

Fractal Volatility Index for PEP : 0.521. Market Wide FVI:0.478

(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)

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



Verv Stock Analysis Report: PepsiCo Inc PEP FVI 0.521

Analysis Period: 2021-10-02 to 2026-10-02

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

Breakout Probability Score (BPS): 1.182

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: 0.521 (Fractal Volatility Index FVI)

DFA Result: 0.5307 (Detrended Fluctuation Analysis)

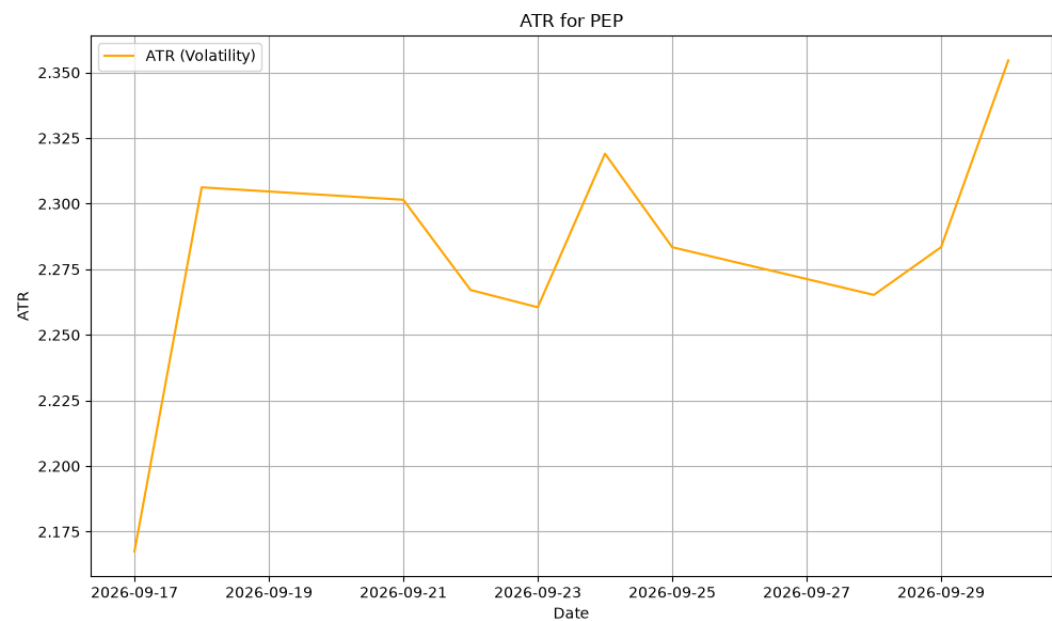
Lyapunov Exponent: 0.0159 (Measures chaos and predictability)

Hurst Exponent: 0.5168 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 126.72 is within the Bollinger Bands range (124.82 - 141.93).
Latest ATR: 2.3546

Average True Range (ATR)



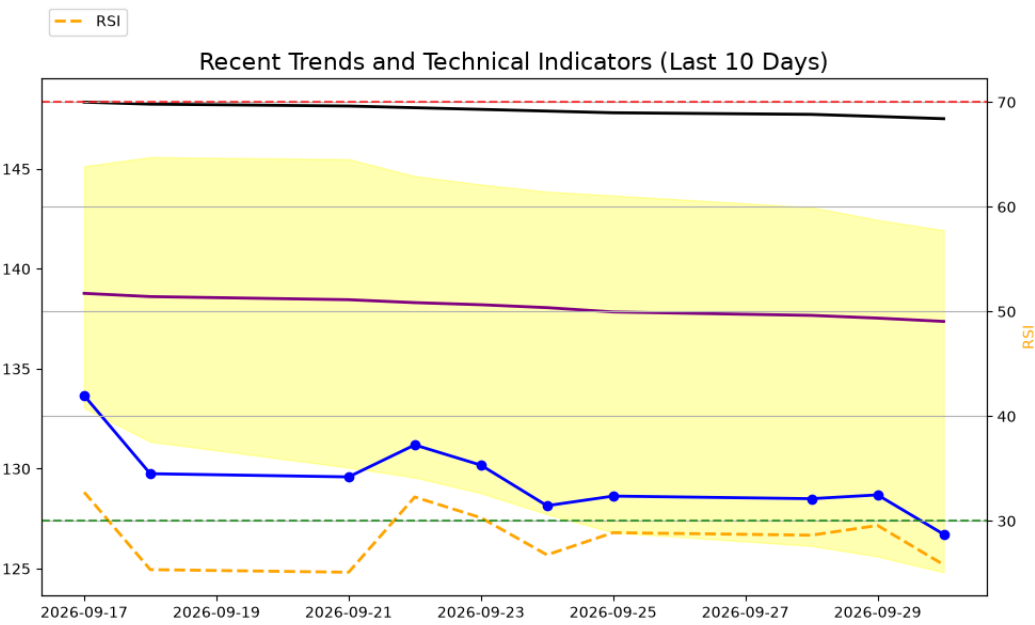
The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

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

Technical Indicators

Technical indicators are based on historical price and volume data used in technical analysis to forecast financial market direction. They help identify trends, momentum, volatility, and potential entry and exit points in the market.

