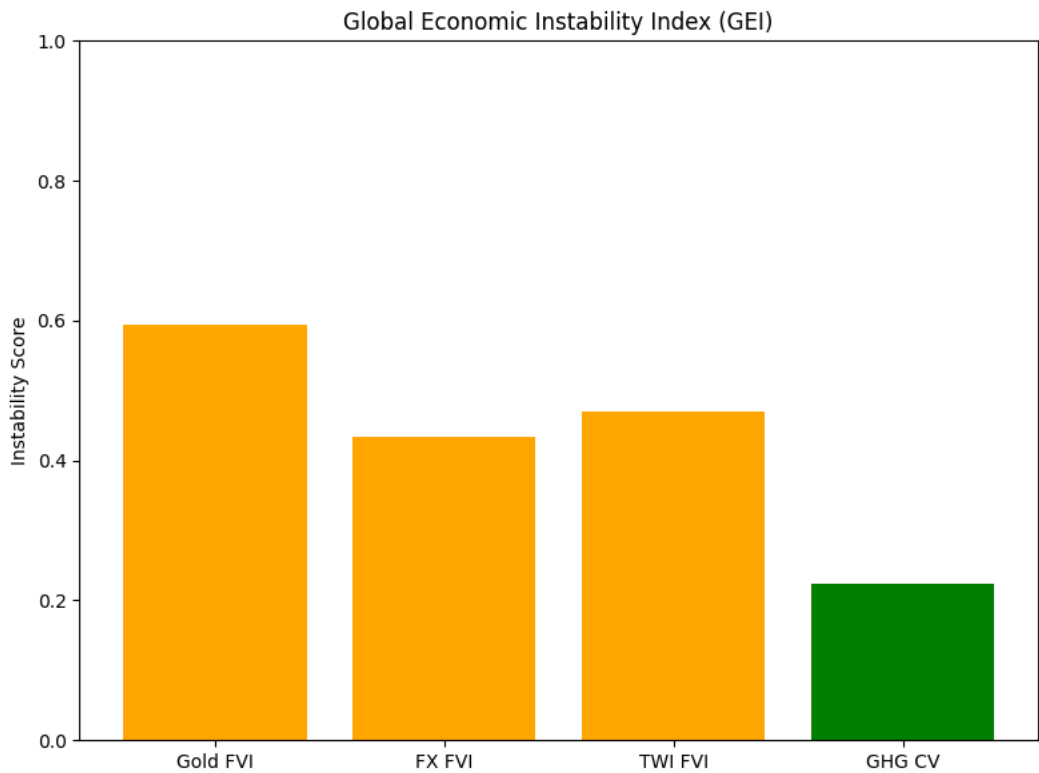


Fractal Volatility Index for PEP : 0.553. Market Wide FVI:0.478
(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)



Global Geopolitical Volatility



Red: High Risk FVI zone,Orange: Medium Risk FVI zone, Green: Low Risk FVI zone

Verv Stock Analysis Report: PepsiCo Inc PEP FVI 0.553

Analysis Period: 2021-07-15 to 2026-07-15

Global Geopolitical Fractal Volatility (Gold, Forex, TWI (Tariffs) and GHG Emissions)

FVI_GOLD: 0.593608 => Moderate gold volatility, likely reflecting investor caution
FVI_FX: 0.434301 => Low FX volatility; currency markets stable for now
FVI_TWI: 0.469352 => Moderate TWI volatility; minor export/import fluctuations
GHG_CV: 0.223036 => Moderate emissions volatility; sector-level uncertainty exists
Primary Risk Driver: Gold volatility is a good proxy for global geopolitical risk. 0.593608.

The Fractal Volatility Index (FVI) is scaled between 0 and 1 reflecting the stock's overall volatility. A higher score indicates greater unpredictability and market instability.

Unlike traditional volatility indicators like VIX or Beta, FVI does not track short-term fluctuations—it detects hidden instability before it manifests in price swings.
FVI is a composite score that incorporates Lyapunov Exponent, Hurst Exponent, and Detrended Fluctuation Analysis (DFA).

Breakout Probability Score (BPS): 1.025

Breakout Probability Score (BPS) quantifies price momentum likelihood: BPS > 1.5 suggests high breakout potential, while BPS < 0.5 indicates consolidation.

(BPS > 1.5 High breakout potential - Strong momentum, watch for confirmation.)

(BPS 0.5 - 1.5 Moderate breakout likelihood - Possible move, monitor closely.)

(BPS < 0.5 Low breakout probability - Likely consolidation or range-bound.)

