

Airbnb in Copenhagen and on Bornholm island

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@ Collaborative Economy in Experience and Tourism seminar,
14th Sept. 2016, Roskilde University (elaborated 27th Sept. 2016)

Relations between key variables relating to Airbnb listings and accommodation spending

0. Listings, total

1. Listings, got ≥ 1 reviews (e.g. last 12 months)

2. Reviews (per calendar year or 12 month period)

3. Review rate (assumption – ideally: known)

4. Bookings = ("2"/"3"), excluding cancellations

5. Nights, ave. (estimate, assumption)

6. Rate per night (201X-level) DKK (or other currency) **

7. Gross booking value, million DKK = $4 * 5 * 6$ / mio.

8. Persons per room (assumption)

9. Accom. spending per person per night, DKK = "6"/"8"

10. Apartment and room nights = "4"*"5"

11. Person nights = $4 * 5 * 8$

12. Arriving persons = "4"*"8"

** The correct average rate is weighted (e.g. by no. of reviews), not the simple average.

Assumptions and comments to calculations

- The review rate is assumed to be 0.65 (not only 0.50). This is a prudent assumption.
- The number of persons per travel group is assumed to be 2.0 in Copenhagen (not 2.4, which is a national average). – This assumption is supported by the hotel statistics.
- The length of stay varies and is estimated to min. stay + 1 night, 3.4 in 2015, 3.3 in 2016 (was 3.8 in 2013).
- The average price per room night is total estimated renting spending divided by total number of renting nights, not the simple average of list prices.
- The 12% booking fee, which guests have to pay, is not included. – Airbnb gets the 12% from guests plus 3% from the hosts. – So, 15% of total accommodation spending goes abroad.

- No listings with minimum stay of more than 31 nights are included. The limitation is undertaken to separate typical tourist stays from prolonged stays.
- No listings with list price of more than 2000 DKK (268 EUR) is included. – In a few instances (3) obviously wrong prices have been corrected, but this procedure is too time consuming. Therefore the cut-off.
- The maximum number of occupied nights per year has been set to 256 night. This corresponds to an occupancy rate of about 70%, which is one tenth below the average occupation rate for hotels in Copenhagen in 2015, which was 77% for rooms.

Airbnb in Copenhagen 2011-2015, 2016 est. (1)

	1	2	3	"4"=("2"/"3")	5="4"/"10"	6="7"/"10"	7=4*5*6
Year, time	Listings, got >=1 reviews	Reviews	Review rate (assump- tion)	Bookings	Nights, ave (estimate: min. + 1)	Rate / night (2016-level)	Gross booking value, mio. DKK excl. 12% fee
2011	81	492	65%	757	4,4	613	2,0
2012	362	2.211	65%	3.402	3,8	680	8,9
2013	1.129	7.610	65%	11.708	3,6	710	30
2014	2.809	20.193	65%	31.066	3,6	727	80
2015	7.773	57.285	65%	88.131	3,4	704	209
2016, est.	14.000	118.900	65%	182.923	3,3	680	410

Source: Insideairbnb.com (No. of reviews, list prices per night). – The rest are own estimates.

Airbnb in Copenhagen 2011-2015, 2016 est. (2)

	$7=4*5*6$	$=7 / 7.46$	8	$9="6"/"8"$	$10="4"*"5"$	$11=4*5*8$	$12 = "4"*"8"$
Year, time	Gross booking value, mio. DKK excl. 12% fee	Gross booking value, million EUR ex. 12% fee	Persons / room (assumption)	Accom. per person per night, DKK	Apart./ room nights	Person nights	Arriving persons
2011	2,0	0,3	2,0	307	3.337	6.674	1.514
2012	8,9	1,2	2,0	340	13.057	26.114	6.803
2013	30	4,1	2,0	355	42.583	85.166	23.415
2014	80	11	2,0	363	110.527	221.054	62.132
2015	209	28	2,0	352	296.609	593.217	176.262
2016, est.	410	55	2,0	340	603.646	1.207.292	365.846

Airbnb on Bornholm – compared to CPH

Bornholm: No. of listings, end of sept. 2015: 220

Bornholm: No. of listings, middle of sept. 2016: 379

Increase: 72% in 347 days, ~75% last 12 months.

Registered bednights ~1.5 million. – Airbnb: **1.1%** 2015. **1.9%** 2016.

Copenhagen city+sububs : 16,150 Airbnb listings by middle of 2016.

670,000 person nights in 2015=**8.2%** of 8.2 mio. registered bednights.

1.2 million person nights in 2016=**13.9%** of 8.6 mio. regist. bednights.

Bornholm: 2.3% of CPH Airbnb listings 2016. 18% of CPH regist. nights.

