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**VIII Congrés**

**Barcelona, 6 i 7 de juny de 2019**  
**IQS School of Management**



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# Airbnb impact on renting prices: Evidence from European cities

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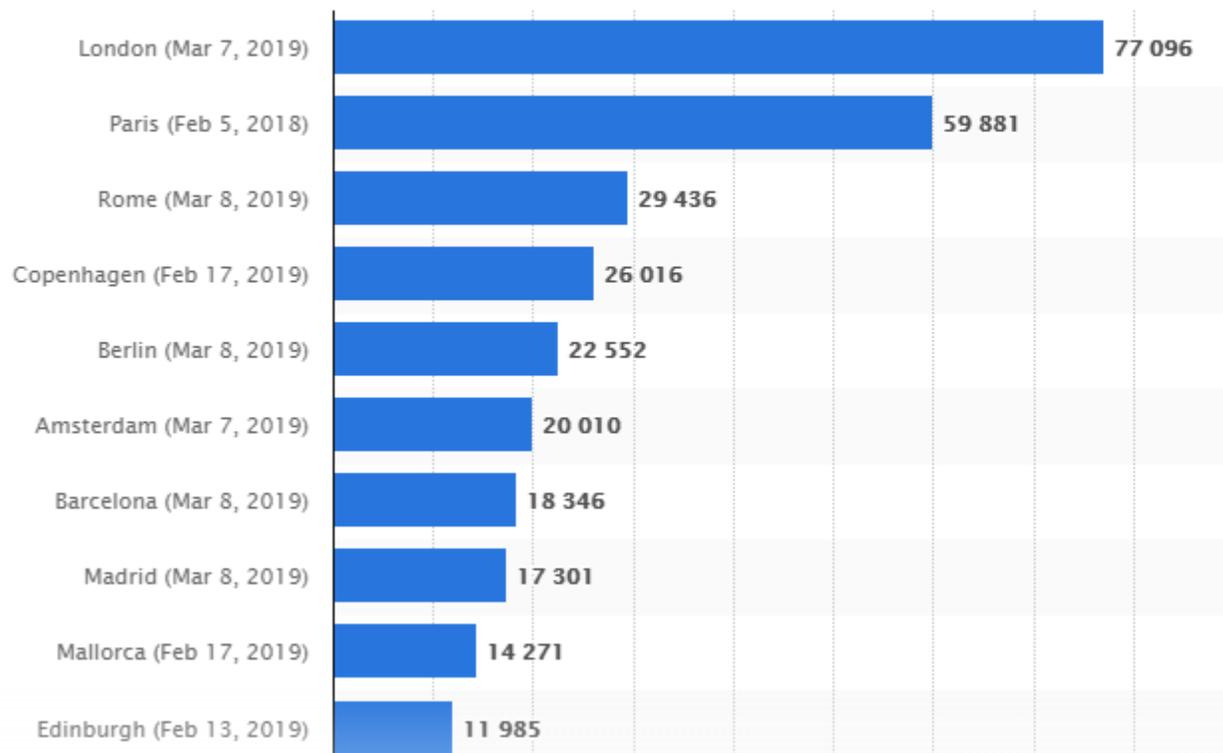
- Airbnb has shown an exponential growth in many European cities.
- Airbnb implies a new way of getting profitability from real estate properties, in a period of time in which real interest rates are really low.
- For some investors renting a flat to residents or short-term rent contracts to tourists are two options.
- A higher profitability from renting to tourists can lead to a higher renting prices: making to rent a flat more difficult for residents or even generating gentrification.

- Some cities have decided to regulate short-term rental contracts with tourists: Barcelona, New York, Munich...
- There is an intense debate about if tourism is the cause for this pattern on renting prices or the lack of supply is the key variable.
- The academic research suggests that location is one of the main explanatory variables for explaining renting prices.

