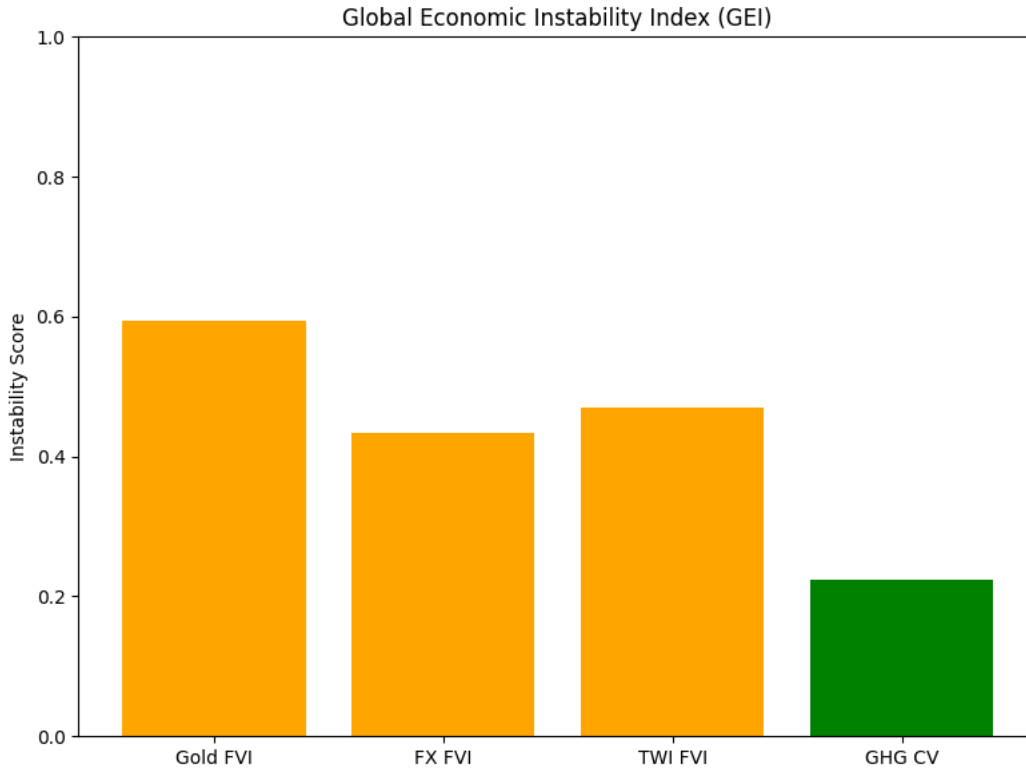


**Fractal Volatility Index for AAPL : 0.539. Market Wide FVI:0.478**  
(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)



## 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 0.539

Analysis Period: 2021-04-22 to 2026-04-22

### 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): 0.896

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: 0.539 (Fractal Volatility Index FVI)

DFA Result: 0.5029 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0163 (Measures chaos and predictability)

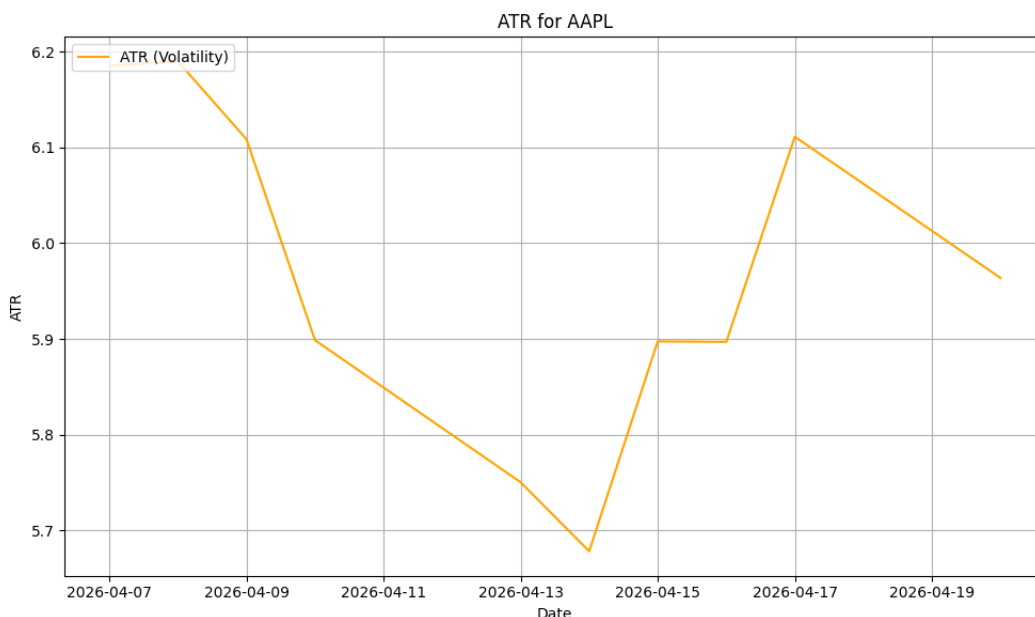
Hurst Exponent: 0.4928 (Indicates trending or mean-reverting behavior)

