

**Fractal Volatility Index for PEP : 0.569. 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 0.569

Analysis Period: 2021-04-29 to 2026-04-29

### 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): -0.935

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: 0.569 (Fractal Volatility Index FVI)

DFA Result: 0.5275 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0166 (Measures chaos and predictability)

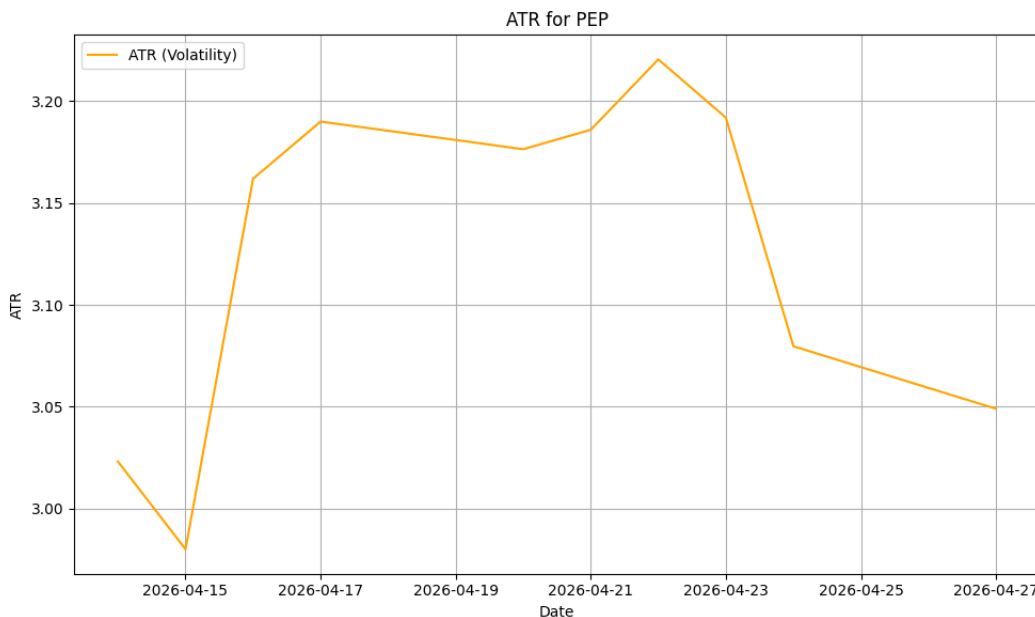
Hurst Exponent: 0.5149 (Indicates trending or mean-reverting behavior)

### Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 154.10 is within the Bollinger Bands range (153.09 - 158.56).

Latest ATR: 3.0490

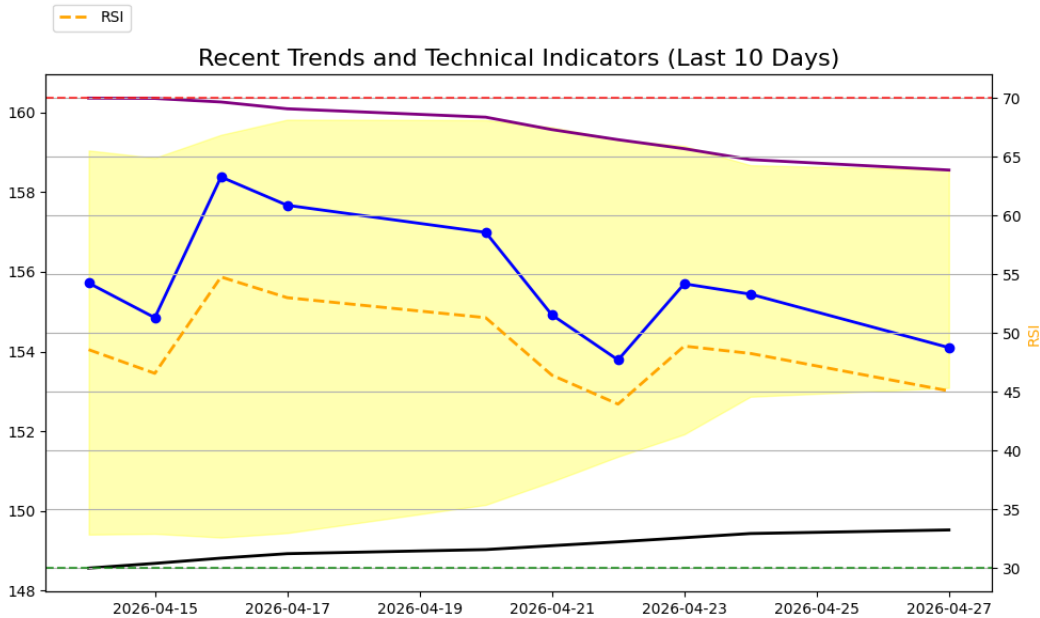
### Average True Range (ATR)



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's FVI of 0.569 suggests moderate volatility, with a Lyapunov of 0.017 indicating stability. The stock is not showing strong breakout signals, with the closing price within the Bollinger Bands range and a negative BPS. Volume change is negative, indicating a lack of strong price movement confirmation.

