

## Article

# Impact of Evictions and Tourist Apartments on the Residential Rental Market in Spain

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**Abstract:** In recent decades, the analysis of residential rental prices in Spain has gained increasing attention. From a socio-economic viewpoint, the increase in long-term rentals compared to new home purchases by the new generations has led researchers to examine phenomena such as the growth of the tourism sector or foreclosures. This paper uses a panel data model to analyze the influence of the rate of foreclosure evictions and number of tourist apartments on residential rental prices in 50 provinces of Spain for the period 2015–2018. The results show that an increase in the number of tourist apartment vacancies increases residential rental prices, while an increase in the rate of foreclosure evictions causes residential rental prices to fall.

**Keywords:** eviction rate; tourist apartments; gentrification; residential rentals



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## 1. Introduction

The real estate market is an important economic and social indicator that reflects the degree of development of a territory. Although most studies on the real estate market have focused on determining the factors that influence both housing and rental prices [1], we should not overlook the important social dimension of this market, as it is closely linked to a fundamental right: the right to housing.

Currently, one of the major societal concerns is that litigation over housing rents or home mortgages very often ends in evictions from the leased or purchased property. It is well known that this problem came to a head following the financial, economic, and social crisis of 2008 due to the loss of confidence in subprime mortgages that triggered the global Great Recession; a problem that was further aggravated in Spain by the bursting of the speculative real estate bubble. Moreover, the economic and social consequences of the COVID-19 pandemic have again increased the risk of eviction [2].

In the last decade, the transformation of the tourism accommodation sector due to the rise in tourist apartments has led to a substantial change in tenants' perceptions of the residential rental market [3,4]. Since the emergence of Airbnb in 2008, the number of tourist apartments has grown exponentially in direct competition with the traditional hotel sector [5,6] and the long-term rental market. The rapid expansion of these accommodations in what were formerly non-tourist areas can also cause the displacement of the local population [7].

Taking into account the above, the main objective of this paper is to analyze and quantify the direct effect of tourist apartments and evictions on the residential rental market in Spain at the provincial level. The paper is structured as follows. Section 2 presents the hypotheses, materials, and methods, followed by the results in Section 3. Section 4 is dedicated to the discussion, while the conclusion and limitations of the study are presented in Section 5.

## 2. Hypotheses, Materials and Methods

### 2.1. Theoretical Framework and Hypotheses

Tourism is one of the most important activities worldwide, not only in sociocultural terms as an exchange of experiences or improved public services, but also as a key source of foreign exchange, investment, and employment [8]. Spain is among the top three destination countries internationally and given the significant contribution of tourism to the economy, it is a strategic sector in the country [9]. According to data from the World Travel and Tourism Council (WTTC), tourism contributes more than 14% to the Spanish GDP and provides around 2.8 million jobs, representing 14.4% of total employment [10]. Numerous studies have examined the link between tourism and the economy in Spain and highlighted the positive impact of the tourism sector in the country's economic development [11–13].

However, while tourism can undoubtedly have a positive effect on a region's economy, a large body of literature has shown that tourism can entail significant social and environmental costs for the destination [14–17]. One of the essential paradigms regarding destination development is Butler's [18] tourism destination life cycle theory, which posits that tourism becomes unsustainable at a certain threshold, at which point significant economic, social, and environmental problems arise. Anderereck [19] and Doggart and Doggart [20], among others, have identified the environmental impacts of tourism, such as waste generation, destruction of the natural habitat, and overuse of resources. This environmental damage is especially significant in a large part of the Spanish coast and in cities, where there have been major urban development, infrastructure, pollution, and degradation problems [21].

Several studies have also shown how tourism affects the quality of life of people living in tourist destinations [22]. The World Health Organization defines quality of life as "an individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns" [23]. In a similar line, the National Wellness Institute defines wellness as "an active process through which people become aware of, and make choices toward, a more successful existence" [24]. Given that quality of life is closely interconnected with the living conditions and well-being of individuals through the fulfilment of individual and collective needs, analyzing the social impact of tourism in destinations is of particular interest since the development of this sector has given rise to certain phenomena that influence the well-being of residents [25,26].

One of the phenomena arising from the impact of tourism on the urban space is a strong process of gentrification that has caused supply, facilities, and services to shift away from the resident population's needs to those of tourists [27]. This dynamic can lead to various forms of social exclusion, as it results in poorer living conditions for residents and the forced displacement of the local population. According to Cocola-Gant [28], the process of tourism gentrification causes three interrelated forms of displacement: place-based displacement, commercial, and residential.

