Managing Tourism Pressure: Impacts on Urban Real Estate in Italy

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Abstract. This research examines the connection between urban tourism and the residential market. Specifically, the comparative method is applied by investigating three Italian cities, representing different levels of tourism development, namely, Bari (southern Italy), Perugia (central Italy), and Venice (northern Italy). The scope of the analysis spans from 2019 to 2024 and involves evaluating residential property sales and rentals, accommodation types, and tourists' arrivals to assess potential effects of tourism on the housing sector and spatial organization of urban areas. As found out, the effect of tourism on urban residential markets follows a non-linear pattern, underscoring the importance of local governance in tackling socio-spatial divides and developing housing policies. By integrating empirical evidence with a governance-oriented perspective, the study provides meaningful insights into the effective management of urban destinations facing diverse levels of tourism intensity.

Keywords: Urban tourism · real estate market · overtourism · residential market dynamics · property value

1 Introduction

In recent years, urban tourism has emerged as a critical driver of economic, social, and spatial dynamics within European cities. The intensification of international tourist flows - facilitated by enhanced transport networks, the proliferation of digital intermediaries, and increased global mobility - has integrated tourism as a structural element of contemporary urban economies. Cities, in this framework, operate as complex adaptive systems in which tourism interacts with multiple dimensions of urban development, affecting spatial configuration, economic activity distribution, and real estate market behavior.

Concurrently, evolving patterns of tourist consumption, particularly through the expansion of home-sharing platforms and alternative accommodation typologies, have redefined the interaction between tourism and urban space. These developments have

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intensified competition over land use and access to housing, positioning tourism as a key driver of real estate dynamics, affecting both price formation and the availability of long-term residential stock.

Manifestly, there are economic benefits in such a situation: creation of employment opportunities, development of the service sector and increased interest in heritage areas. However, destinations facing high volumes of tourists suffer from certain negative impacts associated with the rise in prices, limited access to housing for locals, and changes in city quarters in order to make them suitable for tourists and business.

Overtourism occurs when a certain destination is subjected to tourism pressure to the extent that the activities of the tourists interfere with the lifestyle of the local inhabitants. Overtourism is not necessarily related to the volume of tourists; rather, it depends on the intensity of their flow, urban planning, and ability of public authorities to control such processes [1, 2]. Most often, overtourism manifests itself in historic areas and densely populated urban environments characterized by limited infrastructure where natural resources and economic functions are heavily loaded.

In this context, the following research focuses on the impact of tourism development on the urban real estate market by examining three selected cities of Italy that differ in their stages of tourism development: Bari from Southern Italy, Perugia from Central Italy, and Venice from Northern Italy. This combination allows for understanding the interaction between tourism and various urban systems and economies of these cities as well as the influence exerted by tourism on real estate market organization.

1.1 Overtourism: Socio-economic and Spatial Impacts on Cities

Overtourism is an important characteristic of contemporary urban life, emerging out of complicated interplays between the various economic, social, infrastructural, and factual determinants. However, without proper spatial planning and regulation of cities, this phenomenon may threaten the stability of local communities and social order. On one hand, more tourists mean increased economic opportunities for cities through increased local expenditures, creation of jobs, and improved service availability. Nevertheless recent research is rather unanimous in their assessment that excessive growth generates significant problems to urban life by turning inner city districts into tourist-dominated [1].

On another hand, research focusing on the impact of overtourism on society reveals several consequences of high tourist pressure, including strain on urban infrastructure and resources, resulting in traffic issues, noise pollution, and increased competition between locals and tourists for urban resources. In addition to deterioration of the quality of life, such consequences undermine social harmony in the city and lead to other negative phenomena [1, 3]. Particularly, the increasing dominance of tourism-related development contributes to social disparities and exclusion of vulnerable population segments [4].

From an infrastructural standpoint, congestion caused by the density of tourists in certain locations and peak periods causes pressures on transportation systems, waste management, water resources, and overall urban maintenance systems. The problem is especially noticeable in historic city centers, which often lack flexibility, thereby increasing the likelihood of persistent congestion and resulting in higher costs [1].

In the wide range of issues related to overtourism, the connection between tourism and urban real estate is receiving more attention from researchers because it provides insight into social and spatial changes occurring in cities with high tourism demands. Particularly, the development of online intermediary services such as Airbnb and Booking.com has facilitated the transition of property from residential use to vacation rentals. Such developments have considerable implications for activity location and real estate investment strategies [5].

