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# Sharing Economy, Airbnb and the Italian Case

How Airbnb works and how it can help revitalize Italian rural towns

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**The “Collaborative Economy” is creating new opportunities and Airbnb is exploiting them. New economic theory and empirical evidence suggest that Italy and its villages may be the perfect candidate for Airbnb, increasing tourism and promoting rural areas.**

# Sharing Economy, Airbnb and the Italian Case

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# Abstract

This thesis discusses the changes in the traditional markets brought about by the Sharing Economy, explores how Airbnb is affecting the hotel industry and then focuses on Airbnb in the Italian context. The main question this thesis tries to answer is whether Airbnb can help the revitalization of the Italian rural areas, both economically and socially. Researches carried out in the last few years clarify that Airbnb can grow and have beneficial effects, such as an increase in inbound tourists, higher surplus for customers and a greater overall guest spending, under particular circumstances that depend on the demography, the demand for accommodations and the limits to the construction of traditional hotel facilities: a low percentage of children and married adults, a high demand volatility and limits to the construction of hotels create the perfect environment for the development of Airbnb. Results suggest that Italian rural areas, because of their growing tourism and their characteristics, may be the perfect candidate for Airbnb. As a result, Airbnb should be encouraged and carefully studied, since it may represent a powerful resource for the Italian households, tourism and economy.

# Methodology

The methodology follows a linear pattern. The argument will proceed from the general to the particular, starting from the study of the Sharing Economy in the 1<sup>st</sup> chapter, moving to Airbnb in the 2<sup>nd</sup>, and finally to the study of Airbnb in Italy in the 3<sup>rd</sup>, focusing on how the economic theory inferred can help us understand the role that this platform may have in revitalizing the Italian rural areas.

The main source of information will be academic papers about the Sharing Economy, Airbnb and the economic theory beneath them. Official documents such as annual reports and statistics will be important too, because they are considered a primary source.

However, articles of journalists, books, interviews and even Ted Talks will be a fundamental source as well, because they provide not only sheer information but also different ways to interpret that information.

Academic papers of Stanford and Harvard PhDs, articles of the best journalists of The New York Times and speeches of the greatest researchers in the social fields are a few examples.

It will be the job of the author to organize the information gathered in the best possible way and to draw useful conclusions that will lead us towards a better understanding of the new opportunities unlocked by the Sharing Economy and, hopefully, a better future for the people who will enjoy such opportunities.

If we want this thesis and this analysis to contribute to even a small extent to improving the way we organize our life, that we call institutions, inferring is essential.

For “the great aim of education is not knowledge but action<sup>1</sup>”.

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<sup>1</sup> Herbert Spencer.



# Preface

The Sharing Economy is transforming the way people conceive consumption. It is facilitating the transition from ownership toward accessibility, while democratizing the access itself: low-income people are shifting from being simple non-owners to being non-owner renters. In the new historical model of consumption ‘disownership’ is becoming the new normal.

Moreover, the Sharing Economy is creating a world where “the currency of the new economy is trust” (Botsman, 2012), making possible for people who have never met before and who do not even share the same culture to trust each other, offsetting harmful social biases<sup>2</sup>.

New platforms keep emerging, exploiting the new opportunities that technology and the World Wide Web offer while both make the world shrink. Uber, Airbnb and TaskRabbit “understood that the world was becoming hyperconnected” (Friedman, 2014) creating a trust platform to bring people together: hikers and drivers, tourists and hosts, posters and ‘rabbits’. Sharing had never been more profitable.

Since its birth in 2008, Airbnb has seen exponential growth. In the last 10 years, Airbnb has expanded into 191 countries, with 2 million people using it on a given night, over 200 million guest arrivals since its founding and with currently 4 million listings, more than the top 5 major hotel brands combined. Airbnb offers good accommodations and low prices and, although it usually doesn’t compete directly with hotels, incumbent firms in the tourism sector are seeing lower margins of profits, especially those addressing to low-income tourists.

However, the growth of Airbnb is not homogeneous and there are factors that reveal to be crucial for its development within a specific area: hotel regulations, demand volatility and demography are all determinant which powerfully predict whether it will succeed or fail.

Economic theory can then be used to assess the potential of Airbnb in Italy: it seems that Italian rural areas may be the perfect candidate for an

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<sup>2</sup> ‘Homophily’, Stanford study – ‘Reputation offsets trust judgments based on social biases among Airbnb users’.

Airbnb experience, helping them both socially and economically. This thesis, therefore, argues that Airbnb can powerfully help revitalize Italian rural towns and small villages, giving them international visibility and breathe new life to the culture they preserve.

Welcome to the collaborative economy, are you ready to share?

*Alla famiglia che mi ha  
sempre sostenuto, e alla  
speranza che non mi ha mai  
abbandonato*



# Chapter 1

## Sharing Economy

New and Old Markets

The Evolution of the Sharing Economy

Sharing as a disruptive force

# New and Old Markets

## Introduction

Sharing Economy arouses strong passions.

Ranging from ride-sharing to home-sharing, from freelancing up to crowdfunding, platforms such as Uber, Lyft, Airbnb, Onefinestay, LendingClub and Upstart all have millions of enthusiastic users, but also powerful critics. Supporters point out the rapidity, the quality and the facility in providing a service that otherwise would have either cost more or not been provided at all. In other words, they point out the efficiency by which the service is offered. On the other hand, detractors claim that these new platforms have an unfair competitive advantage due to a lack of regulations and, therefore, they deem the Sharing Economy to be also less reliable than more 'traditional' business transactions, as far as security is concerned.

On top of reduced middlemen costs and unprecedented flexibility for suppliers, new platforms created a network of trust via reviews, track records and identity checks, allowing completely new transactions. Airbnb has expanded this to a new mass market by persuading people to rent out their own home to complete strangers, reassured that the renter has been checked across social networks and the web: "To share is to trust. That, in a nutshell, is the fundamental principle" (Roland Berger, 2014).

Doing so, Airbnb is disrupting the tourism sector, just as the Sharing Economy in general is changing the economic landscape: "In recent years, a major evolution has begun to reshape the capitalist economy" (European Parliament, 2016). The exponential growth and dynamism of this phenomenon suggest that it will also be a long-term trend, favouring the shift from ownership towards accessibility.

"I think now, for the younger generation, ownership is viewed as a burden [...] What I want to own is *my reputation*, because in this hyperconnected world, reputation will give you access to all kinds of things now. ... Your reputation now is like having a giant key that will allow you to open more and more doors. [Young people] today don't want to own those doors, but they will want the key that unlocks them" said Brian Chesky, the CEO of

Airbnb. And, as people better than me have already said, “I don’t know if that’s how it will play out, but given Airbnb’s rapid growth, Chesky’s argument definitely has my attention” (Friedman, 2014).

# What's Sharing Economy

Paradoxically, Sharing Economy does not have a shared meaning. Throughout the academic world we find a variety of definition, some of which are very similar and some of which differ significantly from each other. Even within the European Union, different institutions adopt different meanings for the Sharing Economy: the European Parliament interprets this economic system in a different way compared to the Commission. It is therefore essential to clarify what I intend for “Sharing Economy”.

It is important to use a definition that has two fundamental characteristics:

1. It is not too complicated but, at the same time, not too general and nuanced (ambiguous), so that it is possible to identify with certainty and relatively ease the agents operating in the Sharing Economy sector;
2. It is in accordance with what we intuitively call “Sharing Economy”.

For these reasons, I have chosen to adopt the definition given by Rachel Botsman<sup>3</sup>, considered one of the global leader of the theory about Sharing Economy, since I find it both easy and precise. She defines the Sharing Economy as follows:

“An economic system that unlocks the **value of underused assets** through platforms that **match ‘needs’ with ‘haves’** in ways that create greater **efficiency and access.**” (Botsman, 2016)

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<sup>3</sup> Rachel Botsman is probably the most famous theorist of the Sharing Economy. Author of several books, including “What’s Mine Is yours: The Rise of Collaborative Consumption” (2010), her ideas about the Sharing Economy were appointed by the TIME as one of the “[10 Ideas That Will Change the World](#)”. She designed the world's first **M.B.A.** course on the Sharing Economy at the university of Oxford and she often cooperates with famous newspapers and magazines such as The New York Times and Harvard Business Review.



The Sharing Economy has, therefore, 3 fundamental features:

1. It's an economic model based on sharing underutilized assets;
2. It matches 'needs' with 'haves', who can be impersonated by a variety of players such as companies, individuals or governments;
3. Accessibility and not ownership is a distinctive characteristic of this economic system<sup>4</sup>.



Other meanings may be also useful in specific contexts; however, if we want a common definition to consolidate, it must be broad enough, since the expression subsume many economic transactions, precise enough, so that we can determine the agents operating under such system, and in accordance with our intuitions<sup>5</sup>.

More specific definitions, such as the one offered by the European Commission<sup>6</sup>, may be useful for a particular research but not for a general purpose. For these reasons, I find the Rachel Botsman's definition the most suitable both to be generally accepted and to be the meaning this thesis refers to.

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<sup>4</sup> Through this statement it is not intended to claim that ownership is never present in the Sharing Economy, but that the Sharing Economy as a whole favours accessibility rather than ownership. And this is the only economic system that does so.

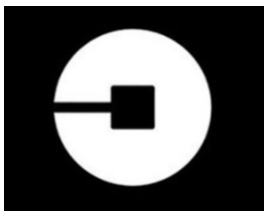
<sup>5</sup> One of the goals of this definition is to harmonize preciseness and intuition so that platforms always associated with the Sharing Economy, such as Uber, will not be excluded by the definition itself. However, rigorousness is paramount and will not be compromised. That's why the choice has been carefully considered and the formulation drawn from one of the best expertise in the field.

<sup>6</sup> The European Commission defines the Sharing Economy as "business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals" (European Commission, 2016).

## Examples

The transportation and hotel sectors have been the most affected by the Sharing Economy, with Uber and Airbnb being the most famous platforms disrupting such sectors. However, there are plenty of examples of sharing economy platforms operating in the most varied fields, many of whom we could find useful. Here is some examples of more or less famous but always helpful platforms:

### Uber



Uber is a platform that connects passengers with willing drivers. A passenger calls for a car with a smartphone running the Uber app. An Uber driver then is called to the passenger's location and then takes the passenger to their destination. No cash is exchanged – payment is taken automatically from the passenger's debit card. Simpler and cheaper than a taxi, still surprised for its valuation of 48 billion dollars?

### Airbnb



Airbnb is an online marketplace that lets people rent out their properties or spare rooms to guests. Airbnb takes 3% commission of every booking from hosts, and between 6% and 12% from guests. It is possible to find any kind of accommodation, from a paradise island to the entire Principality of Liechtenstein, including customised street signs, temporary currency and accommodation for 150. The experiences that this platform can offer go much further than those offered by ordinary hotels. Plus, a valuation of 31 billion. Not bad, isn't it?

## TaskRabbit



TaskRabbit allows “posters” to outsource domestic tasks to “rabbits”. People can post virtually any sort of domestic task or errand, from cleaning to pet sitting, from delivering to home repairs. It’s so useful that it was dubbed ‘home help 2.0’ by The Telegraph. Give it a spin and you won’t have to do your chores ever again.

## LendingClub



LendingClub is the world’s largest P2P<sup>7</sup> lending platform with over 33 billion in loans issued as of 31/12/2017. It offers its services to both consumers and small/medium-sized enterprises. Using processes and algorithms finely honed over the past decade, LendingClub allows individuals to take the place of banks in making personal and even corporate loans. And it does so with a great deal of certainty on the risks versus the return. “You no longer need to befriend your banker; you can just be the bank” (Garret, 2017).

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<sup>7</sup> P2P: ‘Peer-to-Peer’, transactions in which the provider of the good or service and the consumer are both individuals.

## Instructables



Instructables shares knowledge... People with an idea post their instructions and pictures on the website and reply to eventual questions. Instructables covers everything, from technology to food, from craft to costumes. Apparently, even [How To Start a Business](#), written directly by the CEO Eric Wilhelm. You don't know how? Instructable is here for you.

As we can see, the “**underutilized assets**” on which the Sharing Economy is based can vary greatly, ranging from time (the ride offered by Uber) to space (represented by the spare room on Airbnb), from money (LendingClub) to skills (TaskRabbit), all the way to knowledge (Instructables). Those assets are offered through a platform that **matches “needs” with “haves”** (you can see it through the hyperlinks just clicking on the pictures above), and all of them do not provide ownership but only **access** to the assets needed.

What is remarkable in these examples is that sharing is making ownership less and less essential. Let's set aside the Sharing Economy for a moment and focus on the accessibility...why should I own a car if I can rent one in an instant? Why should I own a vacation home if any kind of accommodation is only one click away? And why should I buy a power drill if I need it only occasionally and my neighbour can lend it to me? Of course, not everyone reasons that way, but trends are clear. And this, more than an opinion, is a fact.

# The Evolution of the Sharing Economy

## Sharing: From 1800s to the 21<sup>st</sup> Century

Sharing is not a recent invention.

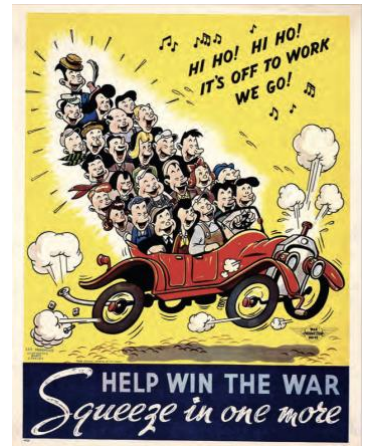
Throughout history, humanity has shown a tendency to pool its resources in order to improve the chance of survival, especially on hard times.

“Early societies learned that the benefits of cooperative behaviours relative to costs were substantial, and that evolution favored populations with larger numbers of co-operators” (Buczynski, 2013).

In the last two centuries, it is possible to find several iconic examples of an early sharing economy developed in different contexts and with different outcomes:

- In 1844 a group of 28 tradesmen in Rochdale, England, came together to form what would be called the “Rochdale Equitable Pioneers Society”. The idea of a co-operative is that the business is owned by its customers and everyone works together for a common goal, that of good service over the pursuit of profit. Indeed, the store had been opened to sell food items that the owners could not otherwise afford. The Rochdale society, founded on 7 rules such as a democratic control that included women (which was unheard in 1844) and political neutrality, was the beginning of a movement that 10 years later counted almost a thousand cooperatives.
- In 1854, the founders of the first Italian cooperatives had been inspired by the Rochdale Pioneers. The first Italian cooperative opened in Turin, where the workers’ mutual assistance society gave rise to a consumption cooperative with the purpose of mitigating high living costs. From then on, the Italian cooperative movement experienced rapid growth, with the creation of financial services such as the Popular Bank and the Cooperative Credit Banks, which still endure.

- During World War II, the US government encouraged ride-sharing in order to conserve resources for the war under way. The initiative was carried out by the Office of the Petroleum Coordinator and later enforced through the media by a committee formed by the petroleum industry.



Those are just few examples, but they show that women and men have always been prone to share “assets” with others. Over time, the way we share has evolved, generating an economic system that, even in its primordial forms, conserves peculiar characteristics that differ from the more traditional transactions in which there is a transfer of ownership. Until a few years ago, in fact, sharing with people we don’t know was another story: what was mainly shared was the ownership itself, not the access, and the opportunity cost of not renting out our spare rooms was, in my view, much lower, but that was due to the fact that also the risks related to renting out to strangers, as well as the marginal costs, were much higher. As a result, often it was not worth the time to arrange an accord that could easily go wrong because of a lack of information about the renter, and therefore because of a lack of trust: risks were high, losses were tangible and finding a renter could take time, effort, and a significant money investment.

So, what has changed so dramatically to allow us to rent out our “underutilized assets” easily, quickly and safely? The answer may be obvious, but it’s too often neglected while it’s definitely worth to mention: technology. Technology is the key to understand the modern market of sharing, as well as the implications we can draw from it.

New virtual platforms that create new social networks, often among peers (individuals), while enforcing trust via a review system, mitigating the information asymmetry and allowing exchange at almost zero marginal cost, together with a proliferation of electronic devices, especially smartphones, has completely changed consumer behaviour. As Rachel Botsman said in one of her interviews, “the smartphone [...] is the real

game changer”, and “reputation is the currency that I believe will become more powerful than our credit history in the 21<sup>st</sup> century”(Botsman, 2016). Hence, risks are nothing compared to those of some years ago, information is available and trust can be built easily: renting out our spare room, as a metaphor to indicate our “underutilized assets”, has become incredibly simpler and, thus, the opportunity cost of not renting it out has skyrocketed. Moreover, thanks to new platforms such as Uber and Airbnb, the marginal cost of adding another taxi or another bed to the market is so low that the New York Times bestselling author Jeremy Rifkin<sup>8</sup> wrote a book entitled “*The Zero Marginal Cost Society*” (2014).

And this zero-marginal-cost characteristic, together with the absence of market barriers, has powerful effects also on the market equilibrium, creating processes that we had never seen before, that we are not used to, and that are disrupting entire sectors: for the first time, whole traditional industries, such as the one of tourism, are getting to their economic equilibrium not through price changes in the peak and low season, but through supply changes, thus raising the consumer surplus. The explanation is simple: since providing a good or service has an insignificant marginal cost, even the slightest increase in the price drives up supply a great deal. The simple formula “Price=Marginal Cost” ( $P=C$ ) tells us that, if the marginal costs tend to rise very slowly, at a slight increase in the price will correspond a large increase in supply. And that is exactly what is happening: for example, in the tourism sector the difference between the price of the peak season and that of the low season is decreasing while surplus as a whole is going up. During the peak season supply rises, prices are kept low, and more people can enjoy the stay: efficiency is boosted and the allocation of resources is improved.

Of course, for the incumbent economic agents the Sharing Economy can be a problem, driving down profits while increasing competition. But that is a normal event in a competitive and free economy, therefore States should try not to prohibit these new platforms outright, otherwise in the

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<sup>8</sup> Jeremy Rifkin is an American and social theorist, writer, public speaker, political advisor, and activist. Author of 20 bestselling books such as “*The Third Industrial Revolution*” and “*The European Dream*”, he has lectured at many of the world’s leading Fortune 500 companies and at more than 300 universities in some 30 countries. He has also been the advisor to the leadership of the European Union since 2000. He advised three presidents of the European Commission: Romano Prodi, Jose Barroso and Jean-Claude Juncker. He is a current lecturer at the Wharton School, University of Pennsylvania.

long-run particular interests will prevail over a higher and more democratic welfare that, in a period in which inequalities are on the rise, may be a useful tool for social inclusiveness.



## What's New

So, what is the difference between eBay<sup>9</sup> and a Medieval merchant fair? They are both marketplaces where buyers and sellers come together, and their purpose is exactly the same: to facilitate trade.

However, technology, again, is the key. Bringing costs down in terms of money is just the tip of the iceberg: the time required to complete a transaction and the ease with which that is possible are not less important. You don't need to travel, you don't even need to go out, you don't have a time set and every synchronization problem vanishes with the World Wide Web. All you need is an electronic device and the internet access, and everything is at hand: what has change over the last few years is not how people behave occasionally or in very particular moments, but how they act in their ordinary life. Even what was thought would be left out from the ecommerce such as clothes and groceries is now bought with a tap on the smartpone, maybe while waiting on the train or in a bus, at home or in in the streets: everywhere is the right place, and every moment is the right time. This may seem irrelevant or not so important for an economic theory that tries to explain the huge changes we are going through, the shift from an analogical trade to a digital one, from a real experience to a virtual access, from our identity card to our social reputation. However, in my opinion, this is exactly what new platforms in the sharing economy domain are exploiting, disrupting entire sectors.

The economic impact of little changes carried out by billions of people can be overwhelming. Thanks to the combination of the internet and new platforms, marginal cost is decreasing and barriers to the market are falling down, while competition, efficiency and opportunity costs are on the rise. Regulations in the hotel industry, as well as in the taxi service, have always prevented the formation of a perfectly competitive market: as we'll see later in this thesis, platforms such as Airbnb have thrived exactly where those regulatory constraints were higher, making the market more competitive and eliminating the "deadweight loss" caused by the supply rationing. As a result, the surplus of incumbent firms is reducing, together with their profits, but surplus as a whole is increasing, with both consumers and new suppliers (often individuals) enjoying it.

