HOST-RELATED FACTORS INFLUENCING AIRBNB PRICES IN RURAL AREAS

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Abstract

The advent of the sharing economy has transformed the travel and lodging industry, with Airbnb emerging as a prominent player in this revolution. While numerous studies have examined factors influencing Airbnb pricing in urban areas, this research endeavors to explore the determinants of Airbnb property prices in rural Lithuania, focusing on often-neglected host-related variables. Through a comprehensive analysis of host attributes, the research aims to provide insights into how hosts influence pricing decisions in these unique, often underrepresented contexts. Using data collected from Vilnius and Kaunas counties, Ordinary Least Squares (OLS) regression was employed to investigate the relationship between host characteristics and property prices. Findings challenge some conventional assumptions. Specifically, research shows that ratings of hosts or "Superhost" status had no significant effect on property pricing; the number of reviews was associated with lower property prices. Contrary to common expectations, the quality of host communication was not found to significantly influence pricing decisions. Strict property policies were also found near higher prices. Interesting results were found analyzing host gender influence on price - female hosts were found charging higher prices in Lithuanian rural areas. This research extends our understanding of Airbnb pricing dynamics and is invaluable for both hosts seeking to optimize their pricing strategies and travelers navigating unique geographical contexts.

Keywords: sharing economy, Airbnb pricing, host-related factors, rural properties in Airbnb.
JEL Codes: Z30, R15.

Introduction

The emergence of the Airbnb platform has revolutionized the landscape of the hospitality industry, providing travelers with an array of distinctive and often more cost-effective lodging options. While Airbnb listings have proliferated in urban metropolises, they have also made substantial inroads into rural and countryside regions. These scenic locales have garnered the favor of travelers in search of serenity, proximity to nature, and genuine, immersive experiences. Indeed, the year 2022 witnessed Airbnb secure its position as the fourth most downloaded travel application on mobile devices, amassing an impressive revenue of $8.4 billion (Statista, 2023).

Airbnb, operating within the realm of the sharing economy, lures customers through a plethora of advantages, one of the most prominent being the price within the platform (Zervas et al., 2017). The lower price phenomenon wields influence, not only on attracting guests but also on the competitive dynamics of the local hotel industry. Nonetheless, the determination of Airbnb prices is a multifaceted process, influenced by a diverse array of factors. Hosts must navigate this complexity to set rates that entice prospective guests while simultaneously ensuring profitability. For travelers, comprehending the determinants of Airbnb prices is invaluable for budgeting their trips.

As the body of research (Perez-Sanchez et al., 2018; Adina et al., 2022; Falk et al., 2019; Zhang et al., 2017; Gibbs et al., 2018) on this subject matter suggests, Airbnb pricing is predominantly governed by three distinct categories of factors: those related to the property, the property's location, and those associated with the host.

Scholars such as Moreno-Izquierdo et al. (2019) and Falk et al. (2019), who have delved into the realm of Airbnb pricing, have illuminated a significant skew in research focus, with the majority of studies centered on urban locations, often major cities. The few studies conducted in rural areas have underscored the marked variance in contextual factors and their influence on listing prices. Consequently, there emerges a compelling need to shift the analytical lens beyond urban contexts to explore the dynamics at play in rural settings.

The primary objective of this paper is to scrutinize the influence of host-related factors on Airbnb pricing in rural areas. This research endeavor will begin by establishing a robust theoretical foundation and drawing insights from existing works primarily centered on urban contexts. Subsequently, an econometric modeling approach, specifically Ordinary Least Squares (OLS) regression analysis, will be applied to quantify the significance and magnitude of various host-related factors' impact on pricing.

The structure of this paper is organized as follows: part two covers the theoretical view of the study, part three demonstrates the econometric model, variables, and data sources, part four provides a detailed discussion of the findings, and the final section offers concluding insights drawn from the analysis.

Theoretical background

The emergence of the sharing economy has ushered in a transformation in the global hospitality industry, with Airbnb at the forefront. Although considerable attention has been given to Airbnb's urban presence, its entry into rural areas deserves closer examination.

Airbnb's ubiquity extends beyond urban centers, reaching the serene landscapes of rural areas. Rural regions, known for their natural beauty, cultural richness, and tranquility, have become an enticing choice for Airbnb guests seeking unique and authentic experiences (Airbnb, 2021; Zhang et al., 2020).

One central aspect of Airbnb's presence in rural areas is its economic impact. Research has shown that Airbnb can invigorate local economies by boosting tourism-related spending and offering rural hosts an additional source of income. Nonetheless, concerns have arisen about Airbnb potentially contributing to elevated living costs and housing affordability issues in these regions (Oxford Economics, 2021; Strømmen-Bakhtiar et al., 2020).

