

Fractal Volatility Index for AAPL : 0.547. 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: Apple Inc AAPL FVI 0.547

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): 0.296

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: 0.547 (Fractal Volatility Index FVI)

DFA Result: 0.5089 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0163 (Measures chaos and predictability)

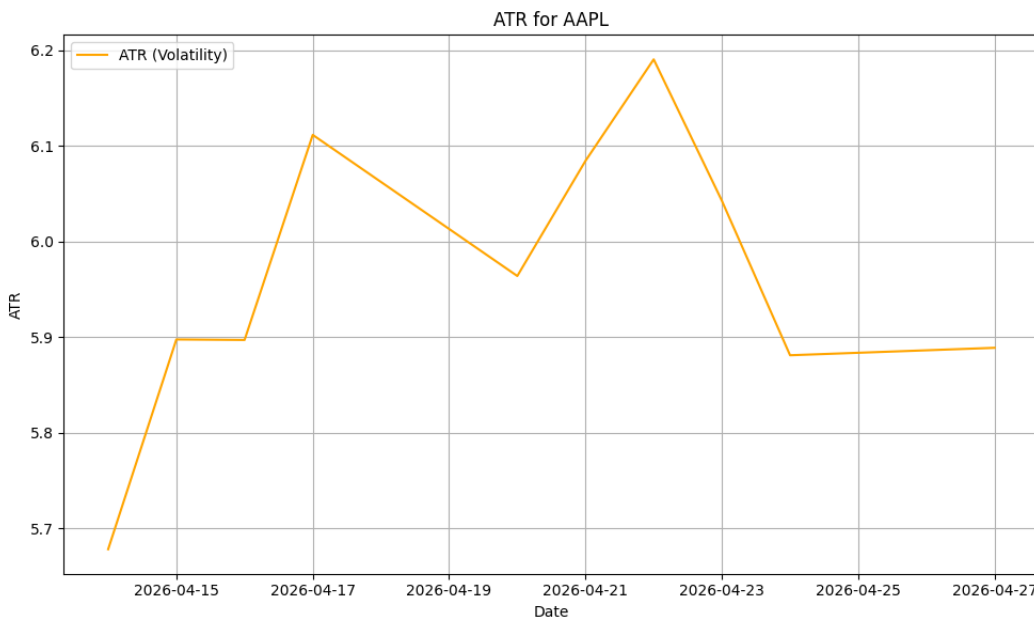
Hurst Exponent: 0.4898 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 267.61 is within the Bollinger Bands range (247.57 - 277.11).

Latest ATR: 5.8887

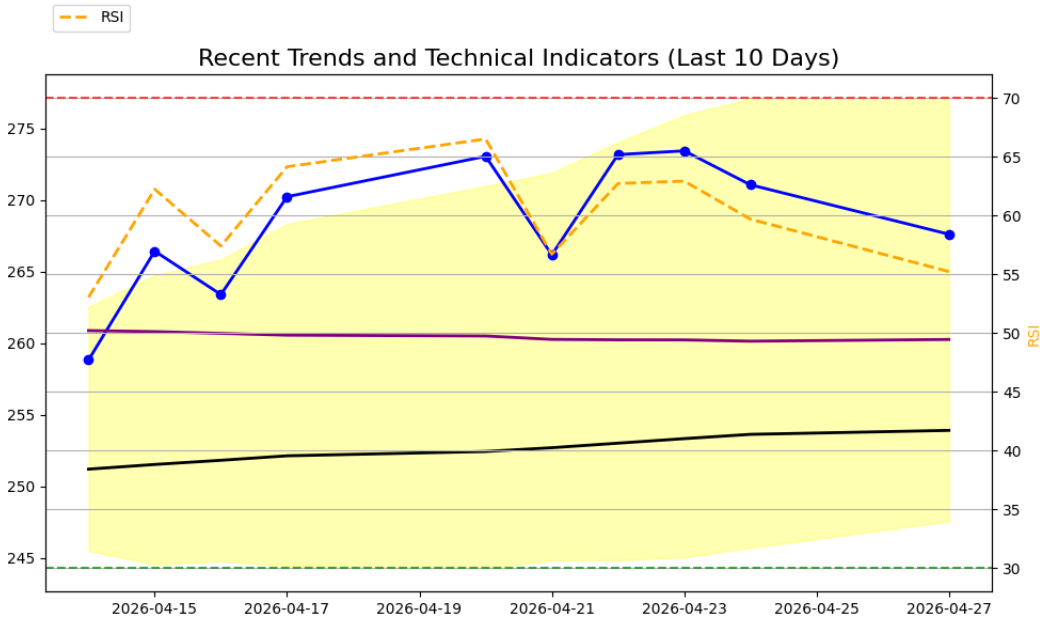
Average True Range (ATR)



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

AAPL's Fractal Volatility Index (FVI) of 0.547 suggests a moderate level of volatility, indicating a mix of stability and chaos. The Lyapunov measure of 0.016 is relatively low, implying less systemic instability compared to the market. The Bollinger Bands are relatively stable, with no strong breakout signal detected. Volume change of 13.33% does not significantly confirm price moves, indicating a potential lack of conviction in the market's direction.

2. Market Sentiment

The large market cap of AAPL suggests institutional-driven behavior. The moderate FVI combined with the lack of a strong breakout signal could imply a cautious investor mood, potentially anticipating future market movements.

