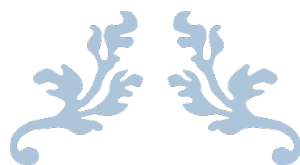


UNIVERSITAT_{DE}
BARCELONA

Facultat d'Economia i Empresa



Managing Mass Tourism in Barcelona

A Study of the Impact of Hotel Moratorium
on the Tourist Accommodation Sector and
the Weight of Home Sharing in the City of
Barcelona



Author: Arnau Oliver Antich

Tutor: Esteve Sanromà i Meléndez

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ABSTRACT

In recent years, Barcelona has witnessed the arrival of a large number of tourists. This situation has led to an increase of tourist accommodation in the city center, causing a series of negative externalities. Facing this situation, the Barcelona City Council decided to carry out two Moratoria, in 2014 and 2015, and also passed the Special Urbanistic Plan for Tourist Accommodation (PEUAT in Catalan) in 2017, of a very restrictive nature. This academic piece of work assesses the impact of this regulation in the tourist accommodation sector, and also provides an analysis from the point of view of the principles of good regulation and minimum distortion. Another relevant aspect on which this piece of work focuses is the study of the weight of home sharing in the city, the annual revenues for hosts and the amount that the Administration is not collecting due to the fact that this activity is not regulated, bearing in mind that different European institutions encourage such regulation. The conclusion reached is that this regulation has had a very significant impact on the prices of tourist accommodation, the number of places available and the change in the type of demand for tourists. We should look for alternatives to the current regulation, since the supply of tourist accommodation cannot be limited indefinitely.

KEY WORDS: Moratorium, PEUAT, Home sharing, Dwelling for Tourist Use (HUT), Regulation, European Commission and Parliament, Airbnb, Taxes.

RESUM

En els últims anys, Barcelona ha estat testimoni de l'arribada d'un gran nombre de turistes. Aquesta situació ha desencadenat un creixement dels allotjaments turístics a les zones més cèntriques de la ciutat, provocant un seguit d'externalitats negatives. Davant aquesta situació, l'Ajuntament de Barcelona va decidir dur a terme dues Moratòries, als anys 2014 i 2015, i l'aprovació al 2017 d'un Pla Especial Urbanístic d'Allotjament Turístics (PEUAT) molt restrictiu. En aquest treball s'analitzarà quin impacte ha tingut aquesta regulació al sector dels allotjaments turístics, a més d'una anàlisi des del punt de vista dels principis de bona regulació i mínima distorsió. Un dels altres punts importants en què es centra el treball és l'anàlisi del pes que té a la ciutat el *home sharing*, quins ingressos genera anualment i la quantia que estem deixant de recaptar per no regular aquesta activitat, sabent que des de diferents organismes Europeus es fomenta la seva regulació. La conclusió a la qual s'arriba és que realment aquesta regulació ha tingut un impacte molt significatiu en els preus dels allotjaments turístics, en el nombre de places disponible i en el canvi de tipologia de demanda dels turistes. S'hauran de cercar alternatives a la regulació actual, ja que no es pot limitar l'oferta d'allotjaments turístics indefinidament.

PARAULES CLAU: Moratòria, PEUAT, Home sharing, Habitatge d'Ús Turístic (HUT), Regulació, Comissió i Parlament Europeu, Airbnb, Impostos.

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I. MOTIVATION AND INTRODUCTION

In the last years, Barcelona has suffered especially the effects of a tourist accommodation boom due the constant increase of the mass tourism. The short-term rental market is a growing business. Globalization, the proliferation of the offer of tourist flats and private houses, the de-qualification of the sector and the massification of this type of accommodation in the most visited cities and towns are circumstances that have come to stay. The strength of the sector has led to negative externalities as: intrusiveness, gentrification, legal problems, increase of residues, unfair competition, and difficulties for neighbourhood coexistence that is not easy to solve.

The City Council of Barcelona has had to take action on the matter. The situation led to the suspension of all new licenses of tourist accommodations in July 2015, one year before it was suspended the licences for dwelling for tourist use (HUTs¹), until the city had a new development plan. But this new plan, The Special Tourist Accommodation Plan (PEUAT), in January 2017, included a system of restrictions of licensing by urban areas.

It is important to differentiate two types of activities in terms of tourist accommodation. Exists the professional activity, related with hotels, hotels-apartments, hostels, pensions, collective residence and dwelling for tourist use (HUTs). From this activity it will be studied the current regulation, PEUAT, the both Moratoriums and the effects of this regulation and the Moratorium in the city. The other kind of activity is the non-professional, called it home sharing. This tourist activity consists of renting a room of your habitual residence, and nowadays is not regulated in Barcelona. For that reason, it will be done a quantification of the tax gap and the real weight that it has in the city.

Home sharing can be related with the umbrella term of collaborative economy, but in the case of this analysis it is more appropriate to use the concept of platform economy, since this activity is exclusively offer by platforms as Airbnb, the most representative in the city. But during this paper we will also use the concept collaborative economy since all the organisation still use it. Collaborative economy is influencing and have an increasing impact on economic and social relationships, at the same time that alters the classic forms of market organization and generates opportunities, risks and challenges that must be addressed from the perspective of public policies. It is necessary to provide answers in order to cover it within the existing legal framework, balancing the geographical / territorial aspects (urban plans) and the public policies.

¹ HUT is the terminology used in Catalonia for describe dwelling for tourist use. The meaning is *Habitatge d'Us Turístic*.

Related to the non-professional activity, it has been done a proposal for encompasses in the non-professional activity the possibility to rent your principal residence for a maximum of 60 - 90 days per year. It will be like a non-professional HUT, and it will be profitable because it is a form of take profit of your residence when, for instance, in summer you go two months to your second residence outside from Barcelona. There is no room for speculation.

There are many public institutions, as the European Parliament and the European Commission, that argue the need to regulate this new reality and there are many cities, regions and countries around the world that are following these tips and establishing a regulatory framework for tourist accommodation through digital platforms.

In terms of regulation, Barcelona is not an isolate case in Spain. The autonomous communities, concerned about the incidence of mass tourism, have tried to control and regulate this type of rents, the HUTs and the traditional tourist accommodations, developing their own regulations. These regulations have been done with decrees, however, do not maintain homogeneity among them neither they share common criteria, and, more worrying still, they do not seem to have avoided the systematic breach of the rules of the game. The situation of lack of control has reached such a point that some autonomous communities have seen the need to establish a limit of tourist places. These regulations have been adversely affected by the actions of the National Commission of the Market and Competition (CNMC), which has paralyzed certain regulatory provisions that constitute an obstacle to free competition and market development.

This way of regulating has promoted the proliferation of illegal rents, and this fight against it has led to the City Council of Barcelona to detect situations where the tenants of the houses offer tourists accommodations without license. In June 2016, the City Council announced the imposition of a fine of 600.000 euros on the Airbnb tourism platform for the offer of HUTs without a license.

It is also worrying that any autonomous community or city in Spain, even Barcelona, has not introduced home sharing in their current regulations. In the case of Barcelona, in the Draft Decree of Tourism there is mentioned the possibility of regulated, but with some conditions that will be analysed in the section 3.2.3.

It is important to mention, that I have tried to link this report with my internship in the ***“Direcció General de Promoció Econòmica, Competència i Regulació”*** of the Generality of Catalonia. For that reason, the analysis done it will be based on the principles of necessity,

proportionality and minimum distortion and the rest of principles of a good efficient regulation and favouring competition.

The aim of this work is to understand and analyse how has been regulated the tourist accommodation sector, the professional one; if these regulations has been done it following the principles of a good regulation; and analyses the impact of that regulations in the tourist accommodation sector. Respect to the non-professional tourist accommodation activity, it has been done it a quantification of the tax gap of 2017 and the real weight that it has in the city nowadays.

This report is structured in the following way: After the first introduction of the report and the recommendations of the different European organizations about a sustainable regulation and how to introduce the collaborative economy² in the regulation, there is done it a background of what the Parliament of Catalonia have done in terms of promoting the regulation of the collaborative economy. After that, there is an explanation and an analysis of the Moratoriums and of the current regulation, The Special Tourist Accommodation Plan (PEUAT); and the important points of the Draft Decree of Tourism of 2018.

Secondly, there is done it an analysis of the impact of the Moratoriums and the PEUAT in the city of Barcelona. This first analysis it is important to understand where we are going and the real impact of these regulation in the tourist accommodation sector. The second analysis, is the quantification in terms of tax revenue of the regulation of home sharing. Before the quantification, it will be done an analysis of the current number of home sharing in the city of Barcelona. The quantification will have 5 assumptions and will use the current tourism tax (with an estimated parameters) to calculate how much tax revenue the Government of Barcelona is not earning due to home sharing nowadays it is not regulated.

After this first analysis, a benchmarking of the regulations applied in other cities of Spain is analysed. The object of this analysis is to have a comparative situation of how they have addressed the tourist accommodation activity, how they have deal with home sharing and if it has worked or not. In this section a resolution of the National Commission of Markets and Competition (CNMC³) will be provided. After this, it will be an analysis of how the main cities of Europe has regulated home sharing.

² The European Commission and Parliament doesn't use the term platform economy, they use collaborative economy.

³ CNMC: National Commission of Markets and Competition / in Catalan: *Comissió Nacional dels Mercats i la Competència*.

In the last section, a conclusion of the paper will be provided with the explanation of the main contributions and results obtained with the analysis done it before. To conclude this work, a set of contributions will be made on which are the consequences of the current regulation and the forecast of the future, and some tips of how to regulate tourist accommodation, specially focused on home sharing. This regulation will have to comply with the principles of good regulation, especially necessity, proportionality, minimum distortion and non-discrimination.

II. GENERAL FRAMEWORK: POSITION OF EUROPEAN PARLIAMENT AND EUROPEAN COMMISSION

It is important to have an idea about how the European organisms recommends to regulate tourist accommodation, and the benefits of home sharing. Also, it is important to take into consideration the tips that they give in terms of taxation for the collaborative economy that will be used for the application of the tax of home sharing. For that reason, in this section there will be a summary of the main points that each organism proposes for an optimal regulation and how to apply a tax system in the collaborative economy, the home sharing.

First of all, it is important to understand that depends on the use that you give it to some platforms as Airbnb or Uber, as an example, it will be collaborative economy or not. In Spain, for dwelling for tourist use you need a license, from this point, there is no more collaborative economy but you still use a platform. In some European countries exists the possibility to do dwelling for tourist use without any license with a maximum of days a year, in this case, meets the requirements to be collaborative economy and a platform is used.

The activity of home sharing is a concept avoided by the different regulations in Spain. But if we look to the different European organism, they promote the use of this new kind of tourist accommodation because it is beneficial for the society and there is no room for speculation. For that reason, it is necessary to link the proposals with the regulation of dwelling for tourist use, in the case of not needing a license, and home sharing in his totality.

Nowadays, there is a problem between mass tourism in certain territories and the proliferation of new digital platforms that facilitate overnight stay of visitors to residential homes. However, this situation cannot lead to an immediate prohibition on the new technologies that allow this new tourist model. In the points 64 and 65 of the Resolution of the European Parliament on an Agenda for the Collaborative Economy they are in favour of finding an optimal solution to this conflict without doing prohibition, because it considers the expansion of the phenomenon of the home sharing like positive, especially for those zones less benefited by tourism⁴.

In this same report, the European Parliament (EP) recognizes the positive effect of the collaborative economy in the tourism sector, which is growing rapidly, as it reinforces the

⁴ Resolution of the European Parliament on an Agenda for the Collaborative Economy: **64.** Stresses that in the tourism sector, home sharing represent an excellent use of underused resources and spaces, especially in areas that do not traditionally benefit from tourism; **65.** Condemns, in this regard, the imposition of rules by some public authorities, which seek to restrict the supply of tourist accommodation through the collaborative economy.

possibilities of individual income and local economies. It also provides instruments to better respond to demand, for example during peak demand and in isolated areas. And also reflects the different preferences of travellers, especially those with lower incomes; observe that the level of consumer satisfaction with the tourism services of the collaborative economy is high; believe that the collaborative economy should be included in its entirety in the tourism policy of the European Union; and highlights the need to favour a beneficial coexistence between traditional tourism services and the collaborative economy.

In this same line, the European Commission (EC) is positioned in its Communication on a collaborative economy⁵ and recommends to the Member States to avoid the prohibition of this phenomenon focused in the field of tourism:

"Absolute prohibitions and quantitative restrictions on an activity are usually a last measure to apply. In general, they should only be applied when less restrictive measures cannot be used to achieve an objective of legitimate public interest. For example, prohibiting the rental of HUTs in general seems difficult to justify because short-term rental can be limited to a maximum number of days per year. This would allow citizens to share their dwellings on an occasional basis without withdrawing the dwelling from the long-term rental market."

In relation with the fiscal system, the EP and EC recommends and give some tips to the Member States to take measures and exchange best practices in fiscal matters to reduce the possibility of «grey» economic activities and tax avoidance in relation to services from the sharing economy; highlights the potential of collaborative platforms to improve fiscal transparency through the use of electronic means of payment, and encourages, therefore, the development of appropriate and advanced solutions for the payment of taxes in the collaborative economy, without creating unnecessary obstacles; demand to the Member States to clarify what they consider taxable benefits and what they consider to be tax-exempt activities, and recalls that taxes must be paid in compliance with the national legislation of the place where the benefits are generated.

Collaborative platforms must adopt a proactive attitude in cooperation with the tax authorities in order to establish the parameters for the exchange of information on tax obligations, while guaranteeing compliance with the legislation on personal data protection and without prejudice to the regime responsibility of intermediaries established in the Directive on electronic commerce.

⁵ Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions.

Member States are invited to evaluate their tax regulations to create fair conditions of competence for companies that provide the same services. Member States should also continue their simplification efforts, increasing transparency and publishing online guidance on the application of tax regulations to collaborative business models.

Finally, there is a necessary follow-up of the regulation. The platform economy encompasses several sectors in a rapidly changing context. Having in mind this dynamic and evolving nature, the Commission intends to encourage Member States that establish a monitoring framework that covers both the evolution of the regulatory environment and economic and business developments. The purpose of the monitoring will be to know the price trends and the quality of the services, and to identify the possible obstacles and problems, particularly when they derive from divergent national regulations or regulatory lagoons.

So, we have some tips that the European Parliament and Commission gives in order to do a good regulation and also to imply the activity of home sharing in the tourist accommodation sector. Once we have seen what this European Organisms recommends to the Member States, we will see what Catalonia and Barcelona have done in terms of regulating the tourist accommodation sector and home sharing.

III. CATALONIA: THE PARTICULAR CASE OF BARCELONA

This section establishes what has been done in Catalonia first, and more specifically in Barcelona in terms of the regulation of the tourist accommodation and the relation with the collaborative economy. Also, there is a description of the normative framework, explaining the Moratoriums, the PEUAT and the Draft Decree of Tourism. This will be useful for having an idea of how is the regulation in Barcelona in order to understand the analysis of the impact of this regulation.

3.1 Parliament of Catalonia

The Parliament of Catalonia, in a pioneering way among the European regions, decided to create the *Commission for the Study of Public Policies on Collaborative Economics*. This Commission was created on November 12 of 2014, composed of two members of each parliamentary group and with a duration of six months with the objective of knowing the public policies in the field of collaborative economy. Months before, the Parliament observed that the emergence of new forms of collaborative consumption lead challenges but also opportunities due to their social and economic impact and, at the same time, manifested the need to adapt the regulatory framework to ensure the maximum legal security for the consumers, economic operators and public administrations.

After its validity, each parliamentary group presented its conclusions, which were included in the *Report of the Study Committee on Public Policies on Collaborative Economics*, published on June 22, 2015⁶. In addition, and unanimously, a set of recommendations were included in the report addressed to the Government of the Generalitat of Catalonia. The general recommendations suggests to the Generalitat a series of actions, among which highlight: manifest the commitment and support to the collaborative economy, promote the revision of sectoral regulations (activity licenses, tax, and social and labor matters) and develop a code of good practices. On the other hand, in the field of tourist accommodation, it recommends y to the government the renting of rooms in habitual residence, known as home sharing, and in the field of transport, facilitate the use of car sharing. As it can be seen, the Parliament in 2015 already suggested to regulate the home sharing, but if we look to the current regulation there is no signal of a home sharing regulation.

In order to respond to the challenges presented by the collaborative economy and at the same time comply with the recommendations of the Parliament of Catalonia and the different institutions of the European Union (mentioned before), the Government of the Generalitat of

⁶ Report published in the Butlletí Oficial del Parlament de Catalunya no. 626 of July 22, 2015.

Catalonia approved, on April 5, 2016, the Government Agreement 44/2016, for the development of the collaborative economy in Catalonia and the creation of the *Interdepartmental Commission of the Collaborative Economy*. This Commission was created in order to establish, within a year, the bases for the development of the collaborative economy⁷.

