

Insight into investment opportunities across Toronto neighborhoods

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Introduction

Many investors face an important question on how potentially their project will perform and how to respond to demand on the market. It's significant to gain knowledge on how their customers are willing to pay for their product or service.

Problem

The main aim of the project was to find out if there's any correlation between number of venues available in certain Toronto neighborhoods compared to the wealthiness of local population.

This could provide an important insight for potential investors on any future investment (cultural or any other service) in the selected area.

Data sources

In order to fulfill the above assumptions two separate datasets were used:

- **Latest Census data for Toronto city** - including details on Population and Income per each Neighbourhood
- **Forsquare API location data** – mainly venue details

Data Analysis

The latest 2016 open data Census for Toronto city has been extracted and adjusted to receive the final table containing the following columns: Population and Income per each Neighborhood. Once this was done the second step was to create a metric called Income per citizen and extract top 10 and bottom 10 neighborhoods with highest and lowest values of the metric. The outcomes have been visualized on the charts (Figure 1 and Figure 3).

Based on the geographical coordinates of the neighborhood it was possible to retrieve venues in the area of 5km from the center. Cinemas have been chosen as a good indicator for wealthiness but this can be done also for other categories like restaurants, gyms or museums. Using Foursquare queries related number of venues have been retrieved and appended into the main table and visualized on the chart (Figure 2 and Figure 4).

