Cost of Living Index of United States of America

Group 1 : Aniket W, Mohil J, Taha T, Vijay T, Yamini R

Drexel UNIVERSITY

Introduction

The purpose of selecting the information on the cost of living in the United States was to provide an overall picture of salary and expenses as they varied throughout the states. Additionally, we believed that this information would be useful in the future because our presentation's primary audience were other students.

Source of Data

https://www.kaggle.com/datasets/mvieira101/global-cost-of-living

Details of the Dataset

1	50	1048
Country	States	Cities

$3983	$1444
Average Salary (Monthly)	Rent (1 BHK)

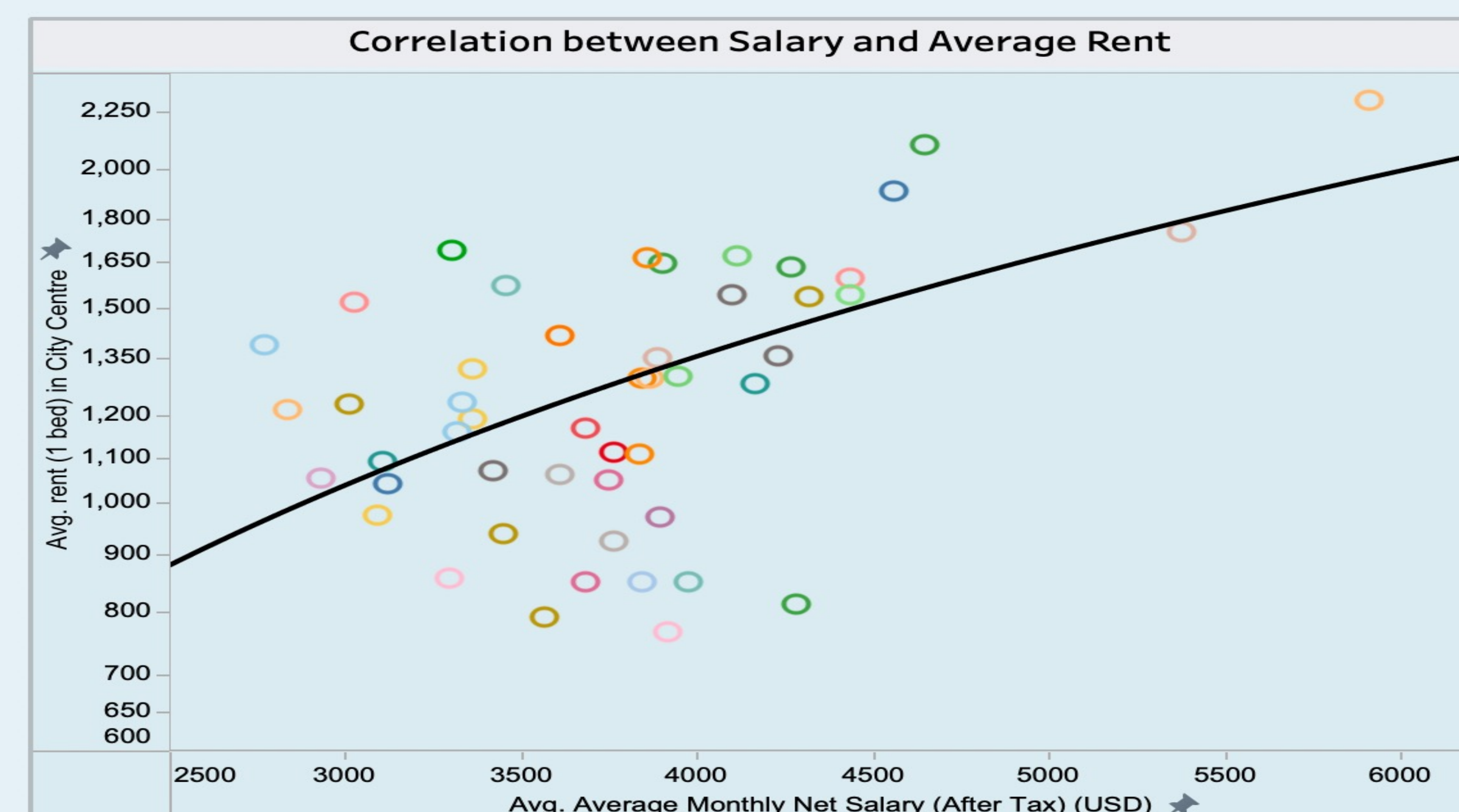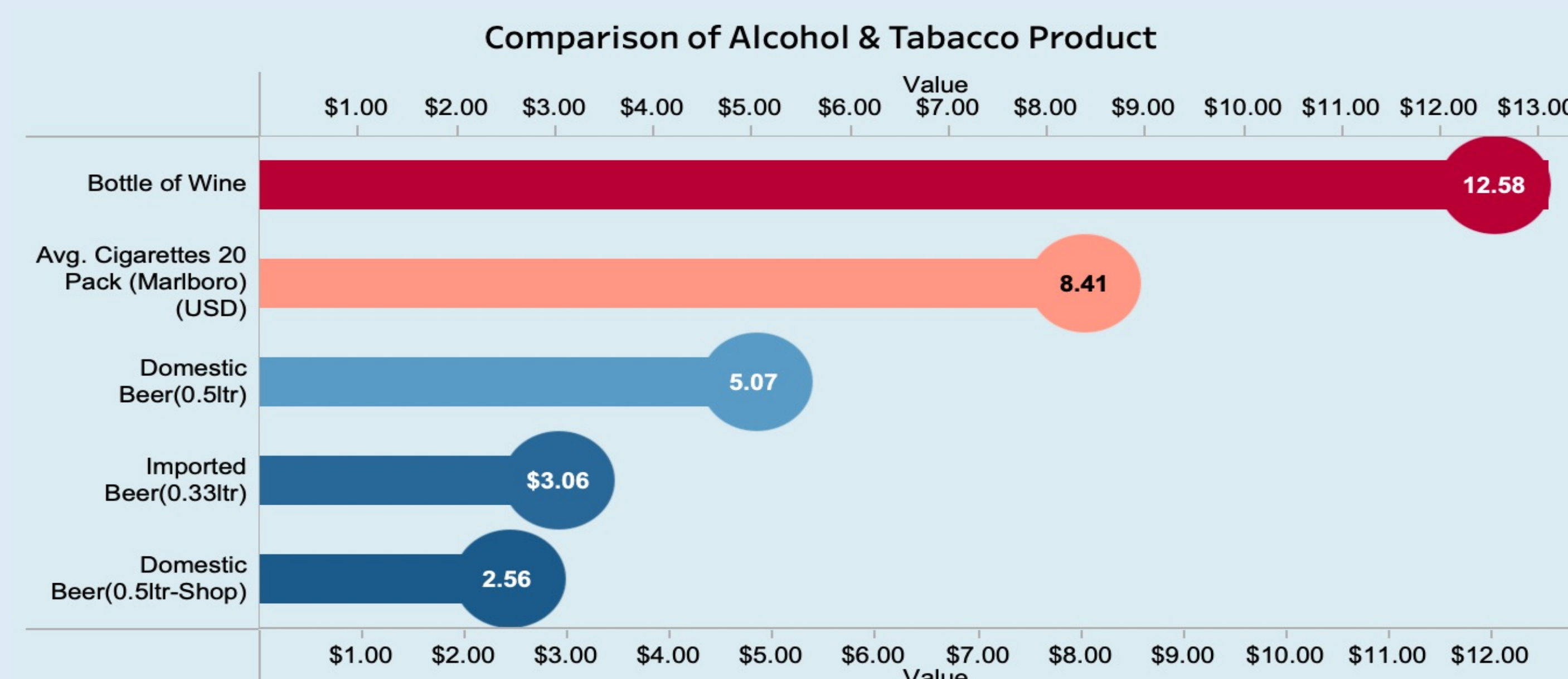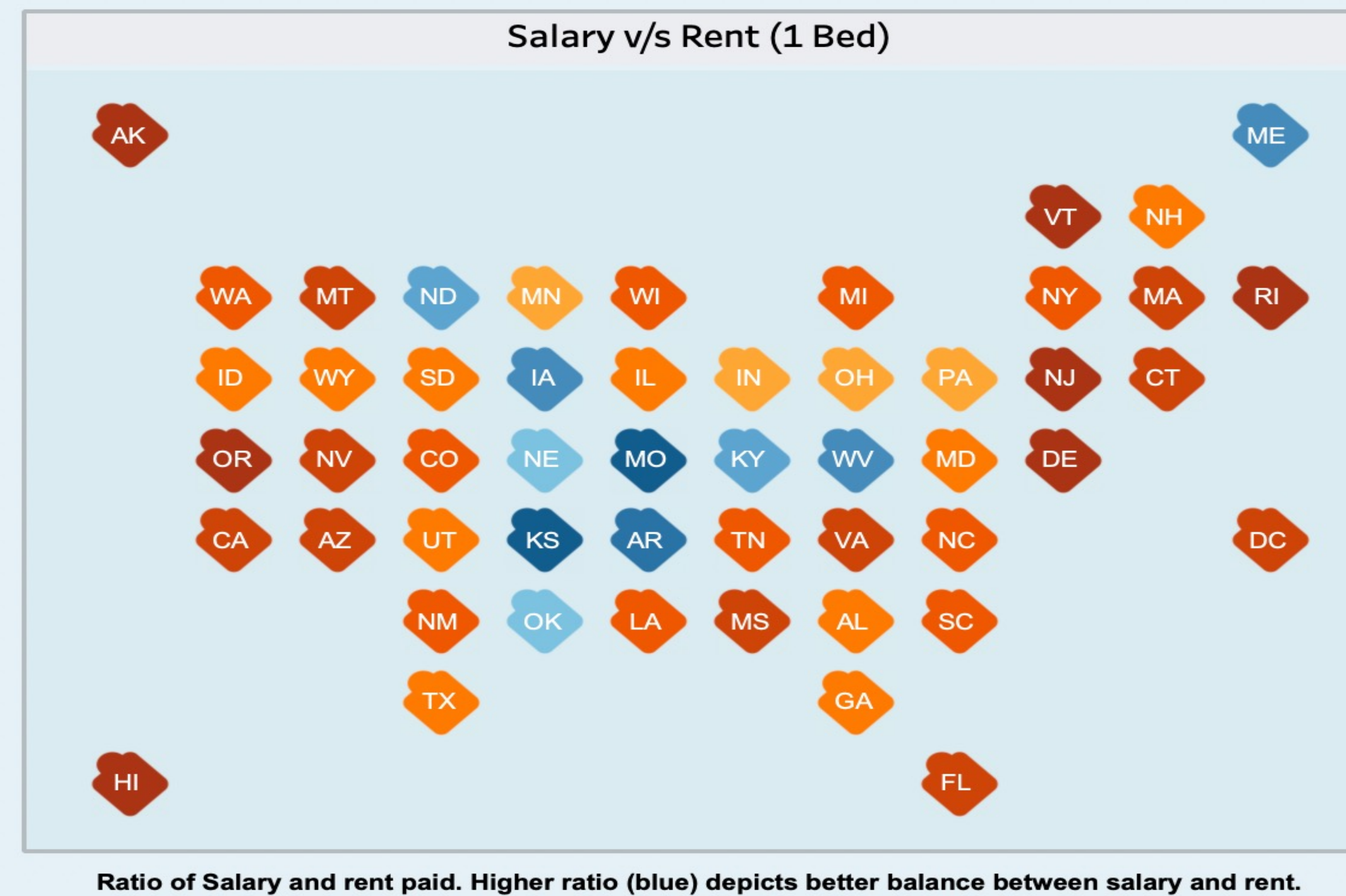| $180	$62	5%
Utility	Meals (for 2)	Mortgage Rate