Place-based displacement refers to the process of appropriation of everyday space by tourists. This process leads to a sense of loss in residents as it creates a new social and cultural context in which residents feel displaced from the spaces they inhabit.

Commercial displacement is caused by the growth of tourism-oriented services to the detriment of local businesses and other facilities used by residents. Again, there is a sense of loss of space as entertainment and leisure services are created specifically for tourists that can lead to the privatization of shared space and a new social and cultural context that can disrupt the daily lives of residents [27,29].

Finally, residential displacement refers to how tourism growth tends to increase the value of land, which can cause the local population to abandon the physical space. Residential displacement largely occurs when residential housing is converted into tourist accommodation. Indeed, some studies, such as Gago and Cocola-Gant [30], have shown that certain tourist areas no longer have housing for residents, because the supply of rental housing is dedicated entirely to vacation rentals.

These arguments are supported in Smith's (1979) rent gap theory [31], which states that an increase in the difference between capitalized ground rent and potential ground rent promote large-scale property reinvestment and gentrification [32]. Potential rent refers to the income that owners could receive by making better use of the land in economic terms, while current capitalized rent refers to the income that owners are receiving given the current land use [33]. Therefore, if we incorporate into the analysis the changes in the value of land as a result of tourism, this theory allows us to explain the impact that tourism rentals have on the residential housing market. According to Wachswuth and Weisler [34], the current income obtained by owners of residential rental dwellings is much lower than the potential income they would obtain if these dwellings were rented out as vacation rentals. The difference between both rents would explain the conversion of dwellings from residential to tourist use. [33]

Therefore, the creation of new infrastructures such as hotels and tourist apartments increases rental prices, since tourism development in a given area causes residential rentals to be taken off the real estate market [28]. More specifically, the emergence of tourist rentals has a direct effect on the increase in residential rental prices [35–38]. This leads us to the first hypothesis of our study:

**Hypothesis 1 (H1).** *An increase in the number of tourism rental vacancies in a region has a direct and significant effect on residential rental prices.*

As regards evictions, this phenomenon is defined as the act of forcibly removing a tenant from a property, usually at the request of the property owner by application of the causes agreed in the contract or set out under law. Specifically, this article will consider foreclosure evictions in which an individual is evicted by a financial entity. Evictions of this type are more difficult for tenants to face, since one of the characteristic features of the eviction process is the existence of a marked asymmetry in the bargaining power between the parties, which plays against the individual user [39].