### Breakout & Recent Price Change Analysis

Breakout Statement: Potential positive breakout: The latest closing price of 273.05 is above the Bollinger Upper Band 270.98. This may indicate bullish momentum.

Latest ATR: 5.9638

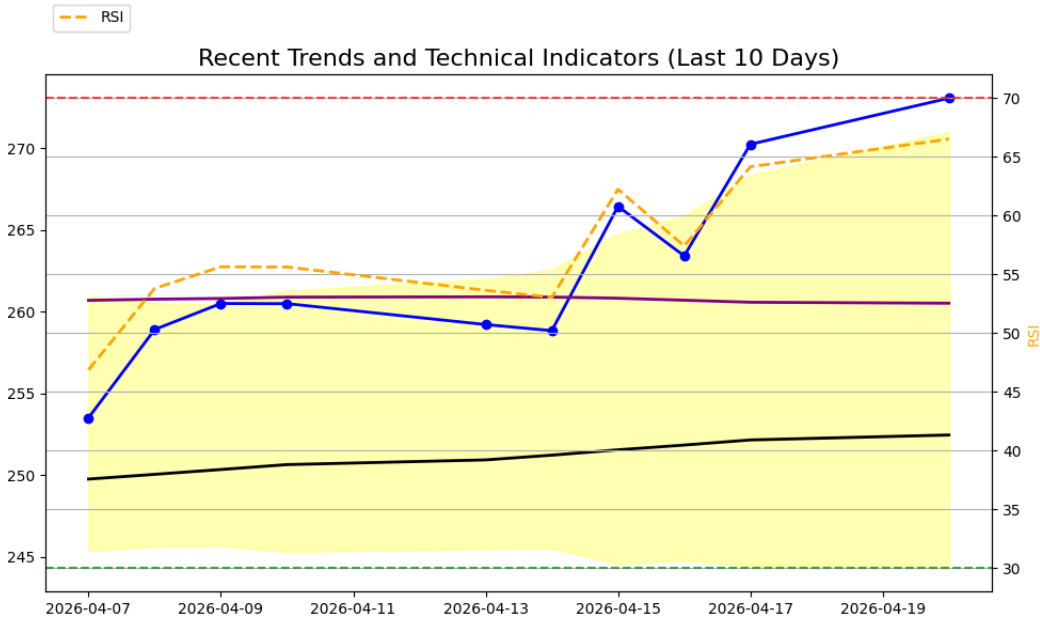
### Average True Range (ATR)



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) stands at 0.539, indicating a moderate level of volatility. The Lyapunov exponent is 0.016, suggesting the system is stable, and the Hurst exponent is 0.493, implying a mean-reverting behavior. The Bollinger Bands are expanding, indicating increased volatility, and the volume change (0.98%) confirms the price moves.

### 2. Market Sentiment

The market sentiment around AAPL appears to be driven by institutional behavior. The breakout signal and volatility dynamics suggest a bullish mood among investors.

### 3. Geopolitical Risk Assessment

AAPL's sector sensitivity score of 0.04825 suggests a relatively low exposure to energy, transport, and emissions volatility. However, given the elevated global FVI indicators, AAPL might face some risks associated with global stress, particularly if it is highly globalized or supply-chain dependent.

### 4. Sector and Supply Chain Exposure

As a company in the tech sector, AAPL might be exposed to risks associated with Asia-sourced components such as semiconductors. Moreover, given the current geopolitical climate and potential for trade disruptions, AAPL could face increased costs and supply chain issues.

--- STRATEGY RECOMMENDATION ---

Given the current market signals, AAPL appears to be in a consolidation phase. The optimal strategy would be mean-reversion, given the Hurst exponent's indication. However, the breakout signal suggests that a breakout might be imminent.

