Fractal Volatility Index for XOM : 0.581. Market Wide FVI:0.478
(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)

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

Verv Stock Analysis Report: Exxon Mobil Corp XOM FVI 0.581

Analysis Period: 2021-08-13 to 2026-08-13

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

Breakout Probability Score (BPS): -0.054
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

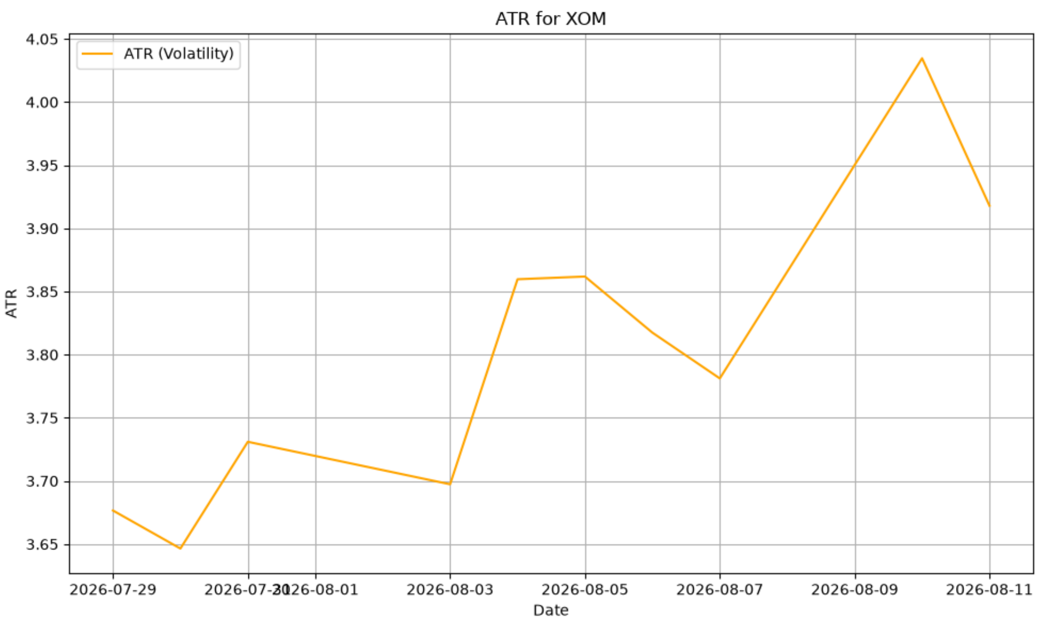
Fractal & Statistical Analysis

FVI Score: 0.581 (Fractal Volatility Index FVI)
DFA Result: 0.5016 (Detrended Fluctuation Analysis)
Lyapunov Exponent: 0.0170 (Measures chaos and predictability)
Hurst Exponent: 0.4732 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 159.80 is within the Bollinger Bands range (145.26 - 161.87).
Latest ATR: 3.9179

Average True Range (ATR)

