordability and demographic stability. The Special Tourist Accommodation Plan (PEUAT) and other measures have been relatively effective in controlling the growth of STRs, particularly in central districts. However, enforcement remains a critical issue. The persistence of non-compliance among hosts underscores the need for more rigorous enforcement mechanisms to ensure the success of these regulations. In contrast, Milan, which has adopted a more lenient regulatory stance, faces a trajectory similar to Barcelona's pre-regulation period. The unchecked growth of STRs in Milan has led to rising housing costs and accelerated gentrification, putting increased pressure on the local housing market. As the city prepares for major upcoming events, such as the Milano-Cortina Winter Olympic Games in 2026, the need for urgent regulatory intervention becomes more pronounced to prevent further market destabilization.

While STR platforms like Airbnb contribute economic benefits, particularly in tourism-driven cities, they also exacerbate social inequalities by displacing lower-income residents and eroding the social fabric of communities. The transformation of residential neighborhoods into tourist accommodations diminishes housing availability and affordability for long-term residents, leading to gentrification and the displacement of local communities. The challenge for cities like Barcelona and Milan is to find a balance between harnessing the economic advantages

of STRs and protecting the social rights of their residents. Policies must strike a careful balance, promoting sustainable tourism while safeguarding the housing needs of local populations.

Given the significant impact of STRs on housing markets and communities, cities like Milan should consider adopting more stringent regulations, similar to Barcelona's PEUAT. These regulations could include zoning restrictions, limits on the number of days properties can be rented as STRs, and stricter enforcement mechanisms. Milan's current regulatory approach, which lacks such comprehensive measures, risks further exacerbating housing affordability and demographic shifts. Cooperation between STR platforms and local governments is crucial to ensure effective data sharing and regulatory enforcement. Platforms like Airbnb hold the key to essential data, such as rental durations and host compliance, which can assist authorities in monitoring and controlling the STR market. A collaborative effort between local governments and STR platforms is necessary to ensure that the growth of the STR market aligns with the broader goals of urban housing sustainability and affordability.

In summary, the rapid expansion of the short-term rental market, driven largely by platforms like Airbnb, presents both opportunities and challenges for cities like Barcelona and Milan. While STRs provide significant economic benefits, particularly in boosting tourism and local economies, they also pose threats to housing affordability and community stability. Effective regulation, as seen in Barcelona, can mitigate some of these negative impacts, but enforcement remains a challenge. Milan, with its more lenient approach, risks facing similar issues of affordability and gentrification without timely intervention. Moving forward, cities must find a balance between fostering economic growth through STRs and ensuring that local housing markets remain accessible and sustainable for their residents. Comprehensive, well-enforced regulatory frameworks are crucial in addressing these challenges and promoting long-term urban sustainability.

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