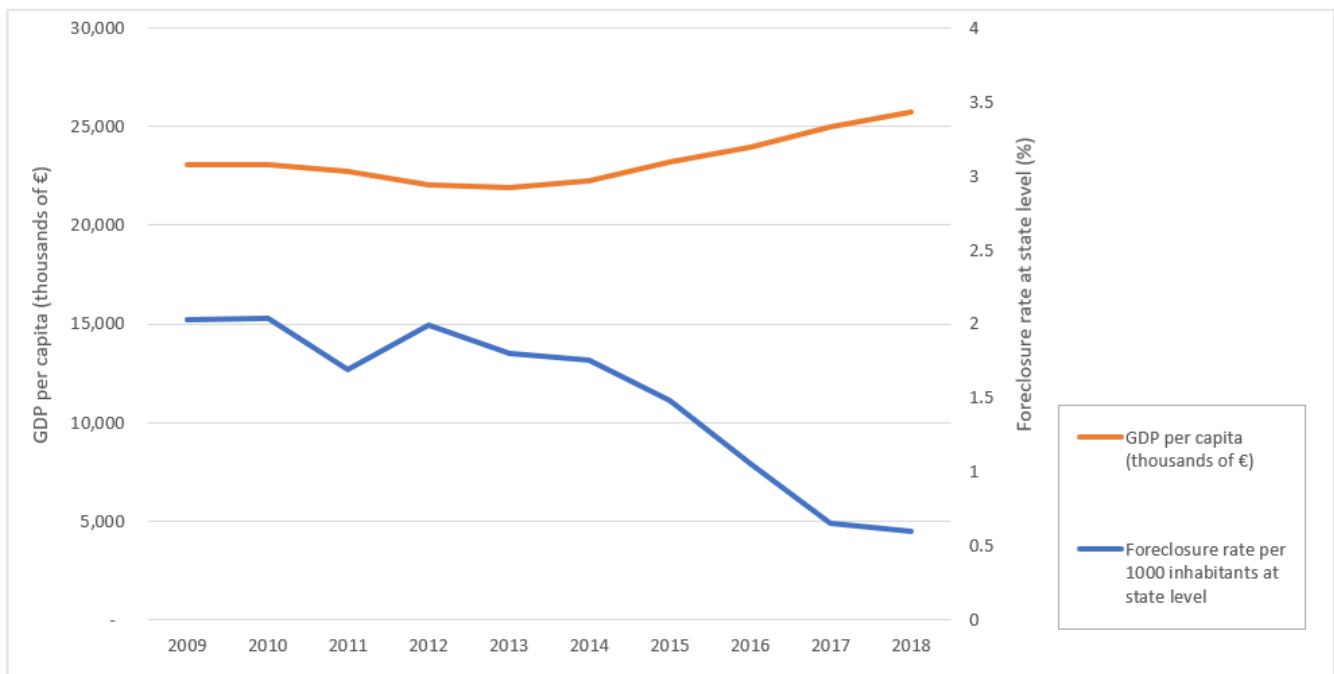
In our analysis, we include the variable *evictions* because Spain has one of the highest eviction rates in the European Union (EU), particularly since the crisis of 2008 [40]. However, there is a general lack of official statistics that permit evaluating the impact of this social problem at both the EU and national (Spain in our case) levels. The statistical office of the European Union (Eurostat) does not explicitly provide data on evictions, so it is necessary to look at other similar indicators such as foreclosures to determine the magnitude of the phenomenon on the European scale [41]. In the case of Spain, there are no official statistics on evictions from primary residences due to mortgage arrears. In fact, the official sources consulted in the Spanish National Institute of Statistics (INE) for 2014, the year prior to the study period (2015–2018), refer to foreclosures and have no official data on evictions. In any case, a foreclosure order is the first step in a process that can last several months until the date of eviction or an agreement has been reached with the lending bank to refinance the mortgage, which is the less frequent outcome given the strong imbalance in bargaining power, as previously indicated. According to the available data, more than 70,000 families have undergone a foreclosure, and although the numbers have progressively decreased since then, it is likely that almost 39,000 families have been affected by foreclosures each year on average during the study period.

The social reality behind evictions is closely related to the situation of social exclusion of the affected families, since evictions are an extreme manifestation of a serious economic situation that, according to Tezanos [42], initiates or aggravates a process of exclusion in which they are already immersed. This phenomenon of social exclusion is the outcome of an initially dire situation of an economic, labor, social, or even sentimental nature, which evolves until it affects all aspects of life and destroys the life projects of the evicted families to such a point that it may cause serious health problems among the affected individuals [43].

It is important to bear in mind that, in addition to being a key element in processes of social exclusion, evictions are a strong indicator of social inequality and hence of the greater or lesser level of social welfare. In fact, one of the most dramatic consequences of the 2008 economic crisis, which affected the disadvantaged strata of society to a greater extent, was the increase in evictions at the height of the crisis, an additional manifestation of the increasing inequality between the social strata [44].

Since this paper deals with the case of Spain, it should be noted that the period spanning the late 1990s to 2007 was characterized by a strong economic dependence on the real estate market and the construction sector. The expansion of the real estate sector in the years prior to the crisis led to an abundance of low-skilled labor in this sector. In this situation of economic bonanza coupled with easy access to credit, the proportion of families who took out large mortgages, especially young people, increased sharply [45]. The arrival of the crisis, the bursting of the real estate bubble, and the marked decline in employment in the construction sector [46] dragged down the financial sector (due to the increase in mortgage defaults and the drastic decrease in the value of real estate assets, with no possibility of selling them on the market) in the first phase, and the fall of the economy in the immediate subsequent phase. This led to a sharp fall in employment in all sectors, as well as in income and purchasing power, which resulted in an increasing trend of increasing mortgage defaults and evictions during the crisis [47].

Evidently this situation is not exclusive to Spain. Studies such as that of Calomiris et al. [48] have analyzed foreclosures in the United States and the relationship between unemployment and evictions, and how both variables feedback on each other. This sequence of chained events (crisis—unemployment—fall in income—evictions) is strongly associated with fluctuations in the economic cycle: In times of growth, the number of evictions tends to fall, while in times of crisis, evictions tend to rise (Figure 1).



