# Regulatory Divergence and Operational Market Structure in Short-Term Rentals: A Comparative Analysis of Rome and Vienna

David Coy-Mesa[1(✉)], Mary Josefina Urdaneta[2], Gustavo Morales-Alonso[1], and Yilsy Nuñez-Guerrero[1]

[1] Department of Organization Engineering, Business Administration and Statistics, Universidad Politécnica de Madrid, C. de José Gutiérrez Abascal 2, 28006 Madrid, Spain
david.coy@upm.es

[2] Faculty of Economic and Social Sciences, University of Zulia, Maracaibo, Venezuela

**Abstract.** The expansion of short-term rentals industry reflects a broader transformation in how urban housing is valued and distributed, one in which digital platforms have played an active and challenged role in redefining residential property as an investment asset. Given these shifts, European cities have responded with different regulatory approaches. Yet, the structural consequences of these decisions are still not clear. This research focuses on modelling the heterogeneity of the markets in Rome and Vienna using logistic regression, to evaluate how different regulatory rules shape the housing market and its structural configuration. The results show that the model demonstrates solid discriminatory power, with an AUC-ROC (Area Under the Curve/Receiver Operating Characteristic) of 0.8030 and an overall accuracy of 70.7%, confirming that the two capitals exhibit structurally distinguishable market configurations even under assumptions of linearity. Among all variables tested, accommodation typology stands out as the sharpest dividing line between the two markets, one that effectively encodes, in categorical form, the institutional gap between Italy's light-touch registration system and Vienna's land-use-based restrictions. Specifically, categories such as pensions, boutique hotels, and serviced apartments act as nearly definitive indicators of Vienna's regulated market. On the other hand, in the Roman market, holiday homes and private residences are the accommodations that best characterise their least restrictive regulation. This shows that regulatory frameworks leave their mark on market configurations. It is also observed that the model has limitations when analysing nonlinear variables such as the professionalization of hosts and spatial concentration, which leads us to highlight the need to incorporate complementary approaches. These findings reinforce the belief that regulatory norms are actions that actively shape the spatial and operational logic of platform-mediated housing markets.

**Keywords:** Sharing economy · Short-term rentals · Regulatory frameworks · Urban housing markets · Logistic Regression · Urban housing regulation

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2027
O. Gervasi et al. (Eds.): ICCSA 2026 Workshops, LNCS 16765, pp. 298–309, 2027.
https://doi.org/10.1007/978-3-032-30536-7_19

## 1 Introduction

The sharing economy has recently become an influential global model, altering economic activities, optimising resource utilisation, and generating substantial structural change [1, 2]. In this context, platforms that allow individuals to offer short-term stays in privately owned dwellings, typically described as peer-to-peer (P2P) or home-sharing accommodation, have gained a central role within the tourism lodging market [3]. This rapid expansion is reflected in recent European Union statistics: in 2025, the total number of tourist nights in the EU, including hotels and online booking platforms, reached an all-time high of approximately 3.1 billion, consolidating the recovery following the health crisis and positioning Italy among the continent's most dynamic markets [4, 5].

However, this growth has given rise to dynamics associated with so-called "platform capitalism," characterized by significant professionalization and concentration of income. Empirical work consistently shows that short-term rental (STR) markets are strongly concentrated. Reported Gini coefficients close to 0.68 imply that a small set of professional hosts captures most of the income [6]. This pattern becomes even more pronounced in cities with a high density of cultural sites. In Rome, STR growth is linked to land-use change and to a shift in how housing is valued, with proximity to cultural attractions increasingly priced in as an investment attribute [7]. Vienna follows a different pattern: demand for platform-mediated accommodation appears relatively price inelastic, suggesting scope to raise revenues via tariff changes [8].

This context has stimulated a substantial and multidimensional debate. Proponents argue that it accesses to tourism and allows middle-income households to generate income from underused housing assets. Recent literature, however, links STR growth to gentrification and touristification [9], with measurable effects on the socio-economic profile of historic areas. STR expansion is also associated with a contraction in the long-term rental supply, upward pressure on rents, and reduced affordability for residents [10–12].

