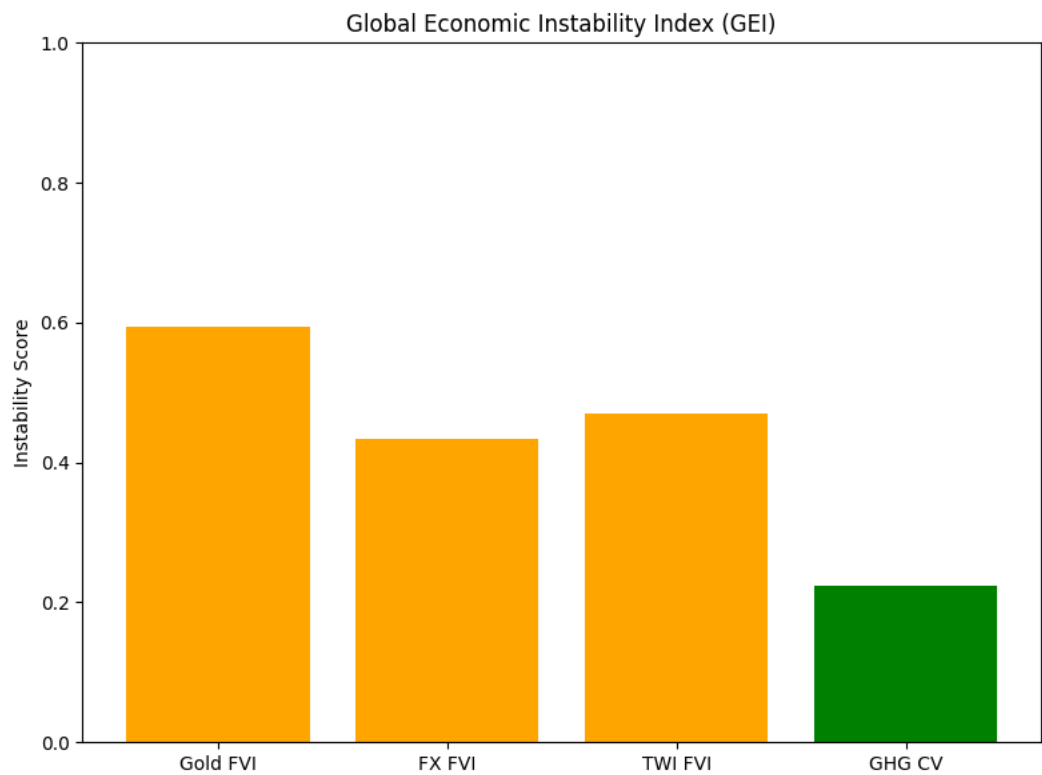


Fractal Volatility Index for MSFT : 0.530. Market Wide FVI:0.478
(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)