Request ID: FVI

Account ID: WeeklyReport

Fractal & Statistical Analysis

FVI Score: 0.553 (Fractal Volatility Index FVI)

DFA Result: 0.5271 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0164 (Measures chaos and predictability)

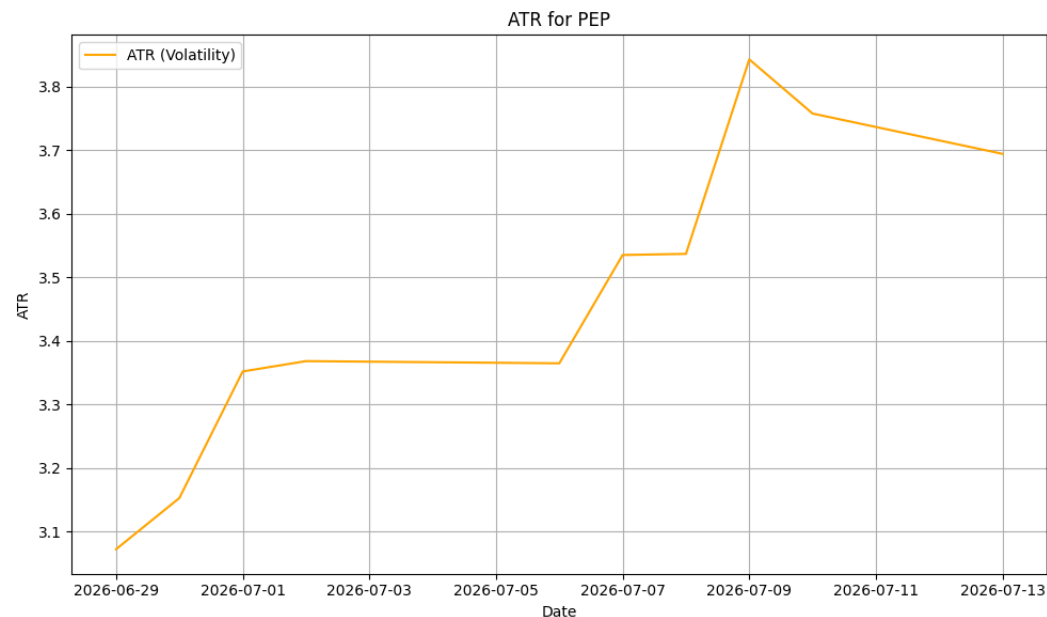
Hurst Exponent: 0.5301 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 138.49 is within the Bollinger Bands range (135.75 - 147.26).

Latest ATR: 3.6943

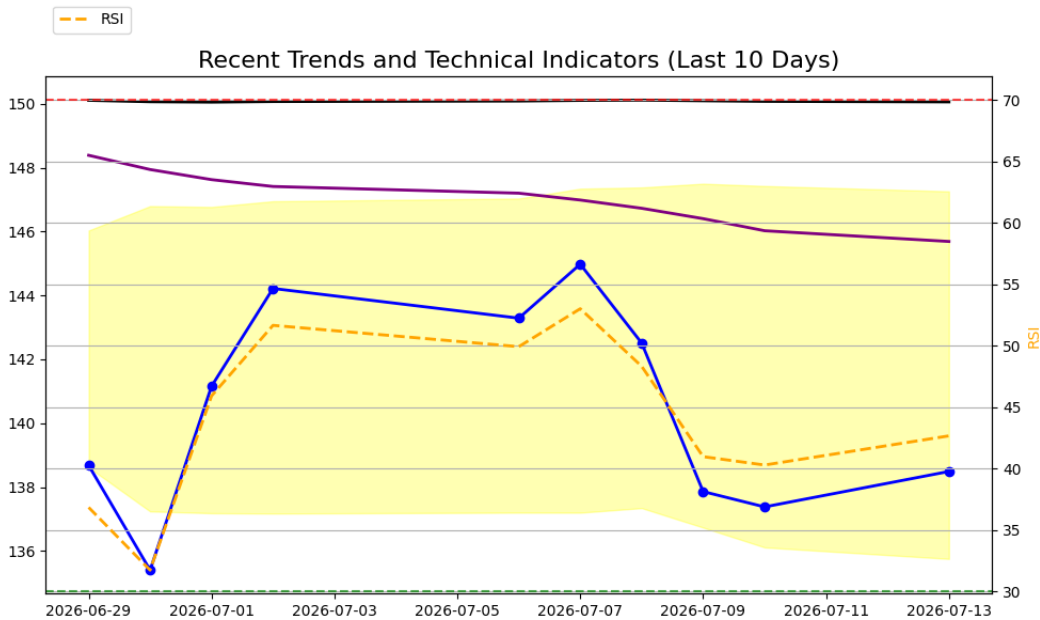
Average True Range (ATR)



The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

Low ATR (below 2): Stable stock, Moderate ATR (2-5): Mild volatility, High ATR (above 5): Highly volatile stock

Technical Indicators



Left y axis - Stock Price. Right y axis - RSI range values (30 - 70)

Close Price(blue line with circles) - Key indicator of the stock's price action and is often used to identify trends or patterns. A rising close price generally indicates an upward trend, while a falling close price shows a downward trend.

