Macroeconomic Impact on Chipotle's Financial Performance (2015–2025)

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Project Topic/Objective

Summary:

- Analyzed how GDP, unemployment, and inflation in the US, Canada, UK, France, and Germany influence Chipotle's revenue, net income, and stock price.

- Used regression, inflation adjustment, and stock-market clustering to assess economic sensitivity and financial performance.

Project Objectives:

- Measure Chipotle's Reliance on the US Economy

- Determine "Real" Profitability Adjusted for Inflation

- Explain What Drives the Chipotle Stock Price

Why We Chose This Topic

- Strong personal interest in Chipotle as both consumers and followers of the stock.

- Chipotle is a fast-growing, high-valuation company making it ideal to analyze through a macroeconomic lens.

Video Link:
https://youtu.be/xEPx7KTjYPY

Insights

A Linear Regression model (R^2 = 42%) shows GDP growth has the strongest positive impact on revenue (+2.61%). Unemployment also shows a surprising positive effect (+1.98), suggesting Chipotle benefits when consumers trade down during economic slowdowns.

K-Means clustering identified four phases in CMG's stock history, with the 2024 stock split marking a new era. Post-split trading volume jumped to 312M shares, confirming the 50-for-1 split greatly increased accessibility and liquidity.

Comparing Nominal vs. Real Net Income (2015 base year) shows much of Chipotle's reported profit growth is inflation-driven. The widening gap highlights that real purchasing power grew far slower than nominal earnings.

Visualizations
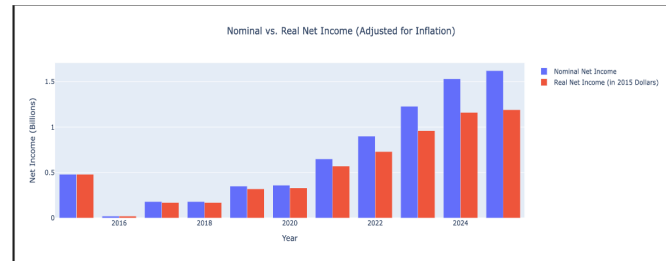
Proof for Insight 2: Grouped Bar Chart showing the widening gap between reported (Nominal) profit and inflation-adjusted (Real) profit, clearly demonstrating the effect of rising CPI on the company's true value.
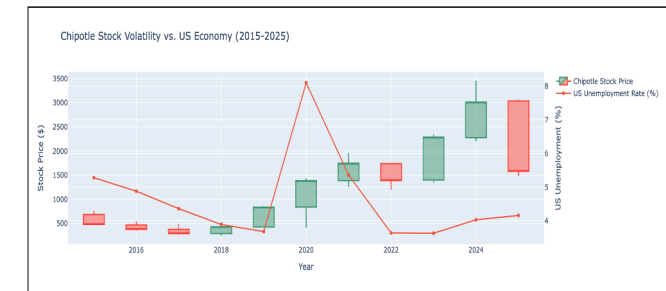
Proof for Insight 3: Candlestick chart overlaid with a line showing US Unemployment Rate. It visually confirms the disconnect, illustrating how the stock price can fall despite an improving economy (2015-2017) or surge during high unemployment (2020), driven by market expectations.