Empirical evidence suggests a positive correlation between the expansion of short-term rentals and rising property values. For example, Barron, Kung, and Proserpio [6] show that, using data from U.S. cities, find that increase in Airbnb listings are associated with statistically significant rises in rental prices and residential values, largely due to the contraction of long-term housing supply. European studies, including those by Cocola Gant [7] and Adamiak [8], corroborate these findings, showing that the growth of short-term rentals in highly attractive historic centers is linked to gentrification processes, spatial polarization of real estate prices and the gradual deterioration of traditional residential functions.

In Italy, official data from the National Statistical Institute (ISTAT) [9] indicate a marked increase in properties dedicated to tourist accommodation, particularly in cities with high cultural demand, leading to consistent effects on the availability of housing for residents. Such changes not only generate systematic increases in per-square-meter property values in central areas, as documented by the Real Estate Market Observatory of the Italian Revenue Agency (OMI) [10], but also progressively limit housing accessibility for the resident population, particularly among socioeconomically vulnerable groups, thus reducing the capacity of families to stay in traditional neighborhoods. The functional conversion of units into tourist accommodations intensify this trend, as the decisive criterion between residential and tourist use increasingly becomes economic profitability rather than the social function of housing, with structural consequences on urban demographic composition and the spatial distribution of the population [8].

Comparative empirical evidence in the literature further indicates that the increase in tourist rentals is frequently associated with a contraction of the stable resident population, with direct effects on demographic structure and socio-economic dynamics of cities, including forms of resident displacement, substitution by temporary residents, or property investors oriented toward tourism valorization rather than traditional neighborhood life [3]. These processes of residential replacement are embedded in broader gentrification mechanisms, wherein tourism attractiveness acts as a catalyst for urban rebranding oriented toward mass tourism consumption, to the disadvantage of established local residency and services for permanent inhabitants [11, 12]. In many European cities, depopulation of historic centers has been documented in association with rising housing prices and the progressive reduction of resident-oriented services, replaced by tourism-oriented activities, with negative consequences for social vitality, access to local infrastructure, and the resilience of historic urban communities. In Italy, locations of high historical-cultural value and great appeal to tourists exhibit a typical situation where the volume of tourists collides with spatial constraints and increasing numbers of short-term

rentals. This situation makes the interaction between local residential areas and tourist-related spaces particularly intense, requiring responsible urban governance and effective urban planning as the main instruments for overcoming these tensions.

To better understand the current issue, it is necessary to combine data about demographics, real estate price fluctuations, and the number of available beds/units aimed specifically at tourists. This insight may facilitate in assessing tourism-related impact on the availability of homes for local residents and identifying regulatory strategies which can ensure a balance between the interests of locals and tourists. In this context, overtourism can be seen not only as a disruptive factor which negatively impacts the quality of life and social justice but as a sign of more general processes occurring in urban housing markets of our time. Thus, researching overtourism requires a combination of urban planning theories with those of territorial economics and tourism.

2 Aim

This work presents a systematic analysis comparing the influence of tourism development on urban real estate dynamics, selecting three cases based on their location along the tourism development continuum. First, there is Bari, located in Southern Italy and representative of a case of emerging tourism; then, Perugia, an urban area in Central Italy experiencing a relatively low level of tourism impact and characterized by ongoing urban digital transformation; finally, Venice, located in Northern Italy, presenting a clear case of advanced and over-tourism. More than a mere description of phenomena, the present study aims to measure the influence of increasing tourist demand on urban areas. Specifically, the analysis focuses on the years 2019–2024, analyzing variations in real estate prices per-square-meter, the diffusion of short-term rentals and the presence of accommodation facilities, in order to identify potential correlations between tourism development and transformations in the urban residential market. The comparison across the three levels of tourism maturity further allows the identification of fundamental differences and recurring patterns in the responses of real estate markets and urban tissues to tourism pressure, highlighting how the intensity of the flows may modulate their effects on cities. The structure of this paper is presented below: in Sect. 3 a comparative analysis across the three case studies is carried out, with an in-depth investigation on the recent tourism trends and real estate dynamics in the contexts under analysis. In Sect. 4 the conclusions of the study and future developments are discussed.