SMA_50 and SMA_200 - (purple line SMA_50, black line SMA_200) Simple Moving Averages (SMA) calculated over 50 and 200 periods. Helps identify the direction of stock price trend.

Bollinger Bands - (shaded in yellow): Bollinger Bands consists of upper, middle and lower prices. The middle line is the moving average. Price reaching the upper band can indicate an overbought condition, suggesting the stock might be due for a pullback. Price touching the lower band could indicate an oversold condition, suggesting a potential buying opportunity. When the price moves outside the bands, it may indicate extreme conditions.

Relative Strength Index RSI - (orange dotted line): The RSI is a momentum oscillator that measures the speed and change of price movements. An RSI above 70 suggests the stock is overbought and might be due for a pullback. An RSI below 30 suggests the stock is oversold and might be due for a rebound. An RSI in between indicates a more neutral market condition.

AI-Generated Market Insights

Investment Report:

--- INVESTMENT REPORT ---

1. Volatility & Breakout Potential

- PEP exhibits moderate volatility, with an FVI of 0.553, suggesting a relatively stable regime. The Lyapunov score of 0.016 indicates low instability relative to the market, further reinforcing this stability.
- The Bollinger Bands are not showing significant expansion or contraction, suggesting a lack of strong momentum in either direction. The latest closing price within the Bollinger Bands range also indicates no strong breakout signal.
- The decrease in volume by -25.43% does not confirm any significant price moves, pointing towards a potential consolidation phase.

2. Market Sentiment

- The large market cap of PEP suggests a significant institutional presence, which is typically associated with more stable and predictable price movements. However, the decrease in volume could suggest a lack of conviction amongst these institutional investors.

3. Geopolitical Risk Assessment

- PEP, being a consumer defensive sector company, may have limited direct exposure to gold, FX, and TWI volatility. However, indirect impacts such as changes in consumer behavior due to economic uncertainty could affect PEP.
- The company's exposure to energy price shocks and trade instability is likely to be moderate given its sector and business model.

4. Sector and Supply Chain Exposure

- PEP, as a food and beverage company, may face potential risks from volatile agricultural commodity prices and disruptions in logistics. However, its diversified supply chain and global market presence may help mitigate some of these risks.

4. Strategy Recommendation

- Given the current metrics, PEP appears to be in a consolidation phase, with low volatility and no strong breakout signals.
- The optimal strategy would be to wait for more definitive signals before making a decision. The current lack of volume and breakout signals suggest a potential risk of a false breakout.

--- FINAL TAKEAWAY ---

PEP exhibits moderate volatility and is currently in a consolidation phase with no strong breakout signals. Despite potential geopolitical risks and supply chain disruptions, PEP's diversified global presence may provide some level of resilience. However, the decrease in volume suggests a lack of conviction amongst investors. Therefore, a wait-and-see approach would be prudent until more

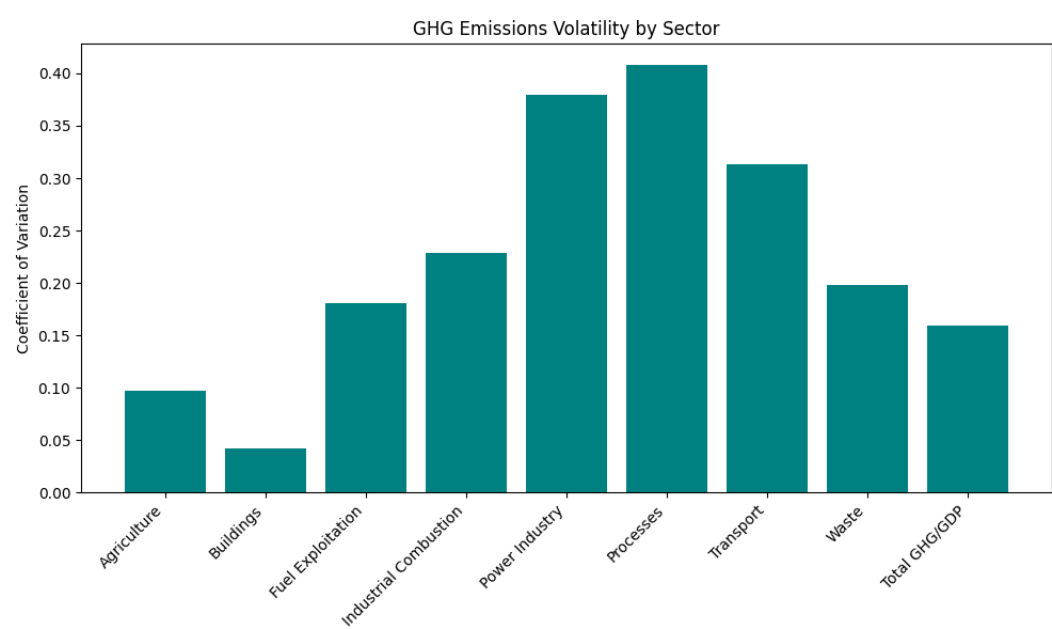
definitive signals emerge.