Types of graphs

- ☐ Hex tile plot
- ☐ Scatter plot
- ☐ Wheat plot
- ☐ Round shape horizontal plot
- ☐ Tree Map

Snippets of few important graphs

Salary v/s Rent (1 Bed)

Ratio of Salary and rent paid. Higher ratio (blue) depicts better balance between salary and rent.

Comparison of Alcohol & Tabacco Product

Product	Value
Bottle of Wine	12.58
Avg. Cigarettes 20 Pack (Marlboro) (USD)	8.41
Domestic Beer(0.5ltr)	5.07
Imported Beer(0.33ltr)	3.06
Domestic Beer(0.5ltr-Shop)	2.56

Correlation between Salary and Average Rent

(X-axis: Avg. Average Monthly Net Salary (After Tax) (USD); Y-axis: Avg. rent (1 bed) in City Centre)

Insights from the data

- ☐ Average monthly salary in the USA is ~$3.9k; with DC, Maryland, Hawaii, California and Washington being the top 5 high paying states.

- ☐ Proportion of spends on rent vis-vis salary: Missouri and Kansas at lowest with ~0.19 and highest being Alaska and New Jersey at ~0.50

- ☐ Mortgage rates are lower in states like Maine, Kentucky, Idaho and New Hampshire with average price per sq ft of 1bed at ~3.2k to ~3.5k

- ☐ Basic cost of living is highest in West at $188 per month and least in East at ~$166

- ☐ Average utility cost of USA is $180 per month with highest in Alaska at $270 per month

- ☐ Meal cost for two people in mid-range restaurant with alcohol cost ~$80 - $100

Challenges and Discovery

- ☐ The original data had ~4.8k unique values of many other countries.

- ☐ We filtered the data for the USA, as due to large number of unique values it was difficult to show an accurate representation.

- ☐ Due to the Alaska effect in the data, it was hard to analyse data of all the states in one vision.

- ☐ To overcome the above, we used the Hex map plot.