3 Comparative Analysis Across Three Levels of Tourism Maturity

To investigate the mechanisms through which tourism interacts with the real estate market and the urban tissue, the current research proposes a comparative approach based on the analysis of urban contexts characterized by different levels of tourism maturity, allowing for the observation of both emerging phases and consolidated situations in the relationship between tourist flows and real estate transformations. In this perspective and in Italian territory, the cities of Bari, Perugia, and Venice represent emblematic cases: Bari as an emerging tourism context, experiencing rapid growth but not yet associated

with structural overtourism; Perugia as an example of moderate tourism pressure, characterized by a more balanced temporal distribution of flows and urban management also supported by the recent introduction of innovative digital tools; and Venice as a scenario of advanced overtourism, where visitor concentration has produced structural effects on the real estate market and social fabric.

Between 2015 and 2024, there is an expected increase in the number of tourists due to improvements in the airport infrastructure and lower costs of air travel. The growth will be characterized by a higher proportion of foreign tourists and seasonality, particularly during spring and summer. However, cultural richness can partially compensate for the negative impact [1]. Combining the data from the OMI and ISTAT databases reveals stable property value but some spatial disparities. Central areas demonstrate greater resilience in terms of their ability to withstand fluctuations in the market, whereas peripheral territories are susceptible to economic cycles. Therefore, the emergence of short-term rentals and other forms of accommodation represents the gradual increase in profit-oriented property management without massive depopulation and congestion issues [6, 8].

On the contrary, Perugia operates within a tourism environment that does not experience strong seasonality. Universities and various cultural events distribute tourists throughout the year. Accommodation facilities remain small-scale, and the increase in non-hotel units does not result in substantial changes in urban supply, preserving residential functions and limiting effects on the real estate market [2]. The case of Perugia is particularly illustrative, as the Municipality has recently implemented an Urban Digital Twin, which is a digital model that enables the prospective assessment of the impacts of planning decisions and policy interventions on the urban territory; it provides an effective tool to support sustainable urban management and guide the monitoring of ongoing transformations [13].

Venice, instead, represents the case in which the historically high overlap of tourist flows, and limited real estate availability have generated structural transformations of the urban tissue, with systematic conversion of residential properties into tourist units, polarization of property values, increased tourism profitability, and a significant reduction in the stable resident population, constituting a consolidated model of overtourism [9]. This scenario has necessitated public tourism management policies, such as regulation of daily flows, daily visitor tax, limits on the conversion of residential properties, and digital monitoring systems, highlighting how urban governance integrated with advanced tools represents a strategic element for the sustainable management of tourism pressure and the mitigation of negative effects on the real estate market and social fabric, in this case, more as a monitoring tool rather than with a predictive function.

The comparison of the three urban contexts allows for the delineation of a continuum of tourism maturity: from the emerging tourism of Bari, where flows begin to affect real estate dynamics without generating structural imbalances; to the moderate model of Perugia, with contained pressure, balanced temporal distribution of visitors, and a stable real estate market; and finally to the critical situation of Venice, where prolonged exposure to intense tourist flows has consolidated a structural relationship between tourism and real estate valorization, with profound implications for residential function, social sustainability, and urban planning. This comparative analysis suggests

that tourism should be seen as dynamic, multidimensional driver, whose impact on urban real estate markets and spatial organization is influenced by the intensity of visitor flows, seasonal variations, spatial patterns of tourism, demographic characteristics of the resident population, and the effectiveness of urban governance. The approach provides a conceptual framework that can guide the development of proactive management strategies and support sustainable urban tourism planning.

3.1 Data and Methods

To compare the real estate market and the tourism sector in the three selected cities - Bari, Perugia, and Venice - a comparative analysis has been conducted using variables related to both property values and urban tourism dynamics over the period 2019–2024. The temporal range of this study (2019–2024) is based on both data availability and analytical relevance. Specifically, 2019 has been selected as the baseline year since it represents the last full period preceding the onset of the COVID-19 pandemic, which generated widespread disturbances and structural changes across all sectors. The year 2024 has been chosen as the upper bound because, at the time of analysis, data for the second semester of the 2025 OMI quotations were not yet available; consequently, in order to ensure consistency over complete annual observations, the most recent fully available year has been adopted. The decision not to extend the analysis further back in time reflects the intention to capture recent dynamics associated with emerging tourism trends, which have become particularly relevant in the post-pandemic context. Future research could extend the temporal horizon to a full decade and incorporate the selected variables into an econometric model enriched with additional contextual factors—such as climate conditions, service provision, and demographic structure—in order to more comprehensively assess the influence of local characteristics, including tourism vocation, on real estate market values.

