CSIT356\_01FA23: Intro to Data Science

Economics of Peace:

Unveiling the Financial Beneficiaries of

Middle Eastern Conflicts

Team Member(s):Richie Molina

1. Description
   1. Basic Information
      1. The Israel-Hamas War has been a central point of geopolitical tension, with recurrent conflicts affecting the region. These events often lead to humanitarian crises, but the economic impacts and the entities that benefit financially from such conflicts receive less attention. This study aims to address this gap and contribute to the discourse on conflict economics, specifically in the context of the Middle East.
   2. Project Objectives
      1. To conduct a comprehensive analysis of financial entities and sectors that have either benefited or shown resilience following recent events in Gaza, thereby understanding the economic dimensions of the conflict.
   3. Description of Data Set
      1. Financial Market Data
         1. Bloomberg Intelligence: Historical stock prices, financial statements, and market data in CSV format.
         2. Stockholm International Peace Research initiative (SIPRI) Arms Transfers Database: Details international transfers of major conventional arms since 1950.
         3. The World Bank’s DataBank: Provides aggregated alternative stock data.
      2. Defense Industry Data
         1. Stock Market Indices: Defense industry-specific indices showing company stock performance.
         2. SIPRI: Data on the arms industry and military spending.
      3. Construction & Real Estate Industry Data
         1. Trading Economics: Economic indicators including construction output in CSV format.
         2. Bureau of Economic Analysis: Industry economic data, including construction sector information.
2. Exploration of Data Analysis
   1. Data Preparation:
   2. Data Loading: Use automated scripts to load CSV datasets into Python's pandas environment.
   3. Data Cleaning: Handle missing values, duplicates, and outliers using techniques like imputation and filtering.
   4. Data Analysis using Descriptive Statistics:
      1. Compute basic descriptive statistics (mean, median, mode, standard deviation, percentiles) to summarize central tendency, dispersion, and shape of the dataset’s distribution.
   5. Other Data Manipulation Techniques:
      1. Pivot Tables: Create pivot tables for multi-dimensional data aggregation.
      2. Merging/Joining: Combine multiple datasets for enriched analysis.
      3. Data Transformation: Apply transformations like logarithmic scaling to normalize data distributions.
3. Data Visualization
   1. Use standard plots (histograms, bar charts, line graphs, scatter plots) to visualize distributions and trends. For complex relationships, employ heatmaps or box plots.
4. Conclusion
   1. It appears that the economic gears continue to churn as if not much is happening around the world when it comes to war. It appears that due the economic activity by nearly avoiding a recession during the pandemic, the outcome is resilient nonetheless despite the bloodshed and the pandemic increasing Arms spending since 2020, the start of the Ukraine war.
   2. While in some ways, the data finds those of us living far away feeling safer because we live so far from the conflict. In any event, it makes me wonder about the actual cost of the privilege we have living in the United States.