Beyond economics, Airbnb's expansion into rural areas carries social and environmental consequences. The platform can enhance community engagement, cultural exchange, and cross-cultural understanding, as guests seek authentic experiences in rural settings (Gold, 2019; Strømmen-Bakhtiar et al., 2020; Caldicott, 2020). Additionally, Airbnb's impact on local environments and resources necessitates scrutiny, particularly in regions with delicate ecosystems (Ding, Niu, Choo, 2023).

Airbnb's presence in rural areas intersects with the ideals of sustainable tourism. The platform's offerings align with the desire for authentic and eco-friendly experiences, contributing to the sustainability of rural destinations. However, the balance between sustainable development and the potential for over-tourism and environmental strain must be carefully assessed (Midgett et al. 2018; Krouk and Almeida, 2021).

Local communities in rural areas are central stakeholders affected by Airbnb's presence. While the platform can boost income and employment opportunities for rural residents, it can also disrupt established social and cultural norms. Balancing economic benefits with the preservation of local identity remains a challenge for rural areas hosting Airbnb properties (Rodney et al. 2020).

The advent of Airbnb has transformed the way travelers seek accommodations, offering a diverse range of lodging options, including those in rural and countryside areas. Understanding the intricate factors that influence Airbnb host pricing in these rural settings is of paramount importance. In this chapter, the author delves into the multifaceted determinants affecting Airbnb pricing in rural areas, shedding light on the complexities and implications for hosts, travelers, and local communities.

Adina et al (2022) note that the authors propose that the correlation between price and its influencing factors unquestionably exhibits variation across different urban centers, nations, or geographic areas, owing to the diversification in urban typology, economic conditions, and the evolution of Airbnb within the respective regions. Authors like Falk et al (2019) highlight that most Airbnb pricing studies are made in urban areas. Work by Moreno-Izquierdo et al. (2019) compares price-determining factors between beach destinations and urban areas and finds variations that prove that there are no general rules of price factors that would reflect general listings in the platform. This gives a solid background for the rural area's Airbnb pricing factors investigation.

Among researchers who have analyzed Airbnb price factors: Perez-Sanchez et al. (2018), Adina et al (2022), Falk et al. (2019), Zhang et al (2017), Gibbs et al. (2018), and others can be mentioned. However, analyzing various sources, it is obvious, that factors, influencing Airbnb pricing can be divided into three main categories: property-related, location-specific, and host-related factors.

The first category of Airbnb price determinants is property-related factors. The most obvious factor is the size of the property which significantly impacts pricing, with larger accommodations generally charging higher rates.

Chen and Xie, (2017), and Gibbs et al., (2018) note that type of accommodation or room, number of bedrooms, bathrooms, additional facilities (that may include Wi-Fi, free parking, air conditioning, well-equipped kitchens, laundry facilities, outdoor spaces, entertainment systems, workspaces, and more to enhance guest experiences), has a positive influence on price. Wang and Nicolau, (2017) add that property condition, and unique or historical features of property also tend to influence price.

Location is another factor determining Airbnb prices. This includes proximity to tourist attractions, the safety and desirability of the neighborhood, accessibility to public transportation, and the overall demand for accommodations in a specific area.

Scholars like Chen and Xie, (2017), Kakar et al., (2016); Li et al., (2016), Dudás et al., (2017) highlight that listings near attractions, natural landmarks, or scenic views tend to command higher prices, aligning with traveler preferences for proximity to unique experiences. Location-linked factors like prices in neighborhoods, similar property prices, and prices of hotel rentals in local areas, tend to influence listing prices as well.

However, the least analyzed are host-related factors influencing price. It encompasses the host's overall reputation, the quality of their communication and responsiveness, their Superhost status, and any additional services or amenities they provide to guests.

Analyzing host reputation, studies from Wang and Nicolau, (2017) and Chen and Xie, (2017), Kakar et al., (2016), Ikkala and Lampinen (2014) show that several reviews harms price, what is explained by scale economy or price impact on demand phenomenon - the lower the price, the higher is the demand; Review score (out of 5), has a positive effect on price.

Airbnb hosts often set their cancellation policies, which can affect pricing. More flexible cancellation policies may come at a higher price, offering convenience and flexibility to guests. Nevertheless, this statement was rejected by works of Chen and Xie, (2017) and Wang and Nicolau, (2017) who found out, that strict cancellation policies were associated with higher prices.

Host attributes, which can be found on any listing, also can play a role in price determination. Chen and Xie, (2017), and Wang and Nicolau, (2017) prove that host verification, profile picture, and response-related measurements positively effects price. Superhost status was found to have mixed effects on price as one scholar found positive, others negative effects on price (Kakar et al. (2016); Chen and Xie (2017); Liang et al.,

(2017). Edelman and Geradin (2015), and Kakar et al., (2016) find that race negatively effect price. Works of Kakar et al. (2016), and Chen and Xie, (2017) argue that gender, which can be revealed by both the name of the host and the picture, has no significant effect on price on Airbnb platform.