3.2 Normative Framework

From a point of view of the regulation of the activity, tourist accommodations are under the legislation of the Law 13/2002, of June 21, of tourism of Catalonia. The text of the Law does not go deeper into tourist accommodation, so it is necessary a Decree specifying how this activity is regulated. The Generalitat of Catalonia approves on November 20, 2012 the “*Decree 159/2012 of establishments of tourism accommodation and dwelling for tourist use*”, currently in force. It is preceded by Law 18/2007, of December 28, on the right to housing, where the dwelling for tourist use is mentioned for the first time, without actually defining it. Subsequently, Decree 164/2010, of November 9, on the regulation of dwelling for tourist use it is approved, which was repealed by the current Decree of 2012. This Decree was affected by the subsequent approval of Law 9/2011, of December 29, of promotion of economic activity, which implied important changes in the regulation of tourism businesses and activities.

3.2.1 Types of tourist accommodation

It is important to understand the definitions of dwelling for tourist use and home sharing in order to be able to analyse the impact of both in the tourist accommodation sector and how to link it to the collaborative economy.

- **Dwelling for tourist use (HUT):** the definition provided is the one in the Law 13/2012 but mostly in the Decree 159 of 2002 that establish that has the consideration of dwelling for tourist use those that are ceded by their owner, directly or indirectly, to third parties, and in exchange for economic consideration, for a seasonal stay, in conditions of immediate availability and with the characteristics established in this Decree. Dwelling for tourist use are given as a whole, the cession by rooms is not allowed. By the effects of this Decree, a seasonal stay is considered to be any occupation of the dwelling for a continuous period of time equal to or less than 31

⁷ Despite of the work done by the Secretary of Enterprise and Competitiveness and the Ministry of Infrastructure and Mobility, finally it could not be approved the final report due to the end of the legislature.

days. In order to carry out this economic activity, it is necessary to obtain a municipal authorization from the city council of Barcelona.

- **Home Sharing:** It is an activity in which an individual shares a space of the house in which he lives, or the whole house, when he is absent sporadically or temporarily. It is a non-professional activity because who carries it out is not dedicated exclusively and the property does not have an intensive tourist use. Contrary, it is a house where someone lives habitually and represents the permanent residence of a person or a family.

In order to understand better the definitions, we can see a table with the main differentiations between both types of accommodation.

Table 1: Main differentiations between HUT and Home Sharing.

Dwelling for tourist use	Home sharing
It is managed by a company or a professional of the tourist sector.	It is the house of a private individual and neighbour of the neighbourhood.
Commercial use dedicated exclusively to tourism: it is not the residence of anyone.	Main use as a home: it is the first residence of someone.
Its use is intensive: the objective of those who take benefit it is to rent it for as many days as possible.	The host opens the calendar when he wants or when he need it.
If there is no growth of the housing stock, to more tourist dwelling less residential housing.	There is no loss of residential housing since the host continues to live there.
In Barcelona there are about 9,000 licenses and this type of accommodation is perfectly typified.	The regulation has not yet recognized the existence of this modality.
The decoration and the environment is usually functional and designed for the entry and exit of tourist, with a strong rotation.	The owner, as he lives there, has all the belongings that travellers can enjoy.
Contact with the host is done it in a punctual manner and is more linked to logistic and service issues.	The host-traveller relationship is much more personal and closer, since they live under the same roof.
Groups of 3 or more travellers are usually accommodated.	1 or 2 people are usually accommodated.

Source: Own elaboration from data of Airbnb.

3.2.2 The Hotel Moratorium and PEUAT

In the last decade, there has been a high increase of the tourism in the city of Barcelona. The problem is that this important increase of the number of tourist has not been distributed around the city, or in special zones created for tourism, it has been concentrated in a few neighbourhoods of the city center creating negative externalities to the citizens of Barcelona. This situation has led Barcelona's city council, with the aim of redistributing the effects and avoiding the agglomeration of tourist accommodation in the centric areas of the city, to implement a Moratorium for the HUTs in 2014 and a hotel moratorium in 2015, that at the beginning of 2017 was replaced by the Special Urbanistic Plan of Tourist Accommodation (PEUAT).

➤ *The Hotel Moratorium:*

The first Moratorium entered into force in 2014 and established a limitation of the granting of new HUT licences. The Hotel Moratorium entered into force on July 1, 2015, it was agreed to suspend the processing of specific urban plans and urban management projects, and the granting of licenses and other municipal authorizations established by sectoral legislation. This meant a freeze for a year of the concession of licenses for all types of tourist accommodation in the city: hotels, aparthotels, tourist apartments, pensions, hostels, dwelling for tourist use, residences of students and youth hostels. But finally this Moratorium was operating until the entry into force of the PEUAT in 2017.

The period of the Moratorium will be devoted to the development of a special plan to analyse and regulate the sector, which will be the current PEUAT. The objective is to obtain a radiography of the tourist accommodation park in order to evaluate and diagnose the existing offer and the social impact it has on access to housing, occupation of public space, mobility, diversity of uses and production and waste management.

➤ *The Special Tourist Accommodation Plan (PEUAT):*

The Special Tourist Accommodation Plan, encompasses the regulation of hotels-apartments, guest houses, tourist apartments, hostels, collective residencies with temporary accommodation, hotels and dwellings for tourist use (HUTs).

This plan is the solution given by the city council of Barcelona to solve the problems created by the tourism. But also, is a solution to the increase of HUTs offer. This high increase of the offer has the origins in the apparition of new platforms, as Airbnb, that has created a new kind

of offer easier to promote than before. This situation has led to the entrance of multiple suppliers in the market. The appearance of these new offerors has been, for many, conflicting: on the one hand, it has led to the appearance of a new type of competition to which traditional operators have had to face; on the other hand, it has also been strongly rejected by the local population, especially in cities with high tourism pressure, as is the case of Barcelona. This rejection has been derived, basically from some of the negative externalities that have been associated, justifiably or not, with this new activity.

It is important to remark that in the PEUAT, there is no mention about the activity of home sharing, neither the real impact of this activity in the city nor the positive or negative effects of regulate this activity. Because as it has said previously, currently home sharing is not contemplated by the law or the regulation.

The objective of this Plan is regulate the increase of the tourism and also how to distribute the offer of tourist places. The main goal is to achieve a redistribution of the tourist places offer in the city of Barcelona, because nowadays the offer is concentrated in the centre of the city, and also attain a sustainable and organized growth of tourism. One of the others objectives is to provide a response to city residents' concern and discontent regarding the phenomena arising from tourism. And also to guarantee the right to housing (no type of tourist accommodation may replace a dwelling), rest, privacy, the well-being of local residents and spatial quality.

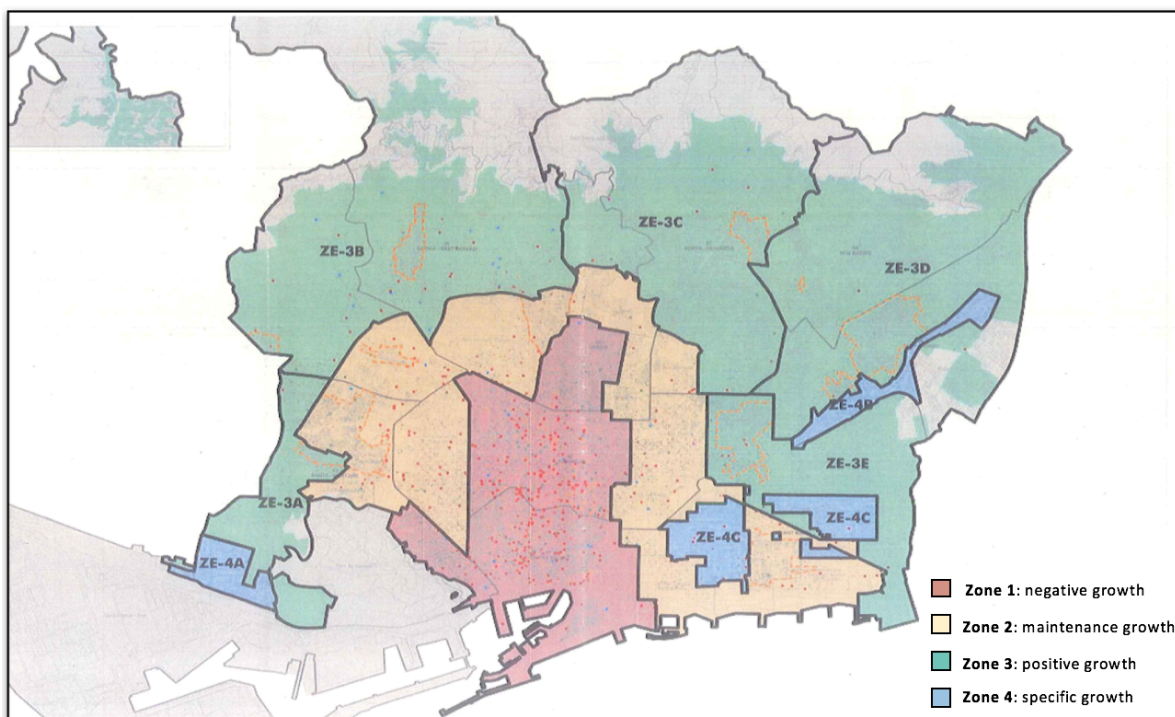
For the detailed application of the determinations of the PEUAT, several Specific Zones / Areas are established, that are delimited according to their sensitivity to be able to accommodate new establishments; the ratio of places offered with respect to the resident population, the saturation of the public space; and the urban morphology of the area. One of the main indicators that has been used are the radial indicators⁸, that establish the minimum distance of separation between the tourist accommodation, not including dwelling for tourist use. One of the reasons of this indicator is to avoid tourist saturation. The city is divided in four specific zones where is a specific normative and regulation in each one.

In all the four specific areas⁹, there is a common regulation for the tourist accommodation (hotels-apartments, guest houses, tourist apartments, hostels, collective residencies with temporary accommodation, hotels) and a specific one for dwelling for tourist use (HUTs).

⁸ The distances of each zone are in the Annex, *Table 1: Radial indicators*

⁹ The map of each area is represented in the Annex, *Figure 1: Maps of each area.*

Figure 1: Map of the PEUAT zoning.



Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Specific Area 1:

It is composed by the district of Ciutat Vella, the neighbourhoods of Antiga Esquerra i Dreta de l'Eixample, the neighbourhood of Poble Sec, Hostafrancs, Vila de Gràcia, Vila Olímpica of Poble Nou, Poble Nou and part of the neighbourhood of Sant Antoni.

It is configured as a natural decrement zone. In this area the implantation of new establishments is not allow nor the extension of places of the existing establishments. Therefore, when one establishment ceases its activity, the opening of another one will not be allowed.

According to the City Council census, over 60% of available places are to be found in this area and it only represents 13.26% of the surface of Barcelona, is the area with a larger concentration of establishments. Also is the area that has the highest average ratio between floating population and local residents¹⁰, reaching maximums of 68.85% in the Gòtic and 67.48% in the Dreta del Eixample, which means that the floating population is higher than the resident population.

¹⁰ This indicator calculates the relationship between the places of all the tourist establishments of a neighbourhood and their resident population.

No new HUTs may be opened in this area. With the exception of the District of Ciutat Vella, the decrease in the total number of HUTs authorized in the census in this specific area will make it possible to have new authorizations for HUTs in the Area 3, under the conditions determined for that area.

Specific Area 2:

It is composed by the neighbourhood of Nova Esquerra de l'Eixample, the other part of Sant Antoni, Sagrada Família, Fort Pienc, la Font de la Guatlla, Sants, Les Corts, Sant Gervasi-Galvany, part of Putxet i el Farró and Vallcarca i els Penitents, La Salut, el Camp d'en Grassot and Gràcia Nova, el Baix Guinardó, and the neighbourhoods of Parc i la Llacuna del Poblenou, Diagonal Mar and el Front Marítim del Poblenou.

It is configured as a maintenance area. In this area the expansion of the number of establishments or the number of places in existing establishments is not allowed. When an establishment decides to stop the activity, another can be established with the same number of places.

Regarding HUTs; they may be regrouped within the same area, and if it possible in non-resident accommodations. They may only be located in blocks where the density per block does not exceed a ratio of 1.48% (the average for this area) between the number of HUT and the number of dwellings or filling an entire building with a maximum of 10 HUT. When a HUT stops the activity in this area, it can be open another one in the specific area 3 under the conditions determined for that area.

This zone accumulates 28.96% of the legal places and represents only 12.48% of the surface of Barcelona. The average ratio between floating population and local residents is 11%, which means that the resident population is higher than the floating population.

Specific Area 3:

It is composed by all the other parts of the city not included in the specific area 1 and 2, except for specific areas of Marina del Prat Vermell, La Sagrera and the 22@ Nord. This area concentrates approximately 10.71% of the offer of legal places in the city.

It is configured as a content growth zone. Growth will be possible if it does not exceed the maximum density of places with the limit of 4030 places, based on the morphological capacity of the area and the current availability of tourist accommodation.

Table 2: Maximum growth of the places in the Specific Area 3.

Area 3A	Sants:	456 places*
Area 3B	Les Corts - Sarrià	1464 places*
Area 3C	Gràcia – Horta	564 places*
Area 3D	Nou Barris – Sant Andreu	1045 places*
Area 3E	Sant Martí	501 places*
Total places:		4030

* Is the maximum places of growth

Regarding HUTs, it can be new licences for doing dwelling for tourist use when:

1. There is a decrease in the total number of HUTs in the specific area 3, as many licences as HUTs stops the activity.
2. There is a decrease in the total number of HUTs in the specific area 1 or/and the specific area 2, with the maximum limit of 387 establishments.

Specific Area 4:

It is composed by the zone of Marina del Prat Vermell, La Sagrera and 22@Nord. Each zone has different conditions in terms of urban location and building density.

In the zone of Marina del Prat Vermell, the relation between the floating population and the total population cannot be higher than 6%, that is the average of the city. The number of places is limited to 1.480 and is linked with the forecast of population of 24.700 inhabitants that was made. In the zone of La Sagrera, it's only allowed to establish a tourist accommodation in the qualified fields used for hotels, with a limit of 78.497 m². Finally, in the 22 @ maximum radial distances¹¹ are set in order to establish a tourist establishment.

Regarding HUTs, in this area new HUTs are not permitted.



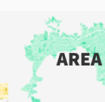

As we can see, the PEUAT is very restricted with the tourist accommodations in most of the Areas, not allowing the establish of new ones or keeping the same number. But with HUTs it is more restricted, only can be established a new HUT in the Area 3 if it only there is a decrease in Area 1 or 2. In Area 4 it is forbidden. So, there is a clear intention to reduce the number of

¹¹ The radial distances are defined in the Annexed figure 1, as for the other areas.

HUTs in the downtown and try to move them to the periphery (Area 3) but also with a maximum of establishments. The reason of this strong restriction it is because HUTs have been linked to a series of negative externalities.

Summarizing the PEUAT, a table of the number of establishments and places operating and allowed by this plan in 2016 will be provided.

Table 3: Number of establishments and places stablished by PEUAT, 2016.

		 AREA 1	 AREA 2	 AREA 3	 AREA 4	TOTAL
Dwelling for tourist use (HUT)	nº establishments	5.358	3.245	1.041	13	9.657
	nº places	33.240	19.753	5.854	64	58.911
Tourist accommodation establishments (hotels, apartment-hotels, hostels or guest houses, tourist apartments)	nº establishments	570	139	53	1	763
	nº places	53.886	21.682	7.330	356	83.254
Youth hostels	nº establishments	86	31	13	0	130
	nº places	6.857	1.425	1.152	0	9.434
Collective residences with temporary accommodation	nº establishments	21	11	19	0	51
	nº places	1.849	2.105	2.831	0	6.785

Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

3.2.3 Tourism Draft Decree

The current regulation of tourism in Catalonia is the Law 13/2002, but more detailed in the Decree 159/2012. This Decree do not contemplate the figure of home sharing understood as a new form of non-professional tourist accommodation consisting of sharing the main dwelling (usual and permanent residence), for periods of short duration and as different activity from HUTs. With the Draft Decree, for the first time, these differentiations will be included. These differentiations were very requested by associations of home sharing, by a great variety of units of the Generalitat of Catalonia (where the Interdepartmental Commission of the Collaborative Economy is included), by the City Council of Barcelona as well as by companies of the sector.

Regarding HUTs, the measures stablished by the Draft Decree do not seem particularly restrictive of the activity, it could be considered necessary and proportionate to the purpose searched, that is the correct regulation and ordering of the activity. On the other hand, the

rental by rooms of the HUTs is prohibited, which could be considered an important limitation without an evident justification.

Regarding home sharing, the established requirements by the Draft Decree seems sufficient to regulate and order the activity in an effective and safe way and, at the same time, provide legal security and a legal framework both to the owners of this activity and its users. However, it seems that there could be a strong barrier in the exercise of the activity. The article 241-1 states literally: *The owner must reside in the house for the duration of the stay*. This precept seems to indicate that it is not possible for the owner to carry out home sharing if he is not at home, which would significantly limit this activity. It does not seem a justified measure from the point of view of the principles of necessity or proportionality and, moreover, it presents a strong control complexity for the Administration. As other European cities and regions have done, home sharing activity could be limited to a maximum number of days a year when the host is outside the home, but it does not seem prudent to prohibit this modality in its entirety.

Finally, it should be noted that a prudential time is established for the adaptation of this new tourism modality by local entities. Concretely, the fifth transitory provision establishes a one-year term for title IV (home sharing) to enter into force. Thus, it can be understood that the activity of home sharing will remain not regulated until after one year of publication to the DOGC¹² of Draft Decree.