This is often discussed within the broader financialization of housing [5], in which dwellings are increasingly treated as investment vehicles rather than as homes. Within this framing, short-term holiday rentals are now a material urban issue: platforms have enabled rapid scaling, while the resulting market reconfigures residential patterns, sharpens place-based competition, and creates new demands for local regulation [4, 5, 7].

In response to these challenges, European cities have implemented regulatory measures to balance economic activity with broader public interests, significantly shaping the composition of supply as well as its spatial distribution and degree of professionalisation [4, 13].

However, local responses remain fragmented, and a lack of transparency in data hinders the effective enforcement of regulations. Furthermore, the shift by operators toward medium-term rentals poses new challenges for urban affordability. In this regard, the comparison between Rome and Vienna is particularly relevant, as both cities exhibit contrasting regulatory and morphological structures, allowing us to observe how institutional arrangements are reflected in the empirical structure of tourism markets. In addition, there is a gap in the comparative research evaluating how differing regulatory frameworks influence the predictive power of supervised learning architectures. While

Rome is grappling with overcrowding in its historic centre, which is driving the adoption of strict zoning regulations, Vienna operates under a regulatory framework aimed at protecting its housing stock through strict limits on construction days and urban planning controls [4, 13]. Consequently, this research is warranted by the lack of international comparative studies that analyse the impact of legal frameworks on market inequality and centralization.

Accordingly, the following research question is formulated: ¿To what extent do the various regulatory regimes applied to short-term rentals influence rental market prices and the structure of the residential supply in Rome and Vienna?

The objective of this study is to determine how different regulatory regimes influence the rental market and the structural configuration of housing in the cities of Rome and Vienna. The study is spatially limited to these two capitals because they represent contrasting market dynamics and regulatory structures.

To address the research objective, two hypotheses are proposed:

H1: In Vienna, the physical attributes of housing have a greater ability to differentiate the market because regulation causes intrinsic value to be a more significant factor.

H2: Regulatory regimes produce structurally distinct market configurations.

The study begins with an introduction, followed by a review of the general theoretical framework relevant to the topic under study. Next, the methodology is presented, followed by the research findings, and finally, discussion and conclusions.

## 2 Theoretical Framework

Short-term rentals trace their roots to the sharing economy, an arrangement built around putting idle assets to productive use through digital intermediaries. This approach relies on individuals' willingness to offer idle goods or services through digital intermediaries, which has expanded the ways in which production, distribution, and consumption take place in urban settings [7]. Scholars broadly concur that the sharing economy substitutes access for ownership as its organising principle, although each author emphasizes different aspects. Using the most cited definition of the model, he describes it as follows: "a new form of economic activity whose main characteristic is peer-to-peer exchange, in which individuals share surplus resources, reducing the need for property and avoiding redundant production." [10]. What makes this approach interesting is efficiency, where the emphasis is on the production of fewer identical goods and less waste of resources. Also, five essential elements that underpin the collaborative economy have been identified: shared resources, distributed networks, trust and reputation mechanisms, the existence of an intermediate platform, and forms of shared governance, with a socio-technical approach [14].

Other authors present the collaborative economy as a catch-all that integrates various practices, organizational models, and economic justifications in various sectors [15–17]. As a result, the environment has been increasingly adapting to the professionalization of supply and the growing concentration of income, which has given rise to platform capitalism. In this context, various studies show that short-term rental (STR) markets have ceased to function as spaces of equitable exchange and have become structures with great inequalities, where a small number of professional hosts mainly benefit [7,

10]. This process shows the consolidation of a market dynamic typical of mature digital platforms, where professional management, investment capacity, and algorithmic visibility generate advantages that are difficult for occasional hosts to copy. Thus, a vision of the complexity of the phenomenon can be appreciated, which serves as a basis for analysing how regulatory frameworks seek to act on the urban, social, and economic impacts derived from the expansion of STRs. In accordance with what has already been stated, a review is presented below that aims to compare the regulations in force in Rome and Vienna, where opposing regulatory approaches to the same problem can be observed. In Europe, the Services Directive (2006) has been tasked with defining regulatory frameworks, along with the E-Commerce Directive (2000), which has been renewed by the Digital Services Act (DSA). In judgments of 2024, the shortage of rental housing is addressed and qualified as a "primary reason in the public interest" by the CJEU in joint cases C-724/18 and C-727/18 (Cali Apartments. In a recent Regulation (EU) 2024/1028, it is sought to harmonize the collection and exchange of data to improve transparency and allow evidence-based governance [18, 19].