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<sup>9</sup> eBay is an ecommerce website founded in 1995 that carries out multibillion-dollar transactions each year in more than 100 countries.

## What's the Future

Is the Sharing Economy here to stay? And how is it going to unfold? While predicting the future with certainty is still not possible, it is rational to try to get an idea based on the trends, as well as on an analysis of the causes related to the phenomenon.

Platforms such as Airbnb and Uber have seen a powerful growth over the years.

Airbnb was founded in 2008, and 10 years later it has more listings than any other hotel chain in the world, it was enjoyed by more than 200 hundred million guests<sup>10</sup> and it is still booming.

Uber was founded in 2009, and in less than a decade has spread in 83 countries, has carried out the astonishing number of 5 billion rides<sup>11</sup> and has achieved a valuation of 69 billion dollars in 2017. Moreover, there is no evidence it is going to slow down.

TaskRabbit was founded in 2008 under the name of RunMyErrand, and in 2014 was already generating more than 2 million a year. It now involves 60 thousand taskers (providers of services)<sup>12</sup>.

LendingClub was founded in 2006. In 2010 the loans issued amounted to 100 million dollars, at the end of 2017 they amounted to more than 33.5 billion<sup>13</sup>.

Instructables was released in its prototype version in 2005. 10 years later, in 2015, the website was celebrating 30 million monthly users<sup>14</sup>.

Platforms in the sharing economic sector have usually experienced exponential growth and they keep growing. The consulting firm PwC<sup>15</sup> (PricewaterhouseCooperation) carried out an analysis in which claims that by 2025 the Sharing Economy in the European Union will see a 20-fold increase, going from 28 billion in 2015 to 570 billion in 2025.

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<sup>10</sup> Source: Airbnb. Available at <https://press.atairbnb.com/app/uploads/2017/08/4-Million-Listings-Announcement-1.pdf>

<sup>11</sup> Source: Uber.com. Available at <https://www.uber.com/newsroom/5billion-2/>

<sup>12</sup> Source: Tech.com. Available at <https://tech.co/taskrabbit-future-sharing-economy-2017-11>

<sup>13</sup> Source: LendingClub.com. Available at <https://www.lendingclub.com/info/statistics.action>

<sup>14</sup> Source: Instructable.com. Available at <http://www.instructables.com/topics/Instructablescom-is-Celebrating-30-Million-Unique-/>

<sup>15</sup> PwC is a multinational professional services company headquartered in London, United Kingdom. It is the second largest professional services firm in the world and has been ranked as the most prestigious accounting firm in the world for 7 consecutive years.

In its conclusions, PwC states: “Overall, our findings strengthen our point of view that the collaborative economy has now become a deep socio-economic trend that is fundamentally changing the way we live our lives” (PwC report, 2016). This statement strongly reinforces the claim that the Sharing Economy is not a temporary event, but a long-term trend that will remain relevant in the future. Moreover, the Swedish-German economist and economic historian Carl Benedikt Frey, who is also a current professor at the University of Oxford, sees three “key drivers” for the Sharing Economy: income inequality, environmental awareness and “the combination of digitalization and globalization”. And when he was asked whether the Sharing Economy will stay he answered that “If one looks at the drivers of the sharing economy, there are good reasons to believe that it will endure [...] So I see no sign of this slowing down [...] But how that plays out is very difficult to predict.”

# Sharing as a Disruptive Force

## The 3 ingredients for a successful peer-to-peer business

Today, we are assisting at the emergence of business transactions in which the provider and the consumer are both individuals: those transactions are known as peer-to-peer (P2P) and are at the hearth of the Sharing Economy. Indeed, even though there is no causal relationship between P2P operations and the Sharing Economy, the correlation is strong, with the first being the fuel of the second. For example, Uber, which is the world's largest company in the sharing economy sector, is based only on P2P transactions facilitated by the platform itself. Airbnb is not much different: the majority of the people rent the house they live in, others their second home, and just a small proportion is not based on arrangements among individuals.

Since these platforms benefit from P2P transactions, their economic model is based on facilitating this kind of business. They must create trade between a large number of fragmented buyers and sellers by matching them effectively while keeping the costs down, creating trust among providers and consumers who do not know each other, and by attracting participants so that providers enjoy many consumers and vice versa. Chiara Farronato<sup>16</sup> and Jonathan Levin<sup>17</sup> call these three ingredients efficiency, trust and “value proposition” (Farronato, Levin, 2015).

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<sup>16</sup> Chiara Farronato is an Assistant Professor at Harvard and a PhD student in Economics at Stanford University, teaching in the MBA course. She focused her study on the Sharing Economy, P2P markets and online platforms with an economic perspective. She published several academic papers on the subject, such as “Peer-to-Peer Markets” and “Market structure with the Entry of Peer-to-Peer Platforms: The Case of Hotels and Airbnb”.

<sup>17</sup> Jonathan Levins is the Philip H. Knight Professor and Dean of Stanford Graduate School of Business. He is best known for his work on contracting relationships and on the design of market rules and institutions. In the last few years, he has studied subprime lending, health insurance, the allocation of radio spectrum, and the economics of internet markets.

The first, efficiency, has to deal with the trade-off between the incorporation of dispersed information and the minimization of transaction costs. Matching buyers and sellers must guarantee that they both have enough information to judge the transaction convenient for their needs while the amount of information provided does not implicate high transaction costs compared to the relative value of the transaction itself. For example, if you are asking someone to bring you ice cream on a given night through an online platform, you do not need much information and you probably want the order to be as quick as possible. On the contrary, if you decide to make a reservation for a house in Paris, you probably want to know where the house is located, its conditions, maybe who the owner is, you will compare several accommodations, and you will try to make the best choice possible; therefore, it makes sense to have a more expensive matching process but that provides you all the information you need. For this reason, different platforms will adopt different matching processes in order to balance the trade-off between the incorporation of dispersed information and the minimization of transaction costs: platforms such as Uber adopt a centralized matching process in which an algorithm picks the best choice for the customer, making the process instantaneous and economical; on the other hand, platforms such as Airbnb adopt a decentralized matching process that focuses more on the customer choice, letting the customer choose the provider himself: the procedure is slower and more expensive, but it allows the customer to be completely in control of his or her choice.

The second ingredient, trust, is crucial especially when buyers and sellers transact only once, because in a single shot game people do not have incentives to cooperate. However, a system of reviews may curb the defection and powerfully strengthen cooperation, making the game a repeated one: previous transactions matter because the feedback record will affect future arrangements, and a bad reputation resulting from poor feedbacks may reduce the chance to be chosen as a provider or the price people will be willing to accept as a commission to get the task done. Eventually, if people cannot trust each other there will be no more transactions: as obvious as it may seem, trust works as the keystone of peer-to-peer businesses and, therefore, as a big part of the Sharing Economy.

Moreover, as shown by a Stanford study (2017), in a world where “the currency of the new economy is trust”, reputation systems can offset harmful social biases such as ‘homophily’, namely the natural tendency to develop trustful relationships with people similar to ourselves. In this study, a group of 9,000 Airbnb users was divided into two groups, and every group was shown mock profiles of Airbnb users. The people in the first group were shown profiles among which some had demographic similarities to the participants (e.g. gender, age or ethnicity); on the contrary, the people in the second group were shown profiles among which some had very different personal traits from the participants, but with better reputations (conveyed by star ratings and reviews). When the participants were asked to assess the trustworthiness of the profiles using imaginary “credits” as a measure of trust, the first group succumbed to the homophily bias trusting people more similar to them; on the other hand, the second group participants invested significantly more credits on those who were different from them but had a better reputation. As evidenced by the study, our reputation will matter more and more as our reputational trail will grow, while our identity will matter less and less. Or maybe not, our identity will still continue to matter, it will just not be defined by where we come from but what we have done. Our ‘reputational capital<sup>18</sup>’, as Rachel Botsman calls it, is getting paramount and it is also likely to democratize our markets: gender, ethnicity and the colour of your skin will be eclipsed by our online reviews.

The third and last ingredient, “value proposition”, refers to the capability of the platform to create a thick market. Ideally, the platform should be able to set up a virtuous circle where buyers are attracted by many sellers and sellers are attracted by many buyers. In order to reach that objective, platforms usually treat the two categories of participants in different ways, depending on their price elasticity.

Sharing economy online markets are perfect examples of “two-sided markets” (Rysman Marc, 2009), namely marketplaces in which:

- 1) two sets of agents interact through an intermediary or platform;
- 2) the decisions of each set of agents affects the outcomes of the other set of agents.

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<sup>18</sup> Rachel Botsman defines the ‘reputational capital’ as “the worth of your reputation – intentions, capabilities and values - across communities and marketplaces”.

As a result:

“the pricing of one side of the market depends also on how their participation affects participation on the other side and the profit that is extracted from that participation [...] The low price on one side not only attracts elastic consumers on that side but also, as a result, leads to higher prices or more participation on the other side [...] Anomalies as price below marginal cost or even negative prices can easily arise in a two-sided market. For example, a platform might charge a price below cost on one side if those agents have a large price elasticity and their participation attracts a large number of participants on the other side who are relatively price inelastic” (*The Economics of Two-Sided Markets*, Rysman Marc, 2009).

For example, Airbnb charges hosts much less than guests (3% against 9-12% on average) because hosts are more valuable to the platform: many hosts attract many guests who, in turn, are more willing to pay than their counterpart. Thus, profits go up and the platform is interested in maintaining an unbalanced pricing system, heavier for customers and lighter for providers: the other way around would not generate so much profits.

## Market Design: Search, Pricing and Trust

In the previous subparagraph, we have seen the three “ingredients” (efficiency, trust and “value proposition”) that online platforms must have in order to be successful. These components are important also when building the market itself, since doing so is the primary object of a platform: these ingredients address the issues that every online platform must solve. Search, pricing and trust are deemed core market design problems, and how they will be solved will determine whether the business will succeed or fail.

‘Search’ corresponds to the first ingredient, efficiency. Platforms must elicit information while keeping friction costs low (the time it takes to sort through options), and the best choice depends on which services or goods the platforms facilitate the access to: “Many aspects of Internet market design can be viewed as trading off between these two priorities: keeping transaction costs low and using information efficiently” (Einav, Farronato, Levin, 2016). So, first and foremost, the platform must decide whether to match the buyers and sellers in a centralized way or in a decentralized one, namely whether to prioritize the customer choice or the efficiency of the matching process. However, when the products and the services vary a great deal a decentralized process will be required, making the choice between the two options superfluous and self-evident. In that case, the intermediary will have to decide how to organize the different options to the customers: “A consistent empirical finding is that the presentation of search results matters a great deal [...] In Internet search advertising, buyers are about twice as likely to click a listing in the top position as they would be if it were moved one position down” (ibidem). The implications for both customers and providers are relevant because the platform may not have an incentive to maximize their benefits if they do not foster its profits, and that is particularly likely when certain sellers pay higher fees or there is vertical integration. For instance, that is exactly what happens when Amazon, which is an online platform, becomes provider itself, showing at first the products with its brand. Moreover, even a price ranking may not lead to a higher surplus for the customer if the product or the service is not clearly defined with few variants.



Pricing refers to the mechanism through which the price of the good or the service is set. Platforms such as Airbnb and Onefinestay let the providers choose the price by themselves. Other platforms such as Uber or LendingClub set the price through an algorithm that takes into account the relevant factors: the first assesses the risks and then decide the interest rate, the second evaluates the distance, time and the rapport between supply and demand and then establishes the fare. Finding the best pricing mechanism is important because otherwise demand and supply may not be balanced and produce a shortage or a monopoly deadweight loss. Even here implications may be more than relevant for the customers: if not necessary, complicated pricing mechanism may act as a deterrent to the purchase (e.g. an auction can last long and must be constantly monitored), but above all, if the platform knows that the competition is not stiff enough, it can set the prices as a monopolist even though the marketplace is indeed composed by fragmented buyers and sellers. As two-sided markets:

“the intermediary can be viewed as a monopolist over access to members that do not use other intermediaries. Hence, firms compete aggressively on the side that uses a single network in order to charge monopoly prices to the other side that is trying to reach them” (*The Economics of Two-Sided Markets*, Rysman Marc, 2009).

Trust, as well, is not only one of the three ingredients for a successful sharing economy platform, but also a component of the market design. Indeed, platforms may enforce trust in different ways: through a review system, star rating, up-front screening or even insurance policies. Usually, internet platforms rely on a combination of these ‘trust-enforcers’: Uber and Airbnb both require their provider to adhere to minimum quality standards, while offering a review and a star rating system, as well as an insurance if certain terms are met. Even though review systems have been proved to have many shortcomings, since unsatisfied customers tend not to leave any feedbacks and since they have no incentive to leave a bad one because they fear retaliation, these systems have been able to screen out most of the worst actors anyway. The problem related to them is the manipulation of the feedbacks themselves, which sometimes can be pervasive (TripAdvisor). Moreover, it is interesting to see if review systems can act as barriers to the market if buyers tend to negotiate exclusively with sellers with strong feedbacks.

# What's the Value Added of The Sharing Economy?

The contribution of the Sharing Economy to the GDP is not easy to measure. The reason is that many transactions that happen within this economic system are part of the shadow economy: often, payments that a non-professional Airbnb host receives for renting out his or her own apartment cannot be measured.

In order to understand the value added of the Sharing Economy, Credit Suisse tried to make an assessment through 2 different approaches that converged on similar results.

The first approach is called the sector approach. They took into account the industries mainly affected by the Sharing Economy (namely trade, transportation, accommodation and food services), they calculated the contribution to the GDP of these particular industries, which is about 50% in developed countries, and then they determined the percentage of the population engaged in the sharing economy in each industry as well as their share of wallet going to sharing economy transactions. Multiplying these three factors, they estimated the impact of the Sharing Economy on the GDP:

Impact of sharing on GDP for each industry = (share of an industry in GDP) X (share of people engaged in sharing within an industry) X (share of wallet of those people)

The second approach is called household approach. This approach focuses on the most affected sectors: finance, services, goods, accommodation and transport as well as music and video streaming. In each sector, the average expenditure of a household going to sharing transactions was estimated and then intermediate inputs were subtracted from the expenditure on sharing. The sum across all households and sectors equals the value added of peer-to-peer commerce<sup>19</sup>.

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<sup>19</sup> It is important to note that the definition adopted by Credit Suisse for the Sharing Economy refers only to peer-to-peer transactions. Even though the definition adopted in this thesis is wider, most of the sharing economy transactions nowadays are P2P, therefore Credit Suisse estimate can be reasonably considered a good approximation.

The results were clear: in Switzerland only a small proportion of the GDP was affected by the Sharing Economy (as they define it). In the worst scenario it contributes to 0.1%, in the best scenario to 0.95%. Their conclusions are unambiguous “Sharing has yet to affect GDP significantly – while – If, in the future, sharing activities become more widespread, this shift to less measurable activities will require a new way of looking at GDP” (Credit Suisse, 2015).

# Summary

In this chapter, the Sharing Economy was outlined (1) and some examples were given (2). A quick overview of its history was also provided (3) as well as some of its economic implication (4), its novelties (5) and a brief prospect for the future (6). Moreover, some “ingredients” for a successful P2P platform were explained (7), the design of this market was clarified (8) and an estimation of the contribution of the Sharing Economy to the GDP was offered (9).

- (1) The Sharing Economy is defined as “An economic system that unlocks the value of underused assets through platforms that match ‘needs’ with ‘haves’ in ways that create greater efficiency and access.”;
- (2) Airbnb, Uber, TaskRabbit, Landing Club and Instructables are interpreted as Sharing Economy platforms;
- (3) Sharing has always been part of history, though nowadays it has been changed by technology;
- (4) Technology has decreased the marginal cost of renting out assets and dropped market barriers, thus increasing competitions, efficiency and opportunity costs. Moreover, the markets where the marginal cost and market barriers are low, tend to equilibrate through supply changes and not price changes;
- (5) Technology has encouraged these economic innovations making sharing easy and quick;
- (6) The Sharing Economy is expected to grow exponentially over the years;
- (7) Efficiency, trust and value proposition are crucial for a successful P2P platform, and P2P transactions are considered the fuel of the Sharing Economy;
- (8) Search, pricing and trust are the components that build the Sharing Economy market;
- (9) And the contribution of the Sharing Economy to the GDP is still small but on the rise.

In this context, Airbnb is located: it managed to exploit the new opportunities unlocked by technological innovations, creating an online platform that is now worth more than the 5 most valuable hotel chains in the world together. Its functioning, development and economic impact are addressed in the next chapter through a theoretical and empirical analysis that takes into account numerous studies.

The first paragraph will explain the platform itself, its birth and how it can be economically interpreted. The second paragraph will address the factors that influence the Airbnb's growth and its impact on hotels. Finally, the third paragraph will link the economic theory with the empirical evidence.



# Chapter 2

## Airbnb

A Trusted Community

Society, Economy and the Impact of Airbnb

Facts and Trends

# A Trusted Community

## The New Platforms: Two-Sided Markets

Airbnb is one of the many online platforms that have emerged over the last decade. It basically facilitates the match between supply and demand of short-term rentals, becoming an online marketplace that now involves millions of daily users (2 million a day on average in 2017<sup>20</sup>).

Airbnb, which profits from charges of both hosts and guests, just like many other platforms can be interpreted as a two-sided market, in which two sets of agents, in this case hosts and guests, match through an intermediary, the platform.

In this scenario, the two sets of agents are interdependent and the decision of one “side” (set of agents) affect the other “side”: in the specific case, hosts’ decisions affect guests’ decisions and vice versa. How one side affects the other is the keystone of two-sided markets: since participation from one side encourages participation to the other, but their price elasticity is different, the platform charges the two sides in different ways in order to maximize its general profits. The more one side is price-elastic compared to the other, the less should be charged, so that the price-elastic side, attracted by the low prices, will attract in turn the other less price-elastic side, which will eventually be charged more heavily.

The fundamental characteristic of a two-sided market is, therefore, the fact that if the charges on one side increase of a certain percentage and the charges of the other side decreases of the same exact percentage, the total revenues will change because of the different ability to attract the other side agents and the different price elasticity that each side has.

To clarify the argument, Airbnb charges hosts 3% and guests 9-12% (on average); if it switched the percentage, charging hosts 9-12% and guests 3%, its profits would drop as the price elasticity of hosts is higher: fewer hosts would be present on the platform and the great majority of the surplus would migrate from the platform to the guests themselves.

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<sup>20</sup> Source: Airbnb. Available at: <https://press.atairbnb.com/app/uploads/2017/08/4-Million-Listings-Announcement-1.pdf>



Personally, I still have doubts about why that is the case, since if the previous example was true and Airbnb switched the prices of hosts and guests, hosts may raise the price, rebalancing the changed burden. However, it is interesting to see that rebalance does not happen, and it is exactly this lack of rebalance which defines, in my view, the two-sided markets. The author of this theory, Marc Rysman, gives also the example of Microsoft, which charges developers

“well below the cost of serving them – because - consumers value developer participation, and consumers pay a mark-up over marginal cost that makes attracting the developers worthwhile for Microsoft, even at the expense of potential profits Microsoft could be making from the developer side.” (*The Economics of Two-Sided Markets*, Rysman Marc, 2009).

The whole theory would make perfect sense if the provider side could not set the prices of its supply, but if the supply side is free to “impose” its own prices (or let them be determined by the market) a rebalance may be perfectly rational. Therefore, I interpret Airbnb as a limited two-sided market, believing that in the long term a rebalance (at least partial) would be probable and that only when the platform can not only charge but set the prices of the two sides an authentic two-sided market arises.

Anyway, successful sharing economy start-ups tend to focus their attention on the supply side, switching costs on the demand side. Therefore, even though the level of “two-sidedness” is not full, different cost systems produce different outcomes that must be taken into account. An explanation of this phenomenon may be the fact that high prices could be interpreted as market barriers by the supply side but not by the demand side: in that case, what shapes two-sided markets would be the different interpretations about the market of the economic agents: in these circumstances, a microeconomic theory of two-sided markets should take into account the irrationality of the economic agents, irrationality that causes the lack of rebalance.