As a conclusion, we can expect that at least home sharing will not be regulated until the end of 2019. So, as we have seen HUTs are very restricted by the PEUAT, but home sharing is in a situation without restrictions. For that reason, we could expect an increase of the activity of home sharing in the following years.

¹² In Catalan DOGC is *Diari Oficial de la Generalitat de Catalunya*. In English: Official Gazette of the Generalitat of Catalonia.

IV. MARKET SITUATION: IMPACT

This section is composed by two main analysis, the first one is being related to the professional aspect of tourist accommodation, and the second one to its non-professional aspect.

4.1 Analysis 1

This analysis will focus on the professional part of tourist accommodation, such as hotels, tourist apartments, tourist housing, pensions and hostels. In this section we will study the effect that the two Moratoria have had in the city of Barcelona, both the one in 2014 concerning HUTs, and the one in 2015 affecting hotels and other types of tourist accommodation; as well as the effect of the current plan, the PEUAT.

1. BACKGROUND

One of the reasons for the Moratorium and the PEUAT, as it is described, is the high concentration of tourist establishments in certain neighbourhoods and districts, which caused a series of negative externalities such as gentrification and occupation of public space, among others. To give a more numerical view of this concentration, a ratio of the number of tourist places¹³ per hectare¹⁴ (ha) of the different districts has been used to see this differentiation and how it has evolved. Due to the limitation of the data, regarding the number of places per HUT it has been calculated through a district estimate¹⁵ with the data of 2014 and 2016. Therefore, the values could be even higher for the years 2015, 2016 and 2017.

Once the table with the number of places per hectare of each district of the year 2009 up to 2017 has been made, a graph has been elaborated for the respective year to have a clearer vision of this problem.

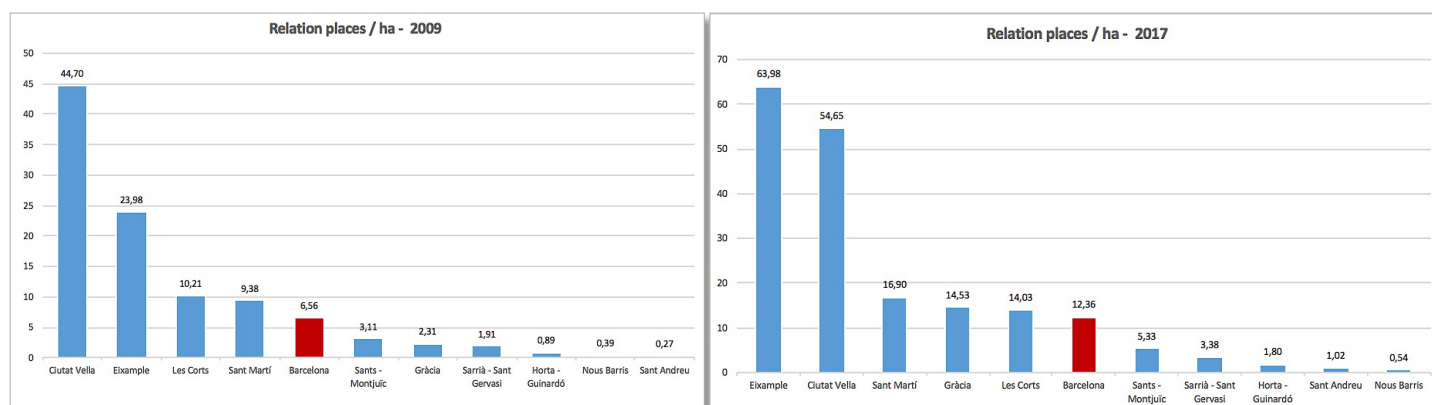
As it can be seen in the figure 2, already in 2009 there are two districts, Ciutat Vella and Eixample, that are clearly above the average of Barcelona, located in the 6.56 places per hectare; this means that tourism is concentrated in some districts of the city center. In contrast, we see that districts such as Sant Andreu or Nou Barris do not reach 0,5 places/ha.

¹³ See Table 2: Number of places per district in Annex.

¹⁴ See Table 3: Hectares per districts in Annex.

¹⁵ See Table 4: Estimation of number of places per HUT in Annex.

Figure 2: Relation places/ha in 2009 and 2017



Source: own elaboration with data retrieved from Ajuntament de Barcelona and annual reports of Gremi d'Hotels i Turisme.

When comparing the results of 2017 with those of 2009, we can see that the problem has worsened. The average number of places per hectare in the city has almost doubled, reaching 12,36 places / ha. The district of Eixample is the one that has a higher places / ha ratio because it has moved from having 17.924 places in 2009 to 47.833 in 2017. This is partly due to the fact a Plan of Special Land Use¹⁶ (Pla d'Ús del Sòl) was established in Ciutat Vella since 2010 where the number of establishments and places that could be established was greatly limited; and for this reason the ratio of places/ha has not experienced a considerable growth during these years. Another curious fact is that in 2017 there are 5 districts above the average value, compared to 4 in 2009. This new district is Gràcia, which has attracted many tourist establishments largely HUTs for its cultural life that has attracted a "modern" segment of middle-aged tourism.

To conclude with, it can be inferred that the problem has not really been solved. This is partially attributable to the fact that the intended solution to this problem is the PEUAT, which it has only had a short margin for the results to be appreciated, since its first version was applied in March 2016 and the definitive one in January 2017. Therefore, it can be expected that around 2019 we will start to see more favourable results around 2019, where the difference among neighbourhoods should have decreased.

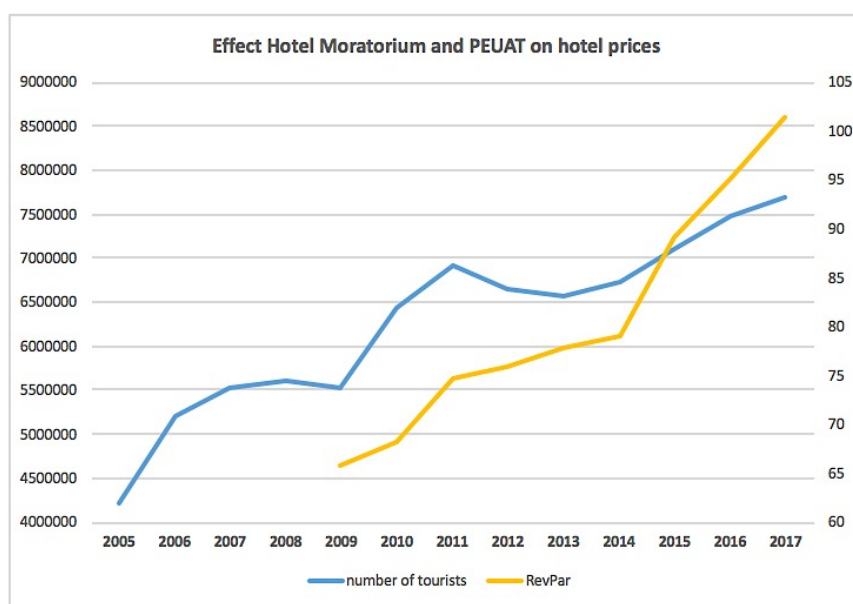
¹⁶ See Plan of Special Land Use (Pla d'Ús del Sòl):
http://apartur.com/media/files/normativa/14.-B1120_APROVACIODEFINITIVA%20PLA%20ESPECIAL%20USOS%20CIUTAT%20VELLA%202010.pdf

2. EFFECT OF HOTEL MORATORIUM ON PRICES

One of the possible effects of carrying out a moratorium is the increase in prices given that, as the economic literature states, when supply is restricted and demand keeps rising, prices are expected to increase. In this section of the Analysis we will try to see whether in the case of the Hotel Moratorium this relationship has really taken place or not. To assess this effect, two price indicators have been compared with the evolution of the number of tourists. These price indicators are the *RevPAR: Revenue for Available Room* and the *ADR: Average Daily Rate*.

The first thing that has been done is observing the relationship between the evolution of the number of tourists and RevPAR.

Figure 3: Effect of Hotel Moratorium on RevPAR



Source: Own elaboration from data from IDESCAT and annual reports of Gremi d'Hotels i Turisme.

From *Figure 3*, it can be drawn as a first conclusion that there seems to be an increase in RevPAR at the end of 2014 and another one more accentuated on 2015, while the number of tourists follows a constant evolution. If we analyse 2015, we can see that the growth rate¹⁷ of RevPAR is 12.56% while the number of tourists increases by 5.13%. This increase coincides with the entry into force of the Moratorium.

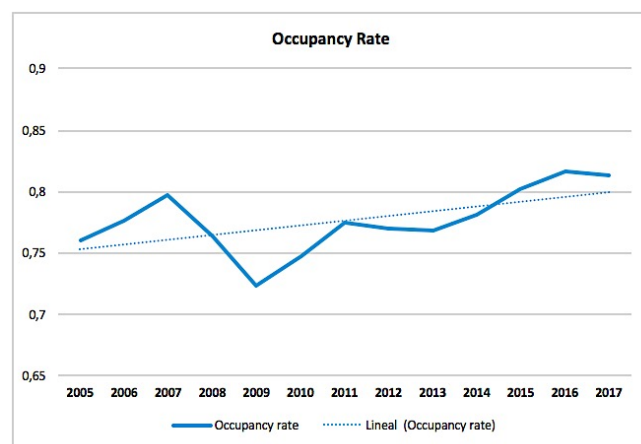
Analysing in detail the RevPAR, we can see that this variable depends on:

$$\text{RevPAR} = \text{ADR} * \% \text{Occupation}$$

¹⁷ See Table 5: Growth Rates in Annex.

Therefore, it is convenient to analyse the two variables to determine which one happens to be the cause of such increase. Regarding occupation, it has been increasing since 2013, although it has done so at low rates, and it has come from a stage of instability due to the crisis and the economic recovery. Between 2015 and 2016 the observed growth rate¹⁸ is 1,74%, rendering a positive value thanks to the fact that the offer was being restricted, but not the number of tourists. In addition, during these years the evolution of occupation is above the trend line, which is in fact a reasonable situation due to the fact that offer is restricted but the number of tourists not.

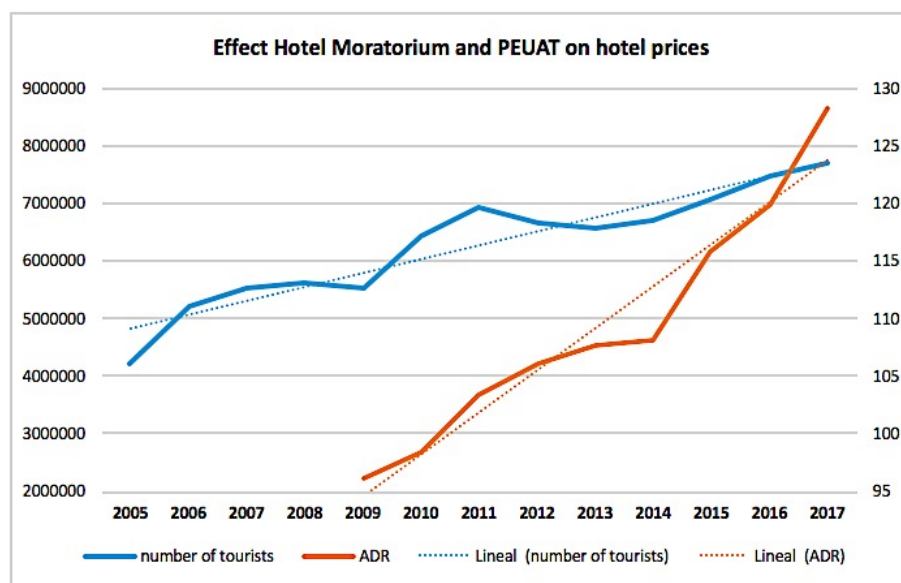
Figure 4: Evolution of hotel occupancy



Source: Own elab. with data from Annual reports of Gremi d'Hotels i Turisme.

Overall, everything indicates that the cause of RevPAR growth is ADR, which is the true indicator that is used to estimate the hotel price.

Figure 5: Effect of Hotel Moratorium on ADR.



Source: Own elab. with data from IDESCAT and Exceltur for 2017 (ADR) and annual reports of Gremi d'Hotels i Turisme.

We can see in Figure 5, that the evolution of the number of tourists follows the trend line from 2015, therefore, it has an expected growth. On the other hand, if we look at the ADR it looks like between 2015 and 2016, which is when the Moratorium has more effect, the ADR does not follow the trend line and experiences a strong growth of 7,19%. To corroborate that this

¹⁸ See Table 5: Growth Rates in Annex.

increase has not followed a natural evolution, we can look at the year 2010, where the number of tourists increased by 16,44% but the ADR only increased by 2,52%. Therefore, it demonstrates that the increase in tourism in 2015 does not explain the large increase in ADR (7,19%) because how it has been exposed, to influence the ADR we need a strong growth rate in the number of tourists. So we can say that the Moratorium has had a direct and important effect on the increase in prices, although there may be other influential factors in this increase.

In order to have a comparison with another Spanish city with similar characteristics, a comparison with Madrid of the hotel ADR has been carried out for the year 2017 to corroborate that the case of Barcelona is well above the normal evolution of prices.

Table 4: Comparison of the ADR of Barcelona and Madrid.

Barcelona				Madrid				
ADR	2017		RevPar	2017	ADR	2017	RevPar	2017
5*	267,5		5*	189,8	5*	184,8	5*	128,7
4*	130,9		4*	103,2	4*	96,4	4*	73,4
3*	102,4		3*	85,8	3*	84,5	3*	66,4
	128,2			101,5		95,8		72,4

Source: own elaboration with data from Exceltur.

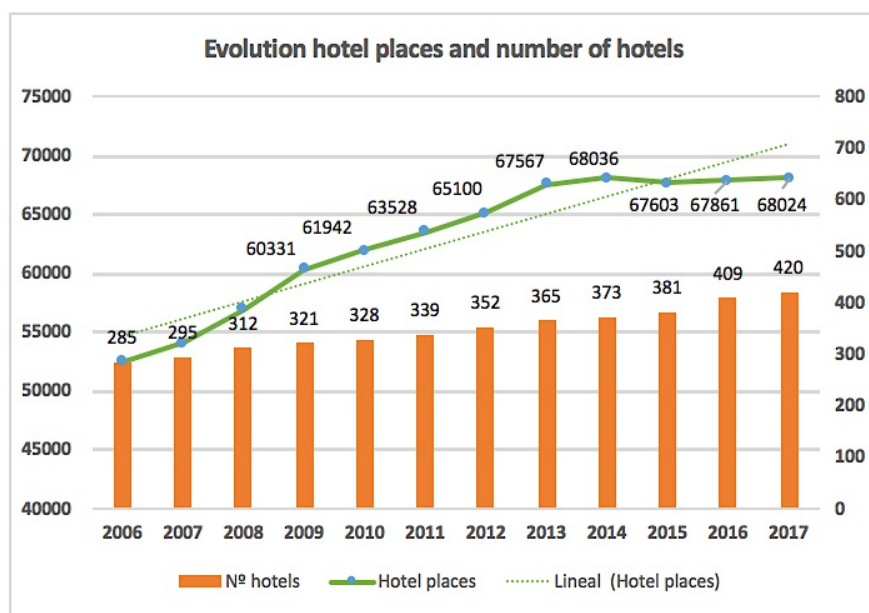
In this table we can see how the ADR of Barcelona is much larger than the one of Madrid in all the star segments. In the highest part that of 5* we can see that Barcelona's price is 82,70€ bigger than Madrid, a relatively high value in terms of prices. On average, Barcelona has a higher price of 32,40€ per room.

We cannot ignore that, together with the increase in prices caused by the Moratorium, one of the effects that will most likely result from the establishment of entry barriers imposed by the PEUAT will be the artificial creation of monopoly rents, as it has happened in many other sectors where the offer is quoted or limited. Consists in income that is transferred in favour of those benefited at the time by, in this case, the granting of licenses for the opening of tourist accommodation establishments. In front of the inability to access the market by other means, the only option to enter will be through the acquisition of a license owned by another operator, the value of which will not respond to market dynamics. In this case, as a consequence of the entry barriers imposed by the PEUAT, a revalorization of the price of the licenses is likely to happen that will harden the entry barrier imposed normatively even more (as it happens, for example, in the case of the taxi sector). In addition, the value of this asset will also imply an indirect cost that consumers will have to assume, since it will be transferred to the prices charged by the operators. Therefore, it can be expected that the increase of the price caused by the Moratorium will continue to grow in the following years, as it can be seen in the *Figure 5*, due to the fact that supply is limited and because of characteristics of PEUAT.

3. RELATION OF NUMBER OF PLACES

Another direct effect of the Hotel Moratorium is the freezing of the offer. In this section we will carry out an analysis of the effects caused by this situation. We must say that despite this Moratorium, new hotels have been built and more hotels will be built until 2019. This is because these hotels already had licenses prior to 2015. For example, it can be seen that in 2017, eleven new hotels¹⁹ were created in the districts with the highest concentration of places/ha, although the places have not increased much since the conditions of the Moratorium and the PEUAT greatly restrict their creation and maintenance. For instance, in order to renew hotel licenses or to carry out construction works, the number of places needs to be reduced.