We have been able to observe that the Italian regulatory framework has a mix of national regulations and municipal competencies aimed at strengthening traceability, tourism safety, and tax compliance. Recently implemented reforms have made the National Identification Code (CIN) and other registration systems mandatory, allowing for more widespread use of residential properties for tourism purposes. It presents greater flexibility for the use of residential properties for tourism. Giving the authorities the ability to supervise, with the requirement of the identification of each accommodation, and in this way, facilitate fiscal and administrative supervision [20]. By contrast, Vienna operates under a more restrictive regime based on the Wiener Bauordnung, which has redefined residential use and limits short-term rentals in residential areas. In a 2024 reform, a limit of 90 days per year was introduced with no exceptions; anything above that threshold requires a special business permit and carries significantly harsher penalties to prevent the conversion of residential properties into tourist accommodation [21, 22].

## 3 Methodology

In order to answer the research question, open data from Inside Airbnb [23] has been used, selecting two European cities: Rome and Vienna, that differ in their regulation regarding STR, which provided a final dataset of 126,621 observations after cleaning and removing extreme values. Data were extracted from three representative periods of the different seasons: low season (March 2025), high season (June 2025), and end of the high season (September 2025). With this, the effect of seasonality was incorporated into the analysis. Therefore, the period analysed includes the implementation of the 90-day limit for short-term rentals in Vienna (July 2024), reinforcing the importance of differences between seasons and allowing for a deeper examination of structural differences between urban markets. A quantitative approach with a binary logistic regression model has been used. To adapt the data, a rigorous data cleaning and quality control process was carried out, guaranteeing the consistency, integrity, and suitability of the data. Also, compliance with the regression assumptions and the absence of multicollinearity were

verified through the analysis of the descriptive statistics of the variables, and no violations that compromised the validity of the results were detected. Then, the variables that required it were transformed. The model was carried out using City as the objective variable and categorizing it as follows (Rome = 0, Vienna = 1). Numeric independent variables are standardized using StandardScaler, and categorical independent variables are encoded using OneHotEncoder, with drop = "first". Class imbalance is addressed using class_weight = "balanced". The model was trained with L2 regularization and the LBFGS solver. The C hyperparameter was optimized using GridSearchCV with three-way cross-validation. To evaluate performance, threshold-independent discrimination Area Under the Receiver Operating Characteristic Curve (ROC-AUC), class classification metrics, and detailed error analysis were combined through the confusion matrix. The results are presented as standardized coefficients and odds ratios.

## 4 Results

In this section, we present the findings of the Logistic Regression model trained with the city as the dependent variable, i.e., Rome (0) and Vienna (1). The predictor set is made up of six numerical variables: accommodates, availability 365, host listings, yearly reviews, distance to city centre, and log price; and three categorical variables: room type, property type, and period season. Together, these variables allow the model to probe whether Rome and Vienna are linearly separable and which characteristics of the advertisements contain the most relevant regulatory signal.

**Table 1.** Optimal model configuration

| Parameter | Optimal Value | Notes |
|---|---|---|
| C (regularisation) | 100 | Weak regularisation, sufficient data to prevent overfitting |
| Penalty | L2 (Ridge) | Compatible with the L-BFGS solver |
| Best CV AUC-ROC | 0.8079 | Model tuning based on three-fold cross-validation (GridSearchCV) |
| Solver | with parameters optimised through L-BFGS | Optimal for large datasets with L2 regularisation |
| Scaling of numerical variables | StandardScaler | Necessary to compare coefficients across variables |

For the implementation, we use scikit-learn. Three decisions shaped the configuration: first, for class imbalance (76% Rome, 24% Vienna; ratio 3.16:1), it was corrected by balanced weighting rather than resampling; second, all numerical predictors were scaled to a uniform range before adjusting; and third, categorical variables were digitized with

a reference category removed to avoid multicollinearity. The solver with parameters optimised through L-BFGS with regularization L2 (max_iter = 1,000) and the optimal regularization parameter C was identified by three-fold cross-validation (GridSearchCV) over {0.01; 0.1; 1; 10; 100}. Table 1 presents the resulting configuration.