Global Geopolitical Volatility



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

Verv Stock Analysis Report: Microsoft Corporation MSFT FVI 0.530

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): -0.788

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

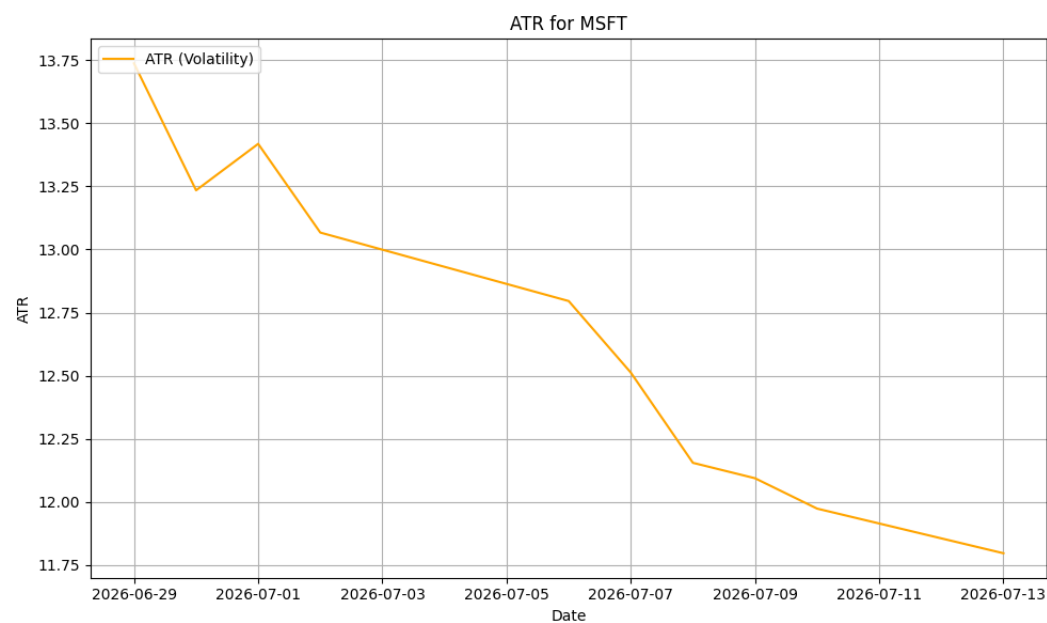
Fractal & Statistical Analysis

FVI Score: 0.530 (Fractal Volatility Index FVI)
DFA Result: 0.4872 (Detrended Fluctuation Analysis)
Lyapunov Exponent: 0.0163 (Measures chaos and predictability)
Hurst Exponent: 0.5147 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 390.99 is within the Bollinger Bands range (358.20 - 402.89).
Latest ATR: 11.7970

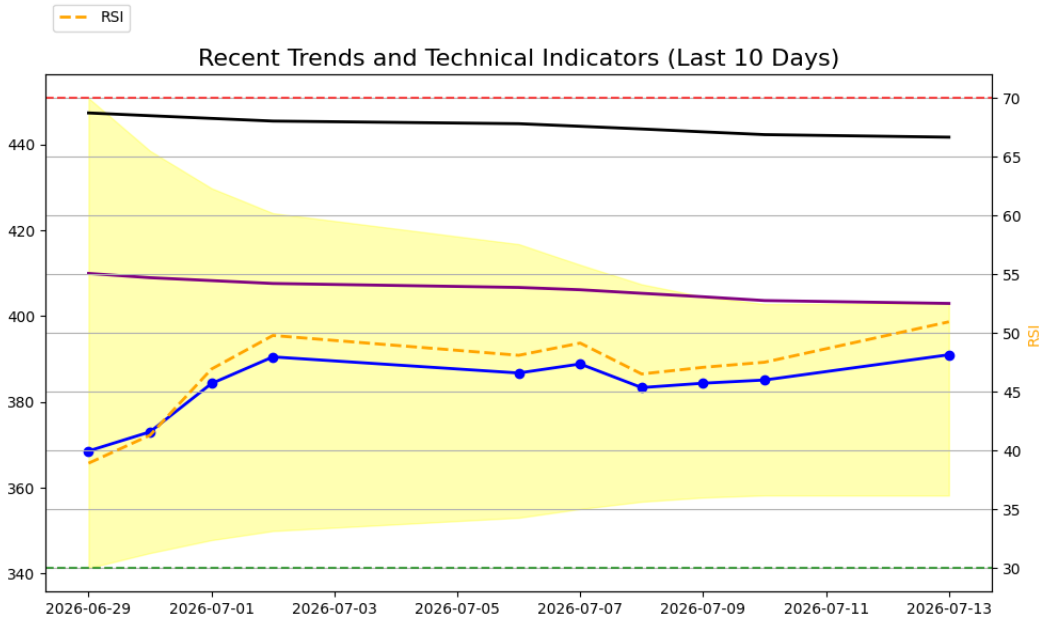
Average True Range (ATR)



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

- MSFT exhibits moderate volatility with a Fractal Volatility Index (FVI) of 0.530, suggesting a relatively stable regime. The Lyapunov exponent of 0.016 indicates minimal chaos or instability in the system.
- The stock's Breakout Potential Score (BPS) of -0.788 and lack of strong breakout signals suggest that the stock is unlikely to experience a significant price surge in the near future.
- The contraction in volume by -15.51% does not confirm the price moves, indicating a lack of momentum.

2. Market Sentiment

- The market sentiment leans towards institutional-driven behavior, suggesting a possible slow-down in price movements and less likelihood of sudden price shifts.

3. Geopolitical Risk Assessment

- Given the technology sector's low GHG impact score of 0.048, MSFT has a low exposure to sectoral emissions risk.
- The company's global footprint and reliance on global supply chains, however, mean it could be affected by trade disruptions, as indicated by the elevated TWI FVI of 0.469.

4. Sector and Supply Chain Exposure

- As a tech company, MSFT is likely to have some level of exposure to Asia or U.S. risk factors due to its reliance on global supply chains for components.
- However, the company's diversified operations and strong balance sheet can potentially mitigate these risks.

