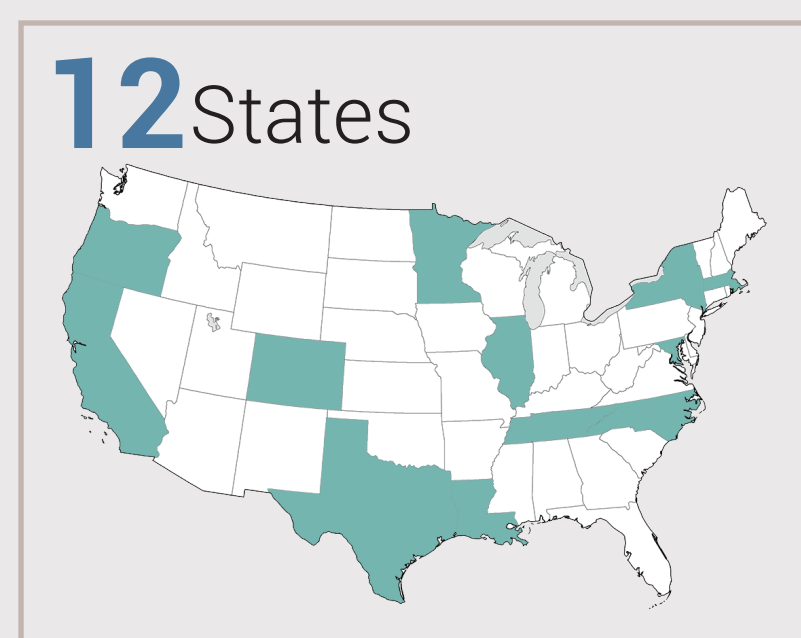


Airbnb and the macroeconomy: searching for connections

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Introduction

Airbnb is an online marketplace that connects people who want to rent out their homes with people who are looking for accommodations in that locale. Nowadays, it is required to understand the affectation that social and economic variables have over this kind of business.



Q2 2018-Q4 2019

Time frame

+86K Listings

+2M Data entries

Research

The main goal of this research is to test how the personal income, GDP and the unemployment rate affect the number of listed properties in Airbnb. The research is based on data from twelve states from the United States of America



Gross Domestic Product



Personal Income



Unemployment rate

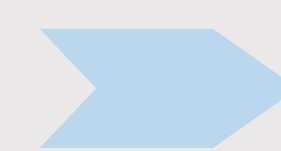


Airbnb listings

Data analysis



- Data cleaning
Removing 2020 data
- Merging of listings
and economic data



- Grouping data by
location (States)
- Grouping date
(quarters)
- Features creation

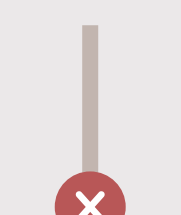


- Creating weighted
values
- Percentage difference
calculation

Results

- The properties listed in Airbnb decrease in the states with a larger GDP
- Rise in personal income increments the properties listed in Airbnb in successive periods.
- There is no significant relation between the unemployment rate and the number of listed properties

Visit the app: <http://airblocuras.online>



Beyond



This research can be a framework for business like Airbnb to assess where to invest and where to place operations that favor the growth in listings



Future investments should take into account not only the current money value but the variations through time for the personal Income and GDP in any region or country



It would be interesting to assess the Airbnb business behaviour after the COVID-19 pandemic and compare those results against the current research results

Glossary

- **GDP:** is the final value of the goods and services produced in a country during a period of time.
- **Personal Income:** Is the amount of money collectively received by the inhabitants of a country.
- **Unemployment Rate:** Unemployed individuals / Total labor force x100