Table 2 shows the model performance metrics for the test suite (n = 25,325). The model achieves an AUC–ROC of 0.8030 and an overall accuracy of 70.7%, placing it within an acceptable range (between 0.80 and 0.90) on the standard discrimination scale.

**Table 2.** Performance metrics

| Class | Precision | Recall | F1-score | Support | AUC-ROC / Acc. (Accuracy) |
|---|---|---|---|---|---|
| **0—Rome** | 0,90 | 0,69 | 0,78 | 19.239 | AUC = 0,8030 |
| **1—Vienna** | 0,44 | 0,76 | 0,56 | 6.086 | Acc. = 0,707 |
| **Accuracy** | | | 0,71 | 25.325 | |
| Macro avg.( average) | 0,67 | 0,73 | 0,67 | 25.325 | |
| Weighted avg. (average) | 0,79 | 0,71 | 0,73 | 25.325 | |

The class-wise analysis reveals an asymmetric performance pattern that is diagnostically informative about the nature of both markets. For the Rome class, the model achieves high accuracy (0.90) when predicting the city of Rome; it is correct in 90% of cases, but low in the Recall (0.69): misclassifying 5,957 Roman listings as Vienna se (31% of the class). On the other hand, for the Vienna class, the pattern is reversed: the Recall is acceptable (0.76), but the accuracy drops to 0.44. This implies that, for every correctly identified Vienna listing, the model produces 1.3 Vienna se false positives (i.e., Roman listings misclassified as Viennese).

Figure 1 presents the ROC curve of the model. With an area under the curve (0.8030) that exceeds the threshold of 0.80. This indicates that the linear model distributes its correct rankings more evenly across the entire range, reflecting lower confidence in assigning class membership scores and suggesting that a substantial part of market differentiation operates through mechanisms that a linear decision function cannot fully resolve.

With regard to the relative homogeneity of the markets, Table 3 presents the model's confusion matrix.

The most significant finding observed in the confusion matrix is the error rate for the Rome class: 5,957 Rome listings (31.0%) are classified as Vienna listings. This indicates that the operational signature of the Roman market, dominated by nonlinear relationships between distance from the city centre, price levels, and host scale, cannot be adequately captured by a linear decision function in log-odds space. For the Vienna class, the model makes 1,457 errors (23.9%), classifying this proportion of Viennese listings as Roman. This shows that these listings correspond to the sub-segment of professional Viennese operators with exceptional permits, whose operational profile is characterized

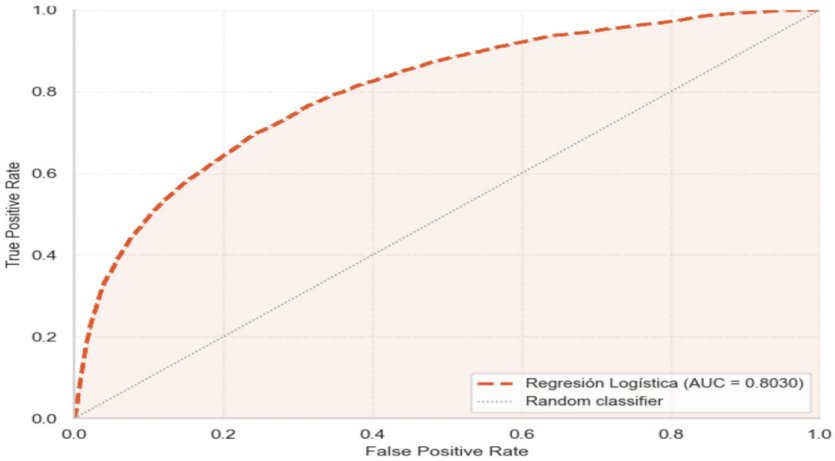



**Fig. 1.** ROC curve (AUC = 0.8030).

**Table 3.** Confusion matrix detail

| | Pred. Rome | Pred. Vienna | Total actual | Recall |
|---|---|---|---|---|
| Actual Rome | 13,282 | 5,957 | 19,239 | 69.0% |
| Actual Vienna | 1,457 | 4,629 | 6,086 | 76.1% |
| Total predicted | 14,739 | 10,586 | | Acc. 70.7% |