**Figure 1.** Trend in GDP per capita and foreclosure rate per 1000 inhabitants at state level for the period 2009–2018. Source: Based on data from the Spanish National Statistics Institute (INE).

Since the 2008 crisis, there has been growing research interest in the problem of evictions and the econometric modeling of this phenomenon. In this regard, several studies have focused on the United States using the information provided by foreclosure databases. In most of these studies, foreclosures are a variable explained by various factors, such as in Schmeiser and Gross [49]. According to the authors, mortgage defaults after the process of

mortgage asset securitization were one of the main causes of foreclosures. However, this process is more limited to the United States and cannot be extrapolated as an explanatory factor in the case of Spain.

These studies have generally modeled the risk of home mortgage defaults leading to eviction. To this end, most have used the available information on mortgaged homes in a specific area and focused on the individual characteristics (social, family, racial, etc.) of those affected by foreclosures, in addition to economic control variables. In this line, Chan et al. [50] developed a model using cross-sectional data for New York City to explain the outcomes of the mortgage default process. The authors considered individual characteristics of borrowers (such as race or nationality), house price depreciation, and the characteristics of the mortgage and the neighborhood where the house is located. An et al. [51] modeled mortgage risk (with the probability of housing eviction as a dependent variable) using cross-sectional data for the United States. The authors incorporated regional-level characteristics and represented the different areas using dummy variables, given that in the modeling of mortgage risk it is important to consider the place of origin of the mortgage contract. Zhu and Pace [52] used cross-sectional data and highlighted the weight of income in modeling the outcomes of the home mortgage process in Las Vegas.

In our model, we incorporate the variable GDP per capita, although in our case data are only available at the provincial level. Tian et al. [53] used individual foreclosure data from North Carolina and emphasized the importance of accounting for unemployment in each of the affected households, the duration of unemployment benefits, the available precautionary savings, and the local unemployment rate as predictors of mortgage default. Aron and Muellbauer [54] developed a predictive model of mortgage default resulting in eviction for the United Kingdom using panel data aggregated at the provincial level, as in our work. The main explanatory variables were unemployment rate and the average wage level in the different provinces.

Calomiris et al. [48] used cross-sectional data for the United States with foreclosures as the dependent variable, although they also examined the reciprocal effect between evictions and housing prices. The authors found that higher prices lead to a higher number of evictions, but also that the higher the number of evictions, the lower the housing prices of a neighborhood. In a similar line, Leonard and Murdoch [55] used cross-sectional data for Dallas County, Texas, and modeled housing prices as a dependent variable. The authors found that one of the most relevant explanatory variables was evictions in the neighborhood and that a greater number of evictions has negative effects (negative externalities) on the quality of the neighborhood and hence on housing prices. Moreover, one of the main concerns of landlords who put properties up for rent on the real estate market is the risk of rent default by tenants. In many cases, tenant default can involve significant financial losses for landlords. For example, the interruption of the flow of income due to rent default could lead to the landlord's insolvency when rental income is being used to cover mortgage payments to purchase the rental property.

This paper takes the approach that rental prices will reflect this tension due to higher or lower default rates and hence higher or lower eviction rates. A reasonable position on the part of an owner is to consider that tenant default will result in eviction, leaving the property once again in the hands of the owner. This increases owners' level of security, so they will be under less pressure to transfer the risk of default to the rent price in the form of higher rents. From this point of view, at the provincial level, if a significant relationship is observed between a high rate of housing evictions and a lower upward pressure on rental prices, it would be reasonable to think that this could be due, at least in part, to owners' perception that they will be able to regain the property in the event of default (although this does not prevent them from having to incur in some type of litigation). In addition, a high eviction rate in a province is also an indication that the economic situation does not allow for very high rental prices. If indicators of the economic situation are introduced into the rental prices model, as has been done in this paper, the association between evictions and rental prices discussed above would be more clearly reflected in the model.