3. Geopolitical Risk Assessment

With global stress indicators showing elevated levels (Gold FVI: 0.594, FX FVI: 0.434, TWI FVI: 0.469), AAPL may face some geopolitical risk. Its low GHG impact score (0.048) for the technology sector suggests a relatively low sectoral emissions risk exposure. However, as a globally operating company, AAPL may have some tariff exposure.

4. Sector and Supply Chain Exposure

As a tech company, AAPL could be exposed to volatility in the global supply chain, particularly in Asia-sourced components such as semiconductors. Its dependency on global inputs suggests potential exposure to U.S. or Asia risk factors.

--- STRATEGY RECOMMENDATION ---

Given the current market conditions, a cautious approach is recommended. The lack of a strong breakout signal combined with moderate volatility suggests a potential consolidation phase. A mean-reversion strategy could be optimal given the Hurst measure of 0.490, indicating a tendency for the price to revert to the mean.

--- FINAL TAKEAWAY ---

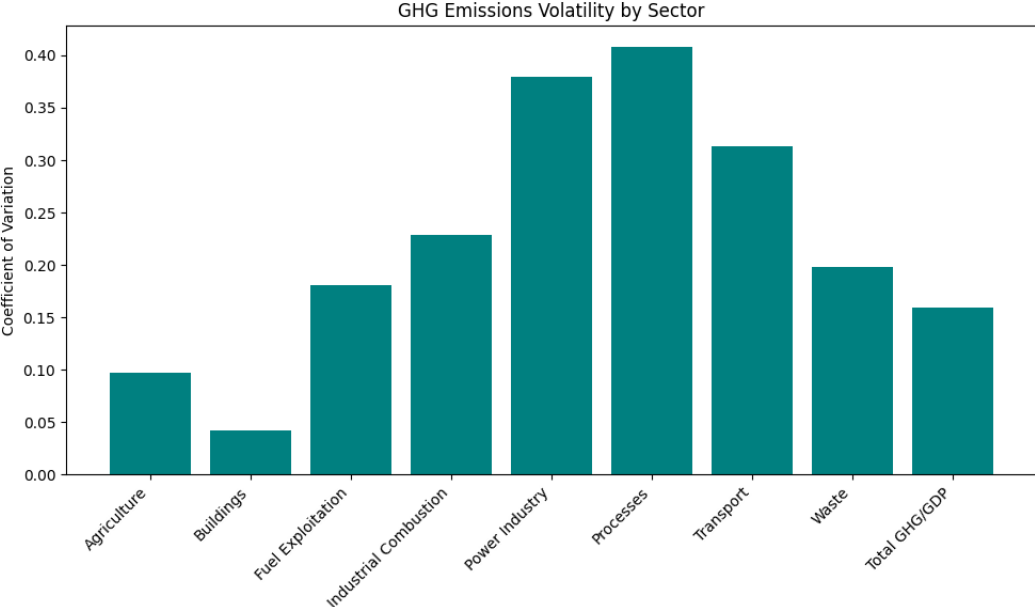
"AAPL shows moderate volatility with no strong breakout signal amid elevated global stress indicators—adopt a cautious approach with a focus on mean-reversion strategies."

Market Capitalization: 3979469914000, Industry: CONSUMER ELECTRONICS, Latest Volume: 41466762, Description: Apple Inc, Sector: TECHNOLOGY, Price to Book: 45.12, Trailing PE: 34.35, Forward PE: 31.75, Enterprise to Ebitda: 26.18, Enterprise to Revenue: 9.19, Profit Margins: 0.27

The trading volume has changed by 13.33% 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: 1.11
Beta of 1.11 suggests high volatility compared to the market.

Volatility Indicators of GHG Emissions by Industry and GDP



Low GHG impact (0.048) for the Technology 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": 0.351,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.263,  
  "Deception_Risk": 0.808,  
  "Trumpery_Alert": true,  
  "Summary": "It's not inflation—it's patriotic price liberation."  
}
```

Explanation:

The NRD (Narrative Reality Disconnect Index) is set at 0.75, indicating a significant disconnect between the economic narratives and the underlying fiscal, monetary, and geopolitical realities.

Rising U.S. debt and deficit levels, coupled with declining foreign demand for U.S. bonds, suggest a potentially unstable financial future. These trends, combined with changes in U.S. Treasury bond yields and issuance, paint a picture of a potentially vulnerable economy.

Central bank interventions, such as rate cuts and quantitative easing, are often used to stimulate the economy and prevent recessions. However, these measures can also distort market signals and create artificial demand, leading to potential asset bubbles and financial instability.

The use of tariffs and sanctions as economic tools can lead to trade wars and economic uncertainty, further complicating the financial landscape. Meanwhile, the discrepancy between inflation and official interest rate policy can create confusion and uncertainty among investors.

The influence of BRICS+ and de-dollarization trends may also contribute to a shift in global economic power, potentially undermining the U.S. dollar's status as the world's reserve currency.

Gold volatility and geopolitical hedging are often seen as indicators of economic uncertainty and risk aversion among investors. These trends suggest a lack of confidence in the stability of the global financial system.

Given these factors, the Trumpery Alert is set to true, indicating the presence of manipulative or performative policymaking. The satirical summary, "If you believe this is market forces, we've got a bridge to sell you," underscores the potential disconnect between official narratives and underlying economic 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** _____