

Correlation between Inflation and Unemployment

Overview

This project investigates the relationship between inflation and unemployment using data from FRED and the World Bank. We test for correlation and estimate a simple linear model (Phillips-curve style) using monthly U.S. data and annual international data.

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##Files and Roles ##data/ — datasets used in the project 1.T10YIE.csv — 10-Year Breakeven Inflation Rate (FRED) 2.UNRATE.csv — Unemployment Rate (FRED) 3.API_FP.CPI.TOTL.ZG_DS2_en_csv_v2_130173.csv — World Bank inflation (consumer prices, %) 4.API_SL.UEM.TOTL.NE.ZS_DS2_en_csv_v2_125709.csv — World Bank unemployment (% of labor force)
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##Scripts/ — code organization 00_requirements.R — installs/loads required packages (tidyverse, lubridate, broom, ggplot2) 01_data_load.R — reads and cleans the datasets; aligns date/years 11_Breakev_Inf_By_Unem.R — analysis & plots for FRED (breakeven inflation vs. unemployment) 12_CPI_By_Unem.R — analysis & plots for World Bank (CPI vs. unemployment)
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##Rmd's FinalReport.Rmd — combines all text, code, and figures into a complete reproducible report.
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##report FinalReport.pdf — final rendered report from the Rmd file, showing code output, analysis, and written interpretation.
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##Reproducibility Instructions 1. Open the project file FinalProject.Rproj in RStudio.  
2. Run Scripts/00_requirements.R to load all packages.  
3. Knit FinalReport.Rmd to generate the final report (FinalReport.pdf).  
4. All data paths are relative, so the project can be run on any computer as long as the data/ folder is in the same directory.
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