Airbnb in Toronto

Data analysis exercise

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[VERY PRELIMINARY DRAFT]
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1 Introduction

My goal in this exercise is two-fold. First, I would like to understand Airbnb rental market in Toronto and how it is related to property prices. From office kitchens to daily newspapers and TV, the housing market in Toronto is one of the most discussed topics. Last year the market was "clearly overheated" (Housing Health Check, RBC report) and currently it is still considered to have low affordability. As in any major city these days, many properties in Toronto are rented short-time through various online platforms, like Airbnb. Is it possible that decrease in supply for long-term rentals (in favor of more profitable short-time rentals) may have added to soaring prices in last several years? Recent new regulation around short-term rentals (December 2017) imposes certain limitations on Airbnb hosts and the company itself.[1] Thus, I would like to investigate Airbnb market in Toronto and report any interesting observations. My second goal is to demonstrate how different technology tools can help to get, visualize, and analyze the data. Since the question of interest is rather complex and collecting all the needed data and performing full-scale analysis are way beyond the scope of this exercise, I will have to make numerous assumptions and leave robustness checks as possible future directions.

2 Model

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[1]Read more about the rules for short-term rentals which will impact Airbnb (to be enforced starting June 1, 2018) at Toronto Government website and some commentaries at, for example, CBC News, Toronto tackles long-term rental supply with new Airbnb rules.

3 Data scraping

3.1 Information theory

4 Data visualization

4.1 Information theory

5 Data analysis

5.1 Information theory

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