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EFFECT OF UBER ON UNEMPLOYMENT AND CRIME

THE INTRODUCTION OF WEB-BASED RIDE-SHARING SERVICES SUCH AS UBER LEADS TO THE REDUCTION OF UNEMPLOYMENT RATES AND REPORTED CRIME RATES IN THE METROPOLITAN AREAS WHERE IT OPERATES IN

RELATED LITERATURE

- ▶ Impact of digitally enabled jobs on creating career options that have a flexible work schedule and low skill set requirement
- ▶ Uber giving more flexible work schedule for independent contractors
- ▶ Uber are not only for the unemployed but those who need an extra source of income or are in between jobs
- ▶ Statistical evidence and justification on how neighborhoods with frequent Uber pick ups have a lower urban crime rate.
- ▶ Uber has contributed to an increased rate of automobile thefts

DATA COLLECTION

- ▶ Introduction of App based taxi services:
 - ▶ This database was manually collected
 - ▶ Aiming at determining a line of comparison it contains two fields indicating the state and date of introduction of the first app-based taxi service of that particular state
 - ▶ For every state but Florida, Uber was introduced first and thus the date of introduction column was filled with the date Uber was introduced in these states. For Florida, we went with the date of introduction of Lyft.

▶ Unemployment Rate

- ▶ The data is sourced by the Bureau of Labor and Statistics in order to identify the changes in the unemployment rate and whether they are influenced by the introduction of app based taxi services.
- ▶ It is in the forms of a CSV file provided by The National Conference of State Legislatures

▶ Crime Rate

- ▶ The dataset covers 10 major crimes: violent crime, homicide, rape (legacy), rape revised, robbery, aggravated assault, property crime, burglary, larceny and motor vehicle theft spanning over the years from 1979 to 2019.
- ▶ It is divided state-wise with the population of each state

FALSIFIABLE EXPERIMENT

- ▶ Unemployment/Crime Rate X months after Uber was introduced
- ▶ Does correlation = Causation?
 - ▶ Unemployment/Crime Rate X months before Uber was introduced
 - ▶ Adjusted Decrement
 - ▶ Unemployment/Crime rate is considered to “decrease” only if it was already non-decreasing before Uber was introduced