Real estate variables have been derived from residential property price quotations per-square-meter published by the OMI of the Italian Revenue Agency, referring to the second semester of 2019 and 2024 [14]. The analysis considered the average selling and rental values across homogeneous urban zones and is restricted to residential properties in normal conservation conditions in order to ensure comparability across the three case studies. Specifically, for each municipality, a central area and a peripheral area have been identified.

For the tourism dimension, official data from ISTAT on tourist flows in accommodation establishments have been used, focusing on the indicators of arrivals and overnight stays for the years 2019 and 2024, disaggregated by accommodation type (hotel and non-hotel sectors) [15]. These variables enable to verify the intensity and evolution of tourism demand in the three municipalities. In addition, the average length of stay (calculated as the ratio between overnight stays and arrivals) has been derived to highlight structural differences in tourism patterns and to relate these dynamics to the evolution of OMI real estate price quotations.

3.2 Comparative Analysis of Tourism and Real Estate in the Three Cities

3.2.1 Trends in Real Estate Prices

In the case of Bari, real estate price data indicate various dynamics between the historic center (B10 OMI zone) and peripheral areas (D1 OMI zone). In the center, sales values increased slightly from €2,175/m^2 in 2019 to €2,200/m^2 in 2024 (+€25/m^2; +1.15%), whereas peripheral zones showed a notable decline from €1.600/m^2 to €1,450/m^2 (−€150/m^2; − 9.38%). Rental prices in the center rose moderately from €7.1/m^2 to €7.4/m^2 (+4.2%), while peripheral rents stayed stable at €5.25/m^2. These findings indicate a relatively balanced market in the central area of Bari, set against a contraction in peripheral zones, and suggest that rental prices face limited dynamism, consistent with a market in equilibrium and without significant structural changes.

In Perugia, the historic center (B1 OMI zone) recorded a substantial decline in sale values from €1,500/m^2 to €1,275/m^2 (−15%), while peripheral areas (D1 OMI zone) experienced a more moderate decrease from €1,250/m^2 to €1,145/m^2 (−8.4%). Conversely, rental prices increased significantly, particularly in the center, rising from €5.65/m^2 to €7.35/m^2 (+30.1%), whereas peripheral rents grew modestly from €5.6/m^2 to €5.8/m^2 (+3.6%). These results suggest that declining property sale values may coexist with sustained rental demand, indicating a possible reallocation in residential demand towards the rental segment.

In Venice, the historic center (San Marco, B24 OMI zone) registered a slight increase in sales prices from €4,700/m^2 to €4,750/m^2 (+1.06%), a trend also observed in the suburban area of Mestre Centro (E23 OMI zone). Regarding rental values, both central and suburban areas show minor declines (−3.57% and −9.37%, respectively). Overall, Venice maintains significantly higher price levels compared to the other cities, with stable sale prices and a slight contraction in rental rates, particularly in peripheral zones.

3.2.2 Trends in Tourist Flows

In Bari, total tourist arrivals increased from 1,192,991 in 2019 to 1,556,312 in 2024 (+30.4%). By comparison, Perugia recorded 2,037,508 arrivals in 2019, rising to 2,234,351 (+9.7%), while Venice registered 9,979,780 arrivals in 2019, increasing to 10,664,823 (+6.9%). Overnight stays exhibited heterogeneous growth patterns: Bari increased from 2,688,879 to 3,612,174 (+34.3%), Perugia from 5,057,919 to 5,824,138 (+15.1%), and Venice from 37,951,808 to 38,843,559 (+2.3%).

Average length of stay, calculated as the ratio between overnight stays and arrivals, further highlights substantial differences. In 2019, it was 2.25 nights in Bari, 2.48 nights in Perugia, and 3.8 nights in Venice; by 2024, these values reached 2.32, 2.61, and 3.64 nights respectively, indicating a slight decline in Venice, a moderate increase in Perugia and relative stability in Bari.

