

Fractal Volatility Index for TSLA : 0.416. 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: Tesla Inc TSLA FVI 0.416

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): 0.322

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: 0.416 (Fractal Volatility Index FVI)

DFA Result: 0.5453 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0144 (Measures chaos and predictability)

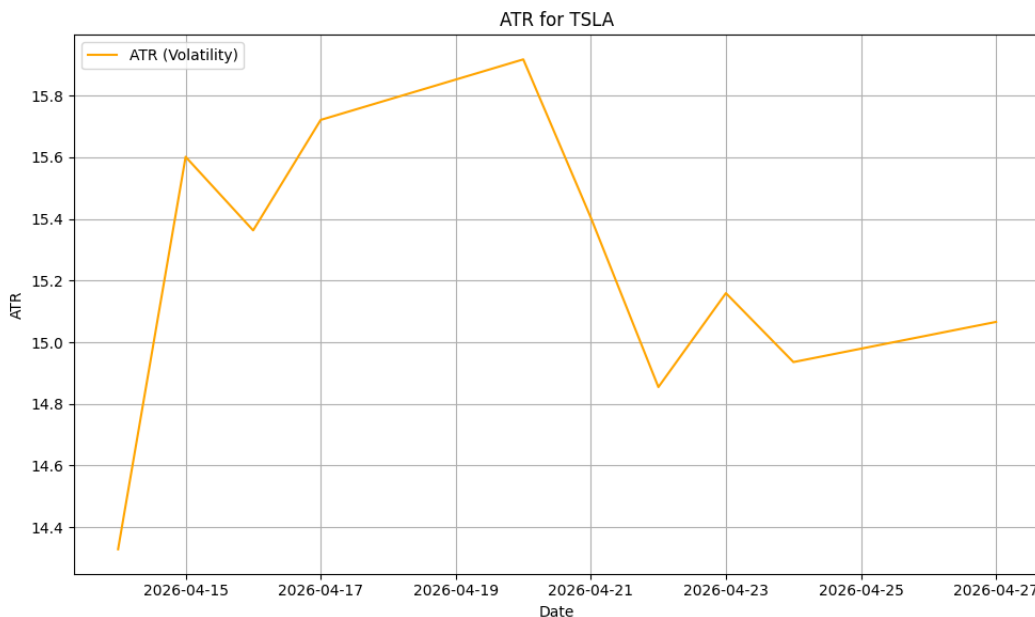
Hurst Exponent: 0.5574 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 378.67 is within the Bollinger Bands range (334.31 - 405.63).

Latest ATR: 15.0660

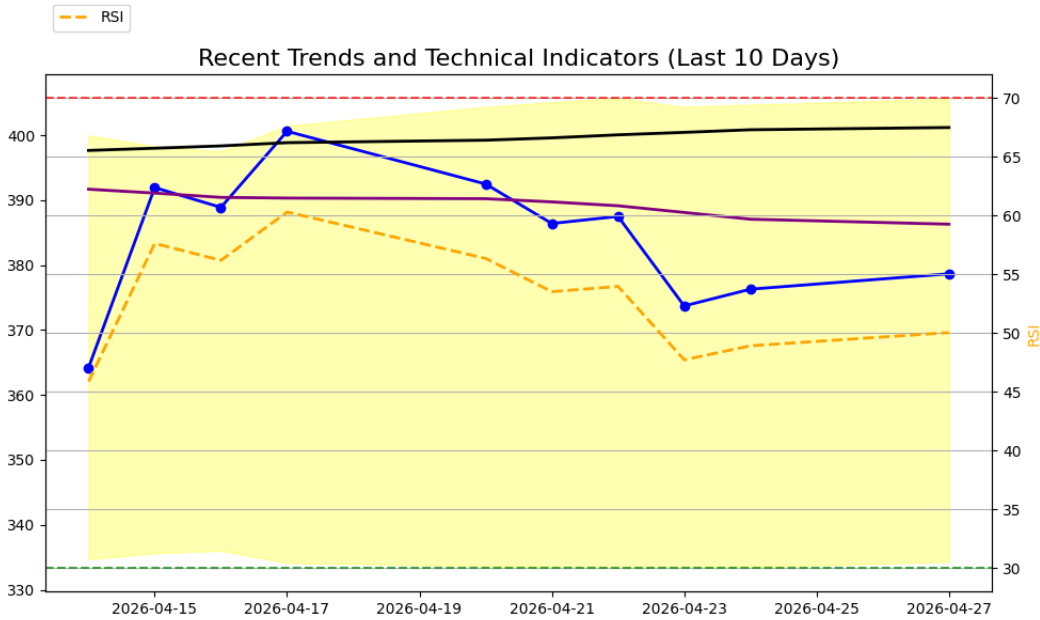
Average True Range (ATR)



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

TSLA shows a moderate level of volatility with an FVI of 0.416, suggesting a degree of market instability. The stock's Lyapunov value of 0.014 is relatively low, indicating less chaos and a more stable regime compared to market-wide values. The Bollinger Bands appear to be contracting, with no strong breakout signal detected. The volume change of 3.3% does not significantly confirm price moves, suggesting investor caution.