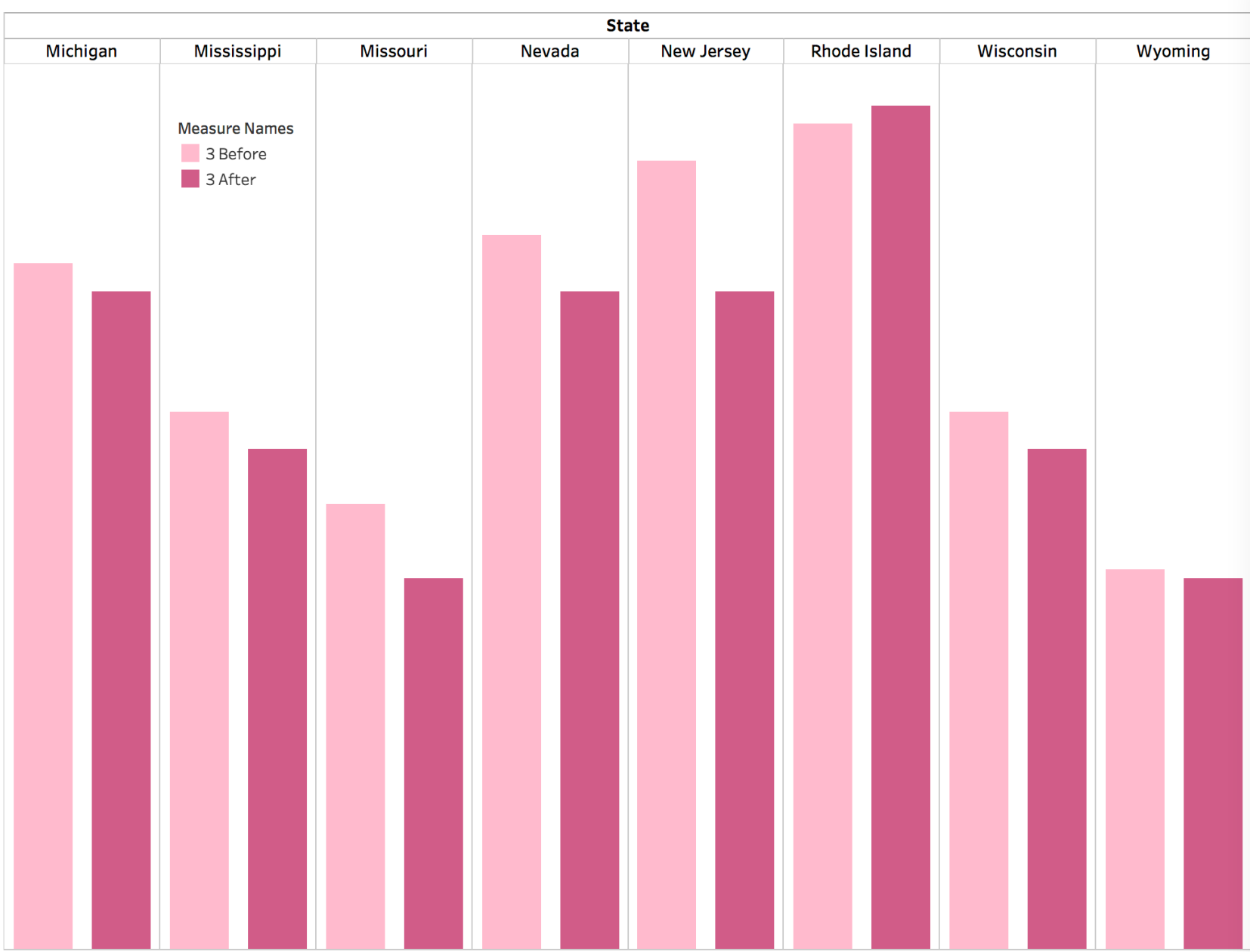
UNEMPLOYMENT RATE ANALYSIS

Time Period	Pre Uber Decremenent	Post Uber Decrement	Adjusted Decrement
3	24	31	17
6	30	36	16
12	35	37	11

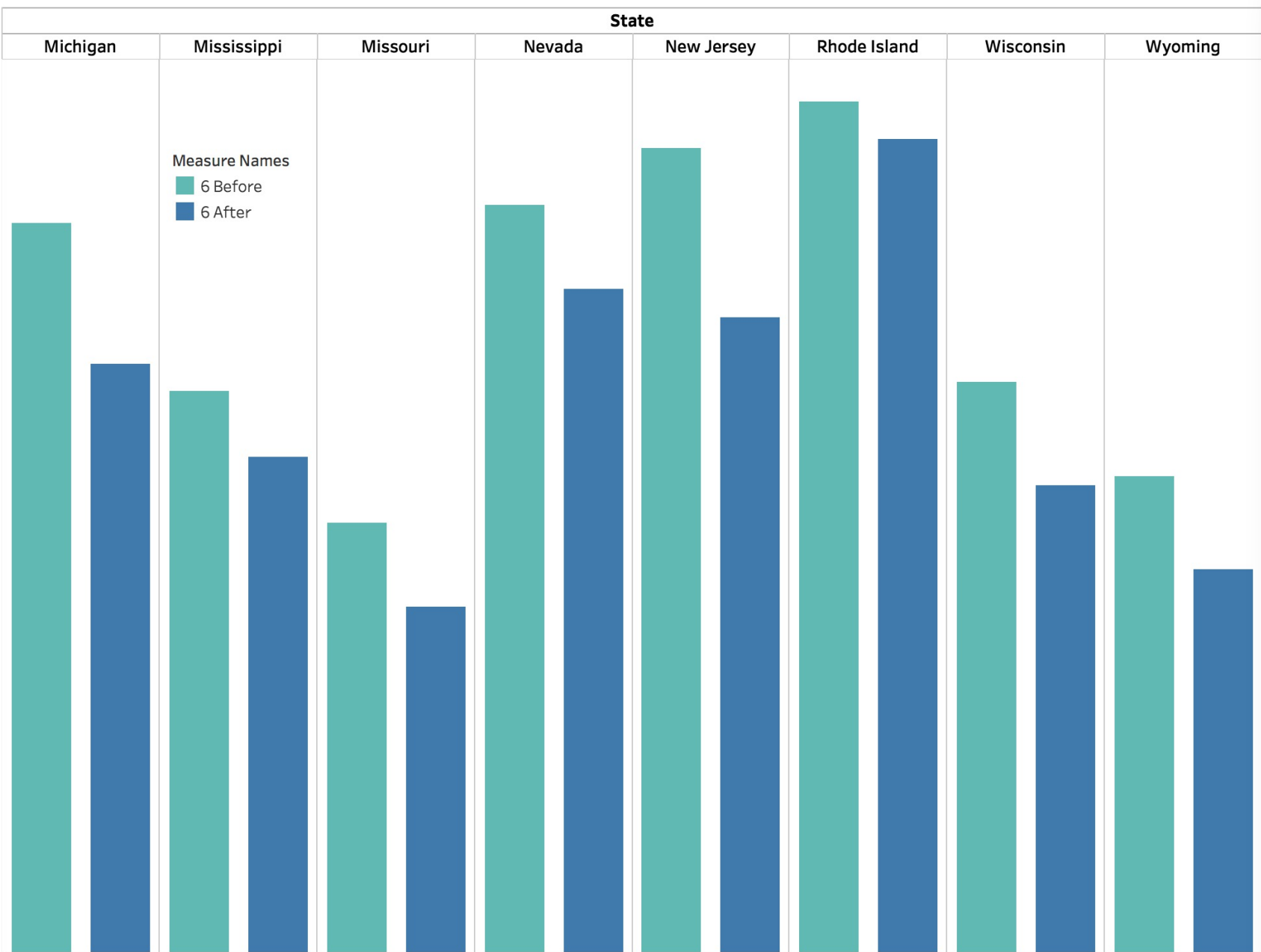
Number of States with a Decrease in Unemployment Rates