by high availability, large scale, and price levels within the Roman range, which becomes operationally indistinguishable from the Roman market even for the linear model.

This finding is consistent with Hypothesis H2 and provides direct empirical evidence of a regulation-induced dual market structure within Vienna, where the majority of hosts operate within the 90-day limit with a distinctly Viennese profile, and a minority of large-scale operators with exceptional permits are operationally indistinguishable from the Roman market based on the available characteristics.

Table 4 below presents the twenty standardized coefficients with the highest absolute values. It shows the linear associations with each city through the standardized numerical variables (mean = 0, SD = 1), where coefficients are directly comparable by magnitude. In the model, Vienna represents the positive class (index 1), so positive values signal greater odds of Vienna, while negative ones point to higher odds of Rome in log-odds terms.

Table 4 presents the 20 highest coefficients in absolute value, showing that they correspond exclusively to property type, which indicates that the type of accommodation alone is sufficient to discriminate between the short-term rental markets of Rome and Vienna. The positive coefficients are dominated by Viennese guesthouses, hotel rooms, and serviced apartments, which reflect the strict delimitation of the Wiener Bauordnung between residential and commercial tourist use, this being a distinction absent in Rome.

**Table 4.** Top 20 standardised coefficients (positive class: Vienna)

| Variable | Coefficient | exp(β) - Odds Ratio | Direction |
|---|---|---|---|
| Property type - Private room in pension | +11,819 | 136.120 | Vienna |
| Property type - Private room in vacation home | −7,370 | 0,001 | Rome |
| Property type - Room in bed and breakfast | −5,472 | 0,004 | Rome |
| Property type - Shared room in home | −3,521 | 0,030 | Rome |
| Room type - Hotel room | −3,500 | 0,030 | Rome |
| Property type - Private room in private home | −3,440 | 0,032 | Rome |
| Property type - Entire vacation home | −3,435 | 0,032 | Rome |
| Property type - Private room in camper | +3,416 | 30,43 | Vienna |
| Property type - Room in hotel | +3,159 | 23,54 | Vienna |
| Property type - Camper/RV | −2,993 | 0,050 | Rome |
| Property type - Private room in cycladic house | +2,943 | 18,99 | Vienna |
| Room type - Private room | −2,934 | 0,053 | Rome |
| Property type - Shared room in hotel | +2,866 | 17,57 | Vienna |
| Property type - Shared room in guesthouse | −2,821 | 0,060 | Rome |
| Property type - Private room in nature lodge | +2,792 | 16,31 | Vienna |
| Property type - Entire cabin | −2,791 | 0,061 | Rome |
| Property type - Entire bungalow | +2,739 | 15,47 | Vienna |
| Property type - Room in boutique hotel | +2,688 | 14,69 | Vienna |
| Property type - Private room in hostel | +2,687 | 14,67 | Vienna |
| Property type - Room in serviced apartment | +2,556 | 12,89 | Vienna |

Negative coefficients, on the other hand, identify Roman private rooms in holiday homes, bed and breakfasts, shared rooms, and entire holiday homes, which corresponds to Italy's most permissive regulatory border between residences and tourist functions.

The clear separation in the probabilities observed at both extremes suggests an almost deterministic typological differentiation: accommodations belonging to these categories can be classified according to their city of origin with practically total precision, regardless of the rest of the variables. This provides direct evidence that regulatory frameworks generate structurally distinct typological configurations in short-term rental markets.