The expansion of Airbnb into rural areas is an evolving phenomenon with multifaceted implications for local economies, societies, and environments. Scientific exploration is essential for comprehending the full scope of Airbnb's impact in rural settings. This part has highlighted the platform's role in rural regions, emphasizing economic, social, and environmental aspects that warrant further investigation. As elucidated in the preceding chapter, the determination of Airbnb listing prices is a complex and multifaceted phenomenon subject to a multitude of variables related to location, property attributes, and host characteristics. It is noteworthy that the salience and impact of these factors may vary according to the specific setting, such as urban, rural, or other geographical contexts. Given that most existing research on Airbnb pricing predominantly concentrates on urban areas, the present study endeavors to address the underexplored terrain of rural settings. Furthermore, in recognition of the relative scarcity of research concerning host-related factors, this investigation places particular emphasis on unraveling the host-related variables that influence Airbnb pricing within rural regions.

Based on the previous research, these hypotheses will be tested in the context of rural listings on Airbnb:

- Hypothesis H_1 - ratings have a positive influence on the price;
- Hypothesis H_2 - The number of reviews has a negative influence on price;
- Hypothesis H_3 - the quality of communication (response rate and time) has a positive influence on price;
- Hypothesis H_4 - The status of superhost has a positive influence on price;
- Hypothesis H_5 - The gender of the host does not influence the price;

- Hypothesis H_6 - flexible cancelation policy has a negative effect on price.

Research methodology

This research aims to analyze the influence of host-related attributes on property prices in rural areas within the Airbnb platform. To achieve this, Ordinary Least Squares (OLS) regression analysis is employed as a widely used method for understanding the relationships between variables in the context of a linear model. This approach has been previously employed in similar studies (Voltes-Dorta A., Sánchez-Medina, 2020; Zhang et al., 2017; Perez-Sanchez V.R. et al., 2018; Ert et al., 2016), making it a suitable choice for investigation.

The data is gathered from the official Airbnb website, focusing on rural areas in Lithuania, specifically within the counties of Vilnius and Kaunas. Data collection is limited to listings that are verified by Airbnb and have accumulated more than 3 reviews to ensure a reasonable level of data reliability.

The dependent variable in the model is "price", representing the average property price of the Airbnb listings.

In the model binary dummy variable "panoramic" is introduced. It takes the value 1 if the location offers beautiful scenery, such as being situated on the shore of a lake, and 0 if no panoramic view is specified.

Control variables to account for factors unrelated to the host are also incorporated. These include "beds," representing the number of beds in the property, and "people," indicating the maximum number of individuals allowed to stay in the property.

Various host-related attributes to determine their impact on property prices are assessed. Independent variables include:

- "rating," representing the overall rating of the host, scored out of 5.
- "reviews," reflecting the number of reviews a listing has received.
- "response," a binary variable indicating whether the host responds to 100 percent of guest requests (1 if yes, 0 if no).

• "r_time," a binary variable indicating whether the host responds within 1 hour (1 if yes, 0 if no).

• "superhost," a binary variable signifying whether the host holds the Superhost status (1 if yes, 0 if no).

• "picture," a binary variable representing whether the host has a picture (1 if yes, 0 if no).

• "name," a binary variable indicating whether the host uses a personal name (1 if yes, 0 if no).

• "gender," is a binary variable designating the gender of the host (1 for female, 0 for male).

• "Hello," a binary variable capturing whether the host uses a creative greeting (1 if yes, 0 if no).

• "en," a binary variable indicating whether the host claims to speak English (1 if yes, 0 if no).

• "ru," a binary variable indicating whether the host claims to speak Russian (1 if yes, 0 if no).

• "cancelation," a binary variable signifying the host's cancellation policy, with 1 indicating a flexible policy (e.g., allowing refunds) and 0 denoting a strict policy (e.g., no refunds).

The Ordinary Least Squares (OLS) regression model for this study can be represented as follows:

$$Price = \beta_0 + \beta_1 \times panoramic + \beta_2 \times beds + \beta_3 \times people + \beta_4 \times rating + \beta_5 \times reviews + \beta_6 \times response + \beta_7 \times r\_time + \beta_8 \times superhost + \beta_9 \times picture + \beta_{10} \times name + \beta_{11} \times gender + \beta_{12} \times hello + \beta_{13} \times en + \beta_{14} \times ru + \beta_{15} \times cancelation + \epsilon$$

Where:

• *Price* is the dependent variable representing the average property price.

• β_0 is the intercept, representing the base property price when all other independent variables are zero.

• $\beta_1, \beta_2, \beta_3, \ldots, \beta_{15}$ are the coefficients for the respective independent variables (dummy, control, and host-related attributes).