--- FINAL TAKEAWAY ---

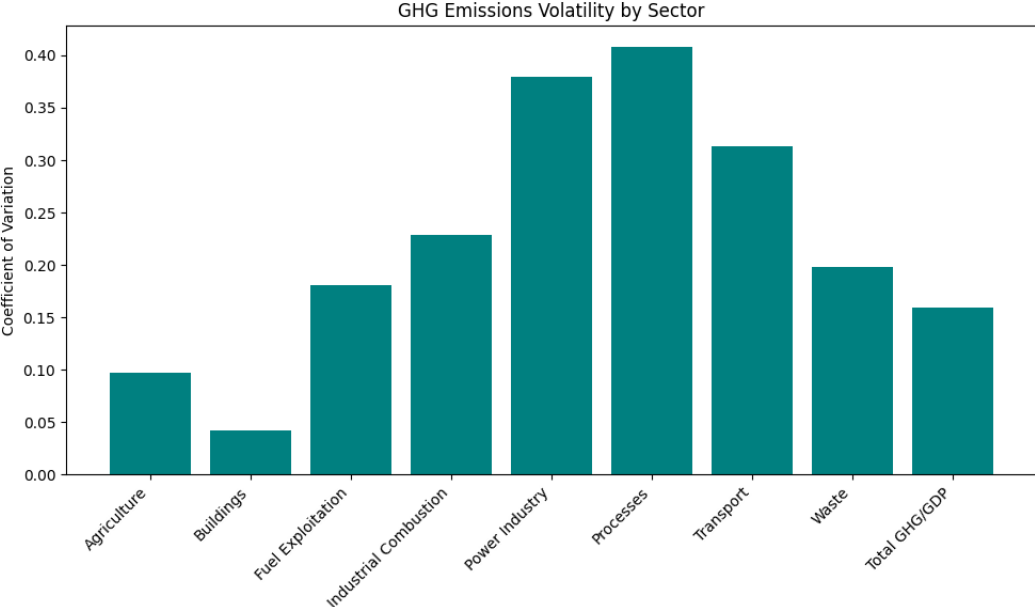
Despite the moderate volatility and geopolitical risks, AAPL shows strong institutional-driven behavior and potential for positive breakout. However, investors should remain cautious due to potential supply chain disruptions and global stress. The recommendation would be: "Moderate volatility with potential for breakout—position cautiously."

Market Capitalization: 4013268402000, Industry: CONSUMER ELECTRONICS, Latest Volume: 36590169, Description: Apple Inc, Sector: TECHNOLOGY, Price to Book: 44.99, Trailing PE: 34.61, Forward PE: 31.65, Enterprise to Ebitda: 26.1, Enterprise to Revenue: 9.16, Profit Margins: 0.27

The trading volume has changed by 0.98% 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": 0.322,  
  "Price_Volume_Divergence": 0.001,  
  "Volatility_Dissonance_Index": -0.313,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "Welcome to the economy where logic took early retirement."  
}
```

Explanation:

The NRDl score of 0.7 suggests that there is a significant disconnect between the economic narratives and the underlying fiscal, monetary, and geopolitical realities. The rising U.S. debt and deficit levels, changes in U.S. Treasury bond yields and issuance, and reports of declining foreign demand for U.S. bonds suggest a divergence between the economic narrative of robust growth and the fiscal realities.

Central bank interventions, including rate cuts and quantitative easing, have been used to stimulate the economy, but these measures may not be sustainable in the long term. The use of tariffs and sanctions as economic tools has created uncertainty and volatility in the global markets, further contributing to the disconnect between the narrative and reality.

The disconnect is also evident in the inflation versus official interest rate policy. While inflation has remained relatively low, the official interest rate policy has been used as a tool to stimulate the economy, potentially leading to asset bubbles and financial instability.

The influence of BRICS+ and de-dollarization trends have also contributed to the disconnect, as these trends challenge the dominance of the U.S. dollar and potentially disrupt global financial markets.

The volatility in gold prices and geopolitical hedging further underscore the disconnect between the economic narratives and the underlying realities. These factors suggest a level of uncertainty and risk that is not reflected in the economic narrative.

The Trumpery Alert is set to true, indicating that there is evidence of manipulative or performative policymaking. The Satirical Summary, "If you believe this is market forces, we've got a bridge to sell you," reflects this manipulation and the disconnect between the narrative and reality.

## 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** \_\_\_\_\_