

Investigating Consumer Expenditure, Investment, and Inflation:
A Data Analysis Approach

The study aims to determine if investment and consumer buying patterns can contribute to the rise of inflation. Understanding this link is very important for businesses and policymakers as it allows them to formulate effective strategies to address the issue of rising prices. So, we plan to use Data Analysis approaches and Visualization tools to find more insights into this matter.

HYPOTHESIS - We hypothesize that shifts in consumer expenditure, including a rise in the need for products and services, cause inflationary impulses in different industries. We aim to test the hypothesis and pinpoint the sectors most impacted by shifts in consumer demand by combining several datasets on consumer spending, investments, price indices, and other relevant factors.

DATA COLLECTION - We will gather our data from multiple sources including retail sales reports, consumer expenditure data, and consumer investment data. The Consumer Price Index (CPI) data will be obtained from the US Bureau of Labor Statistics (BLS), the Securities and Exchange Commission (SEC), and financial institutions. We shall guarantee data integrity and adherence to regulations during the collection procedure.

ANALYSIS STRATEGY - We will analyze data using Python programming language, PySpark, and Pandas library for data manipulation, along with visualization tools including Seaborn, Plotnine, Plotly, and Matplotlib.

PRELIMINARY RESULTS - At this stage, we anticipate identifying initial correlations between consumer spending patterns and inflation rates in different sectors. Moreover, further analysis would be required to validate these findings and get more insights into the relationship between consumer behavior and inflation.

TIMELINE -