A disaggregation by accommodation type reveals differentiated dynamics. In Bari, hotel arrivals declined slightly (−2.6%), while non-hotel arrivals more than doubled (+124%), with overnight stays showing a similar trend (+2.6% in hotels compared to + 108% in non-hotel accommodations). Perugia showed more balanced growth, with hotel and non-hotel arrivals increasing by +4% and +20%, respectively, and overnight stays by +15% in both sectors. Venice presented a decline in hotel activity (−4.7% arrivals; −6.9% overnight stays) but an increase in the non-hotel sector (+25% arrivals; +8.8% overnight stays). These patterns propose three distinct tourism configurations: Bari is

in a phase of rapid expansion driven by non-hotel accommodations; Perugia shows moderate growth with spatially balanced distribution; Venice reveals consolidation with high absolute volumes and internal reallocation toward non-hotel services.

3.2.3 Comparative Analysis of the Three Municipalities

A joint analysis of OMI real estate data and ISTAT tourism statistics shows differentiated interactions between tourism dynamics and property markets. Bari presents the strongest tourist growth between 2019 and 2024 (+30.4% arrivals; +34.3% overnight stays); nevertheless, this expansion has not caused significant increases in sales values, which remain stable in the center (+1.15%) and decline in peripheral areas (−9.38%). Rental growth in central Bari (+4.2%) is modest relative to tourism development, indicating an early stage of transformation in which increased flows have not yet produced structural effects on property values.

In Perugia, reasonable tourism growth (+9.7% arrivals; +15.1% overnight stays) coincides with pronounced contraction in central property sales prices (–15%) and moderate peripheral declines (−8.4%). Conversely, central rental values increased intensely (+30.1%), suggesting selective conversion of the housing market in response to moderate but growing tourist pressure.

Venice, with over 10 million arrivals and nearly 39 million overnight stays in 2024, exhibits very high absolute tourist volumes but a controlled growth (+6.9% arrivals; + 2.3% overnight stays), indicating a phase of consolidation rather than expansion. Real estate sale prices remain broadly stable (+1.06%), while rental values show a slight decline (−3.57% center; –9.37% suburban), suggesting a process of rental market normalization. The average length of stay further highlights these differences, with Venice recording the highest values (3.64 nights), followed by Perugia (2.61 nights) and Bari the lowest (2.32 nights).

The results allow the identification of three different urban profiles. Bari is characterized by rapid tourism growth accompanied by limited and non-structural effects on the residential market. Perugia shows moderate tourism alongside declining property sale values and a marked increase in central rental prices, indicating a targeted restructuring of housing market dynamics. Venice represents a mature tourism system, with high visitor volumes, relatively stable sale prices, and a slight contraction in rental levels. Overall, these findings suggest that the relationship between tourism and real estate markets is non-linear and depends on the level of urban maturity, the structure of local housing demand and the stage of tourism development. In cities where tourism is still expanding under relatively balanced conditions, real estate markets tend to grow together with visitor demand. Conversely, in highly saturated contexts affected by overtourism, rental markets may contract despite stable or increasing tourist flows. These results align with existing empirical literature suggesting that the impact of tourism on real estate dynamics is contingent, context-specific and mediated by structural characteristics of urban systems, including their development stage and housing demand composition [16, 17].

Figure 1 illustrates these trends: Bari shows the strongest growth in arrivals and overnight stays; Perugia displays moderate but significant increase and Venice maintains high absolute volumes with limited percentage variation.

The differences between sales and rental markets illustrated in Fig. 2 are particularly pronounced in Perugia, whereas Bari shows a more balanced dynamic and Venice is characterized by stable sales alongside a slight decline in rental value.