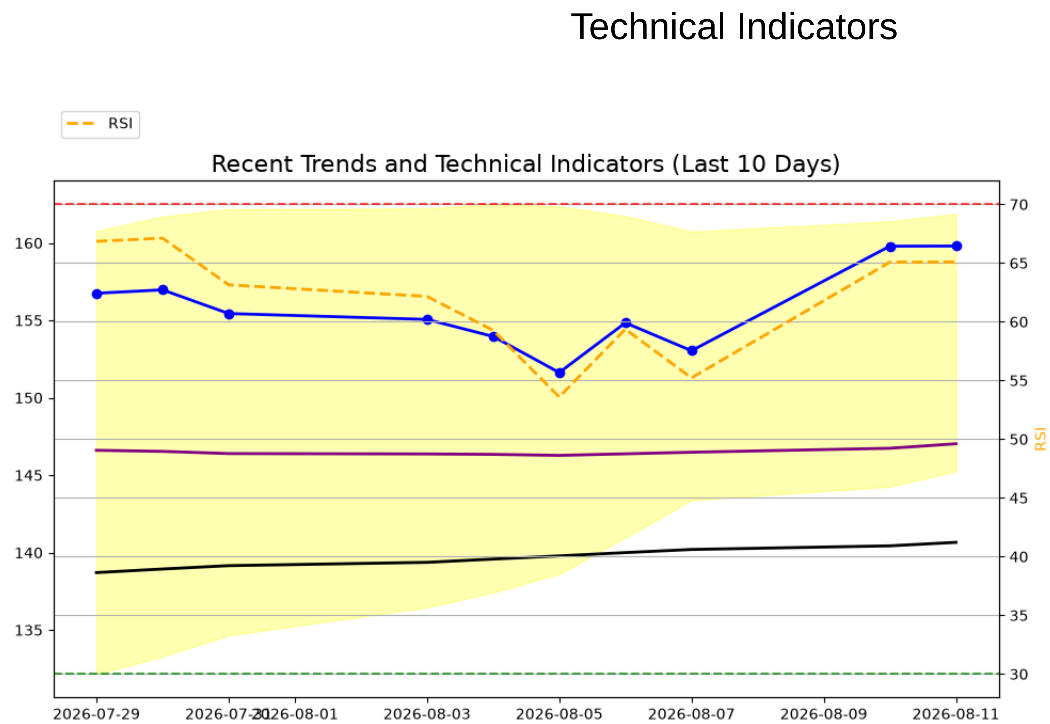


The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

Low ATR (below 2): Stable stock, Moderate ATR (2-5): Mild volatility, High ATR (above 5): Highly volatile stock

Technical Indicators

Technical indicators are based on historical price and volume data used in technical analysis to forecast financial market direction. They help identify trends, momentum, volatility, and potential entry and exit points in the market.



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 Executive Assessment

Investment Report:

--- INVESTMENT REPORT ---

1. Volatility & Breakout Potential
XOM's FVI of 0.581 indicates a moderate level of volatility, suggesting a relatively stable regime. The Lyapunov value of 0.017, which is lower than the market-wide average, indicates less systemic instability. However, the stock's BPS of -0.054 and the volume change of -4.21% suggest that there is no strong breakout signal. The Bollinger Bands are not expanding significantly, indicating a lack of volatility and a potential consolidation phase.

2. Market Sentiment
The large trading volume of 657083531000 suggests a high level of institutional activity. This, combined with the lack of a strong breakout signal and moderate volatility, suggests a cautious investor sentiment.

3. Geopolitical Risk Assessment
The elevated market-wide Gold, FX, and TWI FVI values indicate a high level of global stress. XOM, being in the energy sector, may have a higher sensitivity to these factors. Given the current geopolitical tensions and potential trade disruptions, the company might face risks related to energy price shocks, export fragility, or supply-side inflation.

4. Sector and Supply Chain Exposure
XOM's sector, energy, is prone to fuel cost surges and geopolitical transport risk. As a major oil producer, it may also face risks from declining export demand and rising domestic costs. Without detailed supply chain data, we can infer that XOM is likely exposed to these risk factors.

4. Strategy Recommendation
Given the current market conditions and XOM's metrics, a defensive strategy seems appropriate. The lack of a strong breakout signal, moderate volatility, and potential geopolitical risks suggest a cautious approach.

--- FINAL TAKEAWAY ---
"XOM is experiencing moderate volatility amidst a backdrop of heightened global stress and potential geopolitical risks. With a lack of strong breakout signals and potential energy price shocks, investors should position defensively."

Stock Information

Market Capitalization: 657083531000, Industry: OIL & GAS INTEGRATED, Latest Volume: 13744513, Description: Exxon Mobil Corp, Sector: ENERGY, Price to Book: 2.533, Trailing PE: 20.57, Forward PE: 13.39, Enterprise to Ebitda: 9.09, Enterprise to Revenue: 1.908, Profit Margins: 0.0907

The trading volume has changed by -4.21% 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: 0.17
Beta of 0.17 suggests low volatility compared to the market.

Stock Investment Character Report

Analysis in view of stock characteristics and current global macroeconomic information.