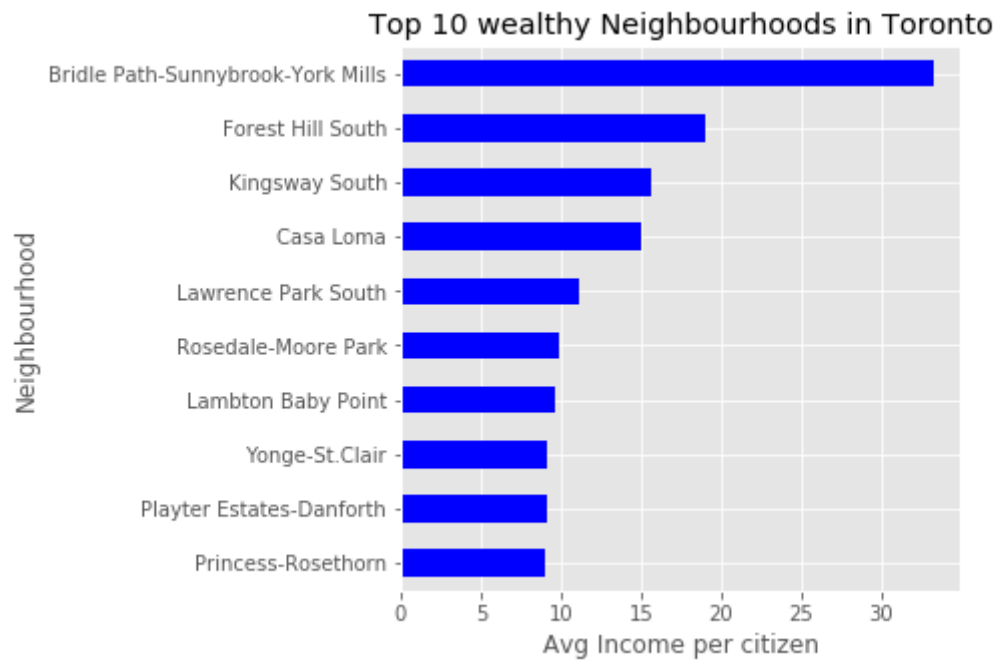


Figure 1. Top 10 wealthy Neighbourhoods in Toronto

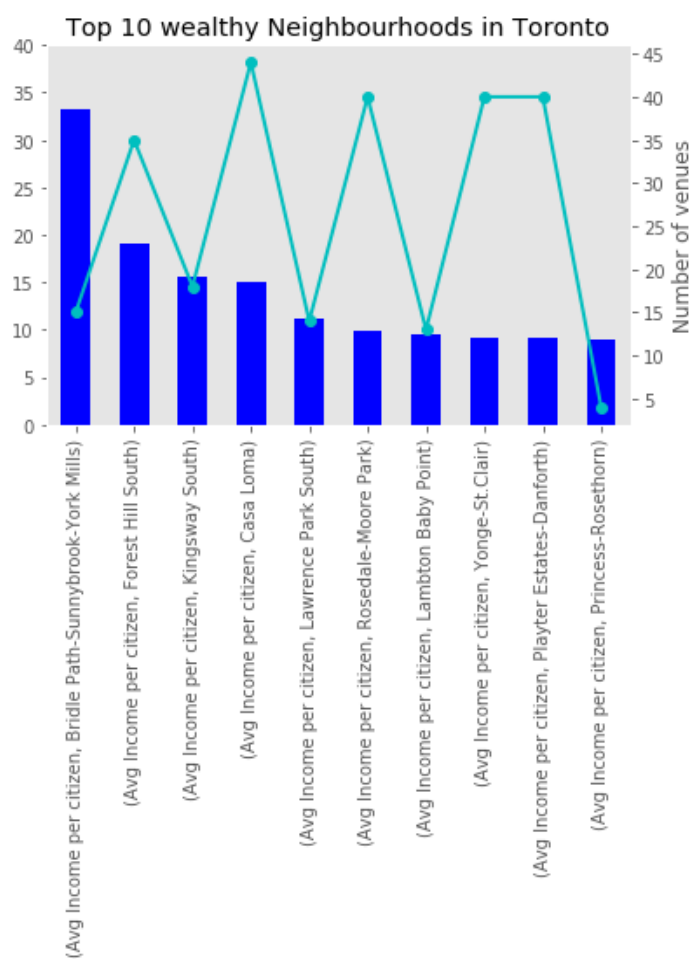


Figure 2. Top 10 wealthy Neighbourhoods in Toronto vs Number of venues

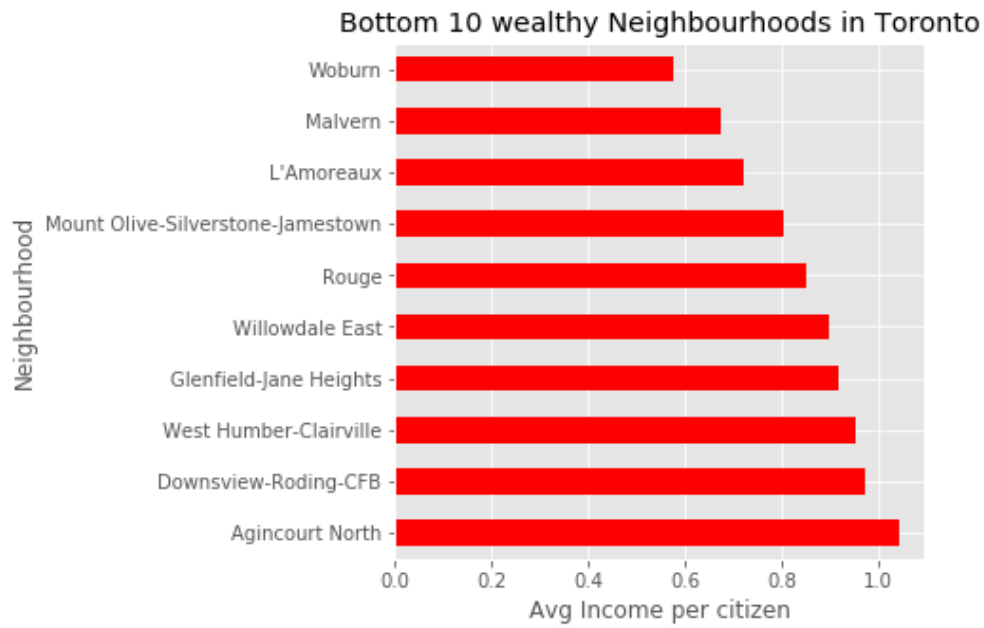


Figure 3. Bottom 10 wealthy Neighbourhoods in Toronto

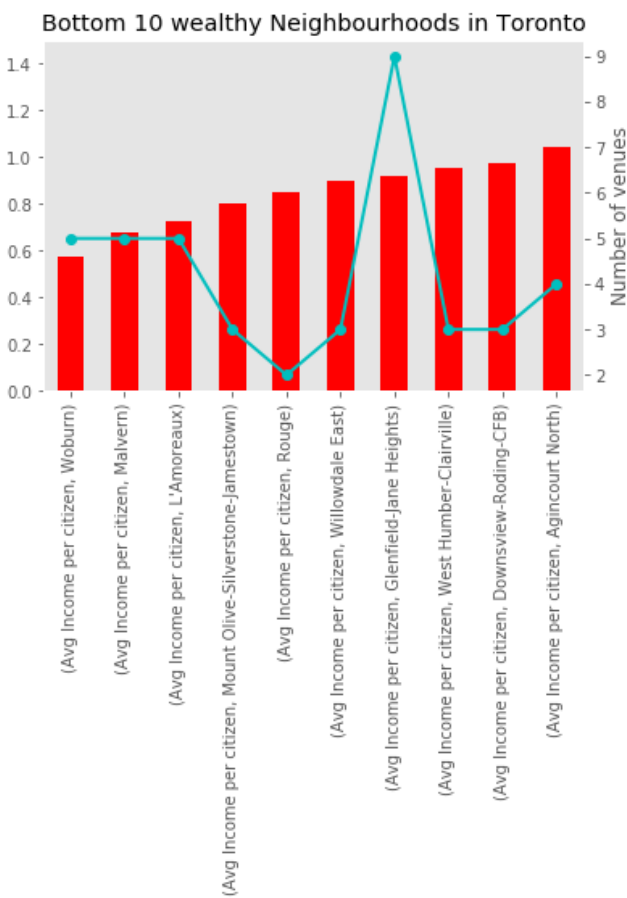


Figure 4. Bottom 10 wealthy Neighbourhoods in Toronto vs Number of venues

Conclusions

After analyzing top 10 and bottom 10 neighborhoods based on income per citizen no correlation between number of venues (in this case cinemas) and income per citizen was observed. However, there's a significant drop in number of venues for the bottom 10 neighborhoods. The average numbers are:

The average number of venues for Top 10 neighbourhoods are: 26.3

The average number of venues for Bottom 10 neighbourhoods are: 4.2

This indicates that top wealthy areas have more venues than poorer ones and seems to dominate in business opportunity. In order to confirm the following conclusions more data would be required, especially data of different categories of services.