Economic impact of airbnb activities in Italy

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1. The aim of this report

This report provides the findings of the economic impact of airbnb in Italy, namely its effect on national income, with a special focus on three cities: Rome, Milan and Florence, the main cities where airbnb has much developed its activities. Furthermore it also estimates the jobs created thanks to the presence of airbnb.

The economic impact of airbnb has been estimated adding up two revenue streams: the first is the income that homeowners perceive for renting the house on the platform and the second is the amount of expenses that guests make during their stay in the city.

2. The owners side: income

The first element to consider is all the income received by the host in nominal terms. The second concerns how the perceived income is spent, i.e. in which economic sector, to estimate the indirect impact on local economy. The year is 2015.

The overall income data comes directly from airbnb database, while the distribution among the various items of expenditure is based on a survey carried out also by airbnb through a questionnaire distributed to the house owners.

The overall income received by hosts is about 400 million EUR, that is 2,371 EUR per capita . So we have, at the same time, a very large overall income at national level, and a little income on a house unit level. This is due to the great number of houses and apartments available and to their occasional use. The unit annual average income corresponds to a monthly income of about 200 EUR per house. It is a revenue that is not enough to live with, nevertheless it contributes a lot to offer additional income, that in many situations may be really precious.

Fig. 1 – Total host income	EUR
Total annual host Income	393.978.960
Typical host income	2.371
Typical host income per month	197

Let us now turn to the assessment of how the income is used by those who perceive it. The income of course can be used in many ways, and from the point of view of economic impact, it is very important to distinguish between income spent in consumption and what is saved. In the first case, money flow goes directly into the economy, while in the second case it just increases wealth (wealth effect) but it does not enter in the monetary circuit and therefore does not affect the economic multiplier.

It is important, from many points of view, to understand how the money is spent by home owners.

The main item concerns ordinary expenses, which include food and other items of everyday life. This kind of expenses represents the 30% of total income. In second place, there is the set of expenses related to the property (the cost of a mortgage, of rent, or building maintenance expenses). In third place there is a set of costs considered as "extraordinary", compared to the previous ones, as the purchase of furniture, equipment and other items often used to improve the houses or quality of service. They are considered extraordinary because they are made from time to time, whenever there is a need or an opportunity.

The savings area is the sum of the items related to property, to financial saving and to the emergency funds. These three kinds of entries reach 29 %, although it varies sometimes from city to city. Basically we can say that most part of the income is correlated, in some way, to the house and as a support for daily expenses.

Fig. 2 - Host Income Spending (Typical Host)	EUR	%	Per capita
Rent/mortgage	72.170.293	18	434
Other regular household expenses (bills, groceries, etc.)	118.641.724	30	714
Long-term savings	33.095.067	8	199
Vacation	29.105.475	7	175
Extra spending money	46.631.836	12	281
Cleaners	27.452.255	7	165
Emergency Fund	20.141.184	5	121
Other	46.741.125	12	281
Typical Host Income Annual Average	**393.978.960**	**100**	**2.371**

3. The guests side: expenditure

Let us now turn to an assessment of the economic data from the demand side, that is, the spending of guests. The total expenditure of guests is 2 billion and 110 million EUR, a very important result; of course, it is also very significant the number of nights, amounting to almost 13 million, and equally important is the average spend per night, that is 164 EUR. This amount does not include the cost directly handed through airbnb to the host, which was previously considered as income to the owner, so there is no duplication of spending.

Fig. 3 - Total Guest Spending	EUR / Nights
Total Spending by guests	2.110.331.521
Nights (number of)	12.973.477
Total Spend per Person per Day	164

Let us now see how the expenses are shared in specific categories. The first one concerns gastronomy, i.e. restaurants, cafés, bars, etc., which amounts to 35 %. Then comes two kind of expenses which are very similar as typology, one is related to shopping and the second to leisure activities. They both represent 38 % of the overall expenses. Also within the food framework, more than 10 % of expenses are dedicated to groceries. So the overall food expenses represent 45 % whereas expenses for activities are 38%. The last item, related to transportation, amounts to 15 %.

People that choose to share a house instead of staying in a hotel are often seen as people who spend less than hotel guests. The findings say otherwise: those who use airbnb spend a lot in shopping, museums and other leisure activities.