2. Market Sentiment

The market sentiment for TSLA appears to be driven by institutions, as suggested by the high value of 1413278859000. The lack of a strong breakout signal combined with moderate volatility suggests a cautious investor mood.

3. Geopolitical Risk Assessment

Given the high values of Gold, FX, and TWI FVI, TSLA may face significant geopolitical stress. As a key player in the EV market, TSLA is likely to have high exposure to global trade disruptions and potential tariff issues. The lack of a GHG score for the Consumer cyclical sector makes it challenging to assess its emissions risk exposure.

4. Sector and Supply Chain Exposure

TSLA, as a leading EV manufacturer, is likely to have significant dependencies on Asia-sourced components such as lithium and semiconductors. This puts the company at potential risk of supply-side inflation due to trade instability. The company's reliance on energy, both for its production processes and the operation of its products, also exposes it to the risk of fuel cost surges.

5. Strategy Recommendation

Given the current market conditions and TSLA's metrics, a trend-following strategy may be optimal. However, the lack of strong breakout signals and moderate volatility suggests that investors should proceed with caution.

--- FINAL TAKEAWAY ---

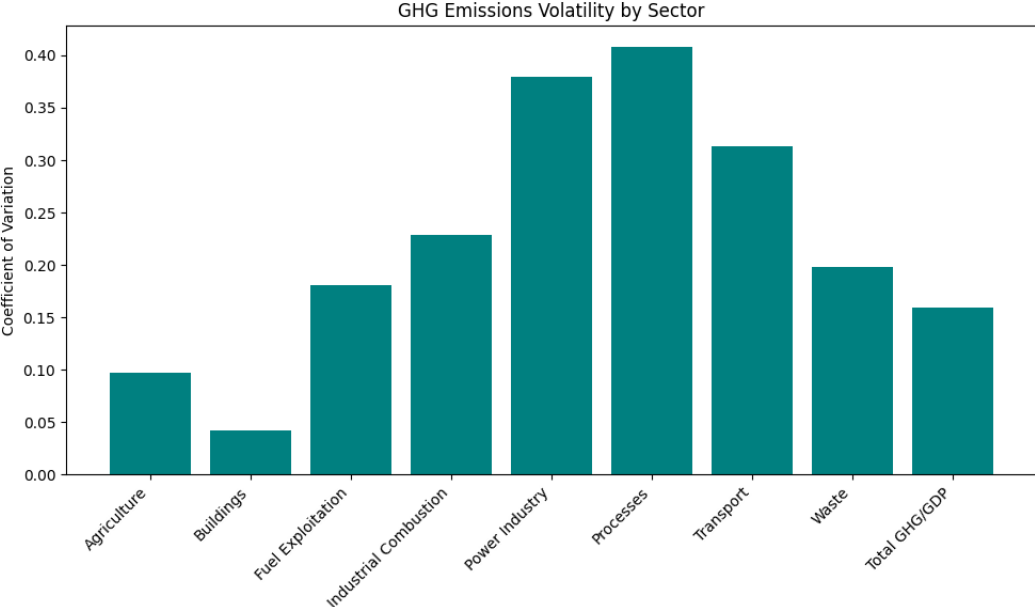
"Moderate volatility and geopolitical stress combined with potential supply chain risks suggest a cautious approach to TSLA. Trend-following strategy recommended, but be prepared for potential disruptions."

Market Capitalization: 1413278859000, Industry: AUTO MANUFACTURERS, Latest Volume: 66735816, Description: Tesla Inc, Sector: CONSUMER CYCLICAL, Price to Book: 16.8, Trailing PE: 345.23, Forward PE: 178.57, Enterprise to Ebitda: 114.73, Enterprise to Revenue: 14.14, Profit Margins: 0.0395

The trading volume has changed by 3.30% 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: 1.92
Beta of 1.92 suggests high volatility compared to the market.

Volatility Indicators of GHG Emissions by Industry and GDP



No GHG score available for Consumer cyclical 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": 0.185,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -1,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "Fiscal policy: now with 30% more denial!"  
}
```

Explanation:

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

The rising U.S. debt and deficit levels, coupled with changes in U.S. Treasury bond yields and issuance, suggest a challenging fiscal landscape. Reports of declining foreign demand for U.S. bonds further compound this issue.

Central bank interventions, such as rate cuts and quantitative easing, are typically used as tools to stimulate the economy. However, these tactics can also distort market dynamics and create an artificial sense of stability.

The use of tariffs and sanctions as economic tools, while not a new phenomenon, has been particularly pronounced in recent years. This approach can lead to trade disputes and economic uncertainty, which can further widen the disconnect between economic narratives and reality.

Inflation vs. official interest rate policy is another area where there can be a disconnect. If inflation is high but interest rates are kept low, this can erode the value of money and lead to economic instability.

The influence of BRICS+ and de-dollarization trends may be undermining the dominance of the U.S. dollar, which could have significant implications for the global financial system.

Gold volatility and geopolitical hedging are indicators of market uncertainty and risk aversion. If these indicators are high, it suggests that investors are concerned about the stability of the market.

The Trumpery Alert is set to true because there are signs of manipulative or performative policymaking. The Satirical Summary "If you believe this is market forces, we've got a bridge to sell you" is a tongue-in-cheek way of saying that the market dynamics seem to be influenced by factors other than pure market forces.

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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** _____