### 2. Market Sentiment:

The institutional-driven behavior suggests a cautious approach, possibly due to the current macroeconomic volatility.

### 3. Geopolitical Risk Assessment:

PEP's exposure to geopolitical risks is moderate. The company may face potential risks from global trade disruptions and currency volatility, as indicated by the high FX and TWI FVI. However, the company's sector (Consumer defensive) is not heavily dependent on energy, reducing its exposure to energy price shocks.

### 4. Sector and Supply Chain Exposure:

PEP operates in the Consumer defensive sector, which is less exposed to global input risks. However, as a global company, PEP may face some risks related to tariff exposure and supply-chain disruptions.

### 4. Strategy Recommendation:

Given PEP's moderate volatility and stability, a trend-following strategy seems appropriate. However, the lack of strong breakout signals and negative BPS suggest caution is warranted.

--- FINAL TAKEAWAY ---

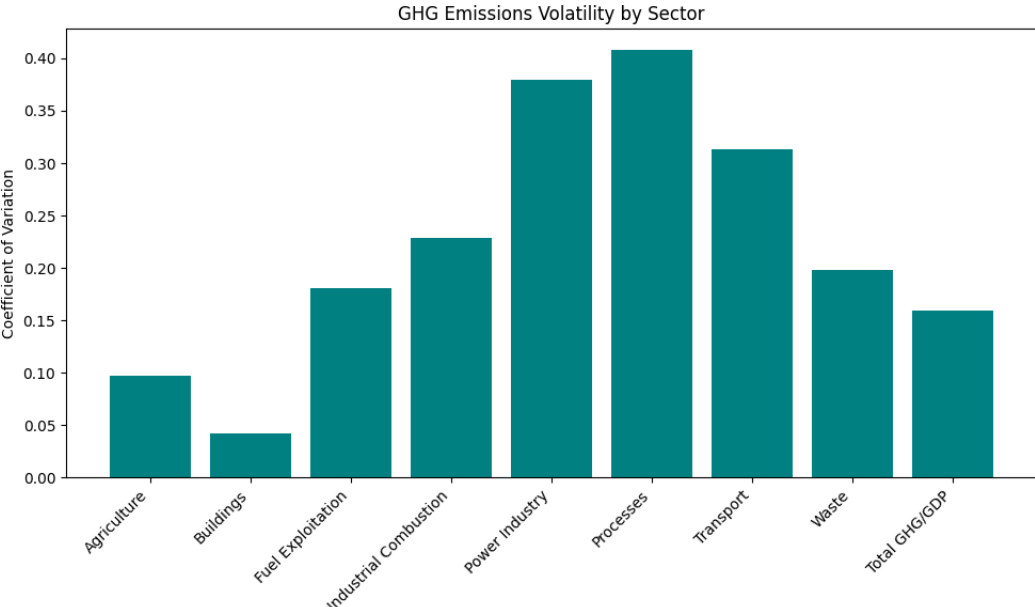
PEP shows stability amidst moderate volatility, but the lack of strong breakout signals and institutional caution suggest a conservative approach. "Stable but cautious—consider trend-following strategy with downside risk protection."

Market Capitalization: 212477297000, Industry: BEVERAGES - NON-ALCOHOLIC, Latest Volume: 4077005, Description: PepsiCo Inc, Sector: CONSUMER DEFENSIVE, Price to Book: 9.94, Trailing PE: 24.4, Forward PE: 18.05, Enterprise to Ebitda: 15.62, Enterprise to Revenue: 2.665, Profit Margins: 0.0915

The trading volume has changed by -28.86% 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: 0.41  
Beta of 0.41 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": 0.384,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.002,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "It's not inflation—it's patriotic price liberation."  
}
```

Justification:

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

The rising U.S. debt and deficit levels are unsustainable in the long run, yet the narrative that fiscal stimulus can indefinitely support the economy persists.

The 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 towards the U.S. economy. Yet, the narrative continues to emphasize the strength and resilience of the U.S. economy.

Central bank interventions like rate cuts and quantitative easing (QE) have created an artificial environment of low interest rates, distorting traditional market signals.

The use of tariffs and sanctions as economic tools has increased geopolitical tensions and trade uncertainties, yet the narrative often downplays these risks.

Inflation is rising faster than official interest rate policy, suggesting that the narrative of 'transitory' inflation may be misguided.

The BRICS+ influence and de-dollarization trends challenge the U.S. dollar's global dominance, yet the narrative remains largely U.S.-centric.

Gold volatility and geopolitical hedging indicate heightened market uncertainty and risk, yet the narrative often focuses on short-term market gains rather than long-term stability.

The Trumpery Alert is set to true due to the evident manipulation and performative policymaking, such as the use of tariffs and sanctions as economic tools, and the narrative downplaying the implications of rising inflation and debt levels.

The Satirical Summary, "If you believe this is market forces, we've got a bridge to sell you," underscores the gap between the economic narrative and the underlying realities.



## 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 NRDIndex is an AI 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** \_\_\_\_\_