Fig. 4 - Guest Spending	EUR	%	Daily
Gastronomy (restaurants, cafes, bars, etc.)	738.283.432	35	57
Groceries	214.279.413	10	16
Shopping	402.435.882	19	31
Other Leisure Activities (entertainment, museum, etc.)	377.808.129	19	31
Transportation (car rentals, taxis, metro, etc.)	324.056.328	15	25
Other Services	53.468.337	2	4
Total Expenditure	**2.110.331.521**	**100**	-
Total Expenditure per Person per Day			**164**

4. The economic impact

Once separately analyzed the two streams of income, you can have an overall assessment of their impact on national economy and on the three major cities. These cities were chosen because they represent those where the airbnb activity is more present. In particular Rome represents 21% of the total nights spent by airbnb guests, following Milan with 13% and Florence, with 10%. Overall, the three cities account for 44%, thus almost the half of the Italian market.

Fig. 5 – Cities nights share	%
Rome	21
Milan	13
Florence	10
Other cities	57
Total	**100**

Adding to the two streams of income, i.e. the approximately 400 million EUR for the houses owners and the 2 billions and 110 millions EUR as costs of the guests, the result is 2 billion and 504 million EUR.

Fig. 6 – Total economic flow	EUR
Total Annual Host Income	393.978.960
Total Spending by Guests	2.110.331.521
Total flows	**2.504.310.481**

The overall economic impact of airbnb in Italy is estimated in 3 billion and 430 million EUR and it has created nearly 100,000 jobs (namely 98,363). The calculation includes both the direct impact (equal to the sum of income received by the owners and the spending of the guests during their stay), and the indirect impact, that is, the multiplier effect, which is 0.5 in the case of the owners income and 1.5 in the case of guests expenditure.

By further analyzing the data in detail, the indirect impact of guest expenses, compared to the impact of the income received by the owners, is much higher (264 million EUR, against 3.4 billion EUR).

Fig. 7 - Airbnb host income, guest spending and economic impact on Italian economy

	Milan	Florence	Rome	Elsewhere	Italy
Input					
- income	47.691.313	37.647.145	92.972.652	215.667.849	393.978.960
- consumption	229.383.407	168.895.385	400.183.570	1.311.869.159	2.110.331.521
Total input	277.074.720	206.542.530	493.156.222	1.527.537.008	2.504.310.481
Output					
- income	30.999.354	24.094.173	58.572.771	150.967.495	264.633.792
- consumption	344.075.111	253.343.078	600.275.355	1.967.803.739	3.165.497.282
Total economic effect	**375.074.464**	**277.437.250**	**658.848.126**	**2.118.771.233**	**3.430.131.074**
Jobs created (number)	**9.708**	**7.440**	**17.483**	**60.759**	**98.363**
- in % on GDP	*0,47*	*1,90*	*0,45*	*0,16*	*0,22*

5. Methodology

The impact of airbnb activities on national and local economy was calculated using the multiplier of the CER (Centro Europa Ricerche) from the econometric model for the Italian economy.

The following assumptions were made in the analysis:

• the assessments do not take into account the effect of replacing airbnb activities with the traditional hotel business;

• with regard to the added value multiplier, local economies behave like the national ones;

• the estimate of the added value does not consider any possible international transactions involved in the hospitality services.

The value of the multiplier derives from the estimates coming from the econometric model of the CER, where a positive shock – such as the self-employment income (hosts) and consumption (guests) – is used as input.

The real economy in terms of additional domestic demand was calculated as the product of the initial input (income and consumption) and their respective multipliers.

The final result is represented as a percentage of the actual local value added (year 2015) specifically for the three cities, and as a percentage of Italy GDP.

The estimated impact on employment is based on regional data referring to the productivity in the service sector (i.e. in the hotels and hospitality services).

The productivity of the local labor sector in the hospitality industry was used to assess the effect on employment (in terms of equivalent jobs units).

To improve the understanding of the analysis results, it may be helpful to describe the sequence of steps:

• First consider the revenues of the houses owners (host income);

• Then consider expenditure flows by guests (guest spending);

• For the revenues of the owners, we used a multiplier of 0.70, because part of the revenues are considered as savings, thus producing a wealth effect, although they do not enter into the consumption circuit. The share of savings is derived by survey dedicated to identify the use of income by hosts;

• For guest expenses we assume that 100% is intended as consumption with the multiplier effect of 1.5;

• The overall economic impact is made by both direct and indirect effects;

• The estimation of the number of job created is based on hospitality industry productivity.