## How It Was Born

The birth of Airbnb has nothing to do with theory and microeconomics. It's more a story of persistence and intuition, as well as of great courage and entrepreneurship.

Two of the three founders, Brian Chesky and Joe Gebbia met for the first time when still in college, and later they decided to work together on a project with the Conair Corporation, which produces hair-dryers and personal-care products. Their purpose was to develop a new design for hair-dryers, instead they presented a new vision for the company and a shirt made by soap. While the manager of the project told Chesky that he had drunk too much coffee, the two friends had an epiphany about what they could come up when together. However, Chesky had just graduated and had to find a job, which meant their separation. Before leaving, Chesky told Gebbia: "We are going to start a company one day, and they are going to write a book about it". What a premonition.

Meanwhile, Gebbia moved to San Francisco. The two never stopped talking to each other and, after a few years, in 2007 Gebbia asked Chesky to come to San Francisco renting a bedroom in his same apartment. The same day, Chesky broke up with his girlfriend, left most of its possession and drove to San Francisco, without health insurance and even being able to afford the first month's rent.

Actually, not even Gebbia could afford the next month's rent. Together again, they started brainstorming how to get the money for staying and remembered that San Francisco was hosting a world congress about design and, for this reason hotels would be full and prices high. They decided to rent the apartment, setting up also some air mattresses they had, so that they could have hosted more people. They created a website, posted an announce online and rented out 4 beds. When the first guest to book submitted a request after googling what an air bed was, he asked for the original "AirBed and Breakfast", and now you know where the platform's name comes from.

The guests went back home more than satisfied and Brian and Chesky made 1'000 dollars in a weekend. They then thought that it could have been the right idea for their company and, to help the process, asked their friend Nathan Blecharczyk to join them. Nathan was a gifted guy who learned on his own how to code when he was fourteen, and by the time he had finished high school he had already made a million dollars.

From then on, the three started working on the Airbnb project, showing an incredible entrepreneurship spirit: to raise money, they bought a ton of cereals and designed 1000 boxes with the caricatures of Obama and McCain, boxes that were filled with cereals, individually numbered and sold. They made 30 thousand dollars with that initiatives and it was only the beginning. When Paul Graham, a co-founder of a start-up accelerator, knew about the initiative he was impressed and let AirBed & Breakfast into his accelerator. From that moment, the company started growing quickly and it is now worth more than 30 billion.



Cap'n McCain's and Obama O's cereal

## How It Works

Airbnb is available both as a website and as an app for smartphone. If you are a guest, you can easily type your destination and find a suitable accommodation through the numerous filters that Airbnb provides. It is possible to look for a house choosing the number of beds, bedrooms, and bathrooms, particular amenities (such as kitchen or air conditioning) and facilities (gym, pool, hot tub), the property type, the house rules, the neighbourhood, the host language, among 19 different options for those who may have accessibility problems and, of course, the price. Furthermore, Airbnb provides the “Airbnb Plus” mark, which the hosts who are highly rated and have homes with particular characteristics, such as a sought-after design, perfect maintenance, complete equip and comfortable spaces, earn after being verified by Airbnb itself through an in-person visit. “Airbnb Plus” is, indeed, a quality mark. Last but not least, Airbnb offers the “experiences”, namely activities designed and led by local hosts, giving access to places and communities that would have otherwise be difficult to reach, if not impossible for a tourist in town just for a few days. Hosts share their hobbies, skills or expertise with guests, who can enjoy unique experiences from a local perspective.

If you are a host, Airbnb lets you create an account and post your listing for free. It provides a pricing tool to help hosts decide how much to charge and it covers them with an insurance on the property up to a million dollars in case of property damage or if the guest gets hurt. The payment is secured through the Airbnb’s payment system, and the money can be transferred via PayPal, direct deposit and international money wire among other ways. Support about the listings is offered 24/7 and a community of Airbnb hosts has been created to help each other and share advice.

As already mentioned, Airbnb charges 3% to hosts, and 9-12% to guests, while experiences are charged 20% to hosts and 0% to guests.

# Society, Economy and the Impact of Airbnb

## Factors That Influence the Growth of Airbnb

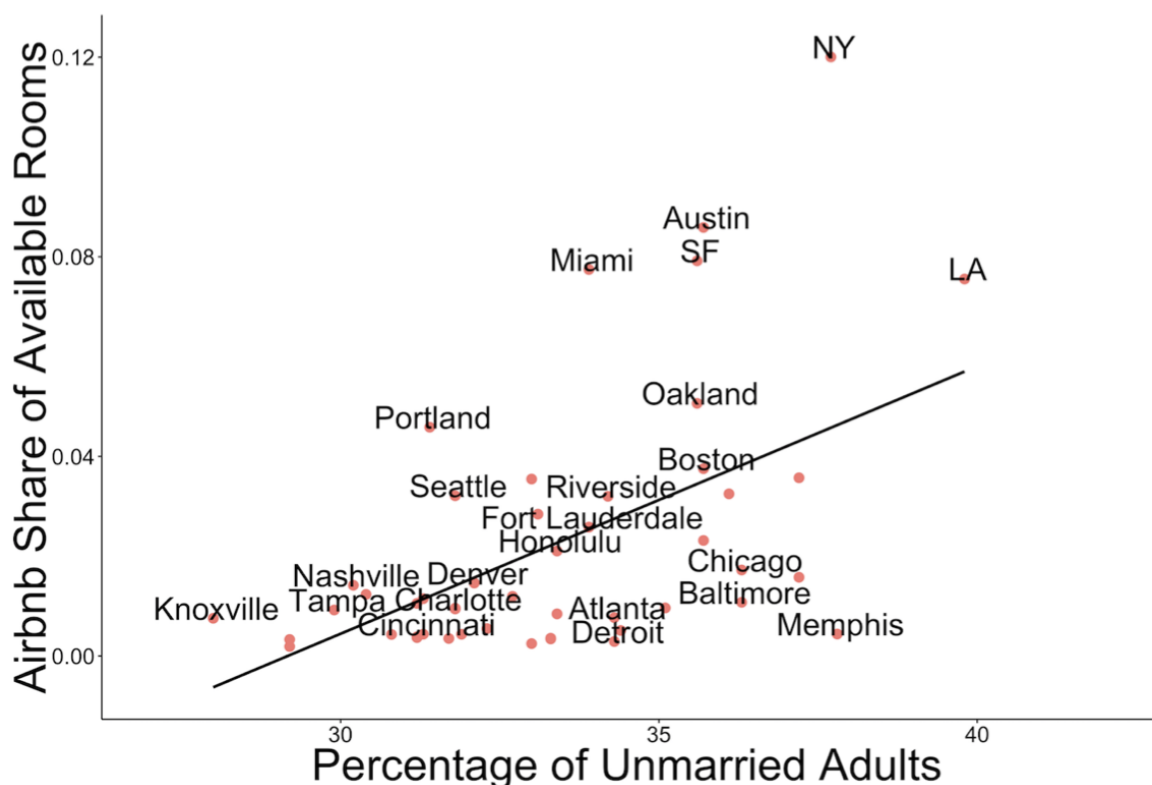
Airbnb does not grow randomly across markets.

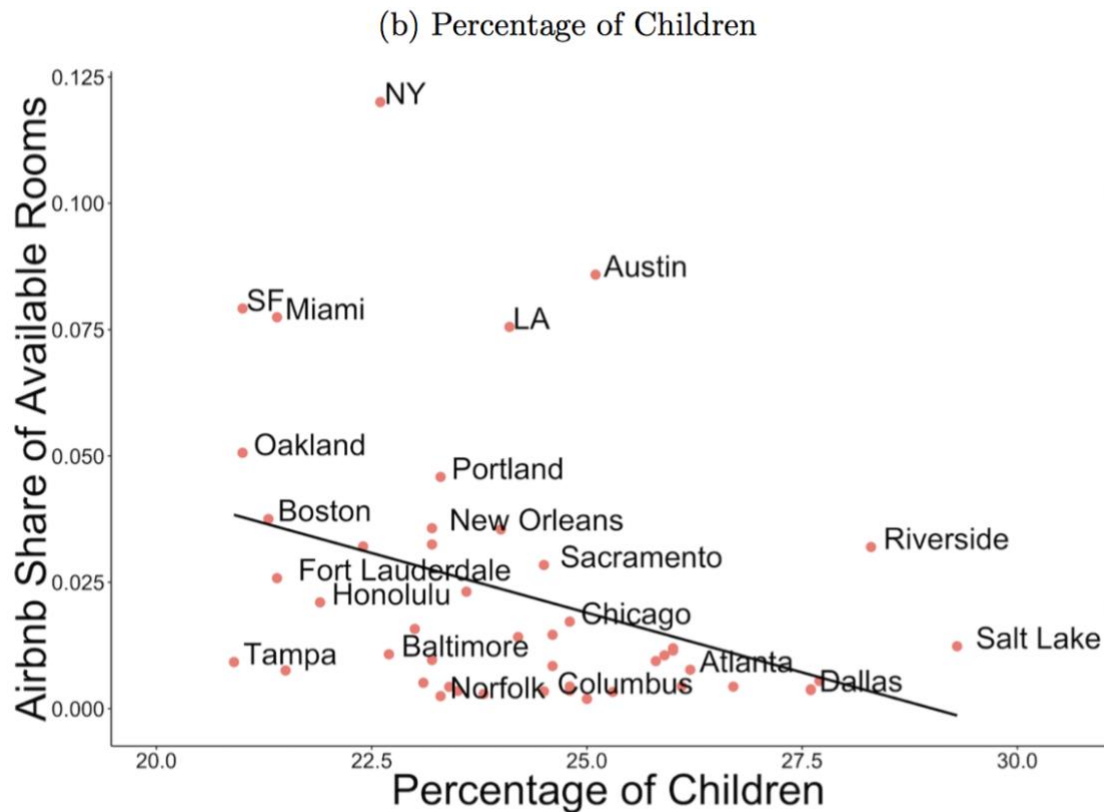
Several factors affect the Airbnb market's penetration and its growth within a particular area. These drivers are, fundamentally, three:

- The demography of the population;
- The hotel supply constraints;
- The demand volatility.

First “the penetration of Airbnb listings (as a fraction of total housing supply) is correlated with the share of city's residents who are single and/or childless” (Farronato, Fradkin, 2016). Children increase the hosts' perceived risk, thus raising their marginal cost. Furthermore, unmarried people tend to travel more, leaving their home more often and, therefore, available to be rented.

(a) Percentage of Unmarried Adults





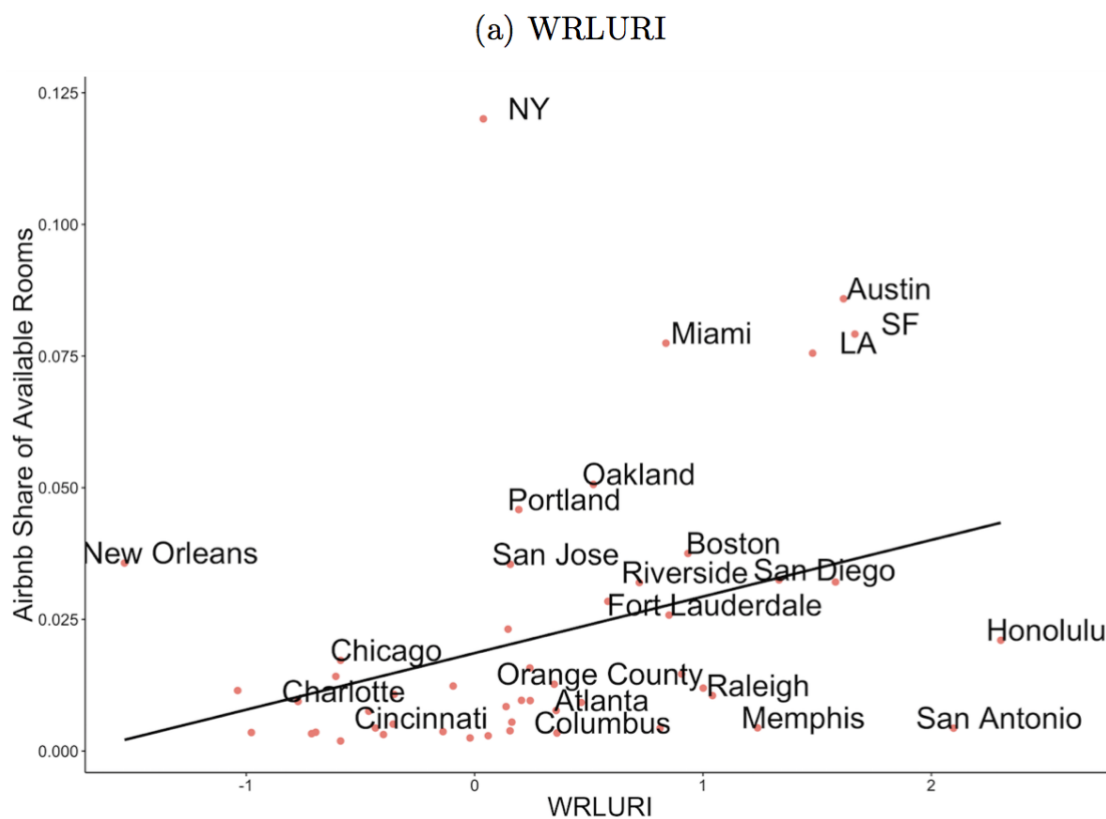
Source: ibidem

The size of Airbnb is measured as the average share of available listings in May 2014. As the two graphs show, the correlation between the Airbnb penetration (size) and the **demography** (children and marriage) of the cities in which it develops is significant. The percentage of unmarried adults is positively correlated to the size of Airbnb, while the percentage of children is negatively correlated, as theorized.

For this reason, Farronato and Fradkin come to the conclusion that “an unmarried 30-year-old professional will likely be more open to hosting strangers than a family with children”. Moreover, when the cost of housing represents a big proportion of the household income, the incentive to rent it out are higher; therefore, low-income households are more likely to rent out their home.

Second, the high cost of building hotel capacity (when possible) caused by **regulatory constraints** drives up the accommodation prices, not allowing the formation of a competitive market. When this happens, the Airbnb penetration tends to be significant, since high prices caused by a shortage of hotel supply, in turn caused by regulatory constraints, allow for high profit margins. Those profits, since they can't be lowered by the market entry of new agents (hotels), remained stable for years. Now, instead,

those profits are attracting Airbnb hosts, who do not have to deal neither with market barriers nor with upfront investments. Airbnb hosts are, thus, making the market more competitive, while driving down prices. The next graph shows the correlation between the size of Airbnb as previously defined (average share of available listings) and the regulatory constraints in each city of the sample, represented by the Wharton Residential Land Use Regulation Index (WRLURI), which is a measure of how stringent the local regulatory environment is in the housing market.

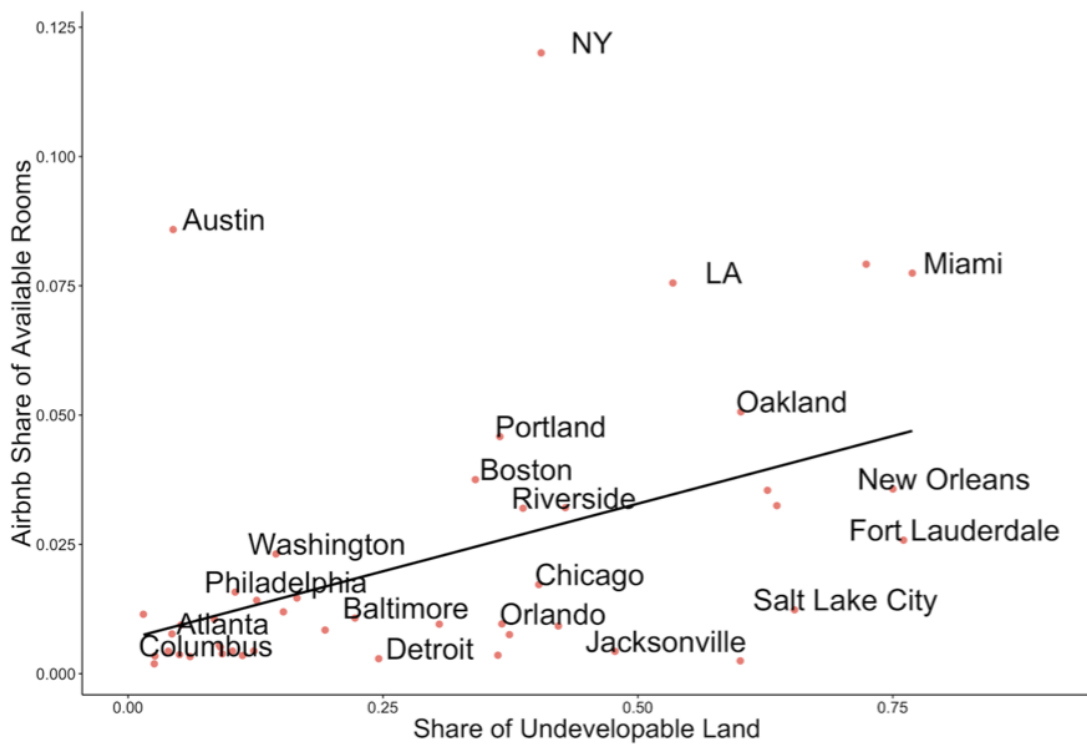


Also in this case, the correlation is positive and significant. Limits to the construction of hotels are, therefore, a crucial factor to predict how much Airbnb is going to develop in a determined area.

To be even more precise, constraints to the construction of hotels that do not depend on the administrative rules should be included, too.

**Geographic constraints** are relevant, indeed, since they prevent an increase in supply just as the regulations.

(b) Share of Undevelopable Area



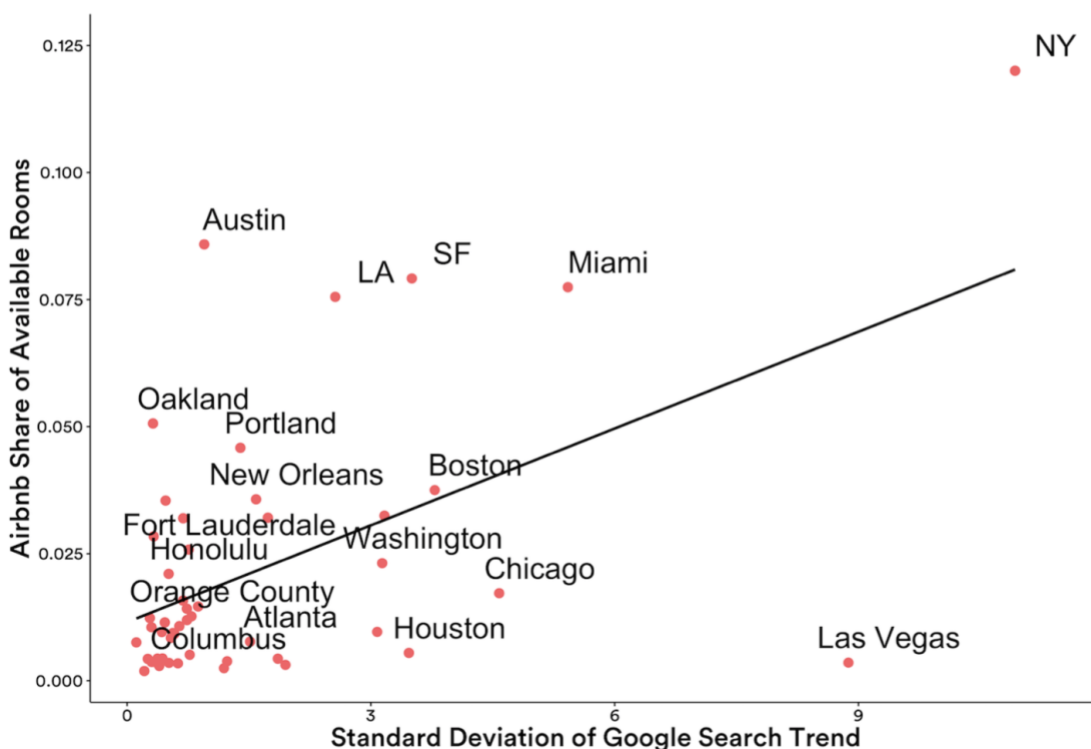
This time, on the horizontal axis there is the share of undevelopable land, drawn from Albert Saiz, associate Associate Professor of Urban Economics and Real Estate Director at the Massachusetts Institute of Technology (MIT), while on the vertical axis there is always the size of Airbnb. Again, the link between the two variables is relevant and anything but insignificant, proving that geographic constraints are an important factor to predict the growth of Airbnb.