Figure 6: Evolution hotel places and number of hotels.



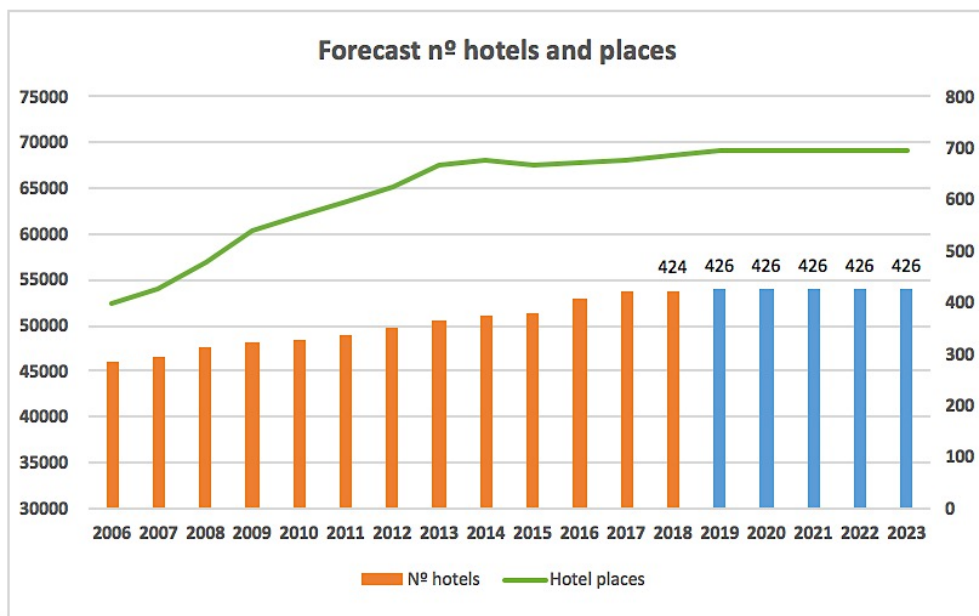
Source: Own elaboration with data from Annual reports of Gremi d'Hotels i Turisme.

We can see in *Figure 6* that the number of places has increased above the trend line until 2015. But if we look between 2014 and 2015, the number of places decreases from 68.036 to 67.603, despite 8 new hotels are created; this is due to the aforementioned conditions that the Moratorium and the PEUAT have implemented. The trend line of the number of places shows that the evolution, in the absence of the Moratorium, would have depicted a positive growth rate; whereas in 2017 we would expect that the number of places was around 75.000, instead we can see that the number of places is 68.724. Therefore, we observe that there is a significant contingency in the offer.

¹⁹ See Table 6: New hotels inaugurated 2017

We have estimated the number of hotels that will be in service from 2019, which will be the year when no more hotels are built. In this regard, Barcelona will be the only Western market where the hotel offer will remain rigid in its territory or will decrease due to administrative regulations.

Figure 7: Forecast of hotel places and number of hotels.



Source: own elaboration with data from Annual reports of Gremi d'Hotels i Turisme and current hotel licences from Ajuntament BCN.

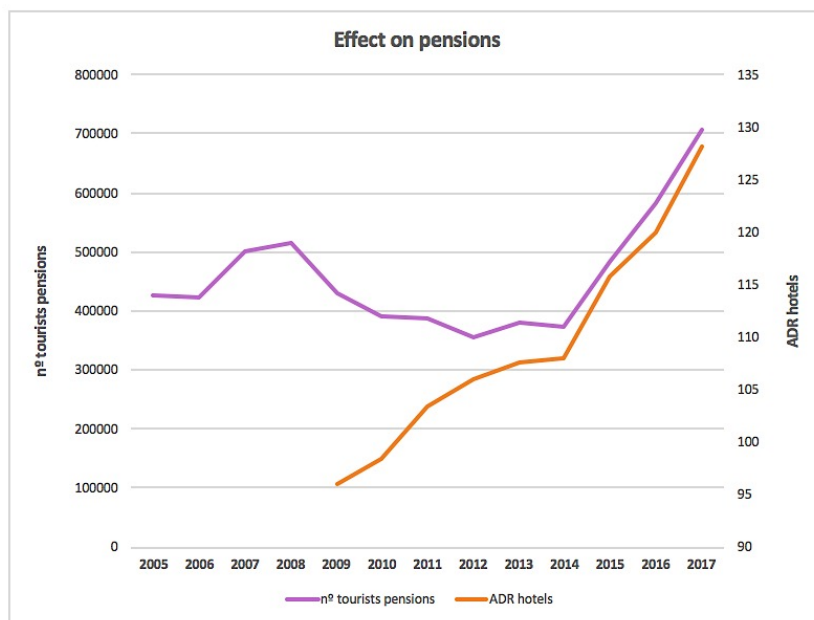
The forecast, in blue, has been estimated taking into account the fact that since the implementation of the Moratorium in 2015, we knew that the construction of 45 hotels will be allowed. The data of 2017 was in the annual report of the Gremi d'Hotels i Turisme and, to know the number of 2018, the number of current licenses in the city has been downloaded from the webpage of Barcelona City Council. Therefore, it has been estimated the year 2019.

As it can be seen, from 2019 onwards the number of hotels cannot grow above 426. The arrival of tourists will continue its growing evolution; nonetheless, the hotel places will not. This will probably cause slight increase in hotel occupancy if possible since in the summer months' the occupancy is around 98%, and it will continue to encourage the growth of the ADR. In addition, a constant hotel offer facing a growing demand for accommodation, will probably create an unsatisfied demand for the offer of traditional tourist accommodation and would help to increase the already existing movement of guests towards other accommodation formulas such as pensions or HUTs, either legal or illegal. This may cause a change in the type of tourist arriving to the city, which will need to adapt to the existing offer at the time.

4. SPILLOVER TO PENSIONS

One of the forms of accommodation that has benefited from the Moratorium is pensions. This Section will show how this cheaper form of accommodation has benefited from the strong increase in hotel ADR due to the restriction of the offer.

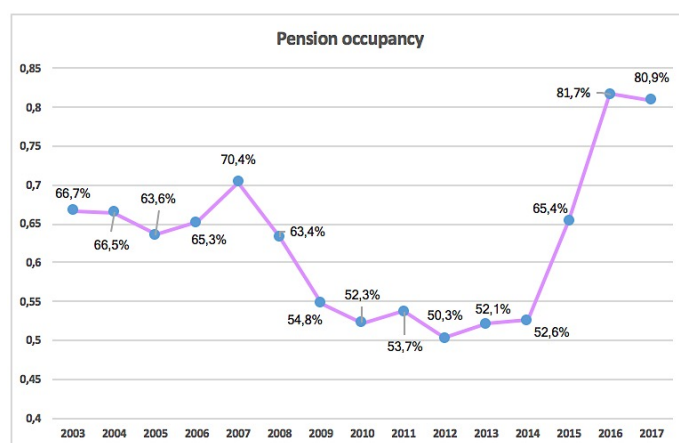
Figure 8: Effect of the Moratorium on pensions.



Source: own elaboration with data from Annual reports of Gremi d'Hotels i Turisme.

We can appreciate in *Figure 8* that there exists a strong correlation between the increase in hotel prices and the increase of the number of tourists in pensions in 2014, but especially in 2015, where the growth rate²⁰ in the number of tourists is 29,98%, in 2016 20,99% and in 2017 20,85%. This situation could not be explained in a context without the Moratorium, this is supported by the fact that, if we look at the growth rates of previous years, we can see that there were negative rates since 2009, except for 2013 (**2009: -16,01%; 2010: -8,99%; 2011: -1,57%; 2012: -8,36%; 2013: + 7,60%; 2014: -2,45%**).

Another consequence of this increase in the number of tourists in pensions involves the occupation, as it has increased reaching values never seen before by this type of accommodation. Between 2014 and 2015 increased by 12,8 points, but between 2015 and 2016 at the time when the Moratorium had a stronger effect it increased by 16,3 points.



²⁰ See Table 7: Annual growth rate tourists on pensions in the Annex.

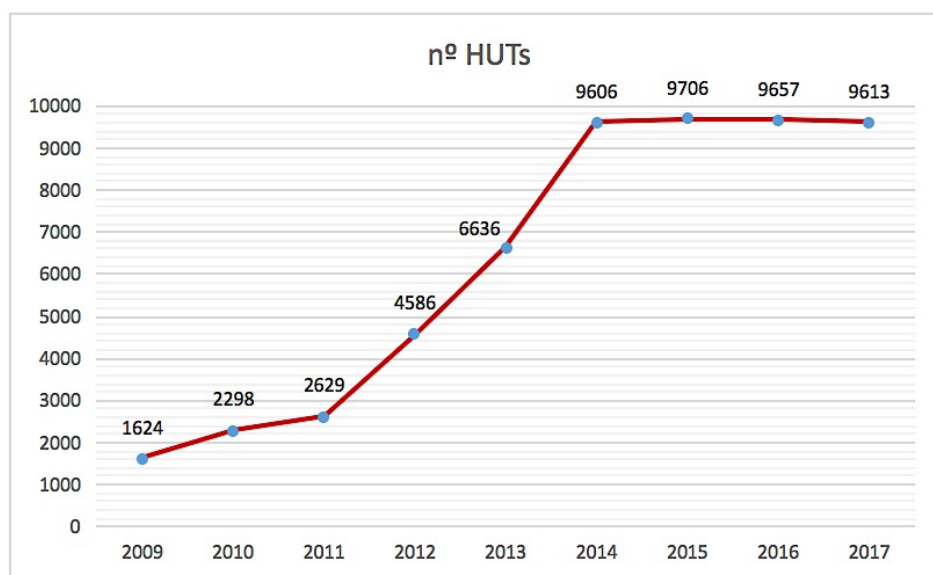
In 2016, the average occupancy was 81,7%, the same value in hotel occupancy. We should remember that this means that at the high seasons the occupancy it is around 98%. This situation shows us the magnitude of this spillover.

It is necessary to remember that this type of tourist accommodation is also affected by the Moratorium and is under the regulation of the PEUAT, therefore the offer is limited. This means that an unsatisfied demand will be created and it will seek other forms of accommodation, such as the case of HUTs, both legal and illegal, which will be analysed in the next section.

5. SPILLOVER TO HUTS

One of the possible destinations of this spill over could be the HUTs. A graph (*Figure 9*) has been elaborated showing the evolution of the number of licenses conceived from 2009 to 2017 and how it has been restricted by the Moratorium of HUTs in 2014 and currently by the PEUAT. In addition, it has been possible to identify the distribution in terms of districts²¹ of the HUTs. In the *Table 8* of the Annex, we can see how all the HUTs are concentrated mainly in the districts of the city center, namely in the Eixample that concentrates 46% of the licenses in 2017. On the other hand, it is surprising to see that Ciutat Vella has had the same number of HUTs 604 since 2009. This is due to the fact that in 2010 the establishment of new HUTs was prohibited through the *Pla d'Usos de Ciutat Vella 2010*.

Figure 9: Evolution number of HUTs.



Source: own elab. with data from Ajuntament de Barcelona; PEUAT; download currently number of licences 2017.

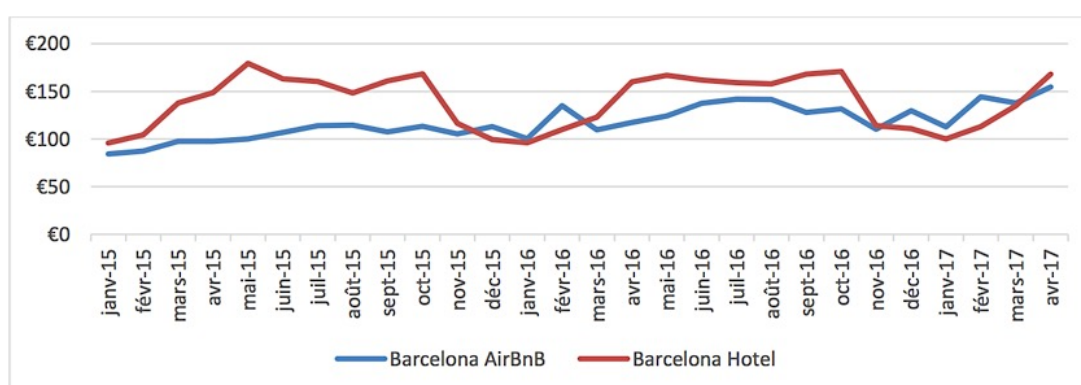
²¹ See Table 8: HUTs per districts in the Annex.

In fact, HUTs have followed an evolution trend contrary to that of pensions. Until 2014, the evolution was highly positive, with growth rates²² of 41,5% in 2010; 14,4% in 2011; 74,44% in 2012; 44,70% in 2013 and 44,7% in 2014. During these years, the hotel lobby pressured the authorities because there was a strong competition with the HUTs since they found a niche market, especially for families and groups that wanted to stay in the city center and with other type of amenities. But, as it can be seen in *Figure 9*, since 2014 the offer is stagnating due to the Moratorium, with a small increase in 2015 due to previously authorized licenses.

The Moratorium of the HUTs was set one year before than the one of the hotels because this kind of tourist accommodation started to experiment an important increase of the number of properties available for short-term rental market in 2010-2011, when digital platforms made it more visible. But this tourist activity was related with some negative externalities such as noise in neighbourhoods, insecurity, excessive waste generation, gentrification, congestion in neighbourhoods with narrow streets, flats not prepared for the entry and constant exit of people, among others; that were higher than the positive externalities being created such as greater economic activity, more jobs, reinvestment in the neighbourhoods with the tourist rate, among others. For that reason, it was very restricted by the current regulation, PEUAT.

One of the consequences of limiting the offer has been the increment of the *ADR* up to levels similar to the ones of the hotels, and also, it has led to an increase of the revenue per dwelling. In the following graph (*Figure 10*), we can see the comparison of Hotel and Airbnb ADR; and in the Annex *Figure 2* we can see the increment of revenue per HUT. Airbnb has been used as a reference for number of HUTs, since it is the most representative platform and the only one that has available data to analyse. These results can be extrapolated to the rest of HUTs.

Figure 10: ADR Airbnb entire place and hotel room.



Source: data from AirDNA.

²² See Table 8: HUTs per districts in the Annex.

In order to have the certainty that such increases in *ADR* in Barcelona have not been an isolated issue, a comparison of the *ADR* of hotels and HUTs (again taking Airbnb as reference) has been elaborated with other relevant European destinations.

Table 5: Comparison between ADR of Airbnb entire place and hotel room.

City	ADR (2016) -EUR			% change
	<i>Hotel</i>	<i>Airbnb</i>	<i>Difference</i>	
Amsterdam	162	157	5	3,1%
Athens	94	60	34	36'2%
Barcelona	142	126	16	11'3%
Berlin	101	85	16	15'8%
Brussels	110	78	32	29'1%
Florence	126	104	22	17'5%
Lisbon	106	76	30	28'3%
London	182	108	74	40'7%
Paris	151	109	42	27'8%
Prague	79	73	6	7'6%
Stockholm	165	127	38	23%

Source: own elaboration with data from AirDNA for Airbnb statistics. National statistics for Hotel.

We can observe in *Table 5* that, with the exception of Amsterdam that has his particularities, Barcelona is one of the cities with the highest prices for hotels and specially for HUTs. In addition, the difference between both concepts is one of the lowest ones, only surpassed by Amsterdam and Prague (that has lower prices in both accommodations). This corroborate the idea that the Moratorium of hotels and HUTs has caused an important increase on prices in both accommodations.

If we look to the forecast in the Section 3, the prediction for Barcelona is a constant increase of *ADR*. So by limiting the offer together with the consequent increment of the prices and occupation, summing a constant increase of the number of tourists will stimulate the creation of illegals tourist accommodations in order to satisfy the unsatisfied demand. This volume of illegal accommodations will be analysed in the following Section using Airbnb as a reference.

6. ILLEGAL AIRBNB

One of the most concerning problems that HUTs have had is that, during the boom experimented as a result to the diffusion of the platforms such as Airbnb, it was created a high number of illegals HUTs because it was very easy to offer one's apartment through these platforms. This situation accentuated even more the problem of negative externalities in the neighbourhoods, since the concession of licences was determined depending on the legal licences established in the neighbourhood but not on the illegals, and this is why between 2009 and 2014 many licenses were granted.

The current situation has not changed much in relation to the number of illegal tourist flats, although Airbnb recently made public the implementation of a new tool²³ to combat illegal tourist flats. This new tool will share data with the consent of users with Barcelona City Council. To have an idea of the magnitude of the number of unlicensed flats in Barcelona, in August 2017 the Airbnb platform removed 2.332 flats from its website since they did not have the corresponding license.

Next, we have carried out an estimation of the number of illegal HUTs in the city of Barcelona, and also determine which percentage it represents.

Table 6: Quantification of total offers by different platforms.

City	Airbnb	Wimdu	9 flats	Home Away	Home Exchange	Guest to Guest	Total
Barcelona	17.369	3.417	1.419	5.501	1.113	5.700	34.069
Entire property	8.762	1.356	1.323	-	1.113	5.700	18.254
Home Sharing	8.607	299	73	-	-	-	8.979

Source: own elaboration with data from collaborative short-term rental platforms website.