• ϵ is the error term, representing the unexplained variance in property prices.

The model aims to estimate the values of the coefficients (β) to determine the strength and direction of the relationship between each independent variable and the dependent variable. The coefficients quantify how changes in these independent variables affect property prices in rural Airbnb listings. By conducting this analysis, we aim to uncover the host-related factors that significantly influence property prices in rural areas, thereby contributing to a deeper understanding of pricing dynamics within the Airbnb platform.

Empirical results and discussion

To assess the impact of various host-related factors on Airbnb pricing in rural areas, the paper focused on regions within the two largest counties in Lithuania. Selection criteria included properties located in rural settings, verification by Airbnb, and a minimum of three reviews. Consequently, 192 properties were identified that met these criteria and were deemed suitable for analysis. In line with the insights provided by Moreno-Izquierdo et al. (2019), which underscore the regional variation in the significance of factors influencing pricing, an analysis for both counties separately, specifically within Vilnius and Kaunas counties, was conducted. The results of the Ordinary Least Squares (OLS) regression **model I**, examining the influence of host-related factors on Airbnb prices in rural properties in Vilnius and Kaunas counties, are presented in Table 1.

Table 1. Model I: host-related factors influence Airbnb prices in rural areas of Kaunas and Vilnius counties

	coefficient	std. error	t-ratio	p-value	
const	−67.9326	152.425	−0.4457	0.6564	
panoramic	−3.40168	11.8899	−0.2861	0.7751	
beds	1.63865	3.86718	0.4237	0.6723	
people	**17.7055**	**3.40512**	**5.200**	**5.50e-07**	*******
rating	18.8742	30.0914	0.6272	0.5313	
reviews	**−1.04088**	**0.248711**	**−4.185**	**4.49e-05**	*******
response	0.0859547	0.119391	0.7199	0.4725	
r_time	−4.50063	14.4105	−0.3123	0.7552	
superhost	9.71998	13.9392	0.6973	0.4865	
picture	**−41.1962**	**18.3048**	**−2.251**	**0.0257**	******
name	46.0309	34.2860	1.343	0.1811	
gender	**51.4664**	**12.7008**	**4.052**	**7.60e-05**	*******
hello	−23.0280	14.5290	−1.585	0.1148	
en	−3.69564	15.7189	−0.2351	0.8144	
ru	29.4893	16.1504	1.826	0.0696	*
cancelation	**−28.4622**	**12.8907**	**−2.208**	**0.0285**	******

Model I Statistics: The R-squared value is 0.532, indicating that the model explains 53.2% of the variance in property prices. The F-statistic is 13.336 with a very low p-value, suggesting that the model as a whole is statistically significant.

The results suggest that several host-related attributes, such as the number of people allowed, the number of reviews, the presence of a host picture, the host gender, and the cancellation policy, have statistically significant effects on property prices in rural Airbnb listings. Specifically, the number of people allowed is strongly associated with higher prices, reflecting the value placed on accommodating larger groups. The number of reviews garnered by a listing negatively affects the price – which shows the importance of economy of scale and the lower price – higher demand phenomenon. This is in line with the research results of Wang and Nicolau, (2017) and Chen and Xie, (2017), Kakar et al., (2016), Ikkala and Lampinen (2014). What is interesting, the presence of a host picture leads to lower prices in the region, this objects findings of Chen and Xie, (2017), Wang and Nicolau, (2017). Another objection is from the results of Kakar et al. (2016), and Chen and Xie, (2017) who found that the gender of the host doesn't influence the price. However, analysis of Kaunas and Vilnius county rural areas shows the tendency of female hosts to charge higher rates. Listings with a flexible cancellation policy, which is in line with works of Chen and Xie, (2017) and Wang and Nicolau, (2017), were associated with lower prices. However, the influence of other variables, such as host ratings, superhost status, and response time, was not statistically significant. These findings are not in line with the findings of Kakar et al., (2016), and Ikkala and Lampinen (2014) however, still provide valuable insights into the factors affecting pricing in rural Airbnb settings in Lithuania.

1 equation, represents host-related factors that influence Airbnb prices in rural properties in Vilnius and Kaunas counties Model I:

price = -67.9 + 17.7*people - 1.04*reviews - 41.2*picture + 51.5*gender - 28.5*cancelation (1)

Analysis of the equation shows that the coefficient for "People" suggests that for every additional person accommodated, property prices tend to rise by approximately 17.7 euros, reflecting the increased value of larger accommodations in these regions. Conversely, the "Reviews" coefficient of -1.04 indicates that as the number of reviews for a property increases, its price tends to decrease by 1.04 euros, potentially due to competitive dynamics, the scale of the economy, or other factors. Furthermore, the presence of a host's

profile picture, as indicated by the "Picture" variable, negatively impacts price, with properties lacking such a picture commanding higher prices by 41.2 euros. Gender plays a significant role, with properties hosted by females, and is associated with notably higher prices of 51.5 euros. Lastly, the "Cancelation Policy" coefficient of -28.5 illustrates that properties with stricter cancelation policies tend to have higher prices by 28.5 euros, decreasing the potential impact of booking flexibility on pricing.

