

Fractal Volatility Index for MSFT : 0.541. 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 0.541

Analysis Period: 2021-06-17 to 2026-06-17

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): 0.149

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: 0.541 (Fractal Volatility Index FVI)

DFA Result: 0.4951 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0164 (Measures chaos and predictability)

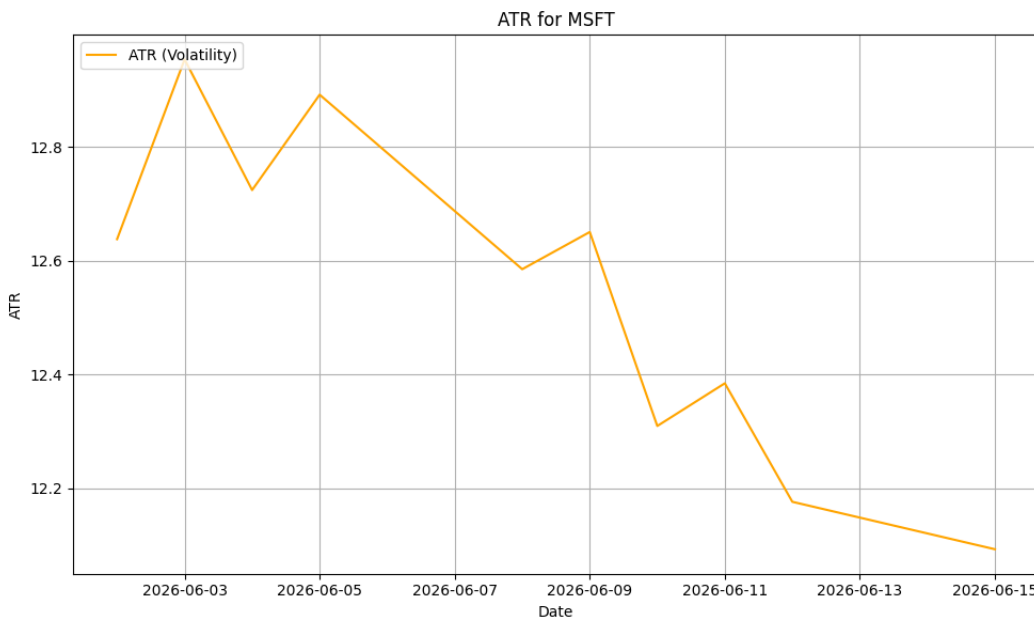
Hurst Exponent: 0.4914 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 399.76 is within the Bollinger Bands range (383.30 - 453.99).

Latest ATR: 12.0934

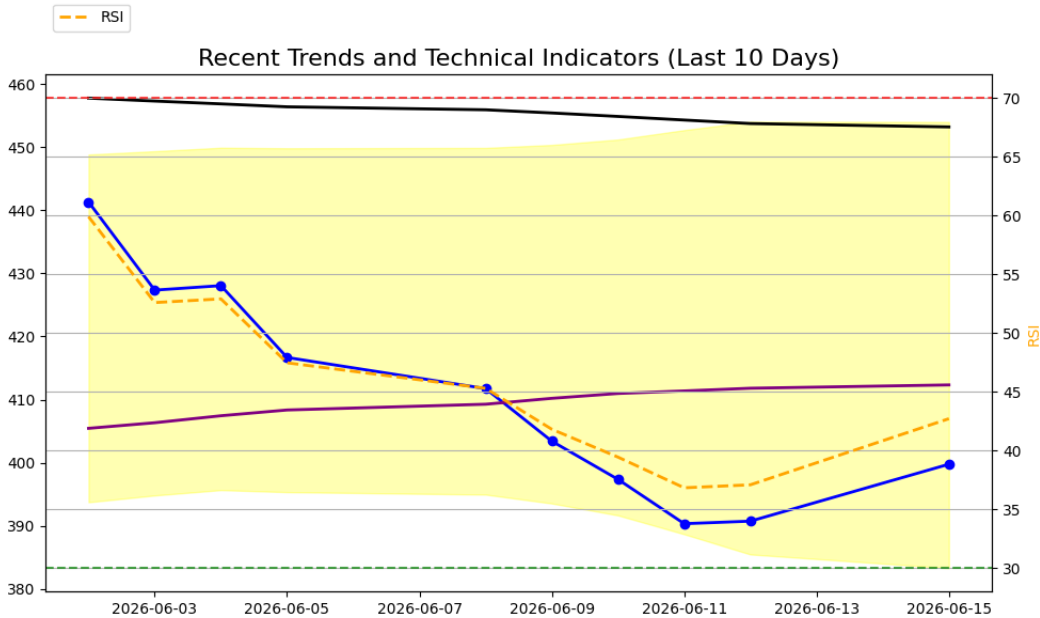
Average True Range (ATR)



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 appears to be in a regime of relative stability with a Fractal Volatility Index (FVI) of 0.541, indicating moderate volatility. The Lyapunov measure of 0.016 indicates less system chaos and instability compared to market-wide values, suggesting a more stable environment for MSFT.
- The Breakout Potential Score (BPS) of 0.149 and the absence of a strong breakout signal within the Bollinger Bands range suggest that the stock is not currently in a breakout phase.
- The slight increase in stock volume change (0.56%) does not provide strong confirmation of price moves.