In Table 6, a compilation of the HUTs offered by the most representative platforms in the city has been elaborated. In this Section of the Analysis we will focus on the entire property, since home sharing is not regulated and therefore we cannot consider it to be illegal. As we can see, there is a total of 18.254 HUTs offered through platforms. But we must keep in mind that there are offers that are duplicated, since a specific HUT can be offered in different platforms. Therefore, an overlapping correction of 23% will be applied. This percentage has been estimated by the Barcelona City Council²⁴.

²³ According to the article by 20 Minutos published on Monday, May 28, 2018:

<https://www.20minutos.es/noticia/3351990/0/airbnb-lanza-nueva-herramienta-1-junio-para-combatir-pisos-sin-licencia/>

²⁴ Overlap correction done it by Ajuntament de Barcelona:

https://ajuntament.barcelona.cat/turisme/sites/default/files/160921_informe_impacte_lloguer_vacacional.pdf

Therefore, if there are 18.254 HUTs among all the platforms and we apply the 23% overlap correction, we obtain that there is a total of 14.056 HUTs. If we take into account that nowadays there are 9.613 licenses, it results that in the city of Barcelona there is a total of 4.443 illegal HUTs. This amount represents the 31,6% of the total offer. Hence, we see that we are in front of a problematic situation, where 3 out of 10 HUTs are illegal. With the Moratorium and the PEUAT, that restrict the supply of HUTs in the city center and have led to the increase of the prices and therefore of benefits, we will see in the following years a potential increase of the number of illegal HUTs, especially in the city center, since this is the area where most tourists want to stay.

To give a global vision of this phenomenon, the number of existing HUTs in Barcelona has been compared with other European cities²⁵. We can appreciate that Barcelona is the third city with the highest number of HUTs (18.254), after London (37.118) and Paris (70.488) which are cities with a much larger territory. As we see, Barcelona has a high number of HUTs even that is under the influence of the Moratorium and a very restrictive regulation currently in force, the PEUAT, which has paralyzed the offer of the HUTs and has caused that the current growth is mainly based on illegal HUTs. In consequence, we can expect an increase in illegal HUTs since it seems that Barcelona is an attractive location for this kind of accommodation.

7. RELATION BETWEEN HUTS AND TRADITIONAL RENTAL

Dwellings for tourist use (HUTs) have been criticised by different sectors, since they have been related to the increase in traditional rental prices and the reduction of traditional rental contracts. The objective of this Analysis is to assess whether this is actually true or not.

First of all, we have compared the evolution of the number of HUTs with the number of contracts of traditional rental. As it can be seen in the *Figure 11*, when HUTs increase, the number of traditional rental contracts also do so. Since 2014 traditional contracts suffered a little decrement but in 2016 they started to increase again. This increase in 2016 can be associated with the removal of some HUTs from the platform Airbnb due to the fines imposed on it and to hosts by the City Council of Barcelona²⁶.

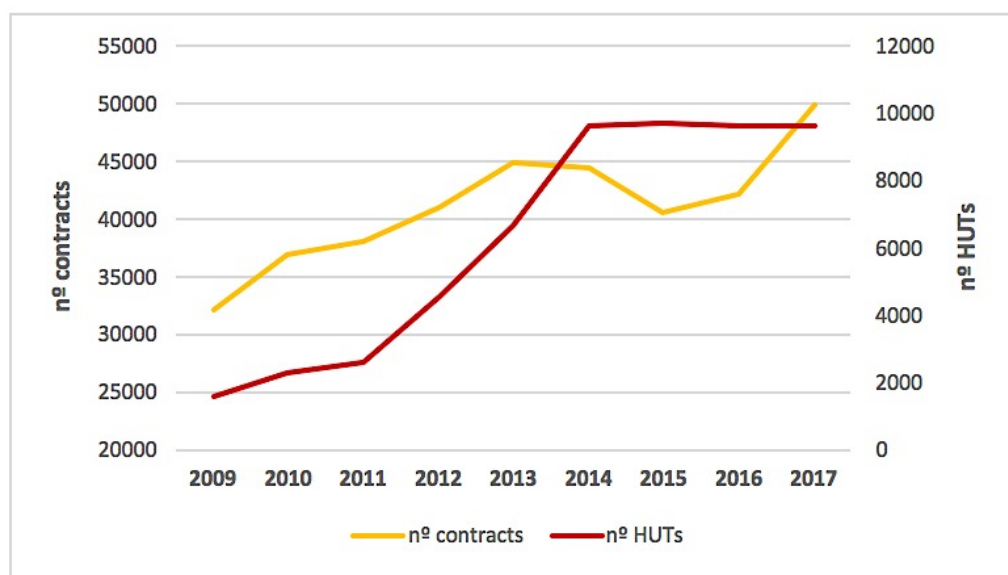
Additionally, we can see that HUTs have not influenced the traditional rental market since they have followed similar trends until the Moratorium in 2014. If a direct incidence had taken

²⁵ See Table 9: Available platform listings for the main collaborative short-term rental platforms in the Annex.

²⁶ According to the article by *El País* published on Thursday, November 24, 2016
https://elpais.com/ccaa/2016/11/24/catalunya/1479976225_934881.html

place, the expected results should have depicted a contrary trend: when HUTs had increased, the number of contracts would have decreased.

Figure 11: Evolution of HUTs and number of traditional rental contracts.

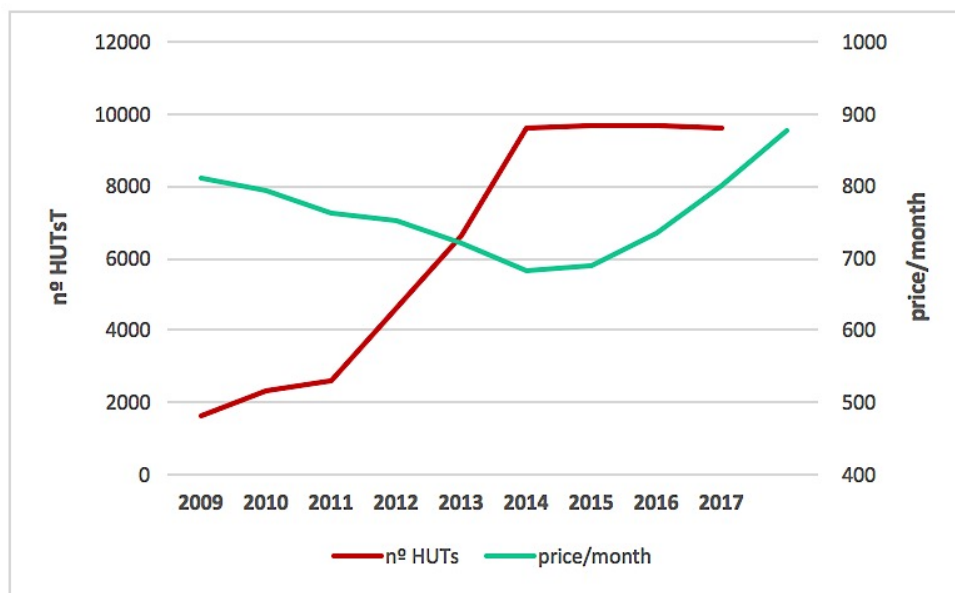


Source: own elaboration with data from Ajuntament de Barcelona.

Regarding the effect of HUTs on the traditional rental price, another comparison has been done between the evolution of the HUTs and the monthly price of traditional rent. As we can observe in the *Figure 12*, we can arrive to the same conclusion as in the case of the number of contracts. There is no direct correlation between the increase of monthly price with the increment of HUTs, since they follow opposite trends. This result matches with the paper “*El impacto del alquiler de viviendas de uso turístico en el mercado de alquiler residencial de Barcelona*”²⁷ done it by InAtlas and APARTUR. In it, they relate the increase of the prices with other factors such as the economic recovery, the increase of qualified demand, increase of the sale of flats, among others.

²⁷ Paper: “*El impacto del alquiler de viviendas de uso turístico en el mercado de alquiler residencial de Barcelona*”: http://apartur.com/media/files/Estudis/El_impacto_del_alquiler_de_viviendas_de_uso_RESUMEN.pdf

Figure 12: Evolution of HUTs and monthly price of traditional rent.



Source: own elaboration with data from Ajuntament de Barcelona.

Finally, we should keep in mind that we only have analysed the HUTs with licence, so, if we also take into account the illegal HUTs, the total number would be much higher. But in fact, it would not affect the conclusion that the HUTs have no effect on the rental price or on the number of rental contracts, since the incorporation of illegal HUTs it would cause a shift of the HUTs curve to the left. But the relationship until 2014 would be the same: when the number of HUTs increases, the monthly price of rental decreases and the number of contracts increases. Regarding prices, from 2015 onwards the illegal HUTs could have had an incidence in the increase of the prices, but this is a complicated hypothesis to examine due to the lack of more precise data.

4.2 Analysis 2

In this Section we will undertake an analysis of the real situation of home sharing in Barcelona, and its distribution by districts. In addition, we will do a quantification of the revenues of the hosts and the possible application of the *Personal Income Tax* (PIT), *Value-Added Tax* (VAT) and the Tax on Stays in Tourism Establishments (TSTE).

1. BACKGROUND

The home sharing boom appears at the same time as technological platforms of intermediation between particulars start to emerge, most of which give value to underused goods or services. The rental of rooms in the main dwelling is an existent offer in other countries, but not in Catalonia, from a legal point of view. This activity could be related with the concept of collaborative economy given that we find an exchange among equal individuals, the resident, the resident family and another citizen, who can offer an underused product, such as an unoccupied room, and generate an economic transaction in doing so; however, it is not a professional activity, but a sporadic one, usually performed as a supplementary source of income. Due to the fact that nowadays this activity remains unregulated, there is no official evidence about the number of rooms in Barcelona, the distribution between districts or the revenues that it generates. In *Table 7* we can observe the real and current weight of home sharing in the different districts and a comparison with HUTs. Also we can see the distribution of the home sharing on maps of the different districts in BCN.

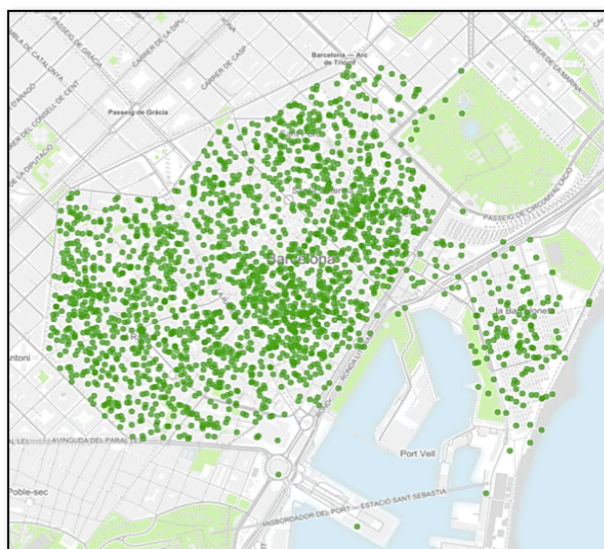
Table 7: Distribution and weight of home sharing by districts.

District	Entire Home (HUTs)		Home Sharing		TOTAL	% Home Sharing / HUTs
	N	% city	N	% city		
Ciutat Vella	1.632	18,92 %	2.141	22,01 %	3.773	56,75 %
Eixample	3.306	38,32 %	2.926	30,08 %	6.232	46,95 %
Gràcia	874	10,13%	847	8,71 %	1.721	49,22 %
Horta - Guinardó	193	2,24%	413	4,25 %	606	68,15 %
Les Corts	197	2,28 %	244	2,51 %	441	55,33 %
Nou Barris	36	0,42%	212	2,18 %	248	85,48 %
Sant Andreu	76	0,88%	213	2,19 %	289	73,70 %
Sant Martí	907	10,52 %	1.218	12,52 %	2.125	57,32 %
Sants - Montjuïc	989	11,46 %	1.192	12,26 %	2.181	54,65 %
Sarrià – Sant Gervasi	417	4,83%	320	3,29 %	737	43,42 %
Barcelona	8.627	100 %	9.726	100 %	18.353	52,99 %

Source: Own elaboration from data of Inside Airbnb.

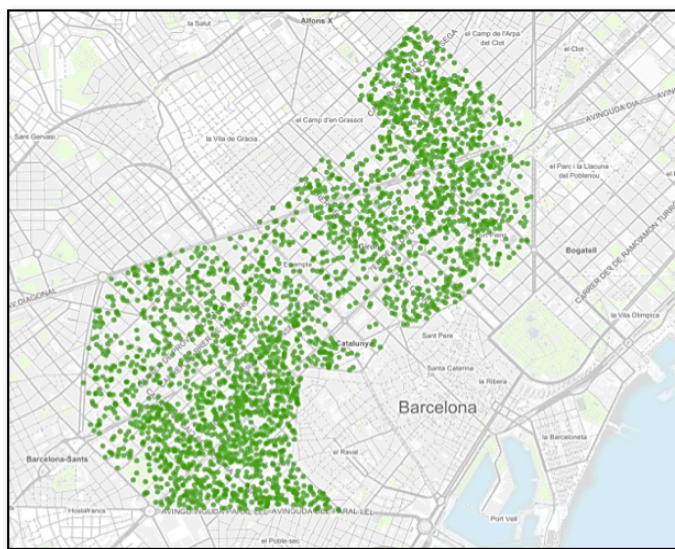
Data from this table have been obtained from the web *Inside Airbnb* that collects information about the platform through a program that analyses publicly available information about a particular city's Airbnb's listings. As it can be observed, the number of HUTs (8.627) does not match the number of current licences mentioned before (9.613). This is why this Analysis only focuses on the platform Airbnb in order to have an equal comparison with the number of home sharing also offered by this platform. From this Table we can extract some conclusions. Firstly, we can observe that the concentration of HUTs and home sharing are established in the downtown districts, following the analysis done it in section 4.1 point 1. Regarding HUTs, Ciutat Vella and Eixample concentrate a share of 57,24% of the total offer, and for home sharing they concentrates a total of 52,09%. In both cases, more than half of the total offer. If we focus on home sharing, we can appreciate that Eixample concentrates 30,08%, Ciutat Vella 22,01% and Sant Martí 12,52 %, summing a total of 64,61% of the total offer. In the next figures we can appreciate this concentration in the maps of the districts²⁸ of Ciutat Vella and Eixample, since they are the most representatives ones.

Figure 13: Home Sharing concentration in Ciutat Vella



Source: Own elaboration from data of Inside Airbnb.

Figure 14: Home Sharing concentration in Eixample.



Source: Own elaboration from data of Inside Airbnb.

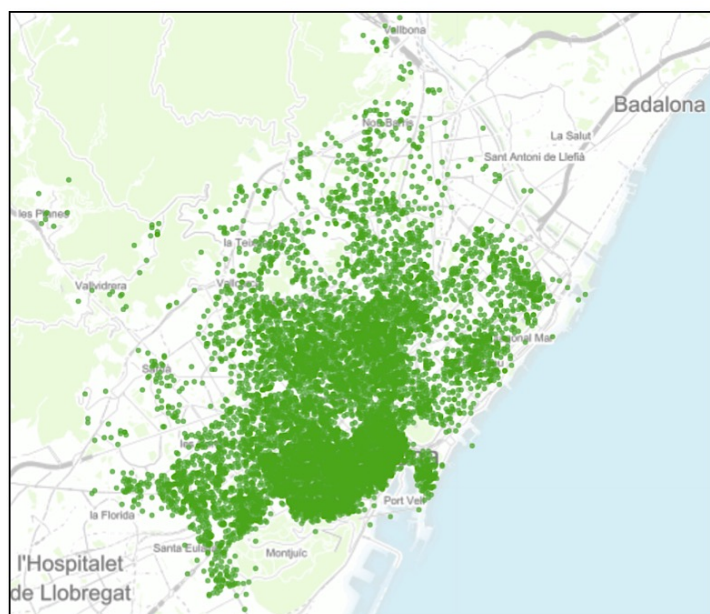
The results corroborate the idea that there is a correlation between the distribution of HUTs and home sharing in the different districts. We can also come to the conclusion that the number of home sharing is higher than the number of HUTs in most of the districts. Only in three districts the number of HUTs is higher than the home sharing (Eixample, Gràcia and Sarrià-Sant Gervasi). As a significant data, in the district of Nou Barris 85,48% of the offer refers to shared dwellings, whereas in the districts outside the city center home sharing prevails since the kind of tourist associated to this type of accommodation seeks more

²⁸ In the Annex, there is the map of the other Districts.

tranquillity, to know the authentic neighbourhoods, to integrate in the environment, and to move away from the mass tourism, among others.

If we look at the absolute values, we can see that the total number of home sharing (9.726) is higher than the HUTs (8.627), therefore, home sharing has a very important weight in the tourist offer of Barcelona. The fact that it is currently not regulated, implies a relevant loss of income for the city in the form of taxes. In *Figure 15*, we can take a look into the distribution of the shared rooms in the whole area of Barcelona.

Figure 15: Home Sharing concentration in Barcelona



Source: Own elaboration from data of Inside Airbnb.