--- STRATEGY RECOMMENDATION ---

Given the lack of strong breakout signals and the contraction in trading volume, the optimal strategy for MSFT at this time may be a mean-reversion strategy. Investors should exercise caution due to the potential for trade disruptions and the current bearish market-wide volatility regime.

--- FINAL TAKEAWAY ---

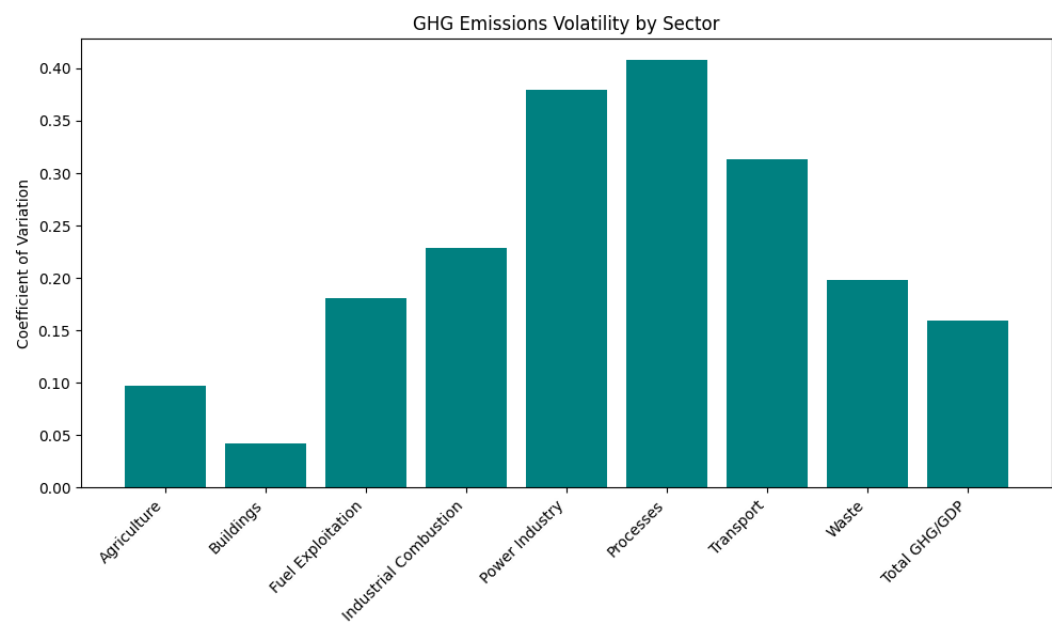
"Amidst the bearish market-wide volatility regime and potential trade disruptions, MSFT presents a stable investment with low breakout potential. Exercise caution and consider a mean-reversion strategy."

Market Capitalization: 2860690440000, Industry: SOFTWARE - INFRASTRUCTURE, Latest Volume: 28914877, Description: Microsoft Corporation, Sector: TECHNOLOGY, Price to Book: 6.9, Trailing PE: 22.94, Forward PE: 19.8, Enterprise to Ebitda: 14.28, Enterprise to Revenue: 8.92, Profit Margins: 0.393

The trading volume has changed by -15.51% 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: 1.13
Beta of 1.13 suggests high volatility compared to the market.

Volatility Indicators of GHG Emissions by Industry and GDP



Low GHG impact (0.048) for theTechnology 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": 0.223,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.807,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "Rates are low, truth is lower."  
}
```

The NRD (Narrative Reality Disconnect Index) is at 0.7, indicating a significant disconnect between economic narratives and underlying fiscal, monetary, and geopolitical realities. This is largely due to the rising U.S. debt and deficit levels, which are not sustainable in the long run.

The changes in U.S. Treasury bond yields and issuance, along with reports of declining foreign demand for U.S. bonds, suggest that the market is losing confidence in the U.S. government's ability to manage its finances.

Furthermore, central bank interventions such as rate cuts and quantitative easing (QE) are distorting market signals and contributing to asset bubbles. The use of tariffs and sanctions as economic tools is causing economic uncertainty and disrupting global trade.

The disparity between inflation and official interest rate policy is another cause for concern, as it indicates that the Federal Reserve may be behind the curve in terms of managing inflation.

The growing influence of BRICS+ countries and their efforts to de-dollarize their economies are also undermining the U.S. dollar's status as the world's reserve currency.

Lastly, the volatility in the gold market and the use of gold as a geopolitical hedge suggest that investors are increasingly concerned about geopolitical risks.

The Trumpery Alert is set to true, indicating that manipulative or performative policymaking is evident. The satirical summary, "If you believe this is market forces, we've got a bridge to sell you," captures the essence of this situation.

.

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** _____