The results of the Ordinary Least Squares (OLS) regression **model II**, examining the influence of host-related factors on Airbnb prices in rural properties in Vilnius county, are presented in Table 2.

Table 2. Model II**:** host-related factors influence Airbnb price in rural areas of Vilnius

	coefficient	std. error	t-ratio	p-value
const	100.022	243.508	0.4108	0.6824
panoramic	−8.20293	18.5758	−0.4416	0.6600
beds	2.31830	5.96059	0.3889	0.6984
people	**16.1630**	**5.19870**	**3.109**	**0.0026 *****
rating	−15.4776	47.1527	−0.3282	0.7436
reviews	**−0.947164**	**0.400335**	**−2.366**	**0.0205 ****
response	0.429930	0.836879	0.5137	0.6089
r_time	1.18343	22.5606	0.05246	0.9583
superhost	10.9891	20.1543	0.5452	0.5871
picture	−37.1180	25.2072	−1.473	0.1449
name	34.9691	63.0430	0.5547	0.5807
gender	**53.1104**	**18.6809**	**2.843**	**0.0057 *****
hello	−16.9103	20.9441	−0.8074	0.4219
en	−10.7503	23.8709	−0.4504	0.6537
ru	35.5039	23.7826	1.493	0.1395
cancelation	−18.2531	18.8851	−0.9665	0.3368

Model II statistics: The R-squared value is 0.491, indicating that the model explains 49.1% of the variance in property prices. The F-statistic is 5.01 with a very low p-value, suggesting that the model is statistically significant.

In the case of singled-out Vilnius county rural areas, results repeat findings of Vilnius and Kaunas counties, except in the case of cancelation policy and presence of host-related picture. However, the strength of influence on price differs. What is interesting, in the case of Vilnius county rural areas, hosts that note speaking the russian language show a near to the significant level of a higher price. This tendency can be explained by possible tourists speaking the Russian language who may be not so sensitive to the elasticity of price. Equation 2, represents model II of host-related factors that influence Airbnb prices in rural properties in Vilnius county.

$$price = 100 + 16.2*people - 0.947*reviews + 53.1*gender \quad (2)$$

Equation 2 proves that the "people" variable illustrates a positive relationship, with each additional person permitted in the property contributing to an approximate price increase of 16.2 euros. This underscores the importance of accommodations with the capacity to host more individuals, reflecting the preferences of travelers in rural areas of Vilnius County. Conversely, the "reviews" variable showcases a negative correlation. For every extra review acquired by the property, prices tend to decrease by approximately 0.947 euros. This negative association may be attributed to competitive pressures or other factors, indicating that as properties accumulate more reviews, prices may adjust

accordingly. Lastly, the "gender" variable highlights that properties hosted by females command notably higher prices of 53.1 euros. This implies that host gender plays a significant role in shaping property pricing in rural Vilnius County.

The results of the Ordinary Least Squares (OLS) regression **model III**, examining the influence of host-related factors on Airbnb prices in rural properties in Kaunas County, are presented in Table 3.

Table 3. Model III: host-related factors influence Airbnb price in rural areas of Kaunas

	coefficient	std. error	t-ratio	p-value
const	−207.131	218.667	−0.9472	0.3463
panoramic	4.56004	17.8444	0.2555	0.7989
beds	−0.957872	6.02442	−0.1590	0.8741
people	**21.0784**	**5.44793**	**3.869**	**0.0002 *****
rating	50.8019	44.2813	1.147	0.2546
reviews	**−1.10365**	**0.359013**	**−3.074**	**0.0029 *****
response	0.0958749	0.573054	0.1673	0.8675
r_time	−12.4189	22.7592	−0.5457	0.5868
superhost	−1.07115	22.4462	−0.04772	0.9621
picture	−38.9906	31.1510	−1.252	0.2143
name	36.4259	48.9223	0.7446	0.4587
gender	**47.3234**	**19.7014**	**2.402**	**0.0186 ****
hello	−29.3404	22.1893	−1.322	0.1898
en	3.50095	23.7241	0.1476	0.8830
ru	13.0770	25.0390	0.5223	0.6029
cancelation	**−37.1739**	**20.0669**	**−1.852**	**0.0676 ***

Model III statistics: The R-squared value is 0.574, indicating that the model explains 57.4% of the variance in property prices. The F-statistic is 7.379 with a very low p-value, suggesting that the model as a whole is statistically significant.