Finishing with the weight of home sharing in Barcelona, we have done a comparison with different European cities²⁹ in order to corroborate that this activity has a very important weight in the city. Currently, Barcelona has around 8.979 home sharing and it is the second European city with the highest number of this type of accommodation, is above cities as Paris (5.318) or Berlin (6.256), only surpassed by London (20.020). So, we can observe that Barcelona is a city that concentrates a high number of this type of tourist accommodation, hence the need to regulate it as soon as possible.

²⁹ See Table 9: Available platform listings for the main collaborative short-term rental platforms in the Annex.

2. QUANTIFICATION REVENUES FROM HOME SHARING

To give monetary value to this analysis, we have made a calculation with different scenarios of the income generated by people who offer a room in their main dwelling through the platforms. The data has been obtained from Inside Airbnb, which has been used for the estimations. We should keep in mind that the amount could be higher if we had known the exact data of all platforms, but in the case of this report it was very difficult to do so since it was impossible to differentiate duplicate offers (the overlap correction used before is not useful in this case). Through the income generated we will do an assumption of how to apply the PIT, VAT and TSTE, and see the amount of revenues that has not been taxed since 2013 – 2014, when this kind of tourist accommodation started to become popular and incremented the number of shared rooms in the main dwellings.

- **Scenario 1:** *All the possibilities of availability and booked.*

Scenario 1	nº home sharing	estimated night/year	total nights	price/night	Revenues
	9726	89	865614	46	39.818.244,00 €

This scenario will be the one similar to the current situation, it has the rooms with high or low availability and the ones that are frequently booked or not so frequent. Under this scenario, the revenue that is earned from all the hosts is 39,8 Millions Euros per year.

- **Scenario 2:** *Only recently booked + all availability.*

Scenario 2	nº home sharing	estimated night/year	total nights	price/night	Revenues
	3705	187	692835	37	25.634.895,00 €

This scenario includes the rooms with high or low availability and the ones that have frequent booking. Under this scenario, the revenue that is earned from all the hosts is 25,6 Million Euros per year.

- **Scenario 3:** *Only high availability + all booked.*

Scenario 3	nº home sharing	estimated night/year	total nights	price/night	Revenues
	5254	99	520146	46	23.926.716,00 €

This scenario has the rooms with high availability and the ones that are frequently booked or not so frequently. Under this scenario, the revenue that is earned from all the hosts is 23,9 Million Euros per year.

- **Scenario 4:** *Only high available + recent booked*

Scenario 4	nº home sharing	estimated night/year	total nights	price/night	Revenues
	2270	188	426760	38	16.216.880,00 €

This scenario has the rooms with high availability and the ones that has only frequent booking. Under this scenario, the revenue is 16,2 Million Euros per year, being the case with the lower earnings, because are the rooms with more probability to be booked and available most of the entire year. These hosts will be more “professionals” than the ones that only offer their rooms a few days in a year.

As we can see, the amount that is being left to be taxed in the general case is around 40 Million, which is not a very large amount compared to a professional activity, but it is a good way to internalize the negative externalities that can be associated with this activity.

Once the amount earned by the different hosts has been calculated, it is important to know how to apply the different taxes. Before, we must know that in this context of collaborative and digital economy, the fiscal problem that the Administration faces how to collect in the most efficient way possible, reducing the complexity encountered by the taxpayer, the taxation of a multiplicity of occasional rents and of unitary dimension much smaller than those obtained in the professional or business field of the same sector. Therefore, we must take into account two basic premises:

- To establish a proportionate tax system for a large number of income earners in the collaborative and digital economy, so that this activity can be developed in an appropriate fiscal framework.
- Not to distort competition with the professional sectors of the traditional economy.

Once we have some guidelines on how to apply each specific tax, we can go into detail with the different taxes.

3. PERSONAL INCOME TAX (PIT)

Taking into account the current regulations, the citizen has to contribute to the PIT regardless of the way in which the income is received or whether it comes from an occasional and accessory activity or from a habitual activity. Thus, any output obtained from an activity developed through a digital platform has to be taxed. For that reason, home sharing is taxed by PIT.

How should we apply the tax? To answer this question, we can first take a look at the European benchmark of what have done countries like France, Belgium or the United Kingdom, following the advice of the European Commission in its agenda on collaborative economy:

France:

It has proposed to create, in its tax regulations, a new category: that of *income received through the intermediation of digital platforms*. In this category, as long as the platforms themselves provide the corresponding information, particulars who obtain these rents can apply a maximum deduction of 3.000€. Thus, these rents will be taxed in a different concept than the income of work and will have this ad hoc bonus of 3.000€.

Belgium:

In the last modifications of the Personal Income Tax³⁰, it foresees that the income obtained through platforms, under certain conditions³¹, will be reduced by 50% in terms of attributable expenses. Thanks to that, the Belgians can declare the PIT with a threshold up to 5.000€ per year as income obtained through digital platforms. These revenues, after reducing them by 50% in charge of imputable expenses (without documenting them), are taxed at a rate of 20%. In other words, revenues up to the threshold of 5.000€ are effectively taxed at 10%, a lower rate than the one applied to the main income of taxpayers.

From March 1st, 2017, the Belgian Government has established a system of collaboration with the platforms in the collection of this tax: the platform practices a 10% withholding of payments to citizens who provide services intermediated by the platform. On the other hand, and coherently with the fiscal threshold, for income below 5.000€ per year the participation of individuals on platforms without requiring registration in the self-employed system is allowed.

United Kingdom:

There exists a Governmental proposal of absolute exemption in PIT and VAT. The English model does not require any fee, tax, or registration for the income of individuals with 2 thresholds, each of 1.000£, one for revenue from goods platforms and the other for revenues from service platform.

³⁰ Modification of the financial Law in Belgium that entered into force 14/07/2016.

³¹ Conditions: borrowed in Belgium; different objectives of the economic activity of the subject; exclusively lent by natural persons to natural persons; provided in the framework of intermediation of a platform hosted by a Tax Code or a platform organized by a public authority; payments for service provision are only received from the platform; In addition, for the exemption from VAT application, the sales does not have to exceed 3.255€ per year.

To apply it in Barcelona, we must take into account our particular tax system, whereby the income obtained in the rental of real estate you have to pay taxes in the category of Returns on fixed capital assets³². The taxed income is the income obtained minus the deductible expenses and we must take into account the concept of imputed income in the cases of rental of the property in a property different from the habitual residence³³.

In collaborative economy activities offered by individuals through platforms, it is not possible to catalogue the income obtained as income from economic activities, since it is for the self-employed or professional category. Independently of what the normative of home sharing could establish, the own normative of the PIT requires to the declarant that has hired a full-time employee dedicated to the activity of management of the offered properties to declare it in the concept of Returns of economic activities. Clearly, then, the concept of the citizen agent-producer citizen (the one that shares his main welling) excludes the realization of the activity by employees under his charge.

Therefore, the proposal is to apply a similar system to the ones mentioned before, where a maximum threshold is set in order to not be declared as a professional activity, which has a bonus (up to 1.000€ a year you do not have to declared it, as the United Kingdom does) and a deduction similar to Belgium when you declare the income of the returns on fixed capital assets, up to a maximum of € 6.000€ per year applying a tax rate with 50% of tax deduction.

4. VALUED – ADDED TAX (VAT)

In the case of the application of VAT in Barcelona for home sharing, the tax definition itself already informs us about how it will be taxed. Article 4 of the VAT Act stipulates that the delivery of goods and the provision of services made by entrepreneurs or professionals, on a regular or occasional basis in the development of their business or professional activity is subject to tax. Article 5 defines as an entrepreneur / professional who makes one or more deliveries of goods or services that involve the exploitation of a tangible or intangible asset in order to obtain continued income over time. Therefore, home sharing would not be under this definition, since it is considered as a non-professional activity. In addition, there exists a VAT exemption in the rental of housing when the individual does not offer services similar to those of hotels services (*Article 20. section 1.23 or letter e/ of VAT Act 37/1992*). This

³² In Catalan: *Rendiments del capital immobiliari*. In the case of occasional rents, if the landlord is the owner of the property, it must be taxed as Returns on fixed capital assets.

³³ The dwellings in property different from the habitual domicile are already taxed in the PIT by imputation of rents (2% of the cadastral value of the property, in general). The PIT declaration will distinguish the part of the year in which the property has been rented and the income obtained will be declared, as well as declaring the corresponding imputed income for the period in which it has not been rented.

exemption is applicable to individuals who undertake home sharing, always under the abovementioned conditions.

Therefore, the income previously calculated would only be taxed in terms of PIT, under the conditions indicated before, and would not do it through VAT.

5. TAX ON STAYS IN TOURISM ESTABLISHMENTS (TSTE)

This tax is exclusive for tourist activity, for that reason home sharing it is under this tax. Therefore, when this activity will be finally regulated, the TSTE will have to be applied. The definition of the tax describes the amount of tax rate for each type of activity, as we can see below:

Type of accommodation		General Rate		Special Rate
		Barcelona city	Rest of Catalonia	
5-star hotel, grand lux hotel and establishment similar category		2,25 €	2,25 €	
4-star and superior 4-star hotel and establishment similar category		1,10 €	0,90 €	5,00 €
Dwelling for tourist use (HUT)		2,25 €	0,90 €	-
Other establishments		0,65 €	0,45 €	2,50 €
Cruise ships	> 12 hours	2,25 €	2,25 €	-
	≤ 12 hours	0,65 €	-	

Source: data from Law 5/2017 of March 28, on fiscal measures.

In the quantification of the tax collection under TSTE, we will use the same tax rate as in the case of HUTs, since it can be considered to be a similar activity, despite the fact that we could use a lower rate because home sharing is less invasive than HUTs. But we have considered that the convenient tax rate is 2,25€ per person. It must be said that the payment exceptions of the TSTE have not been taken into account since we do not know from the data if the person is ≤ 16 years of age, if the purpose of the stay is health reasons, among others.

Tax TSTE	nº home sharing	estimated night/year	total nights	persons per room	tax base	tax rate	tax collection
	9726	89	865614	1,75	1514825	2,25	3.408.355,13 €

Source: Own elaboration from data of Inside Airbnb.

As we can observe, the current tax gap is 3.408.355,13€. It is not a large quantity if we compare it with the tax revenue obtained from other taxes, but it is relevant enough since it solves the problem of the externality at the origin, reducing the competitive and regulatory distortion on the market. In addition, the tax collection of the TSTE goes to the *Fund for the promotion of tourism*, which is configured as a mechanism to finance tourism policies to improve the competitiveness of Catalonia as a tourist destination and to ensure the sustainability of tourism.

Finally, the other aspect to be addressed in relation to the TSTE, jointly with the Tax Agency, consists of the possibility of converting these intermediation platforms into agents of collaboration with the Administration in the collection of the tourist taxes, called *assistant in the collection*. In so far as they already do a function of collection and payment, charging the client and paying the host, it could be incorporated in this economic management the collection of the tourist tax, which would not have to be done it by the host, and the platform itself could make the corresponding deposit to the Tax Agency. This is a collection system beneficial for all parties:

- It would be more simple for the individual that operates through the platform since the tax collection will be managed by the platform itself.
- It would imply an increase in revenue for the Generalitat without a proportional increase in administration costs.
- It would eliminate the presumed disloyal competition argued by the business sector with respect to the non-collection of the TSTE by individuals who act through digital platforms.

V. SPANISH AND EUROPEAN BENCHMARK

In this section we will have two different sections. The first section will be an analysis of what have done the other Spanish autonomous communities with competence in tourism in terms of regulating the tourist accommodation sector, specially HUTs. We will also see the position of the Competition Authorities respect to this regulation. With this first analysis we will know the common way of acting of this organisms. The second section will be a benchmark of what have done the other European cities in terms of the home sharing regulation.

5.1 Position of the Competition Authorities

1. COMMUNITY OF MADRID

The National Commission of Markets and Competition (CNMC)³⁴ has set a contentious-administrative appeal against *Article 17.3* of Decree 79/2014 of July 10 of the Community of Madrid. According to this article of the Decree, which came into force in August 2014, states that *dwelling for tourist use cannot be contracted for a period of less than five days*, which is a serious obstacle to free competition.

The CNMC believes that this article is an obstacle to the effective competition of the markets, since it restricts the consumer's ability to make decisions. In the same way, regulations could lead to the exclusion of certain operators from the market, since they do not have the possibility of meeting the minimum requirements and could lead to higher costs for operators which would transfer this increase to the prices paid by individuals for tourist rental.

Therefore, the commission does not agree with the measure mentioned before contemplated in the decree and considers that it is not justified in terms of necessity and proportionality. Therefore, it asks for its elimination, since it could involve direct damages for the consumer. In 2016, the justice forced to eliminate this article.

2. CANARY ISLANDS

The CNMC has set a contentious-administrative appeal against the Decree 113/2015 because introduces new restrictive regulations on tourist accommodation, specially for the HUTs. The Competition Authority made a request to the Superior Court of Justice of the Canary Islands for cancellation of legal provisions that harm competition. In April 2017, the Court of Justice

³⁴ In Catalan it is Comissió Nacional dels Mercats i la Competència (CNMC). From this point we will use CNMC.

cancels various precepts after the Government's refusal to abolish them. These precepts were the prohibition of short-stay tourist accommodation in tourist areas, since it favours traditional tour operators; the prohibition of rental by rooms; the obligation to be registered in the Registry before the start of the activity since it introduces excessive bureaucracy that serves as a deterrent.

3. CASTILLA LEÓN AND GALICIA

The CNMC has set a contentious-administrative appeal against the decrees of Galicia and Castilla y León that regulate the apartments and HUTs, considering that the legislation approved in these autonomies is contrary to competition and to the principles of efficient economic regulation. These regulations impose obligations, for example:

Castilla y León	Galicia
- Unjustified restrictions and detrimental for competition.	- Obligatory to rental the entire property.
- Intervention of the Administration to do price recommendations that can be used as reference prices.	- Limitation of rent to three months.
- Comprehensive catalogue of technical requirements and minimum services, the requirement of a number license on the property.	- Requirement of a technical requirements and minimum services to include in the rent of HUTs.
- Obligatory telephone assistance 24 hours.	- City councils can limit the number of HUTs.
- Prohibition of rental by rooms.	- Prohibition of rental by rooms.
- Fixation of temporary criteria to limit the stay.	- Imposition of a responsible declaration.

Source: Own elaboration from data of Decrees of Galicia an Castilla León.

The case of the PEUAT in Barcelona is not analysed in this section because the City Council justified this special measure in front of the CNMC. And the Competition Authority accepted that it was a provisional measure to overcome the problems of the city.

As a conclusion, we can say that the position of the competition authorities is always the same, and it was reflected very clearly in the blog of the CNMC when they complained against the Canarian case in 2016: *"In recent years, some regional regulations on tourist accommodations have been imposing a series of requirements and specific conditions that limit the entry and*

ability to compete of these operators. These restrictions to competition grants a privilege to the operators already installed and reduce the general welfare”.

We have arrived to this situation because during last years the tourist accommodation have become a challenge for many governments. Regulate them is not easy: the competences in tourist matter are in the hands of the autonomies. And many urban regulations are regulated by municipalities. This has generated a legal tangle where we can see what is allowed in a territory, a few kilometres away is illegal. The governments of the autonomous communities try to stablish order, but their regulations are often against the Competition Authorities.

Also, we can appreciate that HUTs has been very punished by the different regulations and home sharing completely prohibited. So, it will be a good solution to try to create a common regulation where the it follows the tips of the Competition Authorities and home sharing it is regulated. This common regulation could have differentiations depends of the characteristics of the different autonomous communities or cities, but following a common path.

5.2 European Benchmark of home sharing

The finality of this section is to do a briefly comparison of how different European cities have regulated home sharing. It will be useful to see the regulations that have worked in other cities.

Hamburg (2013): the city of Hamburg promulgated a new law that legalizes the rental of a private room or the entire dwelling when it is the main residence (first residence), assuming that the owners are temporarily away from vacation. There is no need to request any type of license as long as these conditions are met. If a second or different property is rented, a license must be requested from the local administration.

Paris (2014): since the approval of the *Loi Alur* in 2014, everyone who lives in France and has a home can rent a room in their house without having to ask for a specific license from the town hall or local authority, as long as it is the first residence (habitual residence). When a house or entire floor is rented, the limit is 120 days. The same law also allows rent for short stays to the second residences, although it leaves to the cities the criteria to impose additional requirements.

Lombardy (2015): the region that includes the city of Milano approved a regulation that regulates the collaborative economy and it established that the residents of Lombardy are free to share their houses and that home sharing is not a professional activity. This same

regulation allows people to rent their own dwellings without needing the requirements that professionals have to face.

London (2015-2016): London residents can rent their home for a maximum of 90 days a year. Airbnb has recently committed to establishing a limit within the platform, so that who rents an entire house cannot do it for more than this limit established by law.

Amsterdam (2015-2016): Hosts will be required to actively declare that they understand and fulfil with the regulations before publishing their advertisement in the tourist platform. A limit of 60 days is established and, like London, the platform will establish this limit so that an entire apartment cannot be rented more than these days if the necessary license or permit is not available.