Third, on the demand side, volatility explains the Airbnb growth. Since hotels have high fixed costs, a high **demand volatility** cannot be satisfied in full: during the off-season, hotels would lose too much money because of high costs and modest revenues. As a result, just a few hotels can be built, making low or no profits during the off-season, and large profits during the peak season. In this context, Airbnb hosts provide a supply that is incredibly elastic because of the absence of market barriers and marginal costs and that, during the peak season, increases greatly while decreasing the accommodation prices and the supply shortage, allowing more people to enjoy the stay.

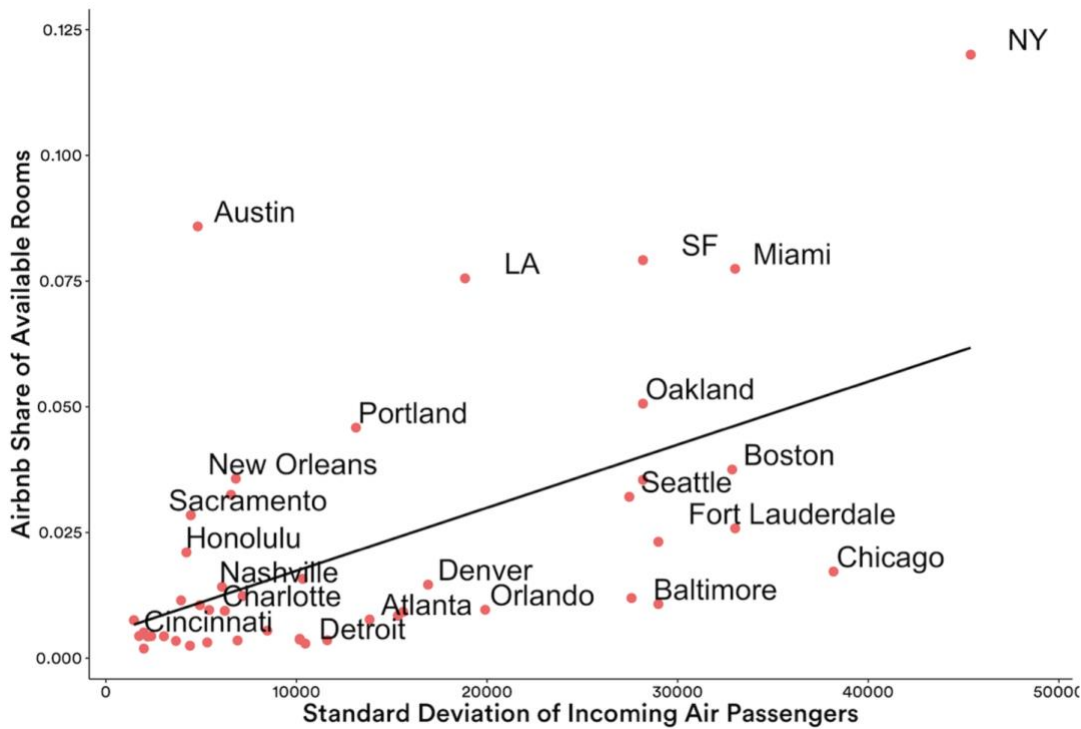


In order to quantify demand volatility, the standard deviation of Google Search queries for “Hotel(s)  $c$ ”, where  $c$  represents the name of the cities in the sample, was taken through STR (which is “the source for premium global data benchmarking analytics and marketplace insights”) and normalized for the period between January 2011 and March 2015. Another way thorough which demand volatility was quantified is the standard deviation of incoming airplane passengers coming from surveys conducted by the Bureau of Transportation Statistics. These two demand volatility versions were then compared with the usual size of Airbnb, generating results that are synthesized by the next 2 graphs:

(a) Standard Deviation of Google Search Trend



(b) Standard Deviation of Incoming Air Passengers



As for the other two variables, an appreciable correlation was found, confirming the theory that demand volatility affects the growth of Airbnb.

In order to conclude and make the theory more complete, it is also useful to point out the correlation between the hotel revenues and the size of Airbnb within a specific area. High prices, in turn caused by the regulatory and geographic constraints already mentioned, guarantee high profits, which attract Airbnb hosts. The last graph shows clearly the correlation.



*This figure plots the supply share of Airbnb against the average revenue per available room in each respective city.*

# Factors that Influence the Impact on Hotels

Airbnb does not affect every hotel equally.

Heterogeneity by hotel type is relevant, since Airbnb is typically considered a competitor to lower-end hotel rooms. Recently, Airbnb has tried to attract more guests to high-end apartments; however, the effect on hotels is still strongly correlated to the segment of guests a particular hotel refers to.

There are three main characteristics of a hotel that affect the impact that Airbnb will have on it:

- The price segment;
- The presence of business facilities (conference and meeting spaces);
- The presence of a brand.

According to these 3 characteristics and the following structure provided by Georgeos Zervia<sup>21</sup>, Davide Proserpio<sup>22</sup> and John W. Byers<sup>23</sup> in their paper “*The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry*” (2017), hotels are divided into:

-5 tiers: Budget, Economy, Midprice, Upscale and Luxury;

-2 guest orientations: those that target business travels and those that do not;

-2 kinds of hotels: chain hotels and independents.

Studying the impact of Airbnb on hotels, the 3 authors found out that Luxury hotels are the “category least affected by Airbnb, motivated by the observation that these hotels are least comparable to Airbnb based on average room price and also by their amenities (e.g., pools, conference rooms, concierge)”

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<sup>21</sup> Assistant Professor of Marketing at Boston University Questrom School of Business.

<sup>22</sup> Assistant Professor of Marketing at University of Southern California Marshall School of Business.

<sup>23</sup> Professor of Computer Science at Boston University.

*Price segment × log Cum. Airbnb Supply (ref. Luxury)*

Budget	−0.039*** (−5.39)
Economy	−0.031*** (−6.02)
Midprice	−0.020*** (−5.20)
Upscale	−0.007 (−1.45)

The table chart above synthesizes their findings. On the left we find the hotels divided by their **prices**. On the right, the first number shows how much the prices for that particular category decreases when the Airbnb size increases 1%, using luxury hotels as a reference. For example, Budget hotels (the cheapest ones) see their prices decreased of 0.039% more than the prices for the Luxury hotels, when the Airbnb size increases of 1%, meaning that a 10% increase in the Airbnb listings causes a 0.39% decrease in the Budget hotel prices if we compare them to the prices of Luxury hotels.

The conclusion drawn by the authors are:

“From a managerial standpoint, this result has direct import: even though lower-end hotels in Texas account for a disproportionately small amount of room revenue as compared with upmarket hotels, they nevertheless bear the brunt of the impact of the market entry of Airbnb [...] While this increased competition affords consumers greater choice, it also places lower-end hotels in regions with high Airbnb penetration at greater risk”. (*ibidem*)

As far as the second characteristic is concerned, the **presence of business facilities**, further studies confirm that the hotels that have those facilities are much less affected by Airbnb.

w/o Meeting Space × log Cum. Airbnb Supply	−0.015*** (−4.28)
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The data above points out that, according to Zerbia, Proserpio and Byers’ analysis, prices of hotels that do not have business facilities decrease of

0.15% more than the prices of hotels that have them for a 10% increase in the Airbnb listings. Therefore, the 3 authors argue that:

“The estimated coefficient between Airbnb supply and the indicator variable denoting absence of meeting space is negative and statistically significant ( $-0.015$ ,  $p < .01$ ), suggesting that hotels lacking business facilities are more affected by Airbnb. These results are consistent with our prior segmentation [...] We do note though that, seeing a growth opportunity in the business travel segment, Airbnb recently launched an initiative to attract more business travellers. An interesting open question going forward is the extent to which business travel will continue to differentiate the impact of Airbnb on hotels.” (*ibidem*)

The last characteristic, the **presence of a brand**, also affects the impact of Airbnb on hotels: hotels with a brand invest a significant amount of money to secure customer loyalty through advertising and brand building itself. This strategy makes the customers less price-elastic, thus making the brand less vulnerable to competition. Furthermore, chain hotels provide a standard service, which differentiates them from independent hotels. The studies confirm this theory, too; however, the difference between independent and brand hotels is not as important as the coefficient correlated to the other 2 characteristics:

Independent  $\times$  log Cum. Airbnb Supply

$-0.008^{**}$   
( $-2.53$ )

The difference is of 0.08% in favour of brand hotels, when Airbnb listings increase of 10%.

On my opinion, efficient hotel chains such as Marriot and Hilton will hold out particularly well against Airbnb. Competition will be real, but more than compete they will coexist. From one hand, Hilton and Marriot provide cutting-edge amenities (ranging from a robotic concierge to digital check-in), and a standard but high-quality service that needs no presentation; to the other hand Airbnb provides a much more diversified supply, which can vary greatly even within a town, and usually fewer amenities. It may even be possible that the hotel industry polarizes with chain hotels and Airbnb gaining market share. This argument is supported by increase earnings by both Hilton and Marriot over the last few years, warning us that “the latest earnings announcements of the two giant hotels

is a rare, optimistic reminder that not all disruptive innovation will annihilate every old timer” (Howard, 2017).

## Results and Economic Significance

Airbnb definitely has an impact on hotels, and its impact is proportional to its size within a particular area. However, the growth of Airbnb is not accidental, but depends on specific characteristics, such as the demography of the population, hotel supply constraints and demand volatility.

Moreover, the impact of Airbnb on hotels is not homogeneous, but it depends on three features of the hotel, such as the price segment, the presence of business facilities and the presence of a brand.

Combining these two results, it is possible to infer that

- 1 low-price
- 2 independent hotels
- 3 with no business facilities,

located in an area with

- 1 seasonal tourism,
- 2 regulatory and environmental constraints,
- 3 and with a small proportion of married couples with children

are the most affected by Airbnb, while luxury chain hotels with business facilities, located in an area with a constant flow of tourists throughout the year, no supply constraints and with a high percentage of married couples with children are practically unaffected.

Economically significant improvements are concentrated in the below-median income segment, allowing a greater number of people to enjoy the stay: one of the last researches confirms that

“over 70% of nights booked on Airbnb would not have resulted in a hotel booking in the absence of Airbnb. These travellers would have instead chosen the outside option, which could represent staying with friends or family, staying at a non-hotel accommodation, booking fewer nights, or not traveling to the city at all.” (*The Welfare Effects of Peer Entry in the Accommodation Market: The Case of Airbnb*, Chiara Farronato and Andrey Fradkin, 17 October 2017)



Airbnb makes the “tourism pie” bigger and reinforces the view that it is not a “perfect substitute” of hotels and does not always compete with them. Therefore, Airbnb is one of the drivers of the tourism growth that have been happening over the last few years and an incredible tool to boost the economy of holiday destinations.

# Facts and Trends

## Airbnb in the World

Airbnb has nearly 5 million listings in 191 countries, and more than 2 million users on a given night with an average per-night price for reservations of \$80. Its worldwide value is over \$31 billion, while in 2017 it made \$93 million in profit on \$2.6 billion revenues, which are forecasted to become \$8.5 billion by 2020. More than 200 million people have used Airbnb, roughly 60% are millennials, 54% are female and 46% male. 88% of Airbnb's reservations are for groups of two to four people and 60% of the reservations were for an entire home / apartment. 7% of the reservations were for single guests and only 11% of the reservations were for one-night stays.

The top 5 countries for Airbnb listings are:

- United States — 660,000 listings
- France — 485,000 listings
- Italy — 340,000 listings
- Spain — 245,000 listings
- United Kingdom — 175,000 listings

The demand for non-traditional accommodations is on the rise, with a forecasted growth in 2018 of 700% for nature lodges, 600% for ryokans (traditional Japanese inns), 155% for yurts and 133% for RVs. Over Airbnb's lifetime, there have been:

- 130,000+ guest arrivals at treehouses
- 140,000+ guest arrivals in yurts
- 570,000+ guest arrivals in boats
- 100,000+ guest arrivals in earthouses
- 120,000+ guest arrivals in castles
- 300,000+ guest arrivals in RVs

1.9 million listings are instantly bookable, with prices from 8% to 17% cheaper than a regional hotel's average daily rate in Europe, while in the

top 25 markets in the U.S., Airbnb is 6% to 17% cheaper than hotels in those markets.

## Airbnb in the USA

Airbnb in the US markets has caused effects in accordance with the theories previously mentioned. As a matter of fact, the United States were used as a test bench for those theory, especially to understand and demonstrate both which factors affect the growth of Airbnb and the impact on hotels.

Since the factors that affect the growth of Airbnb have already been discussed widely with respect to 50 major US cities, now we look at the impact of Airbnb on hotels in such cities.

On average, a 10% increase in the number of available listings on Airbnb reduces hotel revenues by 0.36%, and this effect is mostly due to a reduction in hotel prices rather than a decrease in occupancy rates. However, in accordance with our previous analysis, “The effect is larger in cities with constrained hotel capacity, where a 10% increase in Airbnb listings decreases hotel prices by 0.52%” (Farronato, Fradkin, 2017) Moreover, the Airbnb supply is extremely elastic, twice as elastic as the Hotels’: a 10% price increase (due to peaks in demand) raises Airbnb bookings by 22%, against 11% for hotels. The average Airbnb share of available rooms in the last quarter of 2014 is 2% and, in most cities, it is between 1% and 3% (25th and 75th percentiles), representing 4% of all guests.

According to the Farronato and Fradkin’s analysis, “profits fall by 3.1% on average across all of the cities in the sample, with the largest fall coming in New York [...] Nonetheless, over 70% of nights booked on Airbnb would not have resulted in a hotel booking in the absence of Airbnb”. This, in turn, generates higher surplus both for Airbnb guests, who can enjoy the stay, and for hotel guests, who enjoy lower prices. The estimate is “\$70 of surplus per night booked in 2014 [...] In total, Airbnb generates \$432 million in consumer surplus in 2014 for 10 large US cities” (*ibidem*).

The data available extends from January 2011 through December 2014. In the meantime, Airbnb has been growing exponentially and, conceivably, has amplified its effects on the accommodation market. Further studies will shed light on the matter, meanwhile Airbnb has decreased hotel prices and generated a demand that did not previously exist, increasing travel and tourism spend overall.

## Airbnb in Texas

We now look at Airbnb in Texas to see if the findings reported in this thesis are reflected in a more “micro” area and, therefore, are also applicable in contexts not extremely broad. Texas becomes, thus, a testing ground to try out the conjectures advocated and to falsify or corroborate them.

According to Zerbas, Proserpio and Byers, in Texas each additional 10% increase in the size of the Airbnb resulted in a 0.39% decrease in hotel room revenue. These results are incredibly close to those obtained by Farronato and Fardkin while studying the impact of Airbnb in 50 major US cities, where a 10% increase of the Airbnb size resulted in a 0.36% decrease in hotel revenues. They also agree on the price elasticity of Airbnb supply: “accommodating surges in demand through flexible scaling of supply is a defining feature of the sharing economy” (Zerbas, Proserpio, Byers, 2016).

Price effects caused by Airbnb in Texas are primarily driven by Austin, which is what was expected given the 3 characteristics that affect the growth of Airbnb (in the previous graphs Austin is easily visible). Austin has, in particular, unusually relevant supply constraints for hotels: again, this fact is in accordance with the Farronato and Fradkin’s findings, showing that price effects are particularly strong in cities where the construction of hotels finds important barriers. Consequently, Zerbas, Proserpio and Byers found that in Texas, as we expected, the Airbnb growth was not homogeneous:

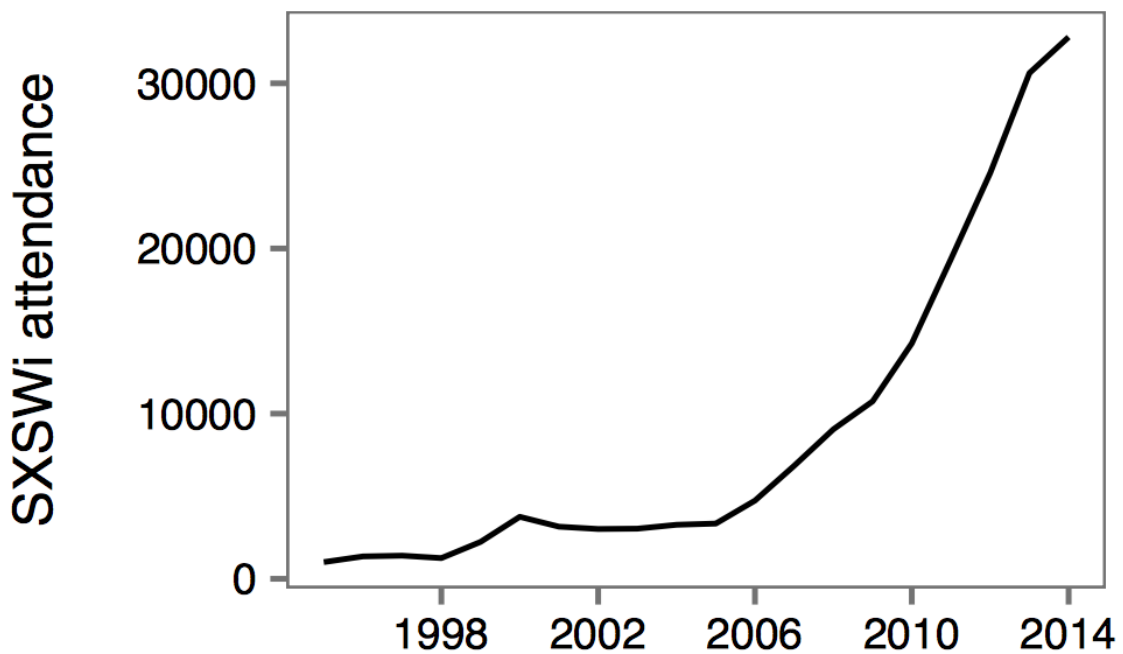
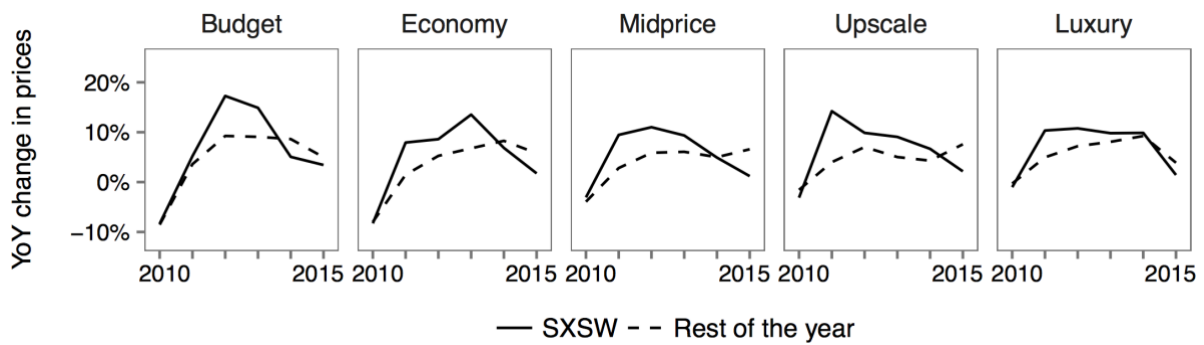
“Airbnb adoption, over the past eight years in the ten most populous cities in Texas, are themselves diverse, with several cities experiencing early adoption and rapid growth, while others experienced minimal Airbnb adoption” (*The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry*, Zerbas, Proserpio, Byers, 2016).