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 Executive Assessment

1. Volatility Structure

The Fractal Volatility Index (FVI) for PepsiCo Inc. stands at 0.521, which is slightly higher than the market-wide FVI of 0.478. This indicates a slightly higher level of structural instability for PEP compared to the broader market. The Lyapunov Exponent is at 0.0159, and without a set threshold or historical comparison, it's challenging to interpret its significance. The Hurst Exponent, at 0.5168, is marginally above 0.5, which may suggest some level of persistence in the stock's price series, but the evidence is weak. The DFA value of 0.5306 doesn't independently predict any future breakout or price direction.

2. Breakout Evidence

The Breakout Probability Score (BPS) for PEP is 1.18, which does not provide a strong signal for a possible breakout. The latest closing price of \$126.72 is within the Bollinger Bands range (\$124.82 - \$141.93), further affirming the lack of strong breakout evidence.

3. Participation and Technical Context

There's been a 19.97% change in volume, but without any additional context or comparison, it's hard to draw any conclusions from this. The stock's latest Average True Range (ATR) stands at 2.35, which is a measure of volatility but without a historical or price-normalised comparison, it's difficult to interpret this value.

4. Macro and Sector Context

The Gold FVI stands at 0.5936, which is higher than both the FX FVI (0.4343) and TWI FVI (0.4694), indicating greater structural instability in the gold market. Without any GHG score available for the Consumer Defensive sector or PepsiCo, it's not possible to comment on the company's exposure to emissions-related variability.

5. Risk Interpretation

The available evidence suggests moderate uncertainty for PEP, with a slightly higher level of structural instability compared to the broader market. However, there's no strong evidence of breakout potential or elevated instability.

6. Monitoring Implications

Given the current state of PEP, the Fractal Volatility Index (FVI), Hurst Exponent, and Breakout Probability Score (BPS) should continue to be monitored for any significant changes that could provide further insights into the stock's volatility structure and breakout potential.

FINAL TAKEAWAY

The analysis suggests moderate uncertainty for PepsiCo Inc., with a slightly elevated level of structural instability compared to the broader market but no strong evidence of breakout potential. The most important indicators to monitor going forward are the FVI, Hurst Exponent, and BPS, as changes in these could provide further insights into the stock's volatility structure and potential for a breakout.

Stock Information

Market Capitalization: 173099516000, Industry: BEVERAGES - NON-ALCOHOLIC, Latest Volume: 9812650, Description: PepsiCo Inc, Sector: CONSUMER DEFENSIVE, Price to Book: 8.3, Trailing PE: 16.61, Forward PE: 14.86, Enterprise to Ebitda: 12.12, Enterprise to Revenue: 2.331, Profit Margins: 0.108

The trading volume has changed by 19.97% 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: 0.36

Beta of 0.36 suggests low volatility compared to the market.

Stock Investment Character Report

Analysis based on supplied stock characteristics and market context.

Investment Character: Steady Operator

Resilience: 66%

Momentum: 18%

Structural Stress: 35%

Narrative Dependence: 25%

Confidence: 61%

Calculated Metrics:

- Price-Volume Divergence: 0.000

- Volatility Dissonance Index: 0.093

Evidence:

- Beta is below 1 and ATR falls within the 2 to 5 range defined as moderate.

Indicators: Beta=0.361, Latest ATR=2.3546

Supports: Resilience

- Company FVI indicates moderate structural volatility and is slightly above the market-wide FVI.

Indicators: Fractal Volatility Index=0.521, Market-wide FVI=0.478

Supports: Structural Stress

- No strong breakout signal detected and price remains within the stated Bollinger Bands.

Indicators: Breakout Probability Score=1.1818, Bollinger Bands range=124.82-141.93, Latest close=126.72

Supports: Momentum

- The company is profitable and multiple valuation metrics are provided alongside the profitability figure.

Indicators: Profit margin=0.108, Trailing P/E=16.61, Forward P/E=14.86, EV/EBITDA=12.12, EV/

Revenue=2.331, Price-to-book=8.3

Supports: Narrative Dependence

Assessment:

Evidence points to a steady profile: low market sensitivity (beta) and moderate recent trading range support operational steadiness. Structural instability is indicated as moderate by FVI, not severe. No strong breakout is present, so momentum is unconfirmed. Profitability and stated valuation metrics suggest pricing is grounded in operating evidence rather than a purely narrative premium.

Limitations:

- Growth, cash flow, and balance-sheet leverage data are not supplied, limiting assessment of durability.

- ATR lacks historical context relative to the stock's own range.

- Breakout Probability Score has no provided threshold scale for strength interpretation.

- EPS values are listed as zero, providing no per-share context.

Medium-Term Fit:

May fit an independent thesis seeking lower-beta, consumer-defensive exposure with positive profitability and moderate structural volatility, prioritizing steadier earnings characteristics over breakout-driven returns.