To verify this, in our econometric model of rental prices at provincial level, we have incorporated the foreclosure rate as an explanatory variable and the rental housing eviction rate as a proxy variable due to the difficulties in obtaining this variable. In this regard, it should be noted that public policies on housing in Spain have traditionally prioritized support for home purchases over rentals, especially fiscal support. It is also important to mention that the regulations on data protection in the country do not allow individualized information on foreclosures to be included in official statistics and the available information is only disaggregated at the provincial level. This brings us to the second hypothesis of our model:

**Hypothesis 2 (H2).** *An increase in the rate of foreclosure evictions decreases the price of rental housing.*

## 2.2. Materials

For this study, a sample of Spanish provinces for the period 2015–2018 was selected. Data are available for the variables in all provinces and all years. The autonomous cities of Ceuta and Melilla were not included since it could lead to confusion in the interpretation of the results due to the territorial differences of these two cities with respect to the remaining 50 provinces. Data for the explanatory variables were obtained from the INE, while data for the endogenous variable were obtained from Idealista, one of the main real estate portals in Spain, using Web Scraper with Python 3.

### 2.2.1. Dependent Variable

The dependent variable in our study is the mean rental price of residential housing at the provincial level (MRP). This variable is especially important for our analysis as it represents a significant percentage of the cost of living in Spain. Firstly, because residential rental prices in Spain experienced an annual growth of 7–15% over the period 2015–2020 [56] and produced a direct negative effect on disposable income. And, secondly, because there is a growing trend towards long-term residential rentals due to the “generation rent” where young people are increasingly priced out of the housing market [57,58].

### 2.2.2. Independent Variables

Firstly, a series of control variables will be used in the proposed econometric model. The variables are population density, defined as the number of inhabitants per square kilometer (DEN); GDP per capita, calculated as the province’s gross domestic product divided by the total number of inhabitants of the province (GDP\_PC); and the housing occupancy rate (OCP\_DWL), which refers to the number of people living in the dwelling considering the municipal census and the first residence only. Population density provides a reliable initial picture of the distribution of the existing population in the province [59]; GDP per capita is a clear indicator of the economic level, while the housing occupancy rate captures the number of occupants in the dwelling [60,61].

To measure the effect of foreclosures in the Spanish provinces under study, the ratio of number of foreclosures to number of households was used. The total number of foreclosures was divided into rural properties, plots of land in urban properties, and dwellings in urban properties. Dwellings in urban properties were selected to determine the direct effect on housing. With respect to the number of households, reference is made (as in the OCP\_DWL variable) to dwellings that are recorded as the first residence and at least one person is registered in them. Thus, this rate measures the proportion of foreclosures over the number of dwellings recorded as first residences in the province. This variable is denoted as EVC\_DWL.

The impact of tourism on residential rental prices is measured by incorporating the number of vacancies or “bed-places” (VAC) offered by a tourist rental dwelling in the province as an independent variable. By studying this variable at the provincial level, we

can determine the maximum capacity of tourist apartments in the territory. This variable provides information about the offering in the tourist apartment segment.

### 2.3. Materials

Panel data methods are considered the most appropriate approach since they take into account the temporal division of the different annual cross-sections [62,63]. However, it is possible to ignore the distribution and consider that the independent term is similar for the whole time period with a stacked grouping of the sample [64]. The covariance between the explanatory variables and the residuals would be assumed to be 0. This specification is considered unrealistic because there are distinctive and unobservable elements across time periods that may affect the performance of the models [65].

Therefore, for the specification of the panel methodology, we start with the following equation:

$$Y_{it} = \beta_{0i} + \sum_{k=2}^K \beta_k X_{kit} + e_{it} \quad (1)$$

where:

$Y_{it}$  : Average rental price in the  $i$ -th cross-sectional unit (province) and time period  $t$  (year).

$\beta_{0i}$ : Constant term for the  $i$ -th cross-sectional unit.

$\beta_k$  : Regressor for the explanatory variable  $k$ .

$X_{kit}$  :  $k$  explanatory variable  $X$  in the  $i$ -th cross-sectional unit (province) and time period  $t$  (year)

It is considered that the term  $\beta_{0i}$  is not constant in each cross-sectional unit, but that there is a decomposition where  $\beta_{0i} = \beta_0 + \alpha_i$ ;  $\alpha_i$  is a variable element for each group that decomposes in turn as  $\alpha_i = \alpha + u_i$ , where  $\alpha_i$  is considered a random variable with mean  $\alpha$  and random deviation  $u_i$ . This specification derives from two variants: fixed effects (FE), where the value  $\alpha_i$  is a constant parameter correlated with the vector of explanatory variables  $X_{kit}$ ; and random effects (RE), where it is specified that  $\alpha_i$  is a strictly random variable with  $Var(\alpha_i) \neq 0$ , with no correlation with respect to  $X_{kit}$ .