Figure 2 orders these coefficients from most negative to most positive, highlighting the asymmetry: Vienna's private room in pension exhibits the largest coefficient, followed by regulated commercial types; Rome displays a more heterogeneous profile with private room in vacation home and bed-and-breakfast rooms leading. The qualitative regulatory divergence between the cities is thus empirically manifest in their typological compositions.

Each hypothesis is examined below in light of the logistic model's results, drawing on both the AUC and classification metrics and the standardised coefficients.

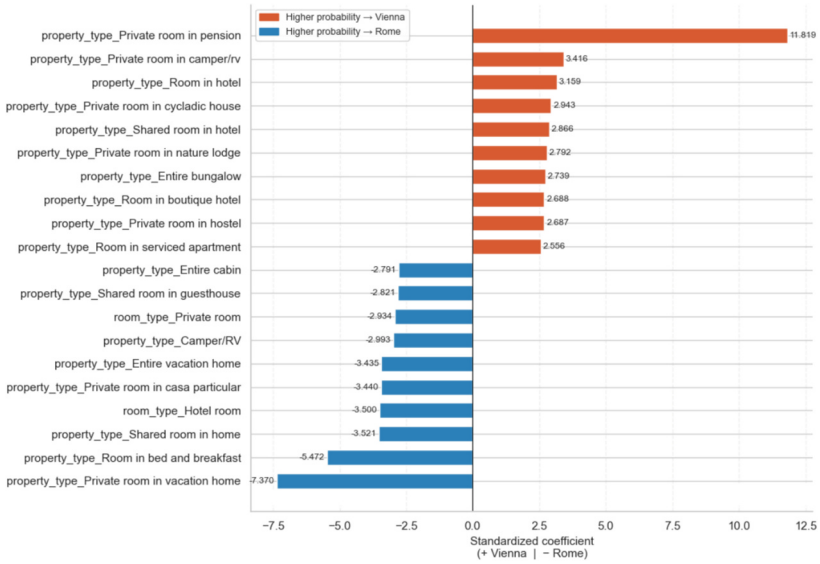



**Fig. 2.** Top 20 standardised coefficients

Table 5 summarises the hypothesis testing results derived from the logistic regression model, contrasting the empirical evidence obtained against the theoretical predictions and identifying the specific limitations of the linear framework for each dimension of analysis.

**Table 5.** Summary of hypothesis testing

| H | Group | Evidence in LR | Limitation of the linear model |
|---|---|---|---|
| H1 | Physical attributes | All top 20 coefficients belong to property type; Viennese and Roman typologies are linearly separable | Well, captured by this model, categorical relationships are linearly separable |
| H2 | Structural distinctiveness | AUC = 0.8030 surpasses the 0.80 threshold; 1,457 Viennese listings identified with a Roman operational profile | Non-linear dynamics and threshold effects limit the model's full discriminant capacity |

The LR confirms H1 with the most direct evidence in the result set: all twenty coefficients with the largest absolute magnitudes belong to property type, demonstrating that accommodation typology is the only linearly separable discriminating mechanism available to the model. The typologies associated with Vienna, pensions, camper/rv

accommodations, boutique hotels, bungalows, and nature lodges correspond to categories governed by their own legal regime under the Wiener Bauordnung, whose legal distinction between ordinary residential use and authorised commercial tourist use generates a quantifiable typological diversity that the LR captures with high reliability. The typologies associated with Rome, vacation homes, bed-and-breakfasts, private homes, and shared rooms in private dwellings reflect the greater informality and heterogeneity of the unregulated market, where the permeable boundary between uses produces categories that are practically non-existent in Vienna.

The LR achieves an AUC of 0.8030, surpassing the threshold established for H2 ($>0.80$) by a narrow margin. This confirms that the two markets are structurally distinguishable even under the assumption of linearity. Nevertheless, the model presents limitations in capturing the full range of differentiation mechanisms, given that certain market dimensions, such as host professionalisation and the spatial gradient of supply, operate through non-linear dynamics and threshold effects that a linear decision function cannot fully resolve. With regard to the dual market, the model identifies 1,457 Viennese listings with a Roman operational profile (23.9%), confirming the existence of a subsegment of professional operators who, having obtained exceptional permits, are operationally indistinguishable from the Roman market on the basis of the available characteristics.