## RESEARCH QUESTIONS

- Is there a relation between touristic apartments density and renting prices for residents?
- Has the size of the city and impact on prices dispersion?
- A good public transport system that reduces time spent to travel to the centre will imply a lower degree of gentrification?

## Number of Airbnb listings in selected European cities as of 2019\*



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SETTINGS

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DESCRIPTION

SOURCE

MORE INFORMATION

This statistic illustrates the number of listings on Airbnb in leading European cities as of 2019. There were a total of 77,096 listings for rooms and apartments in London as of February 2019, ranking it first among the cities in Europe with the most Airbnb hosts. London was followed by Paris and Rome.



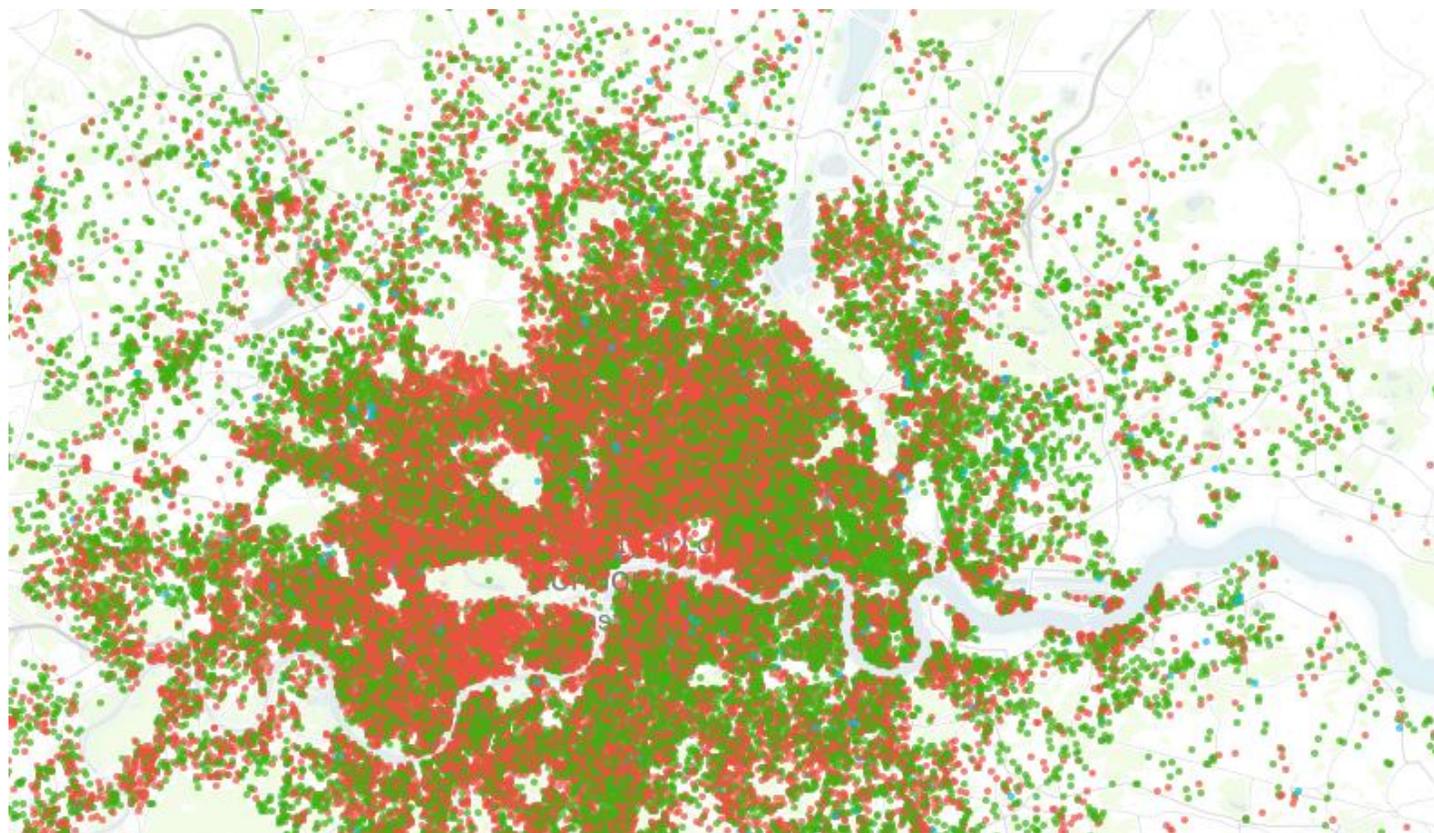


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## London

Filter by:

London

# 77,096

out of 77,096 listings (100%)

[About Airbnb in London](#)

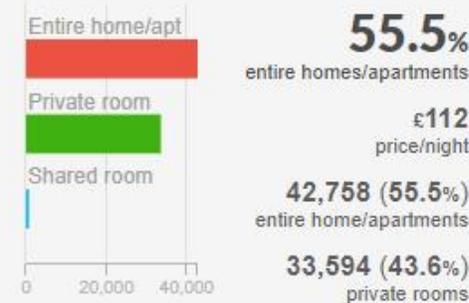
How is Airbnb really being used in and affecting your neighbourhoods?

## Room Type

Only entire homes/apartments

Airbnb hosts can list entire homes/apartments, private or shared rooms.

Depending on the room type, **availability**, and **activity**, an airbnb listing could be more like a hotel, disruptive for neighbours, taking away housing, and **illegal**.



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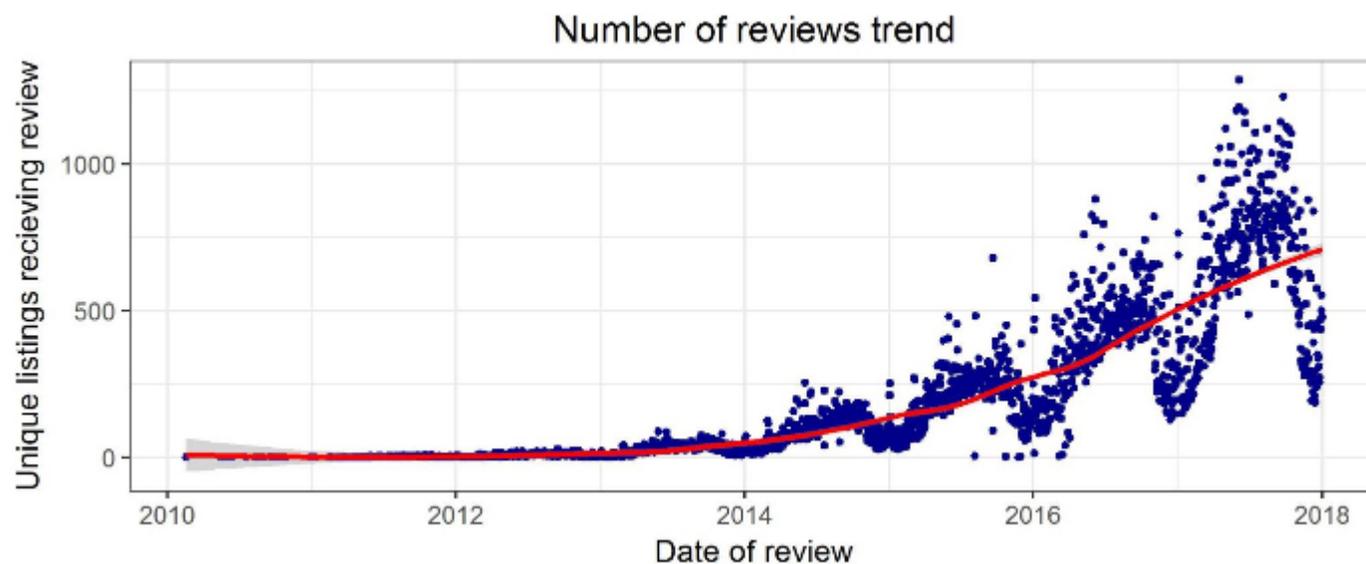
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Rent price= B0+ B1 density+B2 time+ B3 distance

