Final

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## Introduction

Our research focuses on the relationship between the inflation rate and crime rates, as well as the type of crime and its rate relative to the inflation.

With this information, we would like to know if it is possible to predict an increase in crime and type of crime based on inflation rates.

To measure the inflation rates, we used the Consumer Price Index (CPI) as our main metric, which is the measure of the average change in the prices paid by urban consumers for a market basket of consumer goods and services.

The way CPI is calculated is: Value of Basket in the current year over the value of the basket in the prior year, times 100.

### Description of used dataset

We based our research on data obtained from the St. Louis Federal Reserve [1] for the inflation rates data. Specifically, a dataset which includes data from the 1960s to the current era.

As for crime rates, as well as types of crime, we obtained this information from the FBI Uniform Crime Reporting [2] dataset, which was supplemented with data obtained through Statista [3], for which we have access thanks to our student access through the University of Denver.

Unfortunately, the FBI datasets are split by year, which would take too much time to put everything together. Fortunately, we could use disastercenter [4], which presents the same information already gathered.

[1]: https://fred.stlouisfed.org/

[2]: https://cde.ucr.cjis.gov/

[3]: https://www.statista.com

[4]: https://www.disastercenter.com/

### Data preparations

### Data Visualization

### Description of what our model does and how the algorith works

### Major Data analysis and modeling

### Model Evaluation / Model Selection / Model Comparison

### Conclusion