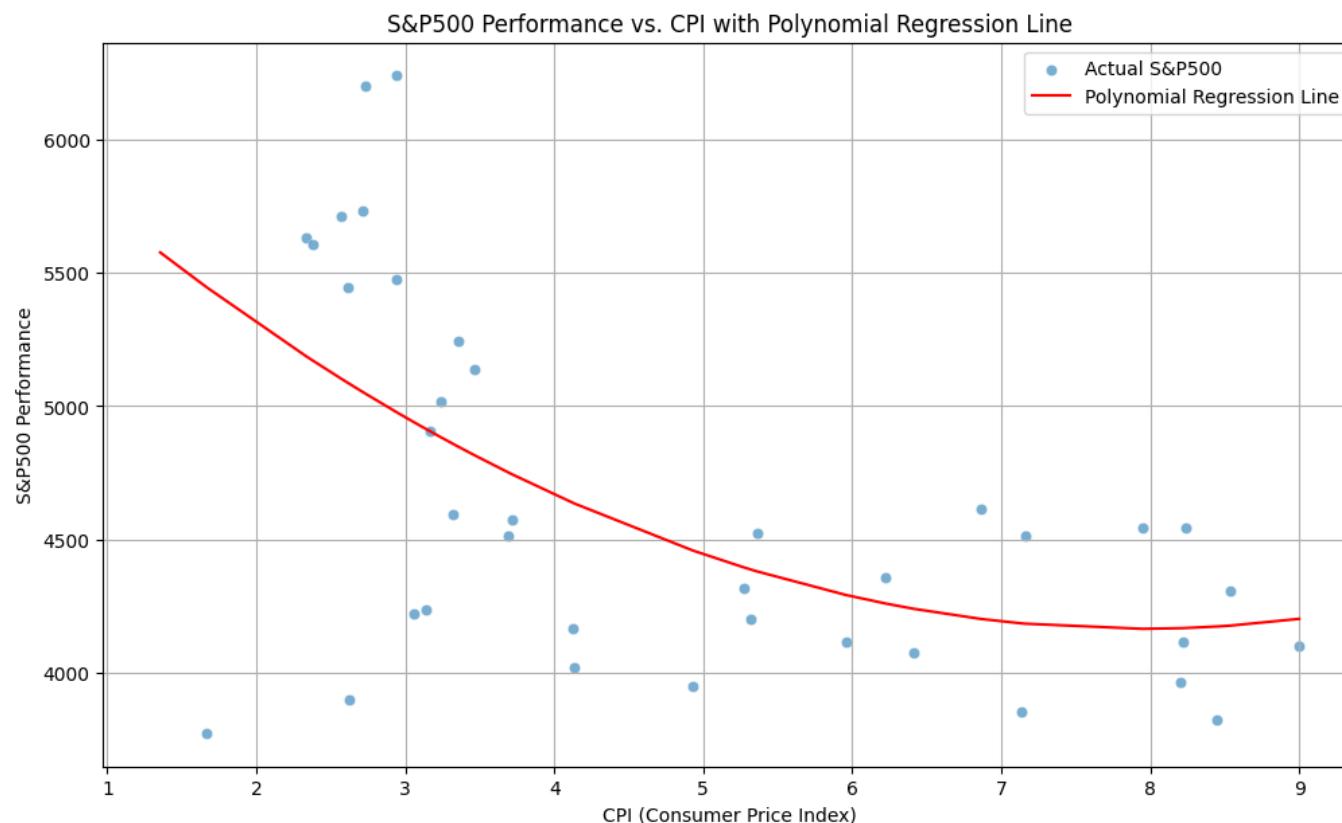


Does CPI Correlate With S&P 500 Returns?

- Scatterplot comparing S&P500 performance and CPI data.



Does CPI affect S&P500 Returns?

Model finds a statistically significant, negative relationship between CPI inflation and the S&P 500, substantial, but far from complete association between inflation and stock market movements.

- $S\&P500\text{return}(t) = \beta_0 + \beta_1 \text{CPIinflation}(t) + \varepsilon(t)$
 - β_1 (CPI coefficient) = -166.28
When inflation goes up by 1 percentage point, the S&P 500 is predicted to be about 166 points lower, on average. The negative sign means higher inflation is linked to a lower S&P 500.
 - p-value for $\beta_1 \approx 0.000$
This is below 0.05, so you reject the null. The relationship is statistically significant.
 - β_0 (intercept) ≈ 5440.73
This is the predicted S&P 500 level when inflation is zero.
 - $R^2 = 0.29$
About 29% of the variation in the S&P 500 is explained by inflation alone.
 - ε :Error term, all other factors affecting S&P 500 returns in period that are not captured by CPI inflation.