In the specification phase, the determination between FE or RE has led to a debate in the literature where certain conditions have even been specified for deciding between the two [66]. The decision criterion in the specification is given in the first instance by the Breusch–Pagan test to choose between a pooled data model or RE model and Chow tests to choose between a pooled data model or an FE model. Subsequently, it is determined whether FE or RE is more appropriate. We determined that FE rather than pooled (Chow test,  $p < 0.001$ ) and RE rather than pooled (Breusch–Pagan test;  $p < 0.001$ ) are more appropriate. To decide between FE and RE, we performed the Hausman test where we accept  $H_0$  with  $p = 0.1154$  that RE is preferable to FE.

The Napierian logarithm was also applied to the endogenous variable to provide stability to the regressors, avoid problems of scale, and limit the range of the dependent variable [67]. The results of the model are given by the following expression:

$$\ln(RMV) = \beta_{0i} + \sum_{k=2}^K \beta_k \times DEN_{it} + \beta_2 \times PIB\_PC_{it} + \beta_3 \times PZA_{it} + \beta_4 \times DES\_VIV_{it} + \beta_5 \times POB\_VIV_{it} + e_{it} \quad (2)$$

### 3. Results

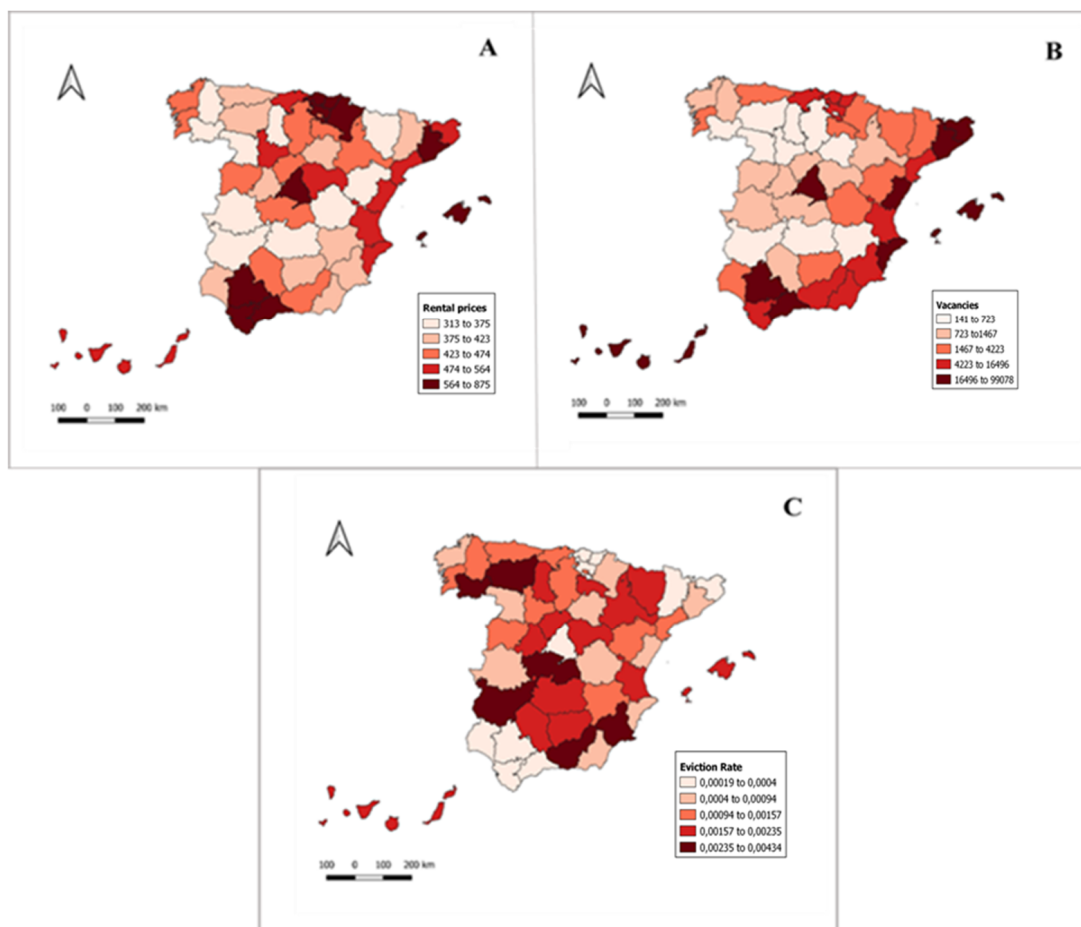
Table 1 shows the main descriptive statistics, as well as the correlation matrix of the study variables. It is worth noting that the size of the endogenous variable is reduced by applying logarithms, resulting in a very small dispersion ( $SD = 0.24$ ). Additionally, the correlation between the endogenous variable and VAC is significant and positive, while for EVC\_DWL it is significant and negative. This coincides with the previous theoretical approach applied for the hypotheses.