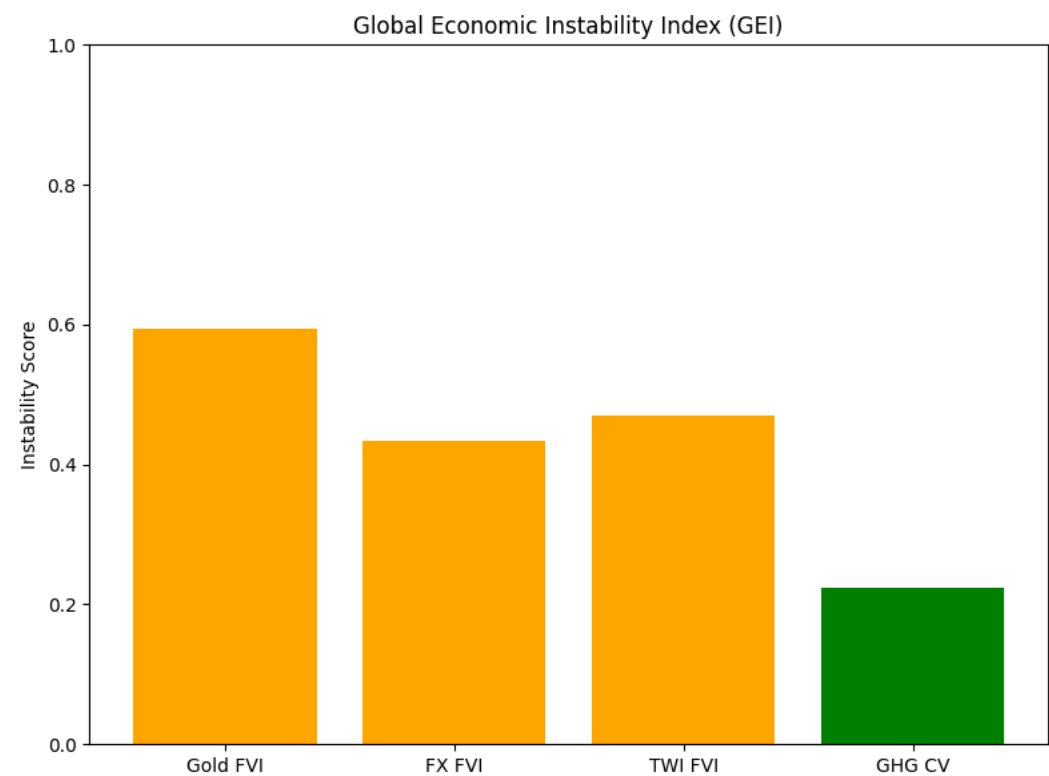
Fractal Volatility Indices

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

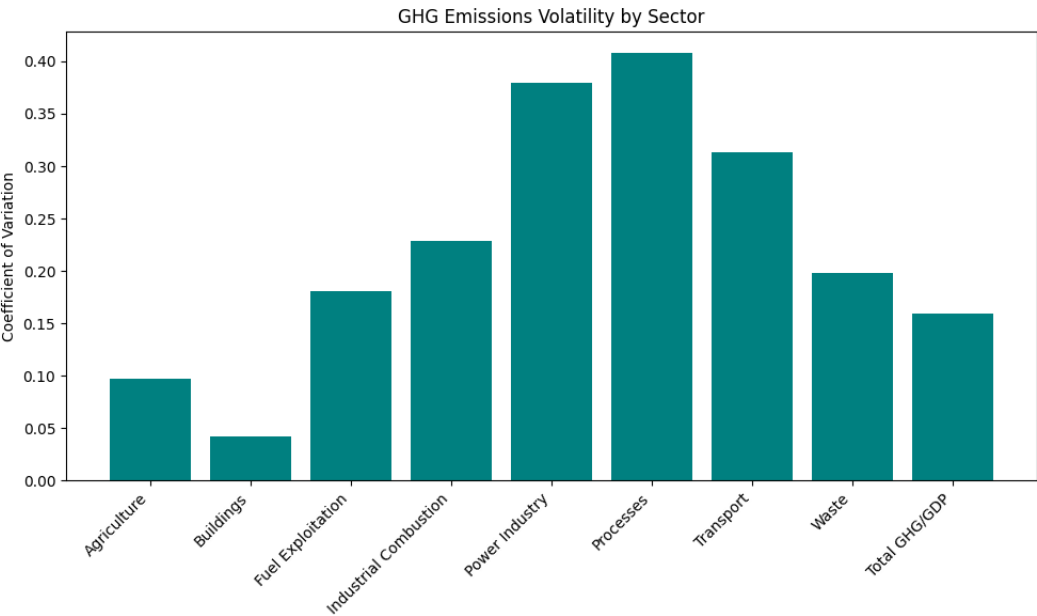
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Moderate FX volatility indicates ongoing currency-market adjustment
FVI_TWI: 0.469352 => Moderate trade-weighted volatility indicates some external-sector adjustment
GHG_CV: 0.223036 => Moderate GHG sector variability indicates some sector-level carbon-risk dispersion

Primary Risk Driver: Gold volatility is a good proxy for global geopolitical risk. 0.593608.

Global Geopolitical Volatility



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.

_____END OF REPORT_____