In Austin, where the Airbnb size is the biggest of the state, the three authors report a relevant impact on hotel revenues that ranges from 8% to 10%. Moreover, during the popular SXSW festival<sup>24</sup> in Austin, the *peak*

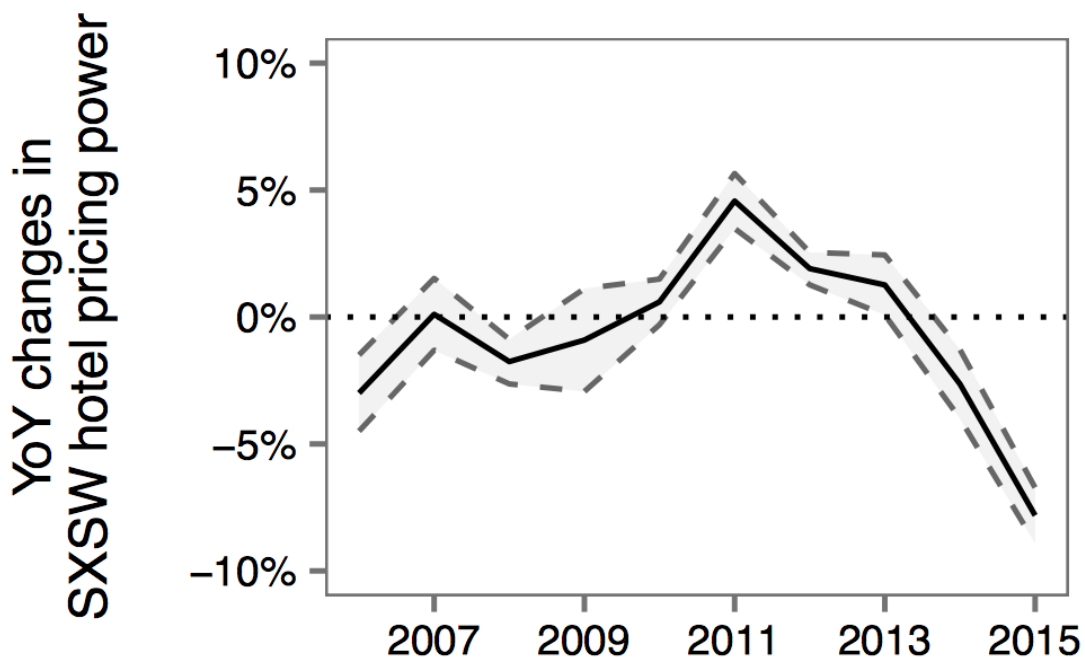
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<sup>24</sup> The South by Southwest (SXSW) is an annual conglomerate of film, interactive media and music festivals and conferences that takes place in mid-March in Austin, Texas, United States (source: Wikipedia).

*pricing power*, namely the hotel industry's ability to command high rents during peak periods (calculated through the difference of the prices in a particular period with the prices in the rest of the year) decreased constantly from 2012 to 2014 even though the attendance was sharply increasing: from 2012 to 2014 Airbnb was strongly on the rise in that city. On the other hand, during the Texas State Fair in Dallas<sup>25</sup>, where Airbnb did not grow as much as did in Austin, the peak pricing power did not show any particular changes.



<sup>25</sup> The State Fair of Texas is an annual state fair held in Dallas at historic Fair Park and , it is still consistently recognized as one of the most highly attended and best state fairs in America as well as Dallas's signature event (source: Wikipedia).



Paradoxically, in 2015 hotel prices during the SXSW in Austin were even lower than the prices of the rest of the year. This confirms the thesis that Airbnb affects powerfully high-season prices, making them converge to the low-season ones.

Overall, the studies conducted about the impact of Airbnb in Texas have confirmed the theories put forth:

- The Airbnb's growth is not homogeneous and depends on several factors, such as hotel supply constraints;
- The impact of Airbnb on hotels depends on the characteristic of a specific hotel, especially its prices (cheap hotels are the most affected);
- The revenues of hotels decrease proportionally to the size of Airbnb;
- The peak pricing power declines significantly where Airbnb is widespread.

Indeed, Airbnb is changing both consumption patterns and the whole accommodation market and, since there is no sign it is slowing down, it will be more and more important to study its consequences.

## Summary

In this chapter, a brief history of Airbnb was given (1), as well as a description of its functioning (2). Airbnb was interpreted as a limited two-sided market (3), and the factors that affect its growth (4) and the impact it has on hotels (5) were traced and outlined. In the third paragraph, some simple facts about Airbnb in the world (6), in the USA (7) and in Texas (8) were offered, confirming several hypotheses.

- (1) Airbnb was born in 2008, after that Brian Chesky and Joe Gebbia rented out their apartment on the internet;
- (2) Airbnb is available both as a website and as an app, where hosts and guests come together; both accommodations and experiences are available;
- (3) Airbnb is a platform where 2 sets of agents are linked, and where the decision of one side affect the decisions of the other; for this reason, Airbnb charges the two sides differently;
- (4) Demography, hotel supply constraints and demand volatility can predict the growth of Airbnb within a particular area;
- (5) Overall, Airbnb decreases hotel revenues; the price segment, the presence of business facilities and the presence of a brand predict how much a particular hotel will be affected by Airbnb;
- (6) Airbnb is present in 191 countries with almost 5 million listings; United States, France, Italy, Spain and the United Kingdom are the most important markets and the prices are usually cheaper than those of the hotels;
- (7) In the US, Airbnb drove hotel revenues down of 0.36% by 2014, generating a surplus for customers and a demand that did not previously existed;
- (8) In Texas, Airbnb drove hotel revenues down of 0.39%. In Austin revenues plummeted of 8%-10% by 2014; moreover, in Austin the peak pricing power decreased significantly because of Airbnb.



In the next chapter, Airbnb will be addressed in the Italian context. The first paragraph will be about the presence of Airbnb in Italy and, in particular, in the Italian rural areas. The second paragraph will focus on how Airbnb will help revitalize Italian rural towns in the light of what was said in the first two chapters. Finally, the third paragraph will address a project dedicated to Italian small towns, as well as a broader context about rural areas and some suggestions regarding policies and regulations.



# **Chapter 3**

## **The Italian Case**

The Italian Landscape

The Revitalization of Rural Italy

Italian Small Towns

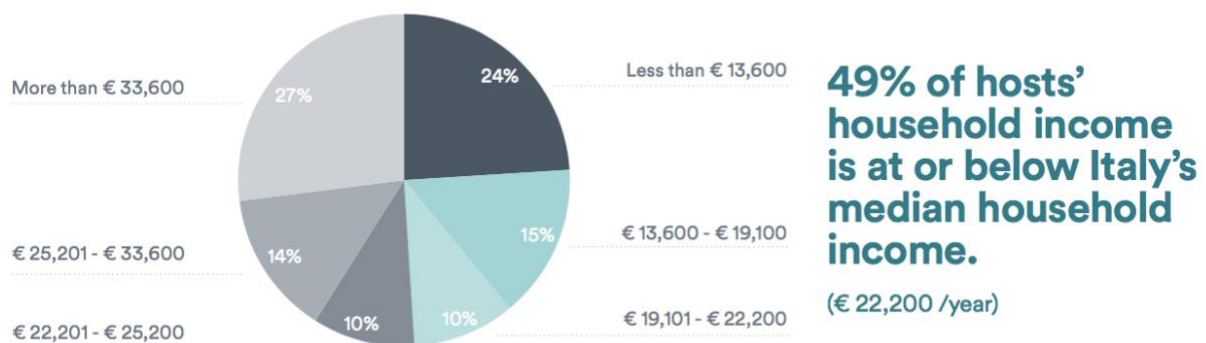
# The Italian Landscape

## Data and Trends in Italy

Italy is the third country in the world for the Airbnb size, counting 340'000 listings.

According to Airbnb, in 2015 Italy hosted 3.6 million guests through its platform. In 2015 there were 83'300 hosts with typical annual earnings for €2300, 3.6 nights as average stay per guest (compared to 3.0 for a traditional accommodation) and 26 days hosted annually per typical listing. Hosts are for 53% female and for 47% male, their average age is 43 and 44% of them rents its primary home. 73% of the active listings offered an entire home and 87% of the hosts had 1 or 2 listings. The income of the hosts varied as follows:

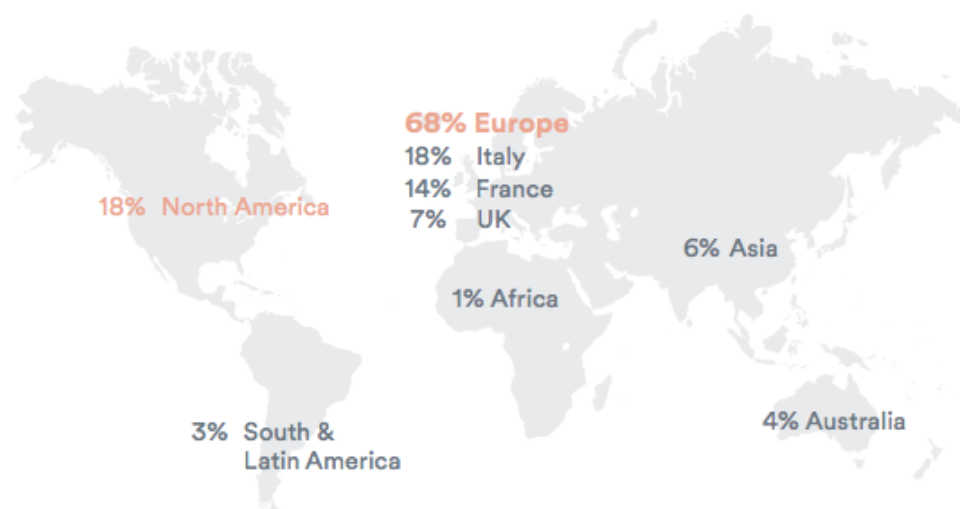
HOST INCOME LEVELS



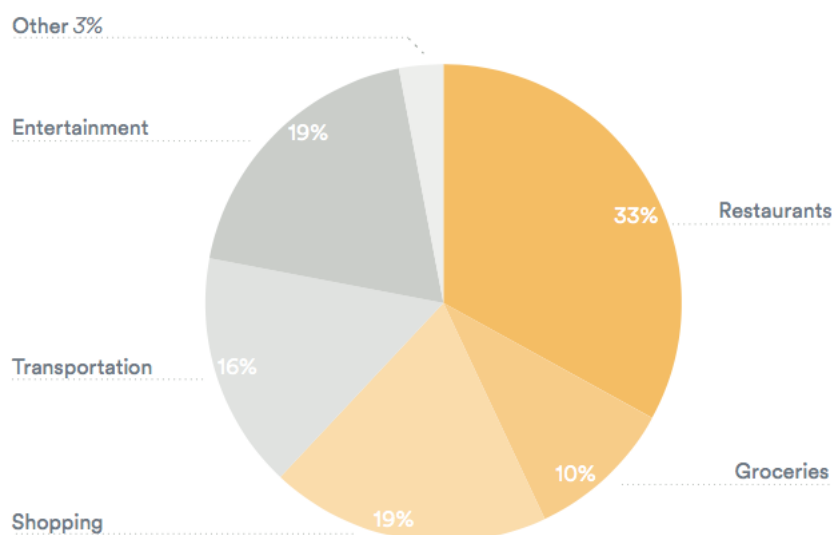
On the other hand, on the guest side, the average party size was made by 2.6 people and 92% of the trips involved 4 or fewer guests. 92% of Airbnb users visited Italy for vacation or leisure. 28% of them reported that would not have come or stayed as long without Airbnb. One of the most interesting data, on my opinion, is that only 18% of the Airbnb guests in Italy came from Italy itself (“domestic vacations”), while 82% of the guests came from abroad, generating a positive cash flow from other countries toward Italy. Moreover, while the inbound Airbnb guests in Italy were 3.6 million in 2015, the outbound guests were only 1.36 million.

## Guest Origin

Guests from around the world are using Airbnb to visit Italy.



In 2015, the income earned by local households through Airbnb amounted at €394 million with an estimated visitor spending of €2.13 billion, distributed as follows:



Moving forward one year only, in 2016 the inbound guests became 5.6 million (from 3.6 in 2015) and the income earned by local households increased, getting to €621 million (from €394 million). Hosts who actually hosted in 2016 passed from 83'300 to 121'000, while other data varied slightly.

## Rural areas: from North to South

Airbnb has been used in the Italian rural areas, too.

Over the period that goes from 1 September 2016 to 1 September 2017, according to Airbnb data, the income earned by “rural hosts” amounts to €77.9 million, with a total influx of tourists of 542’000 people (almost one out of ten Airbnb guests in Italy chooses to stay in rural areas).

The active listings within the Italian rural areas during that period were 30’000, whose hosts were for 52% female and for 48% male, with an average age of 47. The average length of the stay per Airbnb guest was particularly long, 5 days, with an average party size of 3 people. The annual earnings for a typical rural host amounted to €1600, while the nights hosted per year for a typical listing were 16.

Northern Italy<sup>26</sup> had 7000 active listings within rural areas, and the annual earnings for a typical rural host were the lowest compared to those of central and southern Italy: €1400. The average length of stay per Airbnb guest was 4 days, while the total guest arrivals amounted to 162’000. The average host was 47, the nights hosted per year for a typical listing were 16 and the number of people in the average party size was 3.

Central Italy<sup>27</sup> counted 10’000 active listings within rural areas, with annual earnings for a typical rural host of €1800 and 15 nights hosted per year for a typical listing. The number of Airbnb guests reached 190’000 and their average length of stay was 5 nights. The average party size was made by three people, while the average age of the host was 48.

Southern Italy<sup>28</sup> counted 13’000 active listings within rural areas, annual earnings for a typical rural host of €1600 and 17 nights hosted per year for a typical listing. The number of Airbnb guests reached 190’000 here, too, and the average length of stay was 6 nights (particularly high). The average party size was made by three people, while the average age of the hosts was 45.

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<sup>26</sup> Northern Italy includes: Aosta Valley, Emilia-Romagna, Friuli Venezia Giulia, Liguria, Lombardy, Piedmont, Trentino-Alto Adige and Veneto.

<sup>27</sup> Central Italy includes: Lazio, Marche, Tuscany and Umbria.

<sup>28</sup> Southern Italy includes: Abruzzo, Apulia, Basilicate, Calabria, Campania, Molise, Sardinia and Sicily.

## The Last Initiatives

Airbnb has carried out several initiatives in order to promote Italian rural areas.

Thanks to the collaboration of Airbnb with the local authorities, three public spaces of three Italian villages will be redeveloped and reclassified. This initiative follows the pattern that had already happened in Civita di Bagnoregio (Lazio, Viterbo Province), where the mayor, Francesco Bigiotti, set up a partnership with Airbnb in order to restore a public building that became the first public space on Airbnb in the world. The building is called “Casa d’Artista”, and it’s now available on the platform; moreover, all proceeds made from the listing will be used to fund the town’s development.

Another initiative created to promote Italian rural areas is the “Made in Italy” campaign that will support the Italian agri-food industry through customized trips to the country’s rural areas with visits to the leading producers of Italian food, taking into account that Italy is the first in Europe for PDO<sup>29</sup>, PGI<sup>30</sup> and TGS<sup>31</sup> products, as well as the world’s leading wine producer.

Moreover, twenty Italian villages of 20 different regions are being promoted on a dedicated platform already available online<sup>32</sup>. Finally, twenty other villages are being promoted on Airbnb’s social media platforms.

These initiatives are very recent (October 2017), therefore it is not still possible to gather and analyze new data. However, the basis for a successful year for the tourism to Italian rural areas are solid, since it had been increasing even before the advertising offered by Airbnb.

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<sup>29</sup> PDO: Protected Designation of Origin (DOP in Italian)

<sup>30</sup> PGI: Protected Geographical Indication (IGP in Italian)

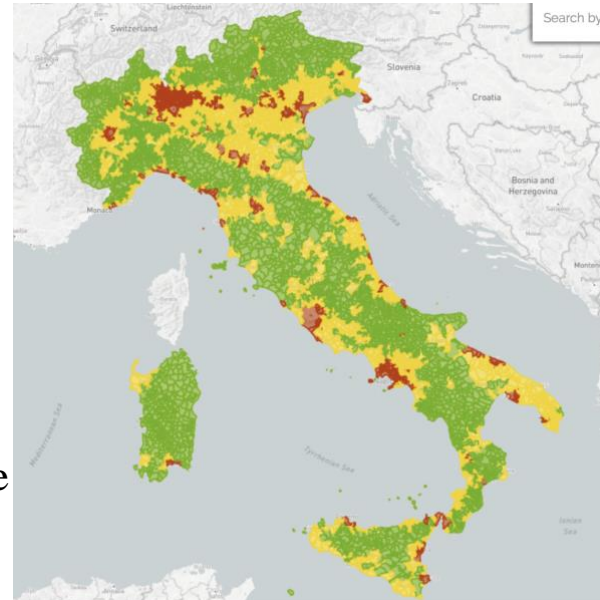
<sup>31</sup> TGS: Traditional Specialities Guaranteed (SGT in Italian)

<sup>32</sup> Available at: <http://italianvillages.byairbnb.com/>

# The Revitalization of Rural Italy

## What Airbnb can do

Rural areas in Italy, such as the cited Civita di Bagnoregio, have tremendous potential. However, while in the big cities such as Rome and Milan<sup>33</sup> the population grows and the economy gets better, in the rural areas there is a population decline (even called “demographic desertification” - infographic n. 9 – Giancarlo Macchi Jànica, 2016) and an economic stagnation. The Italian National Statistical Institute reports that 67.9% of Italian municipalities are characterized by a low degree of urbanization and collect only 24.3% of the population; on the contrary, the municipalities characterized by a high degree of urbanization are only 3.3%, but they collect 33.3% of the population (ISTAT, 2014).



Green: low degree of urbanization

In this context, Airbnb may be a powerful tool to boost the economy of the Italian rural areas through a new source of income that originates from an increased flux of tourists and that distributes to local households, who make available their house to rent. Indeed, according to Airbnb’s data, Airbnb guests increased from 3.6 million in 2015 to 5.6 million in 2016, guaranteeing a cash flow of €621 million to hosts, of which almost 78 million went to the rural areas providers. Moreover, the guest spending in the local businesses is much higher than their Airbnb rents. With an average annual earning for a rural host of €1600 and an average guest spending of €171 a day, the new source of income may breathe new life to the Italian rural areas, where often new ways to earn a living are needed to keep young people and families from leaving.

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<sup>33</sup> During the period going from 2011 to 2016 the population in Rome grew of 9.8%, in Milan 8.8% and in Florence 6.8%. Source: ISTAT. Available online at: <https://www.istat.it/it/files/2017/12/C01.pdf>



At the same time, Airbnb might help promote the culture of small local communities, culture that is part of the Italian heritage but that is not very well-known because it's not located in large cities, such as Rome and Milan. It can be found in small villages ("borghi") that are not even easily accessible: small towns made by fewer than 50 people can hardly have a hotel or afford advertising. Airbnb, thanks to its incredibly low marginal cost and low market barriers (no upfront investments), gives the possibility to host guests easily, promote tourism and boost the economy of these small entities while giving them international visibility through its platform.

# What the Economic Theory Can Teach Us

According to the theory previously outlined, there are a few factors that influence the growth of Airbnb and, in turn, the surplus that Airbnb can generate.

The three factors are:

1. The demography of the population;
2. The hotel supply constraints;
3. The demand volatility.

As far as demography is concerned, the Airbnb growth is usually stronger where the percentage of unmarried adults is high and the percentage of children is low. Matching these theory with the data available, the birth rate in small towns is particularly low, even though the birth rate in Italy is already the lowest in the European Union, with 8 babies per 1000 inhabitants. Moreover, the marriage rate in Italy is one of the lowest of the EU, with 3,2 per 1000 inhabitants in 2015 (ISTAT, 2017).

Hotel supply constraints refer to the impossibility of building the hotels that the market requires. In the previous chapter two different forms of hotel supply constraints were taken into account, namely regulatory constraints and geographic constraints: it is important to consider that in small Italian villages it is often not possible to build hotels because the town is well delimited (as for Civita di Bagnoregio, Sperlonga, Sambuca di Sicilia) or because the construction of a hotel may undermine its landscape. Indeed, in order to increase tourism without harming the charm of the small village, in Italy, before the birth of Airbnb, it was born what became known as the “dispersed hotel”: a hotel that does not need a single building to work, but that exploits facility sits unused, reconverting them into hotel facilities scattered within the small town. Wikipedia gives a simple but effective definition for the *Albergo Diffuso*:

“The Albergo Diffuso, an innovative concept of hospitality, was launched in Italy in the early 1980s as a means of reviving small, historic Italian villages and town centres off the usual tourist track. Translated into English as "dispersed hotel", "scattered hotel" or "virtual hotel", it is a hotel that is not in a single block, but converted out of various historic buildings in a small community”.