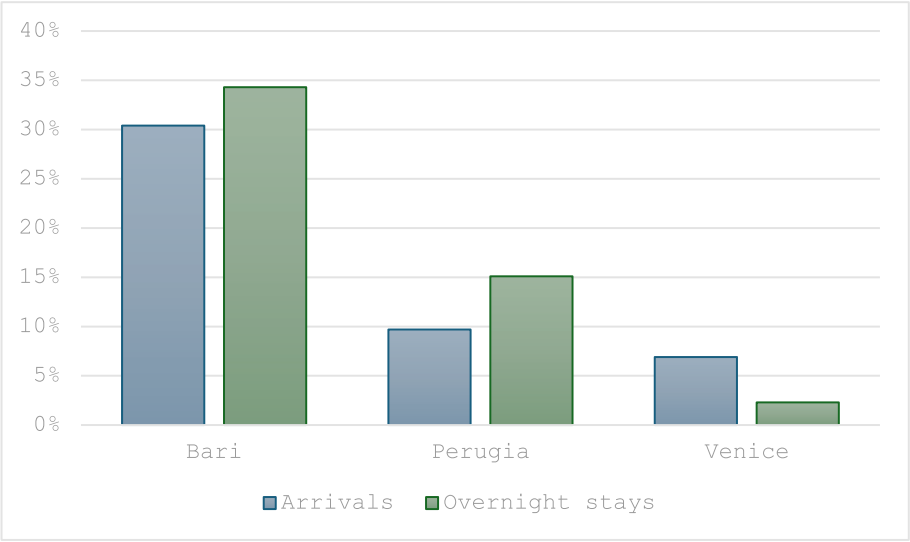

Fig. 1. Percentage variation in tourist arrivals and overnight stays (2019–2024)

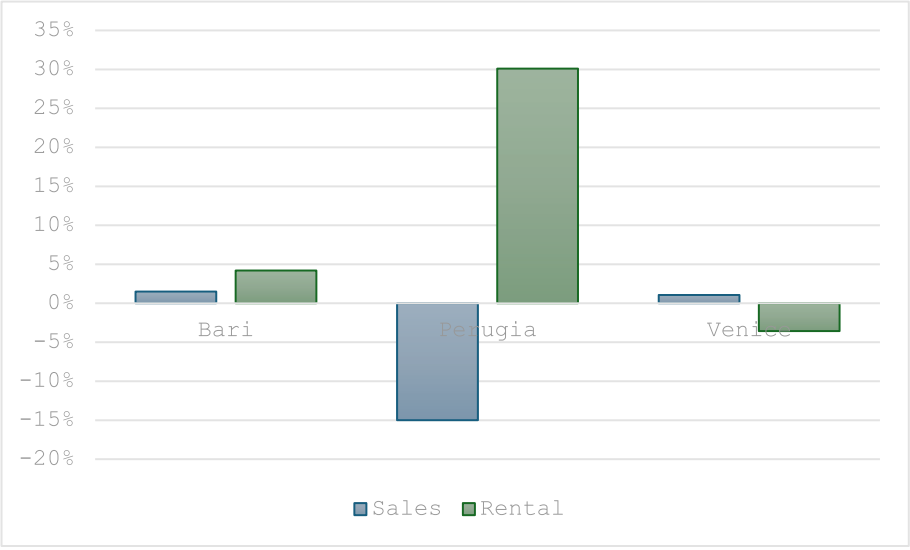

Fig. 2. Percentage variation in sales and rental values in central area (2019–2024)

Figure 3 compares central urban areas and shows how tourism expansion translates differently across property markets: strong rental growth in Perugia contrasts with moderate increases in Bari and slight declines in Venice, thereby visually supporting the differentiated urban configurations identified in the previous analysis.

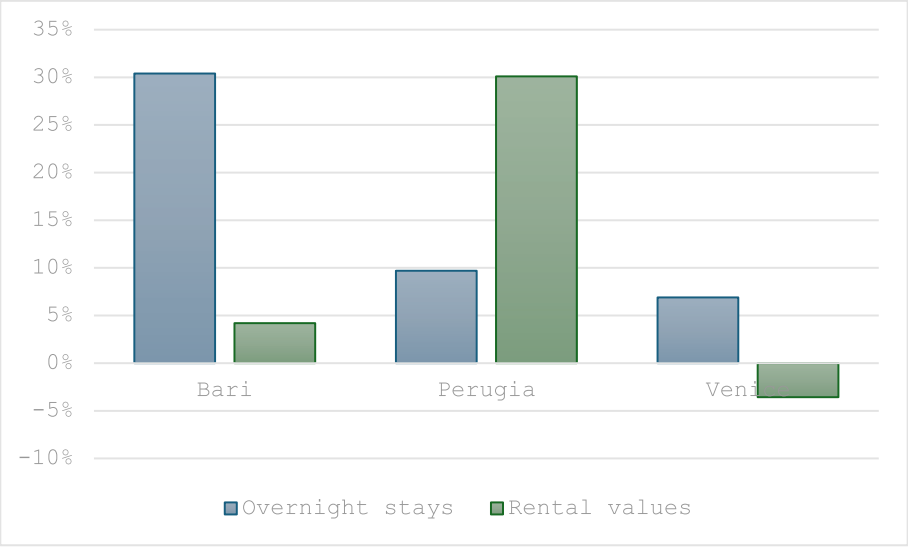

Fig. 3. Comparison of percentage variation in overnight stays and rental rates (2019–2024)