Market Capitalization: 187661091000, Industry: BEVERAGES - NON-ALCOHOLIC, Latest Volume: 6716299, Description: PepsiCo Inc, Sector: CONSUMER DEFENSIVE, Price to Book: 8.49, Trailing PE: 18.03, Forward PE: 15.97, Enterprise to Ebitda: 12.34, Enterprise to Revenue: 2.374, Profit Margins: 0.108

The trading volume has changed by -25.43% over the past week, indicating potential shifts in market sentiment. Please factor this into the volatility and risk analysis.

Beta measures stock volatility relative to the overall market: 0.37
Beta of 0.37 suggests low volatility compared to the market.

Volatility Indicators of GHG Emissions by Industry and GDP



No GHG score available for Consumer defensive sector.
Disclaimer: The Fractal Volatility Index (FVI) measures structural market instability, not short-term price direction. High FVI (red dot) does not necessarily indicate a price breakout—rather, it signals unpredictable price behavior and potential structural shifts. While market instability can precede significant moves in either direction, Verv Stock Reports do not predict price trends but offer insight into underlying volatility patterns. Investors should interpret FVI alongside fundamental and technical analysis before making decisions.

Stock Market Price Credibility Report

Analysis based on current global macroeconomic and geopolitical information.

Market_Price_Credibility_Analysis:

```
{  
  "Final_Score": 0.373,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.056,  
  "Deception_Risk": 0.769,  
  "Trumperry_Alert": true,  
  "Summary": "Tariffs are up, rates are down, and gravity no longer applies."  
}
```

Rationale:

The NRDl is set at 0.7, indicating a significant disconnect between the economic narratives and the underlying fiscal, monetary, and geopolitical realities.

The rising U.S. debt and deficit levels are often downplayed in economic narratives, despite posing substantial long-term risks. Similarly, changes in U.S. Treasury bond yields and issuance, coupled with reports of declining foreign demand for U.S. bonds, suggest a shift in global confidence in the U.S. economy that's not reflected in mainstream narratives.

Central bank interventions, such as rate cuts and QE, are often portrayed as necessary measures to stimulate the economy, but they can also distort market signals and contribute to asset bubbles. The use of tariffs and sanctions as economic tools is often justified in terms of national security or trade fairness, but the economic costs and potential for retaliation are frequently understated.

The gap between inflation and official interest rate policy suggests that central banks may be prioritizing other objectives, such as employment or growth, over price stability. This could lead to higher inflation in the future, which is often not factored into economic forecasts.

The influence of BRICS+ and de-dollarization trends is often overlooked, despite the potential for these developments to reshape the global economic landscape.

Finally, the volatility of gold and its use as a geopolitical hedge suggest that investors are concerned about potential risks that are not reflected in mainstream economic narratives.

The Trumperry Alert is set to true, indicating that manipulative or performative policymaking is evident. This is reflected in the satirical summary: "If you believe this is market forces, we've got a bridge to sell you." This suggests that the current state of the markets may be more a result of policy interventions and geopolitical maneuvering than of underlying economic fundamentals.

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Deception Risk:

Between 0 and .2, markets appear fundamentally sound, no price distortion.

Between .2 and .4 there may be some irrationality or manipulation. Caution is advised.

Between .4 and .6 there are signals of disconnect between narratives and reality.

Between .6 and .8 distortions mean possible financial gaslighting.

Between .8 and 1 signals a confidence scam - you are being sold a bridge.

What Price Credibility Sell You a Bridge Index captures:

Price to Volume Divergence PVD.' When price rises while volume drops is suspicious behavior.

A Narrative Reality Dislocation Index NRDl is an Al score for disconnect between corporate statements and underlying fundamentals.

A Volatility Persistence Score VPI. When volatility indicators stay low despite geopolitical/economic chaos.

The Macro Score includes Tariff Impact Denial. High tariffs plus high exposure plus rising stock. This may be a trumpery illusion alert.

Treasury Detector TFD Liquidity Masking Metric. Fed/Treasury injections may be affecting retail activity or debt spreads.

The Media Sentiment Mismatch is included. This is where news tone is contrary to actual market data (e.g. bullish despite bond collapse).

Note: Trumpery derives from a French word meaning to deceive, in many dictionaries showy but worthless.

_____ **END OF REPORT** _____