Therefore, the dispersed hotel has been a way to build new hotel facilities without endangering the peculiar charm of the Italian *borghi* (small villages). However, with the birth of Airbnb, it is now possible to get around this problem making available the houses of the local residents. Airbnb has two important advantages compared to the dispersed hotel:

1. It does not need any upfront investments;
2. It supplies new accommodations while promoting the culture of the residents, who engage closely with the tourists (who live with them and are their guests), and while sustaining them directly through a new source of income (Airbnb fees).

Indeed, new hotel facilities do not boost the household income in a direct way. Moreover, a large-scale construction of new hotels may undermine heavily the community's culture, making the entire village just a business opportunity, many times with affluent non-residents owners who get most of the benefits.

The third factor is demand volatility, namely the difference of demand for accommodation between the peak season and the low season. Although there is not enough data to determine the demand volatility of the Italian rural areas (especially because they tend to vary greatly across the peninsula), it is possible to infer that a high demand volatility is present in small villages where town festivals, which are typical in Italy, attract a great number of tourists (compared to the other periods of the year). In this scenario, Airbnb may help manage the flux of tourists, making available the accommodations needed so that more guests can enjoy the stay, increasing the customer surplus and the economic gains of the supply chain that a greater number of tourists needs.

As Airbnb puts it: “Home sharing gives guests a way to linger where they historically have had no accommodations due to an absence of hotels, and provides an infusion of revenue which, even if seasonal, can help sustain a village throughout the year” (Airbnb, report, 2017).

## How to Best Exploit New Opportunities

In order for Airbnb to become a tool in the hands of the local residents in the Italian rural areas and have an impact on their lives and their economy, some preconditions are required.

First and foremost, the internet connection must be guaranteed even in the most remote Italian regions: the access to the internet identifies as a *conditio sine qua non* for the residents to exploit Airbnb and, more broadly, to take part in the globalization process. The bottom line is that the internet should not be a luxury, but an actual right.

Second, payment systems must be guaranteed, too. Airbnb itself makes clear that: “Outside of popular vacation-rental markets, tourism isn’t as established an industry as it is in cities and less infrastructure is in place to support travellers. Payment systems can be part of this missing infrastructure” (Airbnb, report, 2017). Local authorities and Airbnb should work together in order to make available payment systems that fit with local approaches. For example, in Brazil Airbnb started to accept the “Boleto”, a form of payment that requires no credit card and that, therefore, allows non-credit-card owners to participate in e-commerce.

Third, data about remote rural areas must be encouraged and made available online for potential tourists. Indeed, “Availability of data can be another missing piece of infrastructure” (*ibidem*), and in a world where information is plentiful and instantaneous, the lack of data can lead to the exclusion of a town from the holiday destinations.

Finally, more traditional communication routes, as well as a good transportation system, must be assured. Transport routes have been vital to trade and commerce since time immemorial, and tourism is no exception.

# Italian Small Towns

## The “Italian Villages” Project

The most important initiative taken by Airbnb is the “Italian Villages” program, a project that is sponsored by the National Association of Italian Municipalities (ANCI) and developed in collaboration with the Italian Ministry of Culture and Tourism (MiBACT) in order to promote more than 40 villages all over the country, at least two in each region.

Three villages, Lavenone in Lombardy, Civitacampomariano in Molise and Sambuca di Sicilia in Sicily will have three public spaces redeveloped thanks to the partnership established between Airbnb and the local authorities, following the approach used in Civita di Bagnoregio. On April 13 (2018), Airbnb announced the three different artists chosen to create “site specific” works of art that will merge with the redeveloped buildings, which will be available on Airbnb from June 2018.

20 other villages, one for each region, will be promoted on a dedicated platform. Those villages include: Aieta (Calabria) Apricale (Liguria), Asolo (Veneto), Barolo (Piedmont) Bevagna (Umbria), Bitti (Sardinia), Città Sant’Angelo (Abruzzo), Cividale del Friuli (Friuli Venezia Giulia), Dozza (Emilia Romagna), Étroubles (Valle d’Aosta), Furore (Campania), Mezzano (Trentino Alto Adige) Moresco (Marche), Pisticci (Basilicata), Poggiorsini (Apulia), Sabbioneta (Lombardy), San Casciano dei Bagni (Tuscany), Sperlonga (Lazio), Savoca (Sicily) and Torella del Sannio (Molise).

Further twenty small villages will be promoted on Airbnb’s social media platforms: Ameglia (Liguria), Badolato (Calabria), Bard (Valle d’Aosta), Candelo (Piedmont), Bosa (Sardegna), Casperia (Lazio), Castelvetro di Modena (Emilia Romagna), Castiglione di Garfagna (Toscana), Cison di Valmarino (Veneto), Conca dei Martini (Campania), Fare San Martino (Abruzzo), Monte Sant’Angelo (Apulia), Montegabbione (Umbria), Offagna (Marche), Petralia Soprana (Sicily), Pietrapertosa (Basilicata),

Sfruz (Trentino Alto Adige), Torno (Lombardy), Vastogirardi (Molise) e Venzone (Friuli Venezia Giulia).

The Italian Villages project fits into a broader national valorization plan created by the Italian Ministry of Culture and Tourism to promote small towns, “unique places, little-known, scattered throughout the Italian territory”. For this reason, the Italian Ministry of Culture and Tourism, the 2 December 2016, adopted a directive in which it was announced the “year of the Italian Borghi<sup>34</sup>”. As a result, 1000 small villages were promoted and 2017 set a new record for the Italian small towns: tourists in those areas increased by 24 million, compared to the previous year. And Airbnb certainly helped host those tourists, while promoting the local culture and boosting the family incomes.



**Red:** villages where public spaces were redeveloped thanks to Airbnb

**Green:** villages promoted on a dedicated platform by Airbnb

**Yellow:** villages promoted on Airbnb's social media platforms

<sup>34</sup> Available online (in Italian) at:

[http://www.beniculturali.it/mibac/multimedia/MiBAC/documents/1484581096228\\_DIRETTIVA\\_2\\_DICEMBRE\\_2016\\_REP.555\\_REGISTRATO.pdf](http://www.beniculturali.it/mibac/multimedia/MiBAC/documents/1484581096228_DIRETTIVA_2_DICEMBRE_2016_REP.555_REGISTRATO.pdf)

## Italy, Europe and the World

The support from Airbnb to rural areas is not limited to Italy.

In France, following the call of the Foreign Minister to “reboot tourism” in 2016 after the drop-off caused by the terrorist attacks in Paris, Airbnb launched the “Maisons de France by Airbnb”, a “marketing campaign to promote travel to all of France’s regions with the goals of drawing visitors beyond Paris”. In a context where one third of French farmers earn less than €350 per month through farming, home sharing is creating more economic opportunity. According to Airbnb data, the annual income of Airbnb hosts in rural France rose dramatically from 2015 to 2016, shifting from €49 million to €105. While the growth of Airbnb listings reached 88%, with 47’000 listings in 2016, whose hosts are 60% female.

Moreover, according to a separate report drafted by the French think tank Tera Nova, there are no hotels in two-thirds of the remote communities where Airbnb hosts list their space, corroborating the thesis that Airbnb grows and is more useful where there is a lack of hotels.

In Ireland, we see the same patterns. Airbnb claims that:” For many parts of Ireland not served by the traditional hospitality industry, home sharing is giving these communities a way to benefit more from tourism, particularly from visitors who wish to venture beyond Dublin to spend time exploring the countryside.” Between August 2015 and September 2016, hosts beyond Dublin City and County welcomed 331,000 inbound guests, typically earning about €2,700, for a total of €22 million and an estimated economic activity of €123 million. The gender of the hosts is predominantly female, with 67% of women.

In Spain, according to a recent study by the Spanish Federation of Municipalities, half of Spanish rural jurisdictions already are at risk of extinction caused by depopulation: there are already 2,652 villages that have less than 500 inhabitants. In these context, income earned by rural hosts switched from €20.3 million in 2015 to €40.9 million, with a greater than a 100% increase. At the same time, rural listings have increased 63 percent year-over-year while guest arrivals have grown by 110 percent.

Outside the European continent, Latin America is the fastest-growing market. In Brazil, for example, rural host income coming from Airbnb rents threefold in one year, passing from R\$8.3 million in 2015 to R\$25.2 million in 2016, with guest arrivals more than tripled (from 27,800 in 2015 to 94,400 in 2016). Argentina had a similar and even stronger increase, from ARS\$8.9 million in 2015 to ARS\$30 million in 2016, while guest arrivals have quadrupled from 5,600 in 2015 to 22,300 in 2016. In Argentina, the focus is on agricultural tourism, *estancias* and *fincas*, whereas In Brazil the focus is on promoting ecological travel.

The United States is still the most important market for Airbnb, even for rural hosts, who earned \$494 million in 2016. 3.3 million guest arrivals occurred at rural listings in the US over the past year, a year-over-year increase of 138 percent - Oklahoma (434 percent year-over-year growth), Illinois (330 percent), Arkansas (309 percent), Missouri (298 percent) and Alabama (288 percent). Even here, Airbnb keeps claiming that “Many rural areas have almost no hospitality infrastructure at all, while in others that are popular for outdoor recreation, Airbnb expands the economic pie by offering more options that make travel more accessible”. These statements, which refer to several countries, do nothing but underline the potential that Airbnb has in rural areas, where a lack of hotel facilities undermines tourism.

In Japan and in Korea trends are not different. In Japan Twenty-two hundred non-urban Airbnb listings in 2015 more than doubled to 5,300 in 2016. Guest arrivals more than tripled from 70,200 to 257,500. Host income nearly quadrupled, from ¥666 million to ¥2.5 billion. Korea, instead, has seen a 106% year-over-year growth in listings beyond metropolitan areas and a 194% Year-over-year growth in guest arrivals at non-metro listings. Curiously, Korea is home to the fastest-growing city in the world for Airbnb booking, Gangneung, with an increase of +2175% in one year. Indeed, Korea will hold the Winter Olympics in the current year and 400'000 visitors are expected. Without Airbnb, the number of tourists that would have been able to come to the country would have been certainly lower, and so would have the cash flow and the total guest spending.



## Policies and Regulations

Institution, in Italy, should encourage the use of Airbnb, both in rural areas and in the urban ones.

Since the connection to the internet is necessary, the Italian institutions should promote its diffusion, especially where it is not profitable for private companies to guarantee the access to the net (remote areas).

Indeed, the Italian State has already acted positively in that way through the “Investment plan for the diffusion of the broadband”, which divides Italy in 94’645 micro areas and categorized them in three different ways:

White areas, where “the development costs cannot be covered by the market since not economically viable” (Italian Presidency of the Council of Ministers, 2015). In a previous communication, the European Commission defined white areas as “those in which there is no broadband infrastructure and it is unlikely to be developed in the near future” (European Commission, 2013);

Grey areas, “those in which one network operator is present and another network is unlikely to be developed in the near future. The mere existence of one network operator does not necessarily imply that no market failure or cohesion problem exists. If that operator has market power (monopoly) it may provide citizens with a suboptimal combination of service quality and prices. Certain categories of users may not be adequately served or, in the absence of regulated wholesale access tariffs, retail prices may be higher than those charged for the same services offered in more competitive but otherwise comparable areas or regions of the country”;

Black areas, namely “a given geographical zone (where) there are or there will be in the near future at least two basic broadband networks of different operators and broadband services are provided under competitive conditions” – no need for State intervention.

The ultimate purpose of the plan is to guarantee a 100% coverage for a 30 Mbps broadband (already provided for by a previous plan) and a 85% coverage for ultra-fast networks (at least 100 Mbps).

Second, Italian policy makers should encourage the adoption of electronic payment systems especially in the small villages, where those systems are not diffused so that the inhabitants can participate in the e-commerce.

In alternative, Italian authorities should collaborate with Airbnb in order to

make available payments systems that fit with local habits and allow people to buy and sell on the internet with a familiar method of payment, following the Brazilian example with the Boledo.

Third, data must be available on the internet, so that tourists from all over the world may have the possibility to get to know less famous towns. In this respect, the Italian Ministry of Culture and Tourism already took the initiative in 2017, creating an interactive map of 1000 small towns in Italy<sup>35</sup>. However, the website is not provided in English and, therefore, does not address international tourists, who account for the most part of the Airbnb guests. Further efforts should be made to develop the website and address international tourism.

Fourth, as far as regulations are concerned, Airbnb should not be as regulated as the traditional hotel industry because it does not require such regulatory degree. Even though a certain level of regulation is desirable, there is no need to regulate aspects that do not present problems on a macro level. As long as Airbnb does not show any threats, laws are needed only where problems are shown, unless compromising what already works is the purpose. Regulation should, therefore, not be excluded as a whole; however, we are supposed to remember to not fix what is not broken. Airbnb and the traditional hotel industry may have similarities, but they also have different needs.

Finally, taxes are usually a big issue when it comes to the Sharing Economy and to Airbnb. Although I prefer leaving the matter to further studies, on my opinion taxes should not be too high because, otherwise, the sharing economy system, which creates greater efficiency unlocking the value of underused assets, may be seriously undermined, especially because the agents involved are often ordinary people and not business men or women able to manage a high tax-burden. Furthermore, in order to rebalance, to some extent, the flux of tourist, different taxations for urban and rural areas may be taken into account so as to prevent overtourism.

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<sup>35</sup> Available at: <http://www.viaggio-italiano.it/it/>

## Summary

In this chapter, data about Airbnb in the Italian context was given (1), some of which focused on the Italian rural areas (2). Several initiatives of Airbnb to promote rural areas in Italy were addressed (3), while what Airbnb can do to help such areas was explained (4) and linked to the economic theory previously outlined (5). How to best exploit the opportunities offered by Airbnb was suggested (6), the Italian Villages project was addressed in greater detail (7) and a broader context for Airbnb was provided (8). Finally, some considerations about policies and regulations were given (9).

1. In 2016, Italian Airbnb hosts gained €621 million with average earning for €2300;
2. Rural hosts, from August 2016 to September 2017, gained almost €80 million, with average earnings for €1600.
3. Airbnb promoted Italian small towns through the redevelopment of public buildings, a dedicated website, and advertising on Airbnb social platforms;
4. Airbnb can boost the economy of the Italian rural areas thank to the gains of local households and the guest spending; moreover, it promotes the local cultures through a direct contact between guests and hosts;
5. Airbnb can be particularly helpful within Italian rural areas because married adults and children are few, because a lack of hotel facilities and because of the demand volatility they may present;
6. In order to exploit offered by Airbnb, the access to the internet must be guaranteed and so should payment systems and infrastructure. Data about little-known town must be made available
7. The Italian Villages Project was developed in collaboration with the Italian Ministry of Culture and Tourism (MiBACT) in order to promote more than 40 villages all over the country, two in each region;

8. Tourism toward rural areas is experiencing exponential growth and Airbnb is helping tourists find an affordable accommodation where hotel facilities lack, while guaranteeing a genuine experience;
9. The internet coverage in Italy should be improved, electronic forms of payment should be encouraged throughout the country, more data should be available and taxes should not be too high as far as Airbnb is concerned.

In the fourth chapter, the conclusions of the thesis will be outlined and explained.

# **Chapter 4**

## **Conclusions**

## The Bottom Line

This research has tried to give an economic interpretation of the Sharing Economy and understand whether Airbnb may be economically and socially helpful to the Italian rural areas.

Thanks to technological improvements and the Sharing Economy, ownership is becoming less and less essential, since renting out assets is getting easier, reliable and instantaneous; as a result, the opportunity costs of not renting out our “underutilized” assets is increasing while the Sharing Economy is lowering market barriers and the marginal costs: data shows that, in these conditions, the market reaches its equilibrium through supply changes, and just for a smaller proportion through price changes. Indeed, Airbnb prices tend to increase slightly during periods of peak demand, making low-season and high-season prices converge, while the supply of Airbnb listings increase greatly in such periods. However, the growth of Airbnb and its effects on hotels are not homogeneous: studies of the American market show that demography, hotel supply constraints and demand volatility powerfully predict the growth of Airbnb within a particular area. In such areas, where Airbnb accounts for a not-negligible proportion of the total accommodations, hotel prices tend to decrease according to the price segment, brand and business facilities of the hotel. Consequently, customer surplus increases and so does the number of tourists, especially during peak periods when, before the diffusion of Airbnb, it was not possible to satisfy fully the demand for accommodations.

In the Italian rural context, where tourism toward rural areas is increasing exponentially, Airbnb finds the perfect environment to grow, with a lack of hotel facilities, low percentage of married adults and children and demand volatility. For this reason, Airbnb can help revitalize Italian rural areas providing new accommodations and economic gains to the local hosts, both through Airbnb rents and guest spending. At the same time, Airbnb offers international visibility for Italian rural towns and a new way to spread their culture through a direct contact between hosts and guests.

As a result of these considerations, this thesis positively argues that Airbnb can actually help Italian rural areas both economically and socially.

# **Chapter 5**

## **Riassunto Italiano**

# Sintesi

Questa tesi si propone di dare una interpretazione economica della Sharing Economy, focalizzandosi al contempo su Airbnb, e di comprendere se tale piattaforma possa essere di aiuto al processo di rivitalizzazione delle aree rurali italiane.

Il primo capitolo si è focalizzato sulla Sharing Economy.

L'“economia della condivisione” è stata definita come “un sistema economico capace di sfruttare il valore di beni e servizi (assets) sottoutilizzati attraverso delle piattaforme che mettono in comunicazione coloro che hanno a disposizione tale asset con coloro che ne hanno bisogno, in modi che creano maggiore efficienza e accesso”.

Le tre caratteristiche fondamentali della Sharing Economy sono, pertanto:

1. La condivisione (anche con ritorni economici) di assets non sfruttati al massimo del loro potenziale;
2. La comunicazione tra coloro che hanno con coloro che hanno bisogno attraverso delle piattaforme;
3. L'accessibilità, la quale diventa una caratteristica distintiva di questo sistema economico poiché la proprietà non è più necessaria per la fruizione o il godimento di un bene o un servizio.

La Sharing Economy sta avendo, negli anni, una crescita esponenziale, in particolare nel settore dei trasporti e in quello alberghiero. Tuttavia, questa sta vedendo risultati importanti in molti altri settori, tra cui quello dei prestiti, quello dei servizi domestici e quello dell'informazione. Esempi ne sono Uber, Airbnb, LeindingClub, TaskRabbit e Instructables. Tali piattaforme stanno mettendo in discussione il consumo come si è sempre inteso e il sistema giuridico che lo sorregge: la necessità di possedere un'auto o una casa al mare sta venendo sempre meno perché è possibile richiedere un passaggio o affittare un'abitazione in pochi istanti. Così come è possibile affittare un trapano dal proprio vicino nel caso serva, senza dover acquistarlo e lasciarlo in disuso dopo il suo primo impiego. Di conseguenza, l'accessibilità sta aumentando la sua importanza a discapito della proprietà.

Nonostante queste piattaforme siano recenti, la condivisione è sempre stata presente nel panorama storico dell'uomo. Nel XIX secolo si è assistito alla nascita delle prime cooperative e delle prime banche popolari, e nel XX



secolo la condivisione dei mezzi è stata incentivata durante le due Guerre mondiali, anche attraverso nuove forme di propaganda.

Ciò che differenzia le forme di condivisione del passato da quelle di oggi è il cambiamento avvenuto grazie alla tecnologia, la quale si identifica come la chiave di volta del moderno mercato della condivisione.

La tecnologia ha reso la condivisione di beni tra sconosciuti facile, efficiente e sicura, determinando un decremento del costo marginale e un aumento dei costi opportunità legati alla scelta di non affittare. Inoltre, portando il costo marginale di affitto prossimo allo zero e abbattendo le barriere di accesso al mercato, interi settori stanno cambiando le proprie logiche di funzionamento: l'equilibrio tra domanda e offerta non si raggiunge più attraverso cambiamenti di prezzo, ma attraverso cambiamenti dell'offerta stessa, la quale aumenta la propria elasticità rispetto al compenso atteso.