4 Conclusions and Future Developments

Analysis of the relationships between tourism and real estate in Bari, Perugia, and Venice for the period 2019–2024 reveals that there is no standardized response in the correlation between tourism and real estate. These relationships depend strongly on the level of tourism intensity, urban layout, and housing demand [18].

Tourism intensity does not appear to affect the price trends of residential properties in Bari significantly. An unprecedented increase in tourist flows in this location did not, at least in the immediate future, lead to a systematic rise in the sale prices of the real estate market. The data imply that an initial alignment of the two markets is observed, suggesting the intermediate stage of development: tourism increases, but distortions have not yet occurred.

In Perugia, a different trend prevails. In this case, the constant pressure from tourists combined with the relatively uniform distribution of tourists within the city results in declining prices for property purchases in the central parts of the city, whereas rents increase significantly. Such an imbalance indicates a change in the demand for properties towards rental housing. This may be attributed to the fact that both tourists and residents find rental housing more attractive than active property development.

Venice is an advanced tourist destination, characterized by very high visitor traffic. In this place, real estate prices have remained constant, whereas rents have slightly decreased. This trend demonstrates the constant strain exerted by tourists on real estate, resulting in diminishing accessibility and affordability for the local population. To attenuate this challenge, the local administration has introduced various measures, including regulating short-term accommodation and imposing a tourist tax. According to literature sources, such governmental actions are essential for mitigating the adverse consequences of overtourism and preventing locals from displacement. Evidence from other

European cities further indicates that tighter regulation of short-term rental markets can reduce accommodation pressure and control speculative behavior, although effective enforcement remains a critical issue [19]. Generally, governance approaches that combine regulatory instruments, stakeholder coordination, and long-term planning are increasingly perceived as necessary to rebalance tourism growth with the social and economic sustainability of urban housing systems.

Mutually, these findings confirm that increases in tourist demand do not generate uniform effects on real estate markets. Instead, results differ according to local territorial conditions, the structure of housing demand, and the current policy framework.

Nevertheless, the current study presents several limitations. First, the analysis is descriptive and comparative in nature and should be regarded as an initial step towards more advanced empirical research. Future studies could employ econometric models incorporating additional contextual variables—such as climatic conditions, service provision, infrastructure systems, and demographic characteristics—to more precisely quantify the impact of tourism on real estate markets and to better capture how the maturity of tourism development shapes this relationship. Second, extending the temporal scope would enable a more comprehensive understanding of the dynamics associated with varying levels of tourism intensity and their evolution across heterogeneous contexts over time. Finally, the study relies on a limited sample of three cities; although these cases reflect different tourism profiles, the restricted geographical scope limits the generalizability of the findings and underscores the need for a broader case selection in future research.

Additionally, future research could further explore the role of digital innovation in supporting urban management processes. In this regard, the Urban Digital Twin could be an instrument capable of integrating forecasting and monitoring functions. For instance, in a context such as Perugia, it could support local decision-makers in anticipating the potential effects of planning choices and tourism-driven changes on housing dynamics, promoting more well-considered and proactive interventions. In extremely saturated destinations like Venice, the same tool could instead function as a simultaneous monitoring system, assessing the success of regulatory measures.

These harmonizing applications focus on the potential of innovative technologies to improve policy adaptability, align tourism development with local housing needs, and reduce the difficult consequences associated with high tourism pressure. In this sense, they reveal how digital technologies can be incorporated into urban governance models to support both anticipatory analysis and ex-post evaluation.

In Italy, initial applications of Urban Digital Twins are evolving through pilot initiatives in some cities as Bologna, Perugia, Parma, and Genoa. By allowing simulation and continuous observation of tourist demand, real estate fluctuations, and infrastructural capacity, these technologies may contribute to defining more effective governance interventions, identifying and addressing emerging pressures in cities before they evolve into structural imbalances.

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