2. Market Sentiment

- The market sentiment for MSFT seems to be largely driven by institutional investors, as indicated by the high trading volume. The moderate volatility and lack of strong breakout signals suggest a cautious investor mood.

3. Geopolitical Risk Assessment

- The elevated market-wide FVI indicators, particularly the Gold FVI of 0.594, suggest increased geopolitical tension and potential market instability.
- As a technology sector company, MSFT has a low GHG impact score of 0.048, indicating lower risk exposure to sectoral emissions. However, as a global company, it may have exposure to tariff risks and global trade disruptions, as indicated by the high TWI FVI of 0.469.

4. Sector and Supply Chain Exposure

- MSFT, as a technology sector company, may have dependencies on Asia-sourced components such as semiconductors. This could expose it to risks associated with trade instability and supply chain disruptions.
- However, its low GHG impact score suggests a lower risk of exposure to energy price shocks or regulations related to climate change.

4. Strategy Recommendation

- Given the current market conditions and MSFT's metrics, a conservative strategy may be appropriate, focusing on downside risk protection rather than aggressive growth.
- The moderate volatility, absence of strong breakout signals, and elevated market-wide FVI suggest a cautious approach, potentially incorporating hedging strategies to manage risk.

--- FINAL TAKEAWAY ---

"MSFT shows moderate volatility and stability, with no strong breakout signals. However, elevated market-wide FVI indicators suggest potential market instability. Given the current market conditions, a

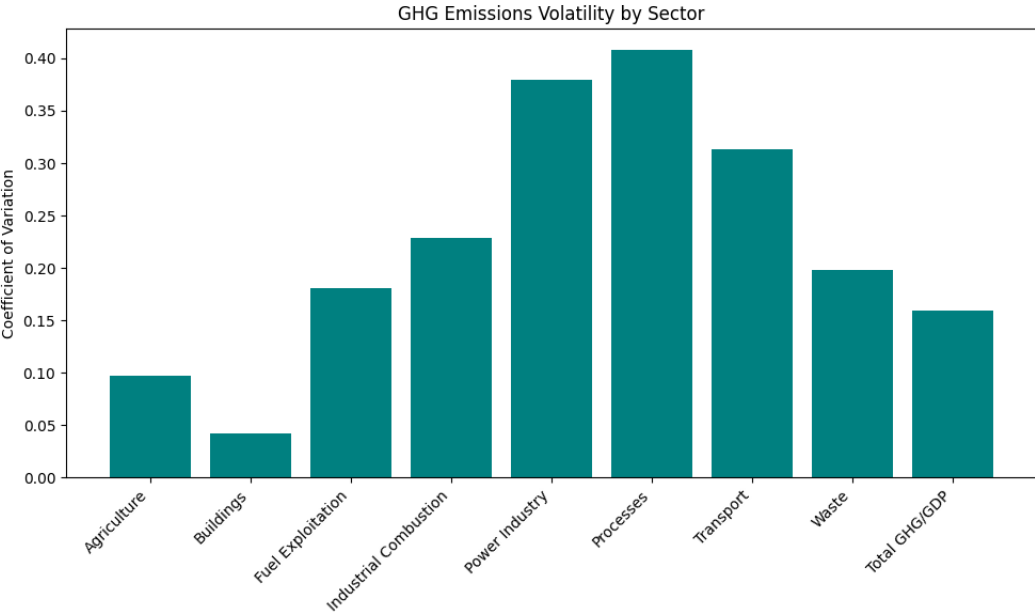
conservative investment strategy focusing on downside risk protection is recommended."

Market Capitalization: 2902586556000, Industry: SOFTWARE - INFRASTRUCTURE, Latest Volume: 32266437, Description: Microsoft Corporation, Sector: TECHNOLOGY, Price to Book: 7, Trailing PE: 23.26, Forward PE: 20.12, Enterprise to Ebitda: 14.49, Enterprise to Revenue: 9.05, Profit Margins: 0.393

The trading volume has changed by 0.56% 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: 1.10
Beta of 1.10 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": 0.236,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.743,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "Rates are low, truth is lower."  
}
```

The NRDl is rated 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, changes in U.S. Treasury bond yields and issuance, and reports of declining foreign demand for U.S. bonds. These factors suggest that the economic narrative of a strong U.S. economy is not fully supported by the underlying data.

The Trumpery Alert is set to true, as there are clear signs of manipulative or performative policymaking. Central bank interventions such as rate cuts and quantitative easing, as well as the use of tariffs and sanctions as economic tools, are indicative of this. Furthermore, the disconnect between inflation and official interest rate policy suggests that policy decisions may not be fully grounded in economic fundamentals.

The Satirical Summary, "If you believe this is market forces, we've got a bridge to sell you," underscores the extent of the disconnect between the economic narrative and the underlying realities. It suggests skepticism towards the idea that market forces alone are driving economic outcomes, hinting at the influence of policy interventions and geopolitical factors.

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** _____