**Table 1.** Descriptive statistics and correlation matrix.

Variable	No.	Mean	SD	Min.	Max.	1	2	3	4	5
1. LN(MRP)	200	6.13	0.24	5.70	6.86	1				
2. DEN	200	129.14	167.38	8.6	833.86	0.766 ***	1			
3. GDP_PC	200	22,935.9	4799.24	16,034	36,404	0.500 ***	0.406 ***	1		
4. OCP_DWL	200	2.5	0.11	2.27	2.77	0.091 *	0.124 *	−0.320 ***	1	
5. VAC	200	9837	19,931.52	111	102,259	0.240 ***	0.339 ***	−0.107	0.124 **	1
6. EVC_DWL	200	0.002	0.002	0.000	0.016	−0.169 **	−0.037	−0.219 **	0.478 ***	0.211 **

Note. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$ .

Figure 2 shows the spatial distribution of the average residential rental price, tourism vacancies, and eviction rate per dwelling from 2015 to 2018 in 50 provinces of Spain. As can be observed, provinces with a large number of tourism vacancies (dark red tones) and a low f eviction rate (light red tones), such as those located in the eastern part of the Spanish coast, the southwest and central northern area, and the center of the country (Madrid), also show residential rental prices. Therefore, the information presented in this figure may be an indicator of the positive and significant relationship between MRP and VAC (i.e., an increase in the number of tourist vacancies in a given region increases residential rental prices in that same region; Hypothesis 1). The data may also be an indicator of the negative and significant relationship between MRP and EVC\_DWL (i.e., an increase in the percentage of evictions in a given region decreases the price of residential rental prices in that same region; Hypothesis 2).



**Figure 2.** Spatial distribution of mean rental prices (A), vacancies (B), and eviction rate (C) in the provinces of Spain. Source: Based on data from the National Statistics Institute of (INE) of Spain.



Table 2 shows the results of the three variants analyzed in the methodology, the pooled, the FE, and the RE models. Given the above decision criterion, the interpretation will be based on the RE model. Both the control group and the variables VAC and EVC\_DWL are significant at the 99% confidence level. In addition, we observed that the variable VAC exerts a positive effect on LN(MRP) and a negative effect on EVC\_DWL, thus validating the hypotheses.

**Table 2.** Regression analysis.

Variable	PDRE	PDFE	POOLED
	LN(MRP)	LN (MRP)	LN(MRP)
DEN	$6.73 \times 10^{-4}$ *** (0.000)	$4.02 \times 10^{-4}$ ** (0.020)	$7.63 \times 10^{-4}$ *** (0.000)
GDP_PC	$2.12 \times 10^{-5}$ *** (0.000)	$2.47 \times 10^{-5}$ *** (0.000)	$1.50 \times 10^{-5}$ *** (0.000)
OCP_DWL	0.452 *** (0.026)	0.156 (0.776)	0.427 *** (0.000)
VAC	$2.58 \times 10^{-6}$ *** (0.010)	$5.41 \times 10^{-6}$ ** (0.040)	$1.73 \times 10^{-6}$ *** (0.000)
EVC_DWL	-0.2228 *** (0.000)	-0.1638 *** (0.000)	-0.2195 *** (0.000)
CONS	4.448 *** (0.000)	4.635 *** (0.000)	4.648 *** (0.000)
N	200	200	200
Groups	4	4	4
Chi2	147.49	-	-
Chi2 Prob.	0.000	-	-
F	-	4	60.91
F Prob.	-	0.000	0.000

Note. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ . Standard errors in parentheses.

#### 4. Discussion

First, the control variables specified in the model confirm the expected results, namely, the effect of DEN, GDP\_PC, and OCP\_DWL are positive with respect to residential rentals in the provinces. Specifically, it is to be expected that, given a growth in the population density of a territory, the demand for access to housing will increase, thus increasing rental prices. This is in line with the housing occupancy rate, since there is a direct relationship between a greater number of people living in a dwelling and an increase in prices. Likewise, in terms of GDP per capita as an indicator of economic development, the model shows the upward development of the rental market when this variables increases.