## 5 Discussion and Conclusions

The main contribution of the logistic regression model is in its signed coefficients, which allow the relationship between the types of accommodation and each city to be clearly identified. Negative values are almost exclusively associated with typical Rome categories, such as private rooms and holiday accommodation, reflecting greater flexibility between residential and tourist uses. On the other hand, accommodation such as hotels, guesthouses, and tourist apartments predominates in Vienna, in line with stricter regulation separating the two uses.

These patterns clearly reflect the regulatory frameworks of each city: Vienna's regulated business categories are virtually non-existent in Rome, while Rome's characteristic informal accommodations have no place in Vienna. This marked typological separation shows that regulation leaves a direct structural footprint on short-term rental markets.

Methodologically, the moderate performance of the model suggests that these differences are not explained only in a linear fashion. Much of the regulatory influence operates through more complex dynamics, such as interactions and nonlinear effects, which the model fails to fully capture. This implies that linear tools may underestimate the actual impact of regulation, highlighting the need for more advanced approaches in public policy analysis.

The analysis identifies three main limitations of the logistics model. First, the dataset does not include variables related to the reputation or professionalization of hosts, which makes it impossible to assess the weight of these factors in the model. Secondly, the elimination of a reference category in the categorical variables conditions the interpretation of the results, which must be understood in relative and not absolute terms. Finally, the

extremely high coefficient associated with pensions suggests an almost perfect separation, as this category is virtually exclusive to the Viennese market. This can generate numerical instability and could require a higher level of regularization.

The limitations identified relate to the integration of short-term rentals (STR) activity into land-use dynamics and the distribution of local economic interest. In the cities analysed, land use transcends its spatial dimension to shape an institutional filter that determines which houses are suitable for conversion to tourist use and the conditions under which such conversion is authorized. In a context where regulations facilitate the transition, properties tend to be reconverted more easily, accelerating the functional transformation of central neighbourhoods. This repurposing process can widen the gap in rental prices, increasing the incentive to change the use of properties and deepening the market segmentation.

Our logistic regression analysis of Rome and Vienna's short-term rental markets show that, the type of accommodation is the main differentiating factor in linear terms. The predominant categories in Vienna, such as hotels, guesthouses, and tourist apartments, are clearly associated with its stricter regulatory framework, while in Rome more flexible accommodations stand out, such as private rooms and bed and breakfasts. This difference generates an almost deterministic typological separation between the two markets.

Also, the model confirms the existence of structural differentiation, albeit with a moderate margin. The presence of a subset of Viennese accommodations classified as Roman suggests the existence of a more professionalized segment that operates similarly in both contexts. Finally, the limitations of the model provide relevant information. Their inability to capture aspects such as the professionalization of hosts or spatial effects shows that part of the regulatory influence responds to nonlinear dynamics that linear models fail to capture. This implies that the impact of regulation may be underestimated, justifying the need to employ more advanced approaches in analysis. In this line, future research should explore interpretable nonlinear models that allow better capturing of threshold effects and complex interactions between variables, while maintaining explanatory capacity.

**Attribution.** The content of the text has been prepared jointly by all the authors, who contribute in equal parts.

**Disclosure of Interests.** The authors declare that there are no conflicts of interest related to this article.

## References

1. Lutz, C., Newlands, G.: Consumer segmentation within the sharing economy: the case of Airbnb. J. Bus. Res. **88**, 187–196 (2018). https://doi.org/10.1016/j.jbusres.2018.03.019
2. Einav, L., Farronato, C., Levin, J.: Peer-to-Peer markets. Annu. Rev. Econom. **8**(2016), 615–635 (2016). https://doi.org/10.1146/annurev-economics-080315-015334
3. Adamiak, C., Szyda, B., Dubownik, A., García-Álvarez, D.: Airbnb offer in Spain—spatial analysis of the pattern and determinants of its distribution. ISPRS Int. J. Geoinf. **8**(3), 155 (2019). https://doi.org/10.3390/ijgi8030155
4. European Parliament: Alojamientos de corta duración: reglas para fomentar la transparencia (2025). https://doi.org/10.5153/sro.4071