In the context of Kaunas County, significant independent variables show similar tendencies as in model I, except in the case the of host profile picture. The influence on the price also tends to vary. Equation 3, represents model III of host-related factors that influence Airbnb prices in rural properties in Kaunas County.

price = -207 + 21.1*people - 1.10*reviews + 47.3*gender - 37.2*cancelation (3)

Equation 3 proves in the case of Kaunas County, the number of people allowed in a property ("people") is positively associated with price, with each additional person permitted resulting in an approximate price increase of 21.1 euros. This underscores the significance of larger accommodations in commanding higher prices in the Kaunas rural area. Conversely, the "reviews" variable showcases a negative relationship, indicating that for each additional review received, property prices tend to decrease by around 1.10 euros. This phenomenon suggests that as properties accumulate more reviews, competitive factors or other considerations may lead to price reductions. The "gender" variable indicates that properties hosted by females have significantly higher prices, of 47.3 euros. Lastly, the "cancelation" variable reveals that properties with a strict cancelation policy (denoted by 1) tend to have higher prices of 37.2 euros.

Summarizing all the results, comparing them with findings of previous research, and checking the hypothesis raised in the theoretical part, this can be noted:

• **Hypothesis H₁**, noting that "ratings have a positive influence on price in" in this particular study was **rejected**. These findings don't match the findings of such works as Wang and Nicolau, (2017) and Chen and Xie, (2017), Kakar et al., (2016), Ikkala and Lampinen (2014). As the majority of ratings were high (4.7-5) and. the standard deviation was quite low, this can imply customer

insensitiveness towards the ranking Lithuanian market.

• **Hypothesis H2** noting that the "number of reviews has a negative influence on price" in the study was **accepted**, going in line with the findings of other works done in the field (Wang and Nicolau, 2017; Chen and Xie, 2017) and proving the possibility of the economy of scale – the more you rent, the smaller price You can offer, also, the lower is the price – the higher is the demand principle works here too.

• **Hypothesis H3** noting that "quality of communication (response rate and time) has a positive influence on price" was **rejected** showing no influence in the particular case. These findings don't match the ones found by Chen and Xie, (2017), and Wang and Nicolau, (2017). These findings can be explained by quite high communication standards in cases of hosts from both Vilnius and Kaunas counties. Hosts were highly responsive and usually not only responded to 100 percent requests but also tried to do that in 1 hour.

• **Hypothesis H4** noting that the "status of superhost has a positive influence on price" was **rejected** as it was didint show a significant influence on price in the case analysed. It doesn't go in line with existing knowledge from previous research, which showed either a positive or negative influence on price (Kakar et al. 2016; Chen and Xie, 2017; Liang et al., 2017). As in the case analysed, all hosts were verified, additional feature of being a superhost, did not show any signs of charging a higher price. This could happen because of one of these consequences: high competition in the region; customers who are not educated enough about the advantages they get from a super host or high number of superhosts and devaluation of the tag;

• **Hypothesis H5** noting that "gender of host does not influence price" was **rejected**. Despite studies from Kakar et al. (2016) or Chen and Xie, (2017) showing no significant effect, all models calculated in the case of Lithuania show that female hosts tend to price their properties at a higher margin. A lot of

studies, like Laroche et al. (2001), and Kucher et al. (2019) show, that woman's willingness to pay for various goods and services is higher. As the price phenomenon and interpretation are usually related to individual experiences, the existence of the „Pink tax"together with a gender-linked willingness to pay more can create a background for an explanation of differences in gender-related pricing in the particular case.

• **Hypothesis H6** noting that „flexible cancelation policy has a negative effect on price" was **accepted**, which goes in line and arguments from such studies as Chen and Xie, (2017) and Wang and Nicolau, (2017).

In the study, the influence of host-related factors on Airbnb pricing in rural areas of Vilnius and Kaunas counties in Lithuania was explored. Key findings from separate Vilnius and Kaunas counties indicate that the number of people allowed and the number of reviews significantly affect property prices. Female hosts command notably higher prices. The presence of host pictures leads to lower prices, suggesting properties without host profile pictures are associated with higher prices. In Kaunas County, more flexible cancellation policies are linked to higher prices. Other factors, such as host ratings, scenic views, and response time, did not significantly impact property prices. These insights offer practical guidance for hosts and travelers in these rural regions.

Conclusions

This research reveals the complex and multifaceted nature of Airbnb pricing in rural areas. It highlights the importance of understanding regional variations and the nuanced influence of host-related factors on property pricing, offering valuable insights for hosts and travelers in rural Airbnb markets. The main findings from the research are:

Host gender matters: The research revealed that the gender of the host significantly influences Airbnb pricing in rural areas. Female hosts tend to charge higher prices, contrary to the hypothesis that gender

does not influence price. This finding aligns with previous studies showing differences in willingness to pay between genders and suggests that gender-related pricing variations exist on the platform.