As we can see, the main cities of Europe have regulated home sharing but also they have established the possibility to rental the entire main dwelling for a maximum of days per year. For that reason, our recommendation for Barcelona is to regulate home sharing, is already in the Draft Decree, but also to establish a maximum of days per year, between 60 and 90, that a particular can rent his entire main dwelling. With this activity there is no room for speculation, it will be a supplementary income when the individual is outside his dwelling, as for instance, during vacations or during a long work trip.

VI. CONCLUSIONS AND RECOMMENDATIONS

In this Section we will do a set of conclusions of all the analysis done during this academic work, and the same time some recommendations will be provided.

Analysing the position of the European Commission and the Parliament, we have arrived to the conclusion that home sharing it is a beneficial activity since represents an excellent use of underused resources and spaces, especially in areas that do not traditionally benefit from tourism; avoids the exit of neighbours of the most touristic neighbourhoods; there is no room for speculation; and fosters language learning, cultural exchange and sharing of experiences, among others. For that reason, we should regulate this activity taking as a reference some European cities that have regulated the home sharing.

We have seen that the Parliament of Catalonia and also the Generalitat have tried to implement this activity in the current regulation and also promote the collaborative economy creating different Commissions. But due to some external factors, as the end of the legislature when it was near to be approval, or the Catalan process of independence have paralyzed the introduction of the home sharing in the regulation.

Analysing the different tips from European organisms or cities and also the Draft Decree we have extract some conclusions and recommendations. We think that there are two points of the Draft Decree that should be changed.

- The first one is that currently in the Draft Decree it is obligatory that the owner must reside in the house for the duration of the stay. We think that this is an impediment to the activity and for that reason, we recommend to implement a maximum of days between 60 and 90 per year where the owner of the dwelling could be outside from his main dwelling when for instance, he goes abroad or to the second residence during vacations.
- The second point is that currently rental by rooms of the HUTs is prohibited, which could be considered an important limitation. For that reason, we think that it can be allowed the possibility of rental the room of the HUTs but always if it is done it as a separate activity.

Regarding the taxation of home sharing, we have seen that it is taxed by the PIT and TSTE, but no by VAT. We think that another tax could be established. This tax will be a special tax by districts that depends of the degree of congestion of the district it will have different tax rates between a range of 0,5 to 1,5 euros per night. This tax will be very useful in order to solve the problem of the negative externalities and it will be collected by the platforms. Each district

will use the tax collection for his district, since the districts with high concentration of tourist accommodation will need a higher amount of tax revenues. This tax could be also applied to HUTs, with the same particularities and with the possibility to establish a higher tax rate since the negative externalities associated to this activity are higher than home sharing.

The platforms should have to play an important role in taxation. We recommend the creation of the *assistant in the collection*, it consists in converting these intermediation platforms into agents of collaboration with the Administration in the collection of taxes. The platform itself could make the corresponding deposit to the Tax Agency.

Once we have finished with home sharing, it is important to extract some conclusions of the current regulation. We have seen that PEUAT is very restricted with tourist accommodation, but specially with HUTs because this activity has been associated with some negative externalities. Regarding HUTs, it is recommended the study of alternatives to the restrictions established by the PEUAT that allow to achieve the objectives in terms of access to rental housing but without the distortion capacity of the competition that presents the current regulation. This solution could be a special tax for districts, as it was mentioned before. But it also exists the possibility to establish a theoretical model for regulating Airbnb and the short-term rental market. This model is based on the article: "*Transferable Sharing Rights (TSR): A Theoretical Model for Regulating Airbnb and the Short- Term Rental Market*" by Stephen R. Miller, 2014.

This proposal is based on attributing rights to each property, but certain limitations could be established both in relation to the level of global activity (the number of days per year that can be rented in the whole city) and in relation to zones (number of days per year that can be rented per neighbourhood). The article proposes that a government website allow the conversion of rights into effective rights, which would require sharing information and at the same time, making a payment, which could act, even though it is not expressly mentioned in the article, as a Pigouvian tax that would allow to internalize the negative externalities.

Additionally, the possibility of transmitting these rights is contemplated, so that if you exceed the limit of rental days allowed in a certain area, holders of rights in that area that had not yet converted them could sell them to those owners of dwellings in areas where the activity was still allowed. One of the main virtues of this mechanism (despite the difficulty of practical implementation) is that it can be updated in real time (thus, at a specific time it is possible that only one right is needed to rent and, subsequently, if the area it is saturated it is necessary more rights or directly the conversion of the right is not allow). This solution provides a dynamic regulation, but it is not easy to implement it.

Regarding the analysis, we have arrived to the conclusion that Moratoriums and PEUAT has had an important impact in the tourist accommodation sector. First of all, we have seen that the Hotel Moratorium has caused an increase in the prices of the *Average Daily Rate (ADR)*, that is the price index for hotels, because the offer has been limited but the number of tourists has continued increasing. Another consequence it has been the artificial creation of monopoly rents. The forecast is that prices will continue to increase because the offer will still be limited but the number of tourists will continue his growth.

This situation has created a spillover to other types of accommodation. One of this type of accommodation is pensions, that with the entrance into force of the Moratorium they received a large number of tourists that without the Moratorium will not have happened, since the evolution of the previous years was a negative growth. But pensions are also restricted by PEUAT, for that reason we expect another spill over to HUTs. The conclusion extracted from the analysis of HUTs is that the HUT Moratorium of 2014 stopped the positive evolution of this accommodation, limiting the offer one year before than the other types of accommodation because it was associated with negative externalities. One of the consequences of limiting the offer of HUTs it has been the increment of the ADR up to levels similar to the ones of the hotels, and also, it has led an increase of the revenue per dwelling.

So, as we can appreciate, the offer of tourist accommodations has been restricted but the number of tourists not. For that reason, an unsatisfied demand has been created. This demand will search another types of accommodations, and in the case of Barcelona, the only possibility to offer more places is through illegal HUTs. The analysis done it show us that the number of illegal HUTs represents the 31,6% of the total offer and the forecast is a continuous growing.

As a final conclusion, thanks to this report we have realised that a very restrictive regulation has negative consequences that sometimes can be higher than the positives. For that reason, we should apply another type of regulation, introducing new types of accommodation as home sharing, setting more taxes to internalize the negative externalities, applying new forms of licences as the transfer sharing rights, giving more importance to the platforms in order to collect taxes, among others. Due to the limitation of this work, the possible solutions are the basic ones, but now that we know the real impact of the regulation we should try to study another type of regulation, since we cannot limit the offer of the tourist accommodations forever.

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Annex

Table 1: Radial Indicators

Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Zone 1 and Zone 2:

Number of places	Distance (meters)
(0 – 50]	150
(50 – 100]	175
(100 – 150]	200
(150 – 250]	250
(250 – 350]	300
> 350	300m + 50m per each 100 more places

Zone 3:

Number of places	Distance (meters)
(0 – 50]	100
(50 – 100]	125
(100 – 150]	150
(150 – 250]	200
(250 – 350]	250
> 350	250m + 50m per each 100 more places

Zone 4:

a) Marina del Prat Vermell:

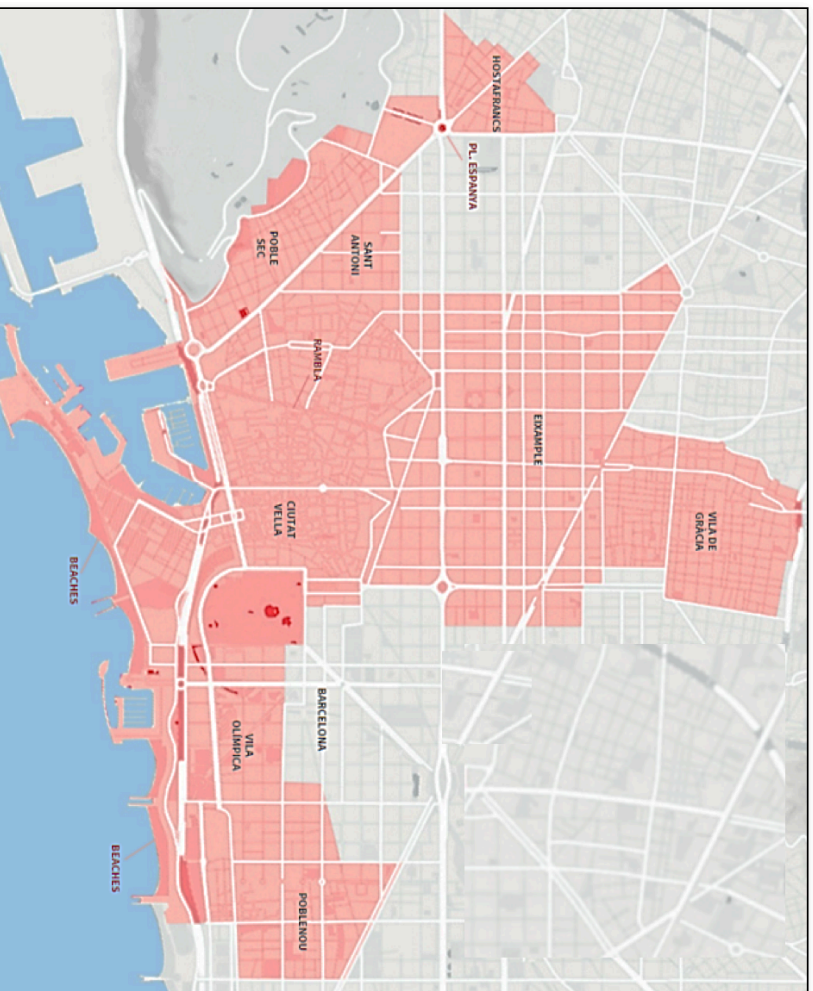
Number of places	Distance (meters)
(0 – 150]	150
(150 – 250]	200
(250 – 350]	250
> 350	250m + 50m per each 100 more places

b) 22 @ Nord:

Number of places	Distance (meters)
(0 – 50]	150
(50 – 100]	175
(100 – 150]	200
(150 – 250]	250
(250 – 350]	300
> 350	300m + 50m per each 100 more places

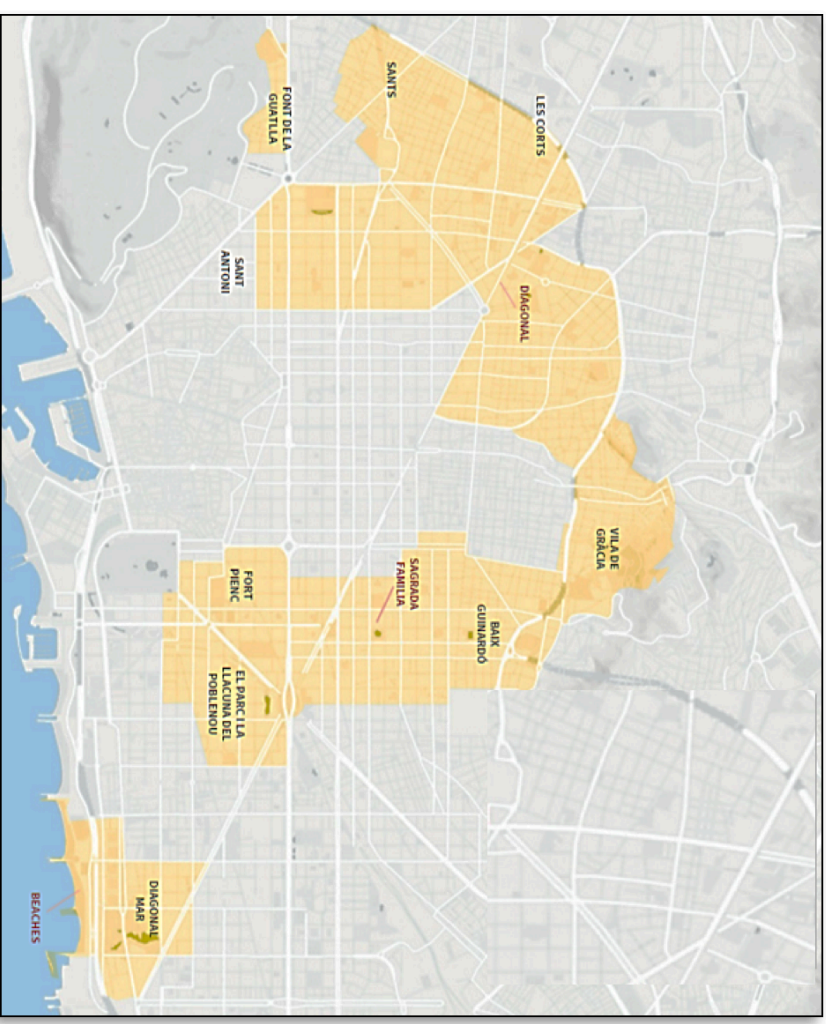
Figure 1: Maps of each area

Area 1: Decrement growth



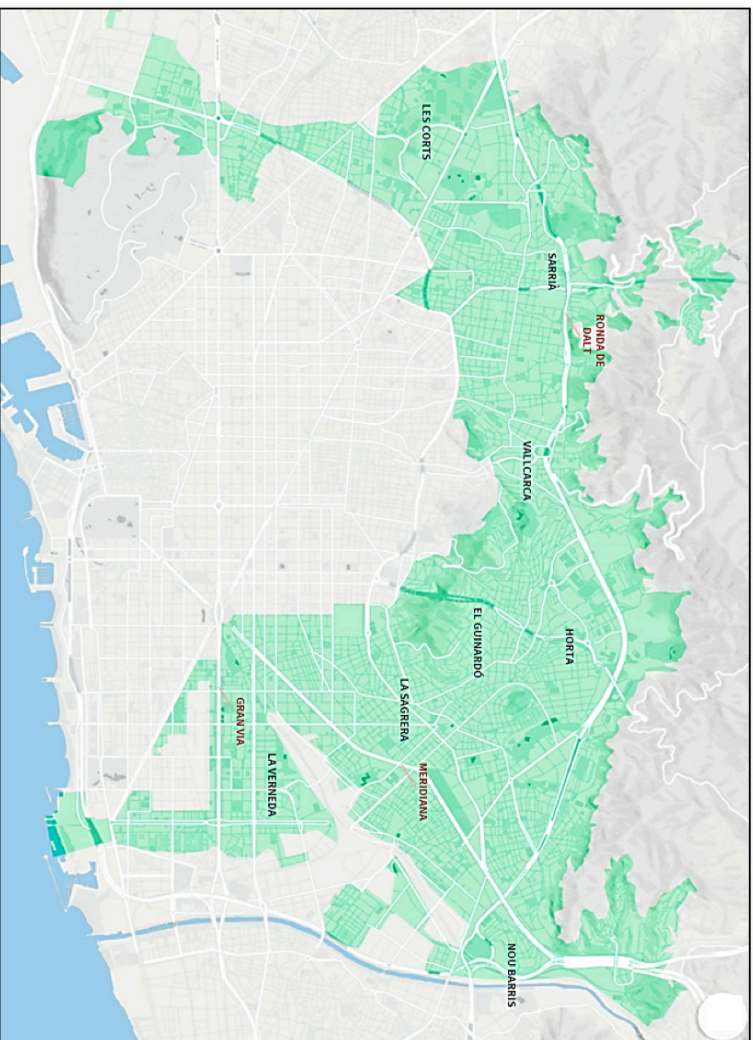
Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Area 2: Maintenance growth



Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Area 3: Positive growth



Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Area 4: Specific growth



Source: own elaboration from data of Ajuntament de Barcelona. PEUAT.

Table 2: Number of places per district

Tourist Activity (places)		2009	2010	2011	2012	2013	2014	2015	2016	2017
Ciutat Vella	HUTs	2667	2667	2667	2667	2667	2667	2667	2667	2667
	Hotels* & Pensions	16859	18575	19380	19778	20114	20404	20663	21039	21204
	TOTAL	19526	21242	22047	22445	22781	23071	23330	23706	23871
Eixample	HUTs	3173	5033	5925	11794	17020	26198	25356	25390	25345
	Hotels* & Pensions	14751	15290	15827	16028	17982	19751	21024	21977	22488
	TOTAL	17924	20323	21752	27822	35002	45949	46380	47367	47833
Sants - Montjuïc	HUTs	578	857	1114	1868	3226	4871	5192	5166	5115
	Hotels* & Pensions	6567	6577	6587	6610	7161	6889	7082	7115	7115
	TOTAL	7145	7434	7701	8478	10387	11760	12274	12281	12230
Les Corts	HUTs	35	328	404	560	823	1085	1368	1342	1363
	Hotels* & Pensions	6108	6022	6113	6149	6180	6139	6163	6169	7081
	TOTAL	6143	6350	6517	6709	7003	7224	7531	7511	8444
Sarrià - Sant Gervasi	HUTs	246	353	482	1479	2246	2868	2985	2868	2800
	Hotels* & Pensions	3594	3609	3715	3760	3751	3832	3909	3987	3985
	TOTAL	3840	3962	4197	5239	5997	6700	6894	6855	6785
Gràcia	HUTs	484	1001	1173	2248	3593	5031	5063	5026	5003
	Hotels* & Pensions	481	501	495	705	935	933	1032	1081	1078
	TOTAL	965	1502	1668	2953	4528	5964	6095	6107	6081
Horta - Guinardó	HUTs	60	69	78	276	460	911	1192	1164	1146
	Hotels* & Pensions	999	999	999	1001	1023	1011	1015	1015	1002
	TOTAL	1059	1068	1077	1277	1483	1922	2207	2179	2148
Nous Barris	HUTs	0	0	0	40	45	85	103	103	108
	Hotels* & Pensions	316	316	316	316	316	327	327	336	330
	TOTAL	316	316	316	356	361	412	430	439	438
Sant Andreu	HUTs	0	0	28	174	270	388	461	456	450
	Hotels* & Pensions	180	208	222	222	222	222	222	222	222
	TOTAL	180	208	250	396	492	610	683	678	672
Sant Martí	HUTs	730	1152	1299	2360	3636	5344	5394	5357	5325
	Hotels* & Pensions	9146	9679	10032	10412	11444	11505	11509	11935	12461
	TOTAL	9876	10831	11331	12772	15080	16849	16903	17292	17786
BARCELONA	HUTs	7974	11459	13170	23465	33984	49447	49781	49540	49321
	Hotels* & Pensions	59001	61776	63686	64981	69128	71013	72946	74876	76966
	TOTAL	66975	73235	76856	88446	103112	120460	122727	124416	126287

Source: data from Ajuntament de Barcelona and annual reports Gremi d'Hotels i Turisme.