In tale contesto si inserisce la piattaforma di Airbnb, che è stata capace di sfruttare le nuove tecnologie per permettere una più facile comunicazione tra “host<sup>36</sup>” (affittuari) e ospiti, superando come alloggi disponibili le 5 più importanti catene di hotel al mondo insieme.

Il secondo paragrafo si è, dunque, focalizzato su Airbnb, il quale è stato interpretato come una piattaforma “a due lati” (two-sided market) in cui due set di agenti entrano in contatto e dove le azioni di un set influenzano l'altro set. Proprio per questa sua peculiarità, i due set di agenti vengono trattati in modo differente a seconda della loro elasticità al prezzo e alla loro capacità di attirare gli agenti dell'altro set: Airbnb, pertanto, impone dei costi più alti agli ospiti rispetto agli host, nella convinzione che in questo modo i profitti vengano massimizzati e che un diverso bilanciamento dei costi più a favore degli ospiti produca una perdita netta nei guadagni. Tuttavia, poiché è presumibile che nel lungo periodo avvenga un controbilanciamento, seppur parziale, dei costi, Airbnb è stato interpretato in questa tesi come un mercato “a due lati” limitato.

Negli ultimi 10 anni Airbnb ha visto una crescita esponenziale, raggiungendo un valore di 31 miliardi di dollari e quasi 5 milioni di annunci sulla propria piattaforma. Tuttavia, la sua crescita non è stata omogenea, ma ha interessato alcune città più di altre.

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<sup>36</sup> Il termine rimane immutato, in lingua inglese, anche nel sito ufficiale italiano.

Studiando le zone in cui Airbnb è cresciuto maggiormente, sono stati rintracciati 3 fattori principale capaci di predire la crescita di Airbnb all'interno di un'area. Tali fattori sono:

1. La demografia del luogo;
2. La presenza di limiti alla costruzione degli hotel;
3. La volatilità della domanda.

Inoltre, l'impatto di Airbnb sugli hotel varia a seconda della fascia di prezzo dell'hotel, del suo brand e dipende anche dalla presenza o meno di strutture adibite all'uso commerciale (ad esempio sale riunioni).

Gli hotel più colpiti dalla competizione di Airbnb sono quelli "low-cost", indipendenti (senza particolare brand) e senza strutture adibite ad uso commerciale, mentre le zone in cui Airbnb si sviluppa maggiormente sono quelle con bassa percentuale di adulti sposati e con figli, quelle con limiti alla costruzione di hotel (ad esempio limiti imposti dalla regolamentazione a tutela del paesaggio, oppure limiti geomorfologici) e dove la differenza tra la domanda durante l'alta stagione e la bassa stagione è più accentuata. Nelle zone in cui Airbnb si è sviluppato, questo ha contribuito a ridurre il prezzo degli hotel, a far convergere i prezzi su un valore medio (minor deviazione standard) e a far aumentare il surplus dei clienti, permettendo ad un maggior numero di turisti di usufruire di un alloggio in cui soggiornare.

Ad Austin (Texas), ad esempio, i prezzi sono scesi dell'8-10% a causa di Airbnb e, durante i periodi di picco della domanda, nonostante questa sia cresciuta vertiginosamente durante gli anni, i prezzi sono continuati a calare allineandosi con quelli del resto dell'anno: confermando quanto detto in precedenza, l'equilibrio tra domanda e offerta si è raggiunto non più attraverso cambiamenti di prezzo, ma attraverso cambiamenti dell'offerta, la quale diventa molto più elastica.

Tenendo conto degli effetti positivi che l'incremento di turisti ha portato all'economia locale e i fattori che hanno permesso ad Airbnb di svilupparsi, le zone rurali italiane potrebbero rappresentare il luogo ottimale per lo sviluppo di Airbnb, contribuendo ad arginare la stagnazione economica e lo spopolamento che rappresentano sempre più molte realtà caratterizzate da bassa urbanizzazione.

Il terzo capitolo, pertanto, si concentra su Airbnb in Italia e nelle zone rurali italiane. Analizzando i dati ISTAT, si osserva che in Italia la percentuale di bambini e quella di matrimoni sono ben al di sotto della

media. La percentuale di nuovi nati è, infatti, la più bassa dell'Unione Europea con 8 bambini ogni 1000 abitanti, e quella dei matrimoni è di 3,2 ogni 1000, nel 2015: solo Portogallo e Slovenia avevano un quoziente di nuzialità più basso. Particolarmente grave è la situazione di molte zone rurali, in cui si accompagna uno spopolamento che è stato definito “desertificazione demografica” e interessa quasi il 15% dei comuni italiani.

In un contesto in cui il turismo verso le zone rurali italiane sta aumentando vertiginosamente, Airbnb può trovare grandi potenzialità proprio in queste zone, dove la demografia, l'assenza di hotel per l'ospitalità di numerosi turisti e la stagionalità della domanda creano un terreno fertile per il suo sviluppo. Mediante Airbnb, tali zone possono migliorare la propria economia sia attraverso ad un aumento diretto dei redditi familiari degli host di Airbnb grazie ai proventi derivanti dall'affitto, sia attraverso la spesa dei turisti stessi all'interno di tali zone.

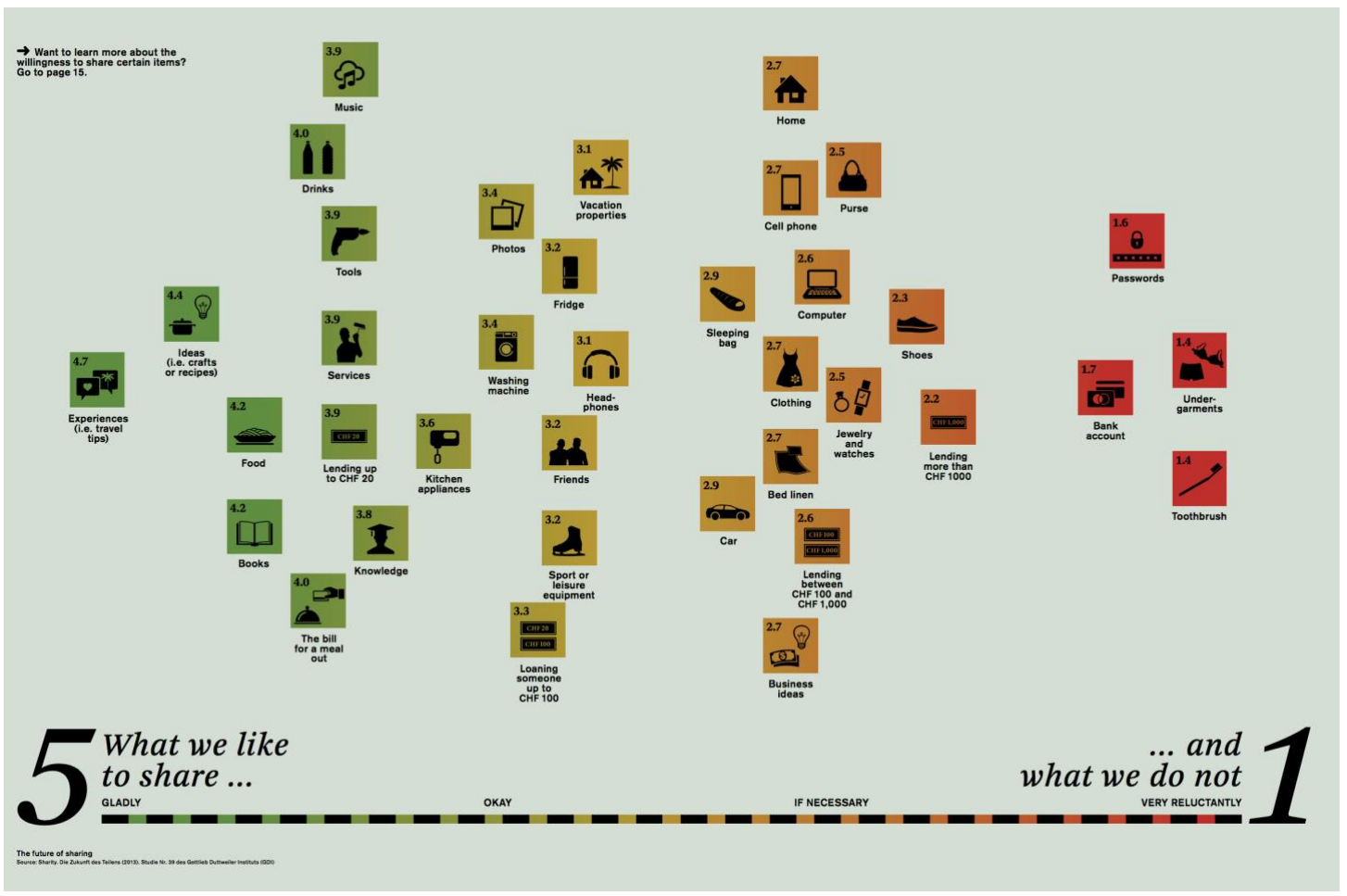
Con un guadagno medio per host nelle zone rurali di €1600 annui e una spesa media degli ospiti di €171 al giorno, l'economia dei piccoli centri italiani, spesso chiamati borghi, può trovare nuovo ossigeno. Inoltre, grazie ad Airbnb questi borghi godono di una visibilità più ampia ed internazionale.

Tenendo conto dei dati raccolti, della teoria economica delineata e dei trend positivi riguardo il turismo italiano, la presente tesi conferma che Airbnb può crescere nelle zone rurali italiane e contribuire positivamente a un processo di rivitalizzazione sia economico che sociale, attraverso la promozione della cultura locale su piattaforme internazionali e un contatto diretto tra host e ospiti.



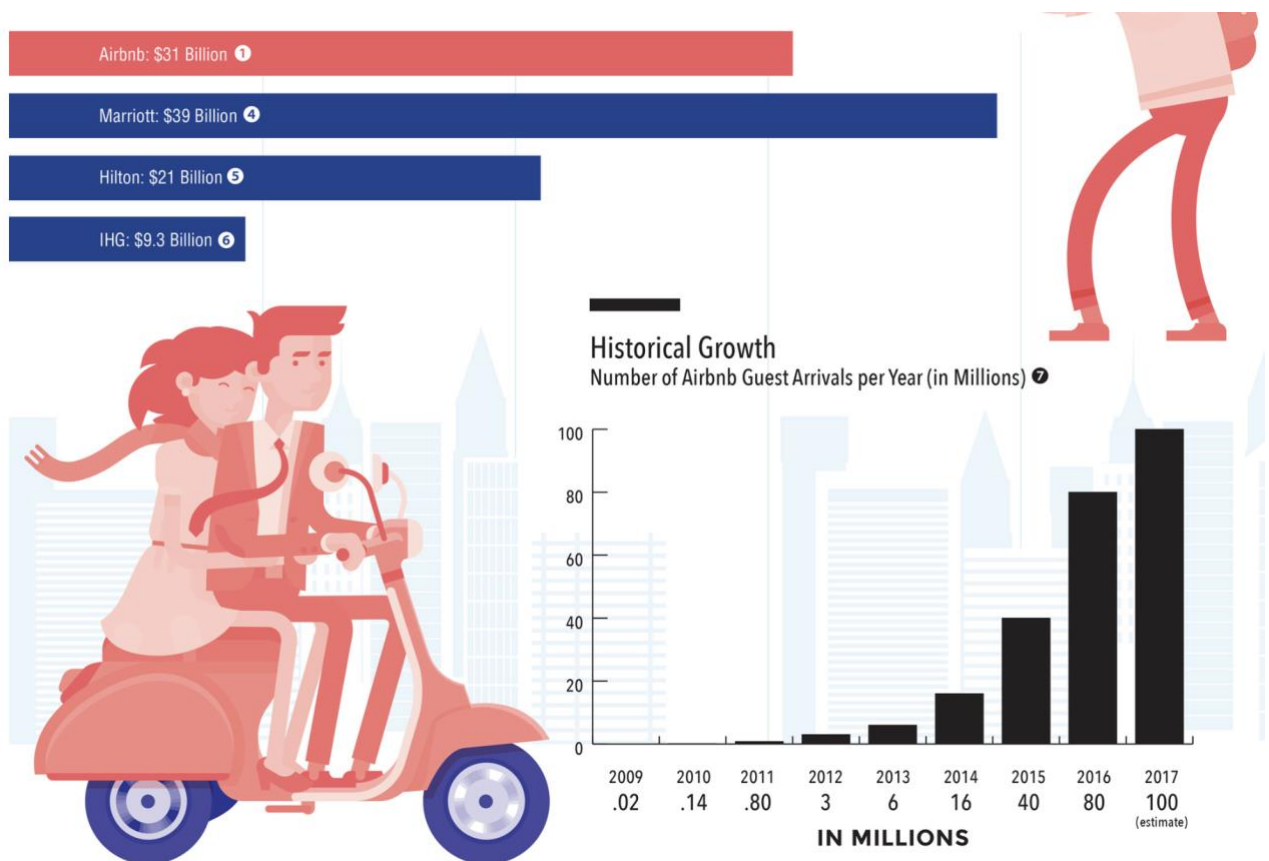
# **Chapter 5**

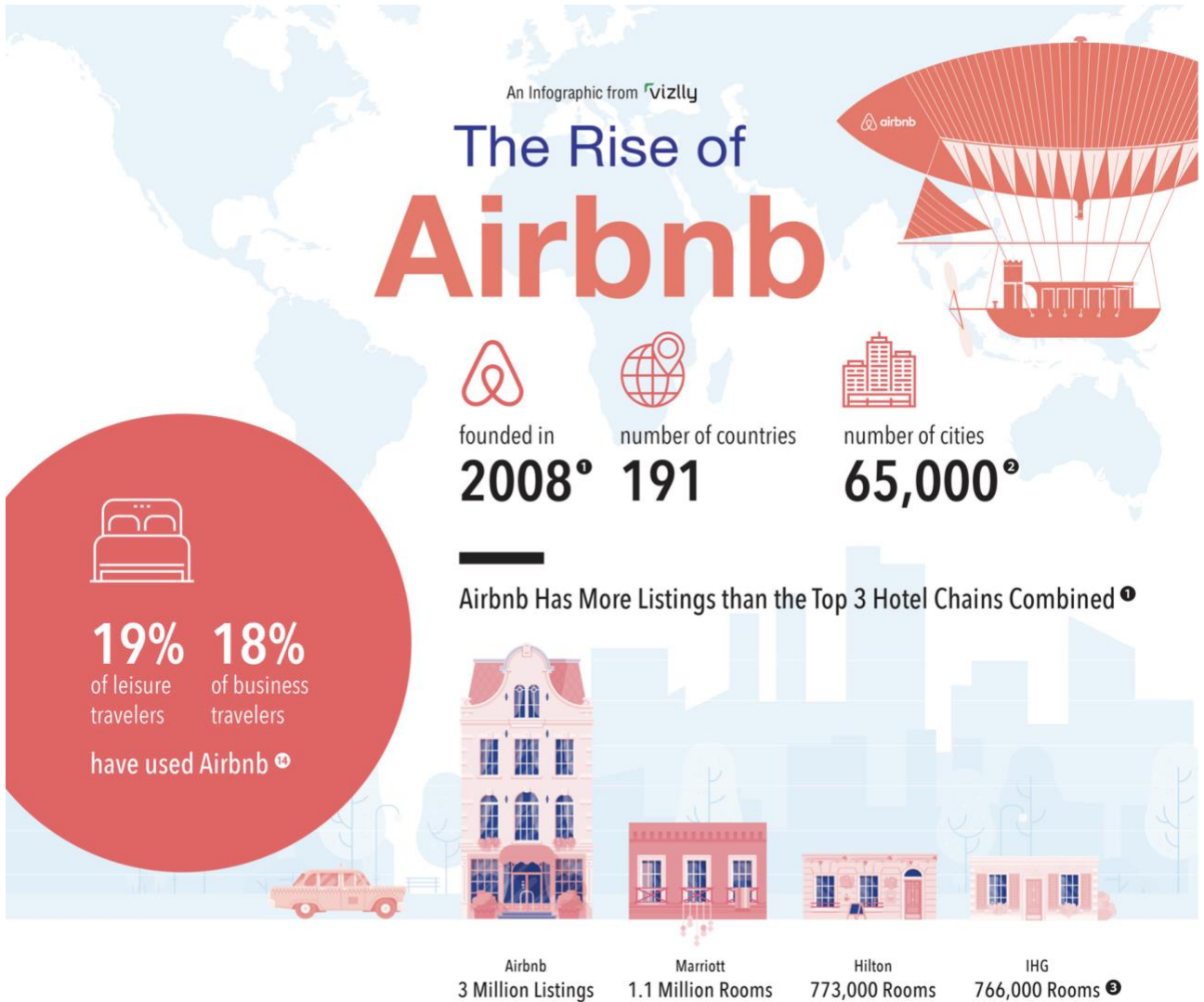
## **Infographics**



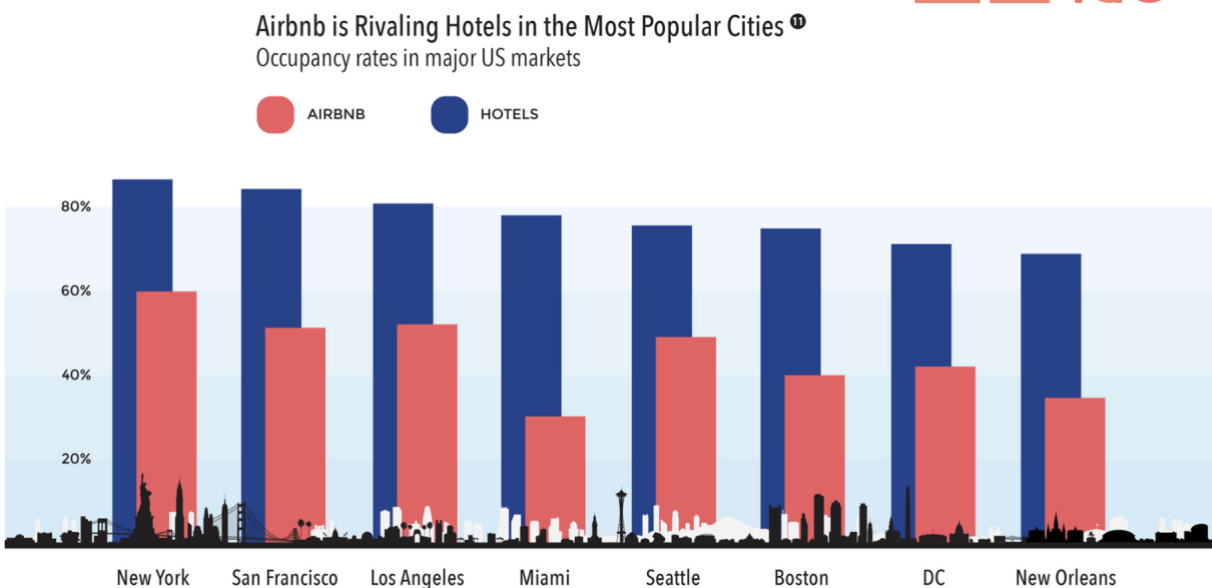
Infographic n. 1 (top)

Infographic n. 2 (bottom)





Infographic n. 3: Airbnb has now reached 4.85 million listings.