Reviews and economy of scale: The number of reviews received by a property was found to have a negative influence on price. This indicates that as properties accumulate more reviews, their prices tend to decrease. This supports the notion of an economy of scale, where offering more accommodations at a lower price can attract more guests, ultimately affecting property pricing.

Flexible cancellation policy: The study confirmed the hypothesis that a flexible cancellation policy has a negative effect on price. Listings with more lenient cancellation policies were associated with lower prices. This finding is consistent with previous research and suggests that hosts can command higher prices by offering stricter cancellation policies.

Host communication quality: Contrary to the hypothesis, the quality of host communication, including response rate and time, did not have a significant impact on pricing in rural areas. Hosts in the study were generally highly responsive, leading to the conclusion that this aspect of service quality was not a significant differentiator in pricing.

Superhost status and ratings: The research found that neither Superhost status nor host ratings had a statistically significant effect on property pricing. These findings contrast with some previous research, highlighting the importance of other factors in determining rural Airbnb prices.

Host profile pictures: The presence of a host's profile picture was associated with lower prices, which contradicts findings in other studies. This result suggests that rural hosts without profile pictures may command higher prices, indicating potential variations in guest preferences or trust factors in these areas.

Regional variations: The study emphasized the regional variation in the significance of host-related factors. The findings differed between rural areas of Vilnius and Kaunas counties, indicating that Airbnb pricing determinants can be location-specific.

References

Adina, V. T, Oana L. N., Bode R., Rus R. V. (2022). Analysis of price determinants in the case of Airbnb listings, Economic Research-Ekonomska Istraživanja, 35:1, 2493-2509, DOI: 10.1080/1331677X.2021.1962380

Airbnb (2021). Airbnb partners with farmer industry associations to grow regional tourism. Retrieved from https://news.airbnb.com/en-au/airbnb-partners-with-farmer-industry-associations-to-grow-regional-tourism/

Allyson E. Gold, (2019). Community Consequences of Airbnb, 94 Wash. L. Rev. 1577. Available at: https://scholarship.law.ua.edu/fac_articles/475

Caldicott, R. W., von der Heidt, T., Scherrer, P., Muschter, S., & Canosa, A. (2020). Airbnb–exploring triple bottom line impacts on the community. International Journal of Culture, Tourism and Hospitality Research, 14(2), 205-223.

Chen, Y., & Xie, K. (2017). Consumer valuation of Airbnb listings: A hedonic pricing approach. International Journal of Contemporary Hospitality Management, 29(9), 2405–2424. https://doi.org/10.1108/IJCHM-10-2016-0606

Ding K, Niu Y, Choo WC. (2023). The evolution of Airbnb research: A systematic literature review using structural topic modeling. Heliyon. 2023 Jun 8;9(6):e17090. doi: 10.1016/j.heliyon.2023.e17090. PMID: 37484274; PMCID: PMC10361235.

Dudás, G., Boros, L., Kovalcsik, T., & Kovalcsik, B. (2017). The visualization of the spatiality of Airbnb in Budapest using 3-band raster representation. Geographia Technica, 12(1), 23–30.

Edelman, B., & Geradin, D. (2015). Efficiencies and regulatory shortcuts: How should we regulate companies like Airbnb and Uber? Stanford Technology Law Review, 19, 293–328.

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the sharing economy: The role of personal photos on Airbnb. Tourism Management, 55, 62–73. https://doi.org/10.1016/j.tourman.2016.01.013

Falk, M., Larpin, B., Scaglione, M., (2019). The role of specific attributes in determining prices of Airbnb listings in rural and urban locations, International Journal of Hospitality Management, Volume 83, 2019, Pages 132-140, ISSN 0278-4319, https://doi.org/10.1016/j.ijhm.2019.04.023

Gibbs, C., Guttentag, D., Gretzel, U., Morton, J., & Goodwill, A. (2018). Pricing in the sharing economy: A hedonic pricing model applied to Airbnb listings. Journal of Travel & Tourism Marketing, 35(1), 46–56. https://doi.org/10.1080/10548408.2017.1308292

Gutt, D., Herrmann, P. (2015). Sharing means caring? Hosts' price reaction to rating visibility. European Conference on Information Systems. Münster. Retrieved October 5, 2019, from

Ikkala, T., Lampinen, A. (2014). Defining the price of hospitality: networked hospitality exchange via Airbnb. In Proceedings of the Companion Publication of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing (pp. 173–176).

Kakar, V., Franco, J., Voelz, J., Wu, J. (2016). Effects of host race information on Airbnb listing prices in San Francisco. Retrieved from https://mpra.ub.uni-muenchen.de/69974/1/

Krouk, R., & Almeida, F. (2021). Exploring the impact of COVID-19 in the sustainability of Airbnb business model. arXiv preprint arXiv:2101.00281.