In relation to the Hypothesis 1, an increase in the number of vacancies in tourist apartments is found to increase the rental price of residential housing, thus confirming the hypothesis.

This coincides with studies carried out on a smaller territorial scale of both the residential rental market [37] and the price of housing [38]. Two conclusions can be drawn. The first is that the growth of housing for purposes of tourism (and consequently the number of vacancies) displaces the housing supply towards this type of accommodation and consequently reduces the supply of housing for initial residential rentals. This, together with an incipient growth in demand in the long-term rental market (Generation Rent), causes prices to increase. Secondly, the social impact on investment in services for residents causes gentrification problems. Although it is true that the model adjusted at the provincial level does not allow us to analyze the direct effects of gentrification on smaller population units, it does show that in provinces where a greater investment is made in this type of accommodation, this process will be more pronounced.

Additionally, the effect of foreclosure eviction rate is found to be negative and significant with regard to mean rental prices in the provinces, thus validating Hypothesis 2. Given that the model is disaggregated to the provincial level, the counterproductive effect that evictions could have on rental prices in nearby areas cannot be captured. On the other hand, an opposite association between the economic situation and evictions (measured in terms of employment or income) has been observed in line with the reviewed studies. However, given that we have data at the provincial level, the model cannot capture the socioeconomic situation of the area where the individual dwellings are located. Moreover, since the socioeconomic situation of the province has been incorporated through GDP per capita, the eviction variable would influence the dependent variable as it captures the greater or lesser capacity to regain the property in the event of default, so there is less or greater pressure (respectively) to transfer the cost of an insurance premium to the rental price to cover the risk of tenant default.

Nevertheless, to gain a more complete picture of the effects of tourism and evictions on the urban rental housing market, certain limitations remain to be addressed. Firstly, processes such as gentrification should be examined in greater depth to prevent the deterioration of tourist destination cities. Secondly, further research is needed on smaller territorial units (i.e., neighborhoods or municipalities) where residents are being displaced and the spatial effects of this phenomenon. Third, in future research it would be interesting to study the effects of the COVID-19 pandemic in the study, analyzing the comparison pre-pandemic, during pandemic, and post-pandemic. In this regard, to analyze in greater depth the tourist rental-residential rental disjunction in greater depth, it is necessary to continue researching the phenomenon of gentrification using smaller territorial units.

Lastly, it should be noted that due to the data protection regulations in Spain, there is a lack of contrasted official statistics on individual-level social, economic, racial, and demographic characteristics of those affected by evictions, making it difficult to model this widespread social phenomenon on a more disaggregated scale.

## 5. Conclusions

This article has attempted to explain the link between the residential rental market and two particularly important social and economic phenomena in Spain: the strategic and economic role of the tourism sector and the problem of evictions. To this end, we modeled the rental market from a new perspective to highlight provincial-level factors that, to a large extent, reflect several current economic and social elements of importance for the development of Spanish society.

The rapid expansion of tourist apartments in Spain has led to a process of gentrification and upward growth in the rental prices of available housing due to the displacement of supply towards this sector and the increase in the demand for residential rental housing. Furthermore, the eviction foreclosure rate serves as an indicator of the capacity to regain the property in the event of default, which in turn produces a downward effect on rental housing prices.

With the validation of the hypotheses proposed, a positive relationship between the price of residential rent and the number of tourist flats in the area has been demonstrated and quantified, as well as a negative relationship between the rate of foreclosures and the price of residential rent. These validations have been carried out at the provincial level, and although in a certain way this implies a limitation when it comes to establishing individual factors in the model, a general picture of the rental market in Spain has been determined and quantified, through the contribution of scientific evidence and the modelling of two hypotheses directly linked to two crucial social problems, namely gentrification and the loss of a fundamental right such as housing.

Finally, this study generates a starting point for national, regional, or provincial public institutions to develop policies aimed at controlling the social effects caused by rising prices in the residential rental market. Also, both with the exploratory analysis proposed in the results and with the model developed in this work, real estate portals and companies that manage tourist flats will obtain valuable information on the functioning of the market at the provincial level, which is not only based on descriptive elements, but on a deeper analysis of the effects derived from their activity.

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