## MADRID

**Resumen del modelo<sup>b</sup>**

Modelo	R	R cuadrado	R cuadrado ajustado	Error estándar de la estimación
1	,745 <sup>a</sup>	,555	,466	2,04726

a. Predictores: (Constante), time, density, distance

b. Variable dependiente: rentprice

**ANOVA<sup>a</sup>**

Modelo		Suma de cuadrados	gl	Media cuadrática	F	Sig.
1	Regresión	78,492	3	26,164	6,243	,006 <sup>b</sup>
	Residuo	62,869	15	4,191		
	Total	141,361	18			

a. Variable dependiente: rentprice

b. Predictores: (Constante), time, density, distance

**Coefficientes<sup>a</sup>**

Modelo		Coefficients no estandarizados		Coefficients estandarizados		
		B	Desy. Error	Beta	t	Sig.
1	(Constante)	15,759	1,796		8,776	,000
	density	,003	,002	,345	1,639	,122
	distance	-,490	,213	-,545	-2,300	,036
	time	,009	,057	,039	,155	,879

a. Variable dependiente: rentprice

## LONDON

### Resumen del modelo

Modelo	R	R cuadrado	R cuadrado ajustado	Error estándar de la estimación
1	,716 <sup>a</sup>	,513	,480	16,54426

a. Predictores: (Constante), time, density



### ANOVA<sup>a</sup>

Modelo		Suma de cuadrados	gl	Media cuadrática	F	Sig.
1	Regresión	8642,446	2	4321,223	15,787	,000 <sup>b</sup>
	Residuo	8211,380	30	273,713		

### Coeficientes<sup>a</sup>

Modelo		Coeficientes no estandarizados		Coeficientes estandarizados		
		B	Desy. Error	Beta	t	Sig.
1	(Constante)	37,174	12,403		2,997	,006
	density	,093	,036	,499	2,565	,016
	distance	-,709	1,510	-,130	-,470	,642
	time	-,232	,330	-,160	-,704	,487

a. Variable dependiente: price

## VALENCIA

Rent price= B0+ B1 density +B2 time+ B3 distance

### Resumen del modelo

Modelo	R	R cuadrado	R cuadrado ajustado	Error estándar de la estimación
1	,725 <sup>a</sup>	,526	,397	,78612

a. Predictores: (Constante), time, density, distance

### Coeficientes<sup>a</sup>

Modelo	Coeficientes no estandarizados		Coeficientes estandarizados		
	B	Desy. Error	Beta	t	Sig.
1	(Constante)	6,578	,881	7,464	,000
	density	,003	,001	,778	,014
	distance	,148	,572	,170	,801
	time	-,004	,078	-,040	,956

a. Variable dependiente: prices

### ANOVA<sup>a</sup>

Modelo		Suma de cuadrados	gl	Media cuadrática	F	Sig.
1	Regresión	7,551	3	2,517	4,073	,036 <sup>b</sup>
	Residuo	6,798	11	,618		
	Total	14,349	14			

a. Variable dependiente: prices

b. Predictores: (Constante), time, density, distance

- Empirical evidence produce mixed results: distance is significant , from a statistical perspective, for some cities: Madrid, but not for others: London or Valencia.
- Density of apartments have an impact on rent prices for London and Valencia, but not for Madrid.
- The R square adjusted for the cities analysed is around 0,4.
- A much more complete analysis must consider time series in the analysis.
- Time and distance don't have a different impact. Can we measure the quality of the public transport and the effect on renting prices?

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**Thank you**

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