Infographic n.4

## Airbnb Sets Its Sights on Corporate Travel



**90%**

of Airbnb customers are leisure travelers



**250**

companies used Airbnb to book and manage business travel in 2015



**250,000**

companies use Airbnb to book and manage business travel today <sup>12</sup>

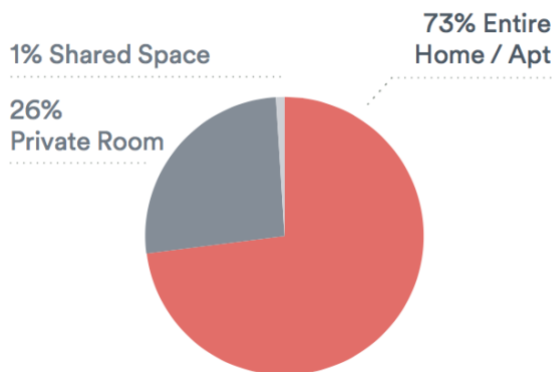


**14,000**

new companies sign up for Airbnb business travel services per week <sup>13</sup>

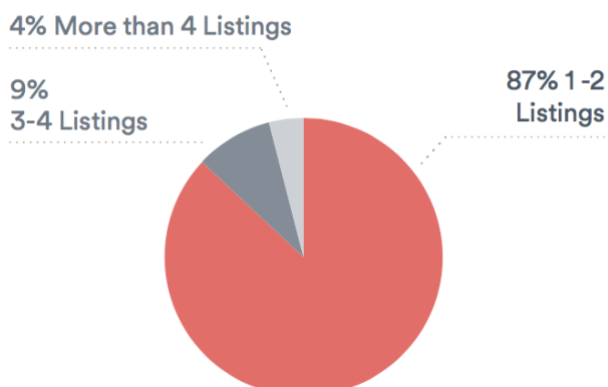
## Infographic n. 5 (top)

### CURRENTLY ACTIVE LISTINGS BY TYPE



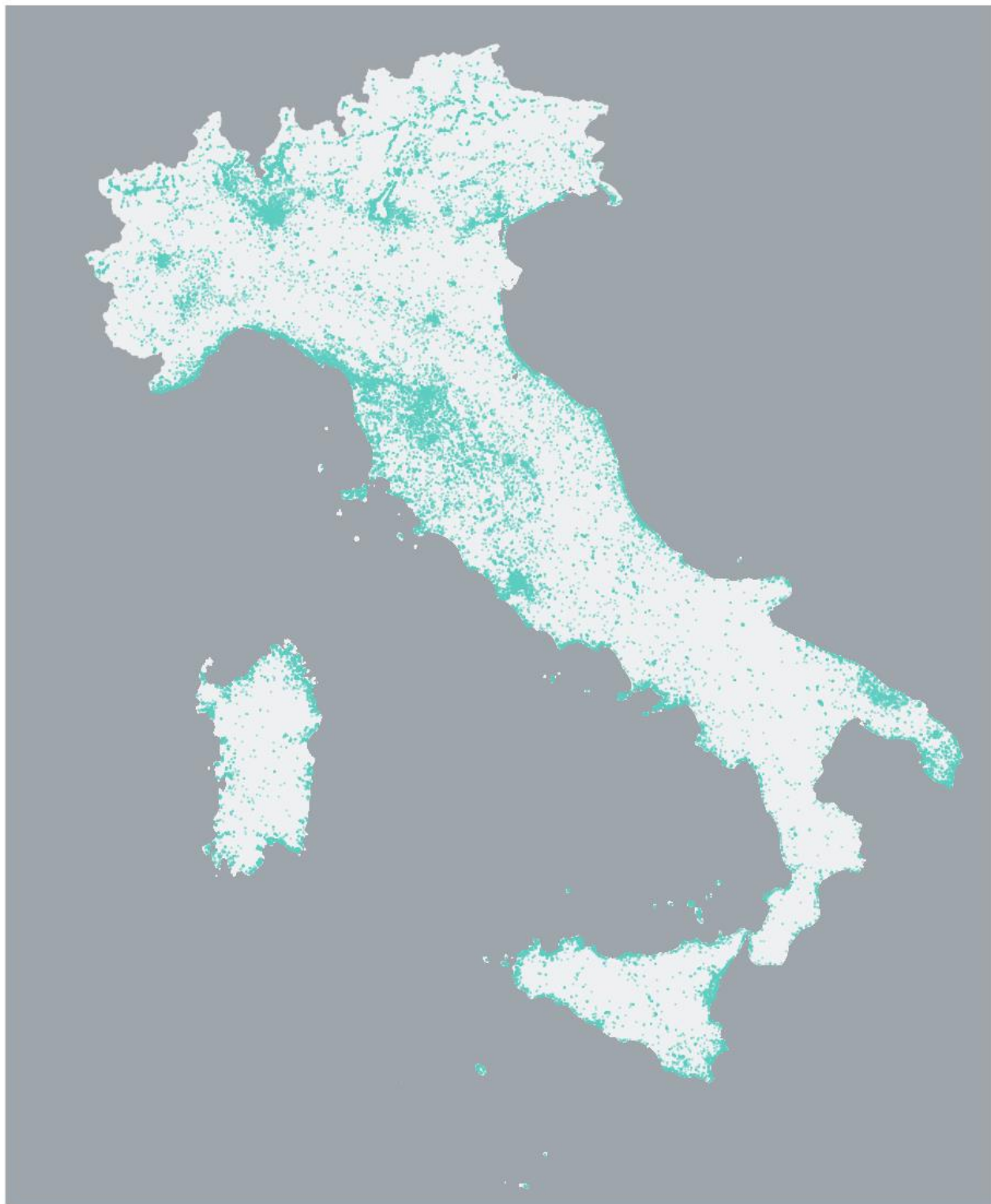
Infographic n. 6  
(left side):  
Active Listings  
Type in Italy in  
2015

### # OF LISTINGS PER HOST



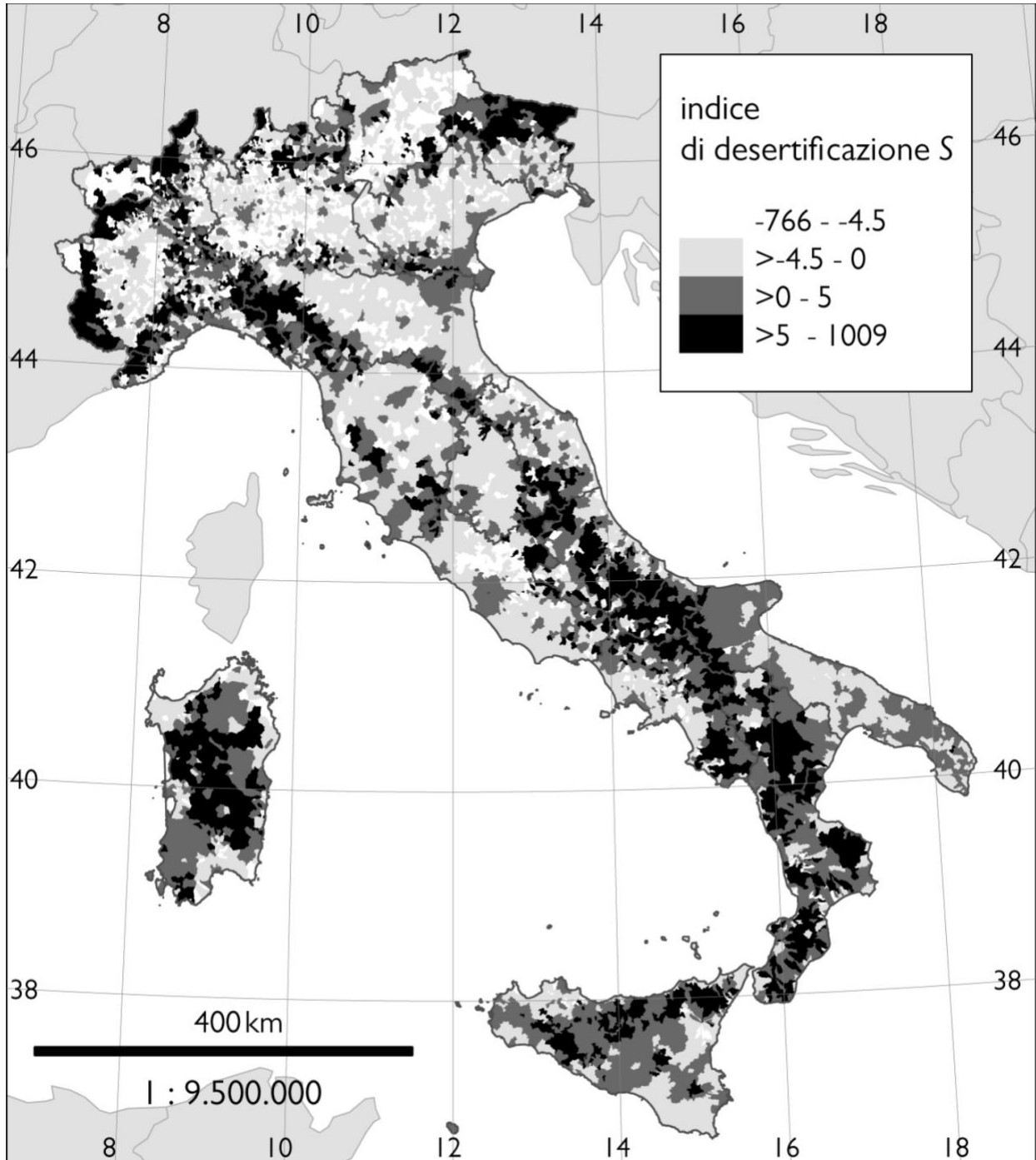


## Infographic n. 7: Airbnb listings visited in 2015





## Infographic n. 9



Sources:

Infographic n. 1: Credit Suisse, 2015

Infographic nn. 2, 3, 4, 5 : Vizlly.com

Infographic nn. 6, 7, 8 : Airbnb, 2015

Infographic n.9: Giancarlo Macchi Giànica, 2016



# **Chapter 6**

## **Glossary**

**Annual Earnings (Typical Host):** Median value of total income earned by host during the one-year study period. Annual earnings are presented for typical hosts.

**Average Length of Stay:** The average length of stay per guest, rather than per trip.

**Guest:** Airbnb community members who stay in Airbnb listings.

**Hosts:** Airbnb community members who rent space on Airbnb.

**Inbound Guests:** All guests visiting a particular location. “Inbound guests” includes guests who live in the same location they may have stayed in.

**Listing (Active):** A property listed on Airbnb. Listings may include entire homes or apartments, private rooms or shared spaces. Active Listings are all listings that appear on the website during a search. Active listings do not necessarily have availability on a particular date or at all.

**Listing Types:** Airbnb classifies listings as three different types: Entire Home / Apartment listings, Private Room Listings, and Shared Room Listings:

**Entire Home / Apartment Listing** - A listing where the guest can rent the entire home from the host. The host is not present in the home during the guest’s stay.

**Private Room Listing** - A listing where the guest can rent a private bedroom within a home. The host may be present in other parts of the home during the guest’s stay, and the guest may share common spaces like the kitchen, living room, and/or a bathroom with the host.

**Shared Room Listing** - A listing where the guest can rent a communal space, such as a shared bedroom or a living room sofa bed, within a home. The host may be present in the home during the guest’s stay, and the guest may share common spaces like the kitchen and/or a bathroom with the host.

**Nights Hosted (By Listing):** Total number of nights a given listing is rented through Airbnb in the study period. Only listings that were active as of the start of the study period, and had at least one booking during the study period are included, in order to present the most representative annual values for Airbnb hosting activity.

**Nights Hosted (Typical Host):** Median value of total nights hosted per host during the one-year study period. Nights Hosted are presented for typical hosts.

**Outbound Guest:** All guests from a particular location who booked an Airbnb listing, regardless of where the listing is. There may be some minor overlap between Inbound Guests and Outbound Guests. All guests associated with a particular reservation are attributed to the location of the booking guest.

**Typical Host:** The median host for all hosts who had at least one active listing as of the start of the study period and at least one booking during the study period. Typical host definitions are used to calculate Annual Earnings and Nights Hosted. Presenting the median value for all hosts who were active as of the start of the study period provides the most representative values for the Airbnb host community.

# **Chapter 7**

## **Bibliography**

Abrahamo Bruno, Cook Karen, Gupta Alok, Martinovich Milenko, Parigi Paolo, “*Reputations offsets trust judgments based on social biases among Airbnb users*”, National Academy of Science, published in print on the 12 September 2017.

Airbnb, “*Overview of the Airbnb Community in Italy*”, Airbnb publication, 2016.

Available online at: [https://www.airnbcitizen.com/wp-content/uploads/2016/05/overview\\_of\\_the\\_airbnb\\_community\\_in\\_italy.pdf](https://www.airnbcitizen.com/wp-content/uploads/2016/05/overview_of_the_airbnb_community_in_italy.pdf)

Airbnb, “*Beyond Cities*”, Airbnb publication, 2017.

Available online at [https://www.airnbcitizen.com/wp-content/uploads/sites/8/2017/06/BeyondCities\\_Italy\\_EN.pdf](https://www.airnbcitizen.com/wp-content/uploads/sites/8/2017/06/BeyondCities_Italy_EN.pdf)

Airbnb, “*Beyond Cities: how Airbnb is supporting rural revitalization in Italy and in the world*”, Airbnb publication, 2017.

Available online at: <https://www.airnbcitizen.com/beyond-cities-how-airbnb-is-supporting-rural-revitalization-in-italy-and-in-the-world/>

Airbnb, “*Sharing Rural Italy*” (report), Airbnb publication, 2017.

Available online at: [https://www.airnbcitizen.com/wp-content/uploads/sites/8/2017/10/Sharing\\_Rural\\_Italy\\_2017.pdf](https://www.airnbcitizen.com/wp-content/uploads/sites/8/2017/10/Sharing_Rural_Italy_2017.pdf)

Airbnb, “*Overview of the Airbnb Community in Italy*”, Airbnb publication, 2017.

Available online at: <https://www.airnbcitizen.com/wp-content/uploads/sites/8/2017/06/ItalyEIS20216-May2017-ENGLISH.pdf>

Airbnb, “*Small Villages: Mayor Bigiotti of Civita di Bagnoregio joins the Airbnb host community*”, Airbnb publication, 2017.

Available online at: <https://www.airnbcitizen.com/small-villages-mayor-bigiotti-civita-di-bagnoregio-joins-airbnb-host-community/>

Airbnb, “*Airbnb Fast Facts*”, Airbnb publication, 2017.

Available online at: <https://press.atairbnb.com/app/uploads/2017/08/4-Million-Listings-Announcement-1.pdf>



Botsman Rachel, “*The currency of the new economy is trust*”.

Speech given on June 2012.

Available online at:

[https://www.ted.com/talks/rachel\\_botsman\\_the\\_currency\\_of\\_the\\_new\\_economy\\_is\\_trust#t-926080](https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust#t-926080)

Visualized on the 24 March 2018.

Botsman Rachel, “*The Sharing Economy with Rachel Botsman*”.

Speech given at the Great Auditorium Room, RSA House, 19 May 2016.

Available online at: <https://www.youtube.com/watch?v=0MHRkeG5HiQ>

Visualized on the 17 April 2018.

Botsman Rachel, “*Trust me, this changes everything*”.

Interview published on the 20 October 2016.

Available online at: <https://www.youtube.com/watch?v=i3LYNZWFK3w>

Visualized on the 4 April 2018.

Byers John W., Davide Proserpio, Georgios Zervas, “*The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry*”.

Journal of Marketing Research, Vol. 54, No. 5, pp. 687-705, October 2017.

Buczynski Beth, “*Sharing is Good*”, New Society Publishers, Gabriola Island, BC (Canada), 11 January 2013.

Credite Suisse, “*What’s the Value Added of the Sharing Economy?*”, November 2015.

Available online at: <https://www.credit-suisse.com/corporate/en/articles/news-and-expertise/whats-the-value-added-of-the-sharing-economy-201511.html>

Einav Liran, Farronato Chiara, Levin Jonathan, “*Peer-to-Peer Markets*”, Annual Review of Economics, 20 September 2016.

The *Annual Review of Economics* is available at: [economics.annualreviews.org](http://economics.annualreviews.org)

European Commission (PwC Report), “*Assessing the size and the presence of the collaborative economy in Europe*”, Publication office of the European Union, April 2016.

European Commission, “*Information from European Union institutions, Bodies, Offices and Agencies*”, Official Journal of the European Union, EUR- Lex – 52013XC0126(01), 26 January 2013

European Commission, “*A European agenda for the collaborative economy*”, EUR-Lex, Brussels, 2 June 2016.

European Parliament, “*The Cost of Non- Europe in the Sharing Economy*”, Directorate-General for Parliamentary Research Services of the Secretariat of the European Parliament, Brussels, January 2016.

Farronato Chiara, Zoë Cullen, “*Outsourcing Tasks Online: Matching Supply and Demand on Peer-to-Peer Internet Platforms*”, Job Market Paper, October 2015.

Farronato Chiara, Levin Jonathan “*Sharing Economy, new opportunities new questions*”, published by Credit Swiss Investment Strategy & Research, November 2015.

Farronato Chiara, Fradkin Andrey “*Market Structure with the Entry of Peer-to-Peer Platforms: The Case of Hotels and Airbnb*”, 2 May 2016. Republished as: “*The Welfare Effects of Peer Entry in the Accomodation Market: The Case of Airbnb*”, 18 October 2017.

Available online at: <https://marketing.wharton.upenn.edu/wp-content/uploads/2017/08/10-19-2017-Fradkin-Andrey-PAPER.pdf>

Fraiberger Samuel, Sundararajan Arun, “*Peer-to-Peer Rental Markets in the Sharing Economy*”, NYU Stern School of Business Research Paper, First version March 2015; current version September 2017.

Friedman Thomas L., “*How to Monetize Your Closet*”, The New York Times, 21 December 2013.

Friedman Thomas L., “*And Now for a Bit of Good News...*”, The New York Times, 5 July 2014.

Friedman Thomas L., “*Self-Driving People, Enabled by Airbnb*”, The New York Times, 26 June 2017.

Friedman Thomas L., “*Welcome to the Sharing Economy*”, The New York Times, 20 July 2013.

Garret Olivier, “*Why You Should Invest In Peer-To-Peer loans in 2017*”, Forbes, 11 January 2017.

Giancarlo Macchi Giànica, “*Desertificazione demografica dell’Italia: geografia dello spopolamento rurale nella penisola*”, Research of the “Università degli Studi di Siena”, 2016.

HBS Working Knowledge, “*The Airbnb Effect: Cheaper Rooms For Travelers, Less Revenue For Hotels*”, Forbes, 27 February 2018.

Howard Yu, “*Marriott And Hilton Stay Ahead Of The Sharing Economy, Proving That Airbnb Is Not The Uber Of Hotels*”. Forbes, 16 February 2017.

IMF, “*Taxation and Peer-to-Peer Economy*”, IMF Working Papers, International Monetary Fund publication, Working Paper No. 17/187, August 8 2017.

ISTAT, “Territorio”, 2014.

Available online at: <https://www.istat.it/it/files/2017/12/C01.pdf>

ISTAT, “Popolazione e Famiglie”, 2017.

Available online at: <https://www.istat.it/it/files/2017/12/C03.pdf>

Italian Presidency of the Council of Ministers, “Strategia Italiana per la Banda Ultralarga”, 2015.

Available online at:

[http://www.sviluppoeconomico.gov.it/images/stories/documenti/ITALIA\\_Strategia\\_BUL-Piano\\_di\\_investimenti\\_fin.pdf](http://www.sviluppoeconomico.gov.it/images/stories/documenti/ITALIA_Strategia_BUL-Piano_di_investimenti_fin.pdf)

Roland Berger, “*Shared Mobility. How new businesses are rewriting the rules of the private transportation game*”, July 2014.

Available online at:

[https://www.rolandberger.com/en/Publications/pub\\_shared\\_mobility.html](https://www.rolandberger.com/en/Publications/pub_shared_mobility.html)

Rysman Marc, “*The Economics of Two-Sided Markets*”, Journal of Economic Perspectives, volume 23, number 3, pages 125-143, summer 2009.

Selloni Daniela, “*New Forms of Economies: Sharing Economy, Collaborative Consumption, Peer-to-Peer Economy*”, March 2017.

Available online at: [https://link.springer.com/chapter/10.1007/978-3-319-53243-1\\_2](https://link.springer.com/chapter/10.1007/978-3-319-53243-1_2)

Stanford Study (Abrahamo Bruno, Cook Karen S., Gupta Alok, Parigi Paolo), “*Reputation offsets trust judgement based on social biases among Airbnb users*”, Washington DC, National Academy of Sciences, 12 September 2017.

World Travel & Tourism Council, “*Travel & Tourism Economic Impact 2017 World*”, WTTC, 2017.