UNEMPLOYMENT RATE ANALYSIS

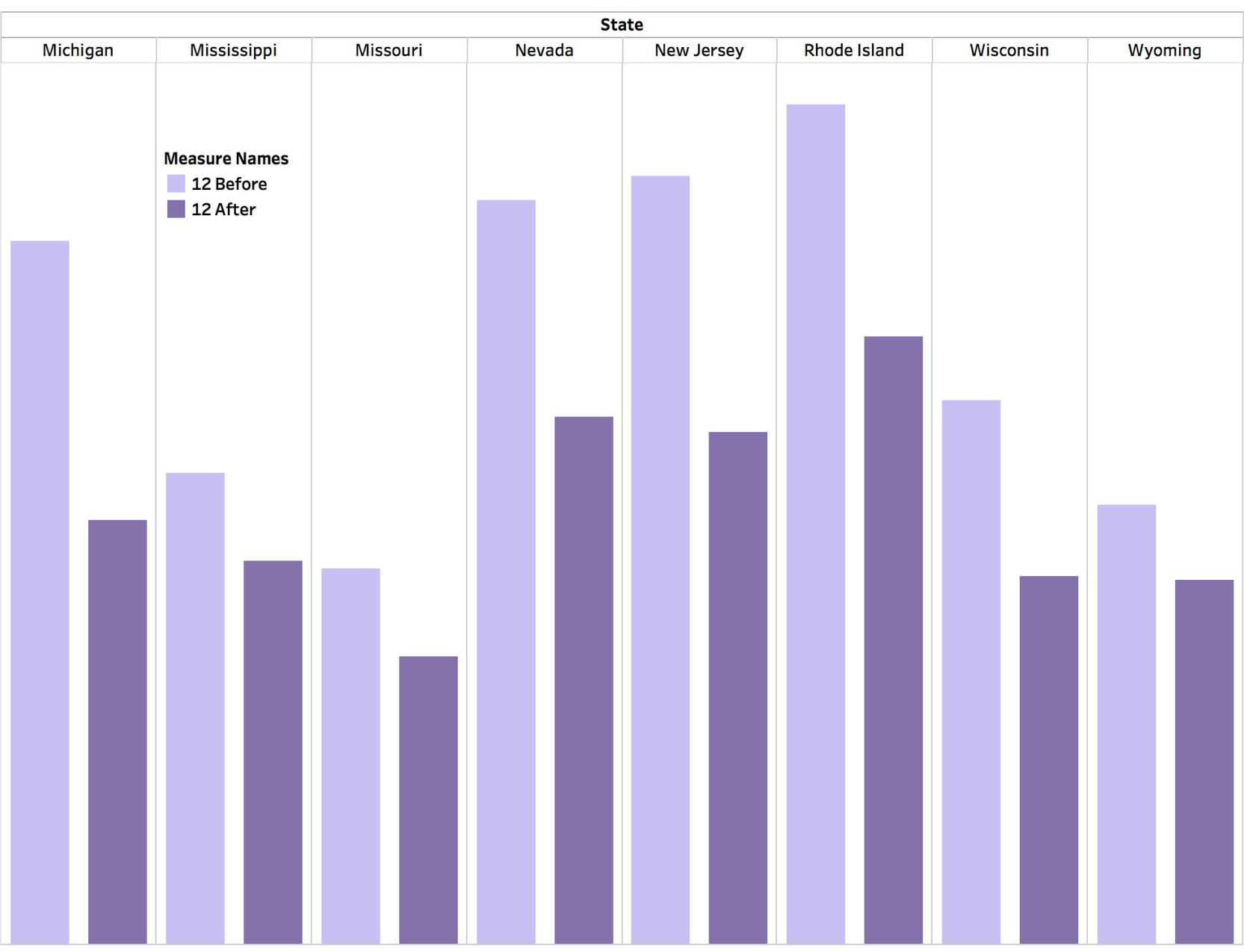
3 months Before and After Uber



6 months Before and After Uber



12 months Before and After Uber



CRIME RATE ANALYSIS

Crime	Adjusted Decrement	Post Uber Decrement	Pre Uber Decrement
Rape Legacy	6	13	23
Rape Revised	5	12	27
Robber	9	25	30
Property Crime	6	37	42
Burglary	6	44	43
Larceny	6	38	42
Motor Vehicle Theft	6	18	25

Number of States with a Decrease in Crime Rates

CRIME RATE ANALYSIS



CONCLUSION

- ▶ Unemployment and Crime rates in states that have a large urban population, such as California and New Jersey.
- ▶ States that have robust public transportation systems in place such as New York and the District of Columbia.
- ▶ External social factors.
- ▶ Proportion of Uber drivers who are female.
- ▶ First world countries v/s developing countries

GITHUB REPO: [HTTPS://GITHUB.COM/AASHKA-TRIVEDI/UBER-UNEMPLOYMENT-AND-CRIME](https://github.com/AASHKA-TRIVEDI/UBER-UNEMPLOYMENT-AND-CRIME)