* Hotels englobes also hotel-apartments.

Table 3: Hectares per district

Surface of the territory (ha)	
Ciutat Vella	436,8
Eixample	747,6
Sants-Montjuïc	2294
Les Corts	601,8
Sarrià - Sant Gervasi	2009,3
Gràcia	418,6
Horta - Guinardó	1194,7
Nous Barris	804,1
Sant Andreu	656,5
Sant Martí	1052,4
BARCELONA	10215,8

Source: data from Ajuntament de Barcelona.

Table 4: Estimation of number of places per HUT.

Number of places per establishments (HUTs)	2014			2016			Average places/est.
	Establiments	Places	Places / Est.	Establiments	Places	Places / Est.	
Ciutat Vella	604	2444	4,0463576	604	2890	4,7847682	4,415562914
Eixample	4607	22269	4,8337313	4465	29198	6,5393057	5,686518495
Sants - Montjuïc	1137	3984	3,5039578	1206	6107	5,0638474	4,283902607
Les Corts	215	872	4,055814	266	1606	6,037594	5,046703969
Sarrià - Sant Gervasi	512	2334	4,5585938	512	3401	6,6425781	5,600585938
Gràcia	1081	4221	3,9047179	1080	5835	5,4027778	4,653747816
Horta - Guinardó	198	865	4,3686869	253	1223	4,8339921	4,601339482
Nous Barris	19	81	4,2631579	23	108	4,6956522	4,479405034
Sant Andreu	69	351	5,0869565	81	499	6,1604938	5,623725174
Sant Martí	1164	4134	3,5515464	1167	6570	5,6298201	4,590683222
Barcelona	9606	41555	4,3259421	9657	56437	5,8441545	5,085048309

Source: Ajuntament de Barcelona and Operative Manual of PEUAT.

Table 5: Growth Rates

	2009	2010	2011	2012	2013	2014	2015	2016	2017
ADR	96,04	98,46	103,44	106,06	107,59	108,05	115,82	119,9	128,2
RevPAR	65,8	68,2	74,77	75,99	77,89	79,14	89,08	95,04	101,5
Growth rate ADR		2,52%	5,06%	2,53%	1,44%	0,43%	7,19%	3,52%	6,92%
Growth rate RevPAR		3,65%	9,63%	1,63%	2,50%	1,60%	12,56%	6,69%	6,80%

Source: data from IDESCAT and Exceltur for 2017.

Hotels	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Occupancy rate (based on rooms)	76,7%	75,5%	76,0%	77,7%	79,7%	76,3%	72,4%	74,8%	77,5%	77,0%	76,8%	78,2%	80,3%	81,7%	81,3%
Growth rate Occupancy		-1,56%	0,66%	2,24%	2,57%	-4,27%	-5,11%	3,31%	3,61%	-0,65%	-0,26%	1,82%	2,69%	1,74%	-0,49%

Source: data from annual reports Gremi d'Hotels i Turisme.

Table 6: New hotels inaugurated 2017

Name	Address	PD	District	Rooms	Places	Month	Code	Group
5* GL The One Barcelona	C/ Provença, 277	08037	Eixample	H	89 178 -	Gener	HB-004745	H10 Hotels
5* Almanac Barcelona	G.V. Corts Catalanes, 619-621	08007	Eixample	H	91 182 -	Novembre	n.d.	Almanac Hotels
5* Sofia	PL. Pius XII, 4	08028	Les Corts	H	460 928 -	Agost	HB-003487	Selenta Group
5* OD Barcelona	C/ Aragó, 300	08009	Eixample	H	93 186 -	Agost	HB-004762	OD Group
4* S SB Glow	C/ Badajoz, 148-154	08018	Sant Martí	H	235 491 -	Juliol	HB-004760	SB Hotels
4* S Yurbban Passage Hotel & Spa	C/ Trafalgar, 26	08010	Ciutat Vella	H	60 123 -	Juliol	HB-004755	Smart Rooms
4* Golden Tulip	C/ Àvila, 135	08018	Sant Martí	H	158 293 -	Juliol	HB-004757	n.d.
4* Room Mate Gerard	C/ Ausiàs March, 34	08010	Eixample	H	66 131 -	Maig	HB-004752	Room Mate
3* Arya By One Hotels	G.V. Corts Catalanes, 619-621	08007	Eixample	H	61 115 -	Setembre	HB-004761	Leonardo Hotels
3* Niu Barcelona	RBLA del Raval, 8	08001	Ciutat Vella	H	27 48 -	Setembre	HB-004756	Ona Hotels
3* May Ramblas Hotel	C/ Cardenal Casañas, 6	08002	Ciutat Vella	H	44 88 -	Juliol	n.d.	n.d.
TOTAL				11	1.384 2.763			

Source: data from the Report Gremi d'Hotels i Turisme 2017.

Table 7: Annual growth rate tourists on pensions.

Pensions	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Tourists	426300	423700	501800	513500	431300	392527	386367	354078	381000	371651	483064	584468	706337
Places	5494	6746	5347	5197	5333	5289	5432	5323	5683	5768	6036	6385	6602
Establiments	212	292	206	205	210	210	215	218	238	252	268	284	286
Annual growth rate tourists		-0,61%	18,43%	2,33%	-16,01%	-8,99%	-1,57%	-8,36%	7,60%	-2,45%	29,98%	20,99%	20,85%

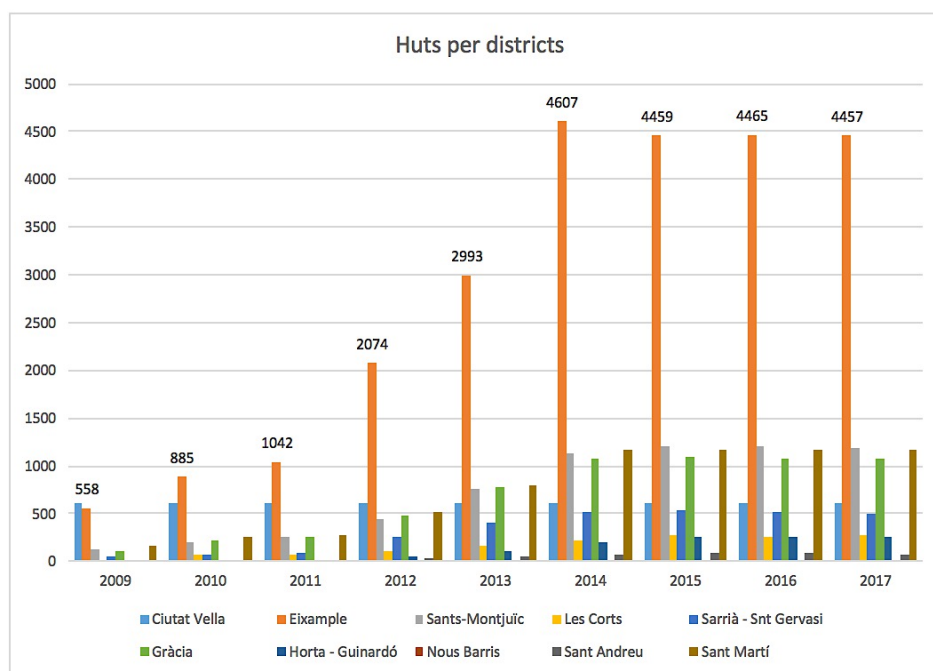
Source: data from annual reports Gremi d'Hotels i Turisme.

Table 8: HUTs per district.

Number of HUTs	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ciutat Vella	604	604	604	604	604	604	604	604	604
Eixample	558	885	1042	2074	2993	4607	4459	4465	4457
Sants - Montjuïc	135	200	260	436	753	1137	1212	1206	1194
Les Corts	7	65	80	111	163	215	271	266	270
Sarrià - Sant Gervasi	44	63	86	264	401	512	533	512	500
Gràcia	104	215	252	483	772	1081	1088	1080	1075
Horta - Guinardó	13	15	17	60	100	198	259	253	249
Nous Barris	0	0	0	9	10	19	23	23	24
Sant Andreu	0	0	5	31	48	69	82	81	80
Sant Martí	159	251	283	514	792	1164	1175	1167	1160
Barcelona	1624	2298	2629	4586	6636	9606	9706	9657	9613
Places	7974	11459	13170	23465	33984	49447	49781	49540	49321
Annual growth rate HUTs		41,50%	14,40%	74,44%	44,70%	44,76%	1,04%	-0,50%	-0,46%

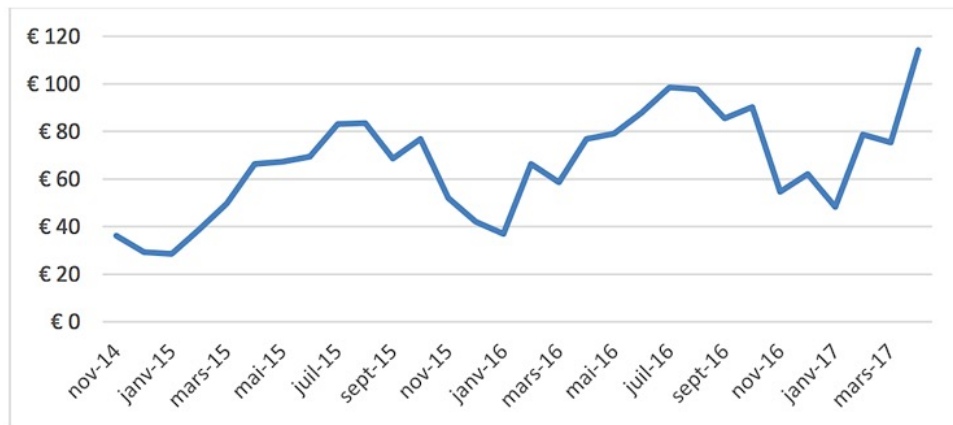
Source: Ajuntament de Barcelona; PEUAT; currently number of licences 2017.

Figure from Table 8: HUTs per district



Source: Ajuntament de Barcelona; PEUAT; currently number of licences 2017.

Figure 2: Revenue for Airbnb entire place



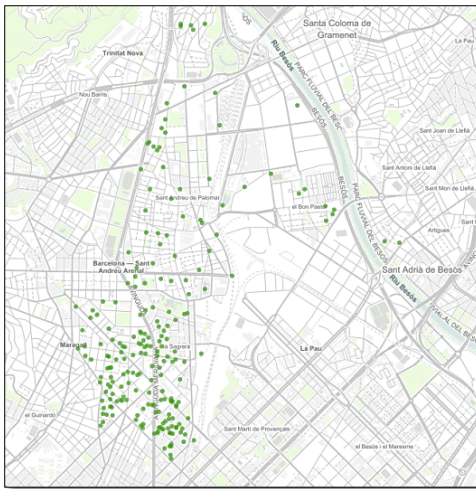
Source: data from AirDNA.

Table 9: Available platform listings for the main collaborative short-term rental platforms

Source: data from collaborative short-term rental platforms website.

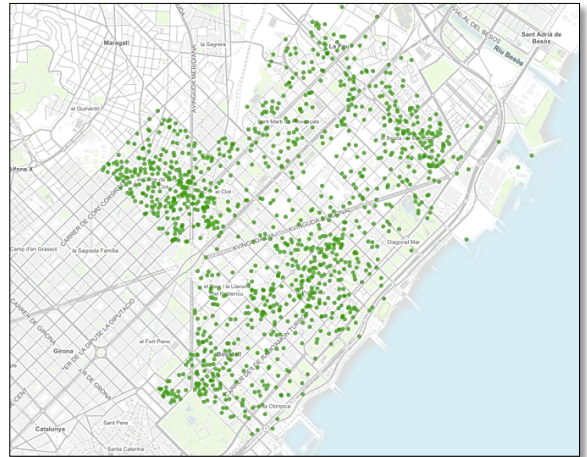
City	AirBnB	Wimdu	9flats	Home Away	Home Exchange	Guest to Guest	Total
Amsterdam	12,581	766	161	3,352	1,042	1,300	19,202
Entire property	9,359	490	161	3,352	1,042	1,300	15,704
Private/shared room	3,161	625	-	-	-	-	3,786
Athens	4,593	581	156	395	4	1,100	6,829
Entire property	3,908	532	155	395	4	1,100	6,094
Private/shared room	679	49	1	-	-	-	729
Barcelona	17,369	3,417	1,419	5,051	1,113	5,700	34,069
Entire property	8,762	1,356	1,323	-	1,113	5,700	18,254
Private/shared room	8,607	299	73	-	-	-	8,979
Berlin	11,902	1,129	600	1,092	703	1,600	17,026
Entire property	5,933	947	495	1,092	703	1,600	10,770
Private/shared room	5,969	182	105	-	-	-	6,256
Brussels	4,489	214	139	619	28	1,100	6,589
Entire property	2,978	185	139	619	28	1,100	5,049
Private/shared room	1,511	29	-	-	-	-	1,540
Florence	8,379	1,027	610	7,822	128	650	18,616
Entire property	6,251	887	597	7,822	128	650	16,335
Private/shared room	2,128	140	13	-	-	-	2,281
Lisbon	10,682	1,802	877	4,729	79	560	18,729
Entire property	8,227	1,643	814	4,729	79	560	16,052
Private/shared room	2,455	159	47	-	-	-	2,661
London	49,348	3,527	1,840	6,374	653	1,100	61,186
Entire property	24,543	2,767	1,681	6,374	653	1,100	37,118
Private/shared room	23,157	760	103	-	-	-	24,020
Paris	41,355	2,298	1,462	9,915	2,276	18,500	75,806
Entire property	36,184	2,178	1,435	9,915	2,276	18,500	70,488
Private/shared room	5,171	120	27	-	-	-	5,318
Prague	10,411	1,009	377	1,415	77	180	13,469
Entire property	8,225	946	360	1,415	77	180	11,203
Private/shared room	2,186	63	17	-	-	-	2,266
Stockholm	2,413	115	14	266	411	16	3,235
Entire property	1,996	91	13	266	411	16	2,793
Private/shared room	415	24	1	-	-	-	440

Figure 7: Home Sharing concentration in **Sant Andreu**



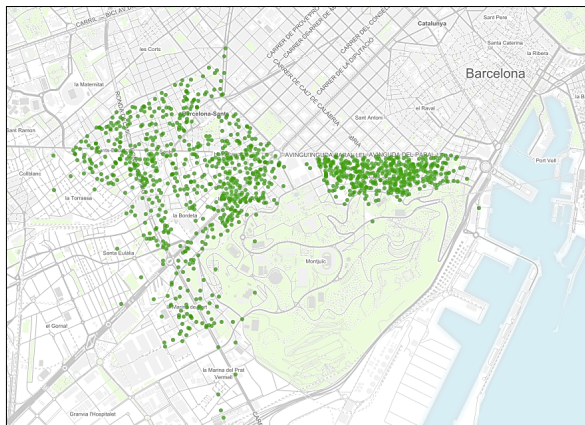
Source: Own elaboration from data of Inside Airbnb.

Figure 8: Home Sharing concentration in **Sant Martí**



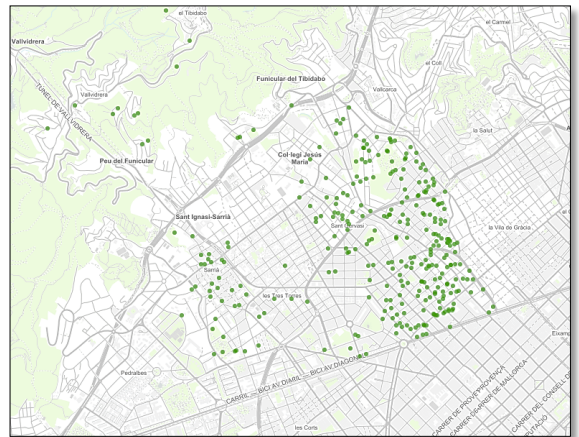
Source: Own elaboration from data of Inside Airbnb.

Figure 9: Home Sharing concentration in **Sants Montjuïc**



Source: Own elaboration from data of Inside Airbnb.

Figure 10: Home Sharing concentration in **Sarrià – Sant Gervasi**



Source: Own elaboration from data of Inside Airbnb.