→ **Airbnb is more predominant in CPH city+sububs than on Bornholm.**

Airbnb to regist. nights	2010	2011	2012	2013	2014	2015	2016
Airbnb Copenhagen %	0,0%	0,1%	0,4%	1,3%	3,1%	8,2%	13,9%
Airbnb Bornholm %	0,0%	0,0%	0,1%	0,3%	0,7%	1,1%	1,9%

Airbnb on Bornholm island

Type	Number of listings	Price per night DKK	Instant booking %	WIFI%	Super-host %	Available% tonight	Available% week 38	Instant avail. week 38
Whole	296	681	22%	70%	6%	6%	44%	8%
Room (+shared)	83	382	43%	94%	4%	19%	58%	25%
2016-09-12	379	615	26%	75%	6%	9%	47%	12%

Beware: The weighted** average price per renting unit per night is lower than the unweighted simple average of 615 DKK (82.50€).

Note: Week 38 is (was) "next week", and is (was) after end of high season.

** Weighting can be by number of reviews.

Rather big difference between
simple ave. prices and **weighted ave. prices**
for Airbnb – at least on Bornholm island

Weighting: $\sum \text{list price per listing} * \text{no. of reviews per listing} / \sum \text{no. of reviews}$

Example 1: Sept. 2015. Basis: 220 listings. Bornholm
Unweighted ave. price: 672 DKK (90€) (100%)
Weighted average price: 522 DKK (70 €) (78%)

Example 2: Spring 2016. Basis: 287 listings. Bornholm.
Unweighted ave. list price 672 DKK (90 €) (100%)
Weighted average list price 493 DKK (66 €) (73%)

Unweighted ave. list price, 615 DKK (82.50 €), Sept. 2016

**Don't forget to remove listings with
extremely high or extremely low prices per night.
This was important – at least for Airbnb listings in Copenhagen.**

Mind the service fee: e.g. +11% - or ~12.4% (CPH)

According to [the Danish marketing act](#) §12a 6.1 (and §13) all fees should have been included in the price from the very outset. Airbnb fails to comply with this requirement.

4 nights minimum stay →

Se billeder



Claus

Bjælkehytte 22 m2 med fantastisk udsigt

Allinge, Danmark



Helt

hjem/lejlighed



4 gæster



1 Soveværelse



2 Senge

200kr DKK ⚡

Per Nat

Indtjekning

17.09.2016

Udtjekning

24.09.2016

Gæster

1

200 kr x 7 nætter ?

1399kr

Servicegebyr ?

152kr

Total

1551kr DKK

200 kr x 7 nætter ?

1399kr

Servicegebyr ?

152kr

Total

1551kr DKK

Tax aspects

In Denmark, those who rent out a room or their entire apartment may receive 24,000 DKK (about 3217 €) in renting income before 40% must be paid in tax of the remaining renting income. **OR:** 2/3 of annual paid rent. - There are many uncertainties in estimating the expected tax revenue. – Arguably, this uncertainty can or should possibly be removed.

Airbnb in Copenhagen	2015	2016, est.	currency
Gross Booking Value, est.	209	410	mill. DKK
Taxable %, approx.	44%	44%	
Taxable amount	91	179	mill. DKK
Tax %	40%	40%	
Tax, mill. DKK, expected	37	72	mill. DKK
DKK:EUR	7,46	7,46	
Tax, mill. EUR, expected	4,9	9,6	mill. EUR

Discussion – some post seminar thoughts

1. Is it good or bad that (or if) rent increases in popular central city areas? –
From an economic point of view, normally its good if goods or services are in high demand, here accommodation.
2. To what extend does Airbnb accommodation substitute stays at more traditional types of accommodations? – Logically, Airbnb to some or great extend replaces other types of accommodation, since people don't travel just to experience different private homes.
3. Is Airbnb just another online distribution platform? –
Some B&B's use both Booking.com and Airbnb.
4. Why don't cottage letting agencies like Novasol and others not respond, if there is a market for rented private accommodations?

Appendix: Some insights from Bornholm island, Denmark (Sept.'15)

- **220** accommodations at Airbnb
- **40%** get review score **5**; **43%** get **4.5**; 10% get 4; 7% 3.5; none lower.
- **42%** started @ Airbnb in **2015**; 31% in 2014; 15.5% in 2013; 9.5% in 2012; 2%..
- **67%** of listings are **single listings**. – 1.26 listings per host in average.
- **5.1 reviews per listing** in average – More for the eldest, less for the newest.

- **Cheapest 25%** of listings get **46% of the reviews**; Expensive 25% get 13% of reviews.
- The average price in EUR per night, **weighted** by reviews, is **70 EUROS**.
- The un-weighted average was ~**90€/night**. So, weighting makes a difference.
- **59%** of the bookings on Bornholm island @ Airbnb are for the **main town**, Rønne.
- 30% of the listings on Bornholm island for holiday cottages (important type there).

- **82%** of the 220 accommodations are **entire** homes, cottages or apartments.
- Only **20%** of the listings on Bornholm @ Airbnb were “real” **online** bookable.
- For comparison, **35%** of those in Palma de Majorca were online bookable, instantly.
- The online bookable accommodations on Bornholm were **20€ cheaper** than non do.
- Those accommodations with **high** ratings are listed **early**. High rating → Early listing.