Kucher A, Hełdak M, Kucher L, Raszka B. Factors Forming the Consumers' Willingness to Pay a Price Premium for Ecological Goods in Ukraine. International Journal of Environmental Research and Public Health. 2019; 16(5):859. https://doi.org/10.3390/ijerph16050859

L. Moreno-Izquierdo, A.B. Ramón-Rodríguez, M.J. Such-Devesa, J.F. Perles-Ribes. Tourist environment and online reputation as a generator of added value in the sharing economy: the case of Airbnb in urban and sun-and-beach holiday destinations J. Destination Mark. Manage., 11 (2019), pp. 53-66

L. Moreno-Izquierdo, A.B. Ramón-Rodríguez, M.J. Such-Devesa, J.F. Perles-Ribes Tourist environment and online reputation as a generator of added value in the sharing economy: the case of Airbnb in urban and sun-and-beach holiday destinationsJ. Destination Mark. Manage., 11 (2019), pp. 53-66

Laroche, M., Bergeron, J. and Barbaro-Forleo, G. (2001), "Targeting consumers who are willing to pay more for environmentally friendly products", Journal of Consumer Marketing, Vol. 18 No. 6, pp. 503-520. https://doi.org/10.1108/EUM0000000006155

Li, Y., Pan, Q., Yang, T., Guo, L. (2016). Reasonable price recommendation on Airbnb using Multi-Scale clustering. In Proceedings of the 35th Control Conference (CCC) (pp. 7038–7041). Retrieved September 15, 2019

Liang, S., Schuckert, M., Law, R., & Chen, C.-C. (2017). Be a "Superhost": The importance of badge systems for peer-to-peer rental accommodations. Tourism Management, 60, 454–465. https://doi.org/10.1016/j.tourman.2017.01.007

Midgett, C., Bendickson, J. S., Muldoon, J., & Solomon, S. J. (2018). The sharing economy and sustainability: A case for Airbnb. Small Business Institute Journal, 13(2), 51-71.

Oxford Economics (2021). AirBnB: An Economic Engine in the EU27. Retrieved from https://www.oxfordeconomics.com/resource/airbnb-an-economic-engine-in-the-eu27/

Perez-Sanchez V.R., Serrano-Estrada L, Marti P, Mora-Garcia R-T. The What, Where, and Why of Airbnb Price Determinants. Sustainability. 2018; 10(12):4596. https://doi.org/10.3390/su10124596

Rodney W. Caldicott, Tania von der Heidt, Pascal Scherrer, Sabine Muschter, Antonia Canosa (2020). Airbnb – exploring triple bottom line impacts on community. International Journal of Culture, Tourism and Hospitality Research. ISSN: 1750-6182

Statista, 2023, Airbnb - statistics & facts, Internet access: https://www.statista.com/topics/2273/airbnb/#topicOverview

Strømmen-Bakhtiar, A., Vinogradov, E., Kvarum, M.K., Antonsen K., R., (2020) Airbnb Contribution to Rural Development: The Case of a Remote Norwegian Municipality. International Journal of Innovation in the Digital Economy, Volume 11, Issue 2

Voltes-Dorta A. , Sánchez-Medina A. ,Drivers of Airbnb prices according to property/room type, season and location: A regression approach, Journal of Hospitality and Tourism Management, Volume 45, 2020, Pages 266-275, ISSN 1447-6770, https://doi.org/10.1016/j.jhtm.2020.08.015.

Wang, D., & Nicolau, J. (2017). Price determinants of sharing economy based accommodation rental: A study of listings from 33 cities on Airbnb.com. International Journal of Hospitality Management, 62, 120–131. https://doi.org/10.1016/j.ijhm.2016.12.007

Zervas, G., Proserpio, D., & Byers, J. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. Journal of Marketing Research, 54(5), 687–705. https://doi.org/10.1509/jmr.15.0204

Zhang, Z., & Fu,J.R. (2020 December 15). Accommodation experience in the haring economy: A comparative study of Airbnb online reviews. MPDI. (PDF) Accommodation Experience in the Sharing Economy: A Comparative Study of Airbnb Online Reviews (researchgate.net).

Zhang, Z., Chen, R. J., Han, L. D., & Yang, L. (2017, September). Key factors affecting the price of Airbnb listings: A geographically weighted approach. Sustainability, 9(9), 1635. https://doi.org/10.3390/su9091635

Zhang, Zhihua, Rachel J. C. Chen, Lee D. Han, and Lu Yang. 2017. "Key Factors Affecting the Price of Airbnb Listings: A Geographically Weighted Approach" Sustainability 9, no. 9: 1635. https://doi.org/10.3390/su9091635