5. Guarini, M.R., Sica, F., Segura-de-la-Cal, A., Núñez Guerrero, Y.: Understanding Airbnb supply in Rome: multivariate analysis of prices and accommodation patterns. In: Lecture Notes in Computer Science. Springer (2025)
6. Törnberg, P.: How sharing is the "sharing economy"? Evidence from 97 Airbnb markets. PLoS ONE **17**(4), e0266998 (2022). https://doi.org/10.1371/journal.pone.0266998
7. Guarini, M.R., Segura-de-la-Cal, A., Sica, F., Núñez-Guerrero, Y.: Heritage value and short-term rentals: spatial dynamics of Airbnb prices in Rome. Land (Basel). **15**(1), 77 (2026). https://doi.org/10.3390/land15010077
8. Gunter, U., Önder, I.: Determinants of Airbnb demand in Vienna and their implications for the traditional accommodation industry. Tour. Econ. **24**(3), 270–293 (2018). https://doi.org/10.1177/1354816617731196
9. Botsman, R., Rogers, R.: What's Mine Is Yours: The Rise of Collaborative Consumption. Harper Business, New York (2010)
10. Morales-Alonso, G., Núñez, Y.M.: Dragging on multilisting: the reason why home-sharing platforms make long-term rental prices increase and how to fix it. Technol. Forecast. Soc. Change **174**, 121297 (2022). https://doi.org/10.1016/j.techfore.2021.121297
11. Gant, C.: Holiday rentals: the new gentrification battlefront. Sociol. Res. Online **21**(3) (2016). https://doi.org/10.5153/sro.4071
12. Aalbers, M.B.: The variegated financialization of housing. Int. J. Urban Reg. Res. **41**(4), 542–554 (2017). https://doi.org/10.1111/1468-2427.12522
13. European Parliament and Council of the European Union, Regulation (EU) 2024/1028 of 11 April 2024 on the collection and sharing of data relating to short-term accommodation rental services and amending Regulation (EU) 2018/1724 (2024)
14. Tan, H., Su, T., Wu, X., Cheng, P., Zheng, T.: A sustainable rental price prediction model based on multimodal input and deep learning—evidence from Airbnb. Sustainability **16**(15), 6384 (2024). https://doi.org/10.3390/su16156384
15. Schor, J.: Debating the Sharing Economy, Great Transition Initiative (2014)
16. Sundararajan: The Sharing Economy, Market Economies, and Gift Economies (2016)
17. Daudigeos, A.T., Pinkse, J.: Promises and paradoxes of the sharing economy: an organizing framework. Technol. Forecast. Soc. Change **125**, 1–10 (2017). https://doi.org/10.1016/j.techfore.2017.07.006
18. Mata, Y.M.: Legal developments on short-term rental accommodations in the European Union (2025)
19. European Commission: The Digital Services Act. https://digital-strategy.ec.europa.eu/en/policies/digital-services-act. Accessed 11 Mar 2026
20. Ministero del Turismo (Repubblica Italiana), 'BDSR: pubblicato il decreto di interoperabilità tra la banca dati nazionale e le banche dati regionali e delle province autonome'. https://www.ministeroturismo.gov.it/bdsr-pubblicato-il-decreto-di-interoperabilita-tra-la-banca-dati-nazionale-delle-strutture-ricettive-e-degli-immobili-destinati-a-locazione-breve-o-per-finalita-turistiche-e-le-banche-dati-regionali/. Accessed 7 Mar 2026
21. Martianov, M.: Airbnb and the City: Exploring Causal Relationships Between Short-Term Rentals and Housing Market in Vienna. Central European University, Vienna (2025)
22. Austrian Federal Government: Vienna Building Code (Bauordnung für Wien). https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=LrW&Gesetzesnummer=20000006. Accessed 8 Mar 2026
23. Inside Airbnb: Inside Airbnb: Data on Airbnb listings and activity. https://insideairbnb.com/. Accessed 10 Mar 2026