Investment Character: Steady Operator

Resilience: 68%
Momentum: 25%
Structural Stress: 20%
Narrative Dependence: 20%
Confidence: 63%

Calculated Metrics:
- Price-Volume Divergence: 0.000
- Volatility Dissonance Index: -0.023

Evidence:
- Beta = 0.173 and Lyapunov Exponent = 0.016996290907007335 indicate low market-linked volatility and stable dynamics
- Breakout Probability Score = -0.0541 and Bollinger statement: price 159.80 within 145.26 - 161.87 (no strong breakout)
- Profit margin = 0.0907 with EV/EBITDA = 9.09 and forward P/E = 13.39 suggest ongoing profitability at moderate valuation multiples

Assessment:
XOM currently presents as a steady, low-beta integrated energy name in consolidation. The absence of a breakout, near-random trend metrics, and modestly above-market FVI point to contained, mean-reverting price action rather than speculative momentum. Profitability and reasonable enterprise multiples support operational resilience, with little evidence of structural stress or reliance on narrative-driven pricing.

Medium-Term Fit:
May suit an independent thesis seeking large-cap, cash-generative energy exposure with lower beta during

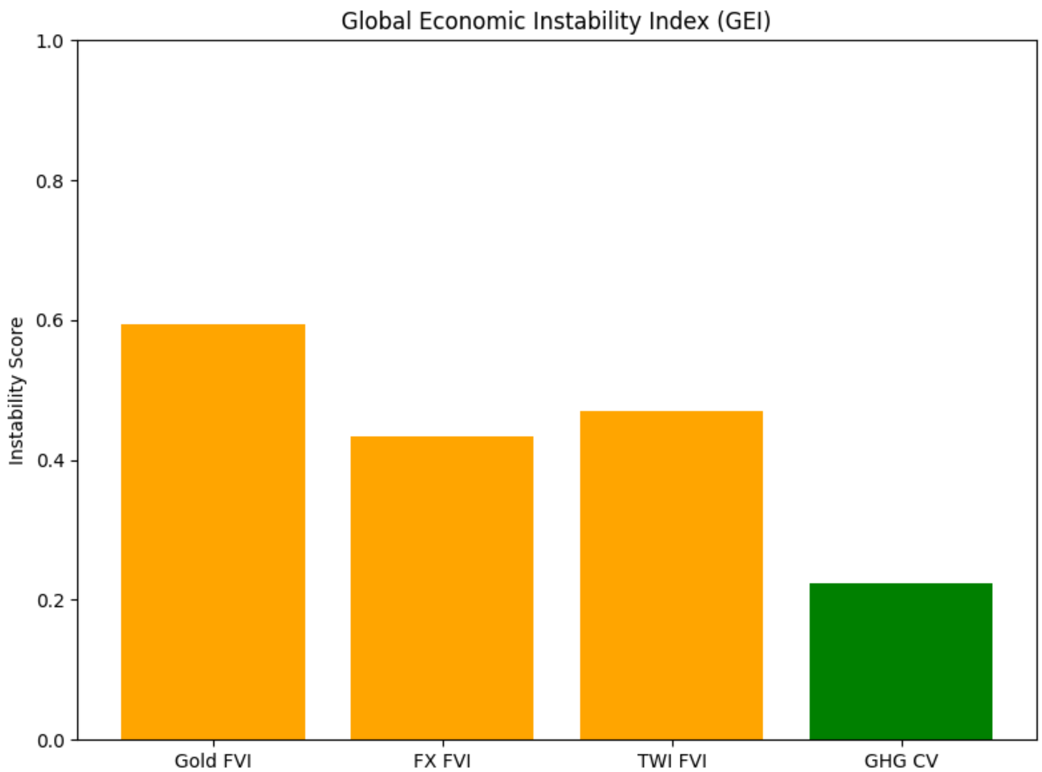
consolidation—such as a view on commodity-cycle resilience, inflation hedging via integrated operators, or preference for stable operators amid shifting rate and deficit backdrops—while not depending on near-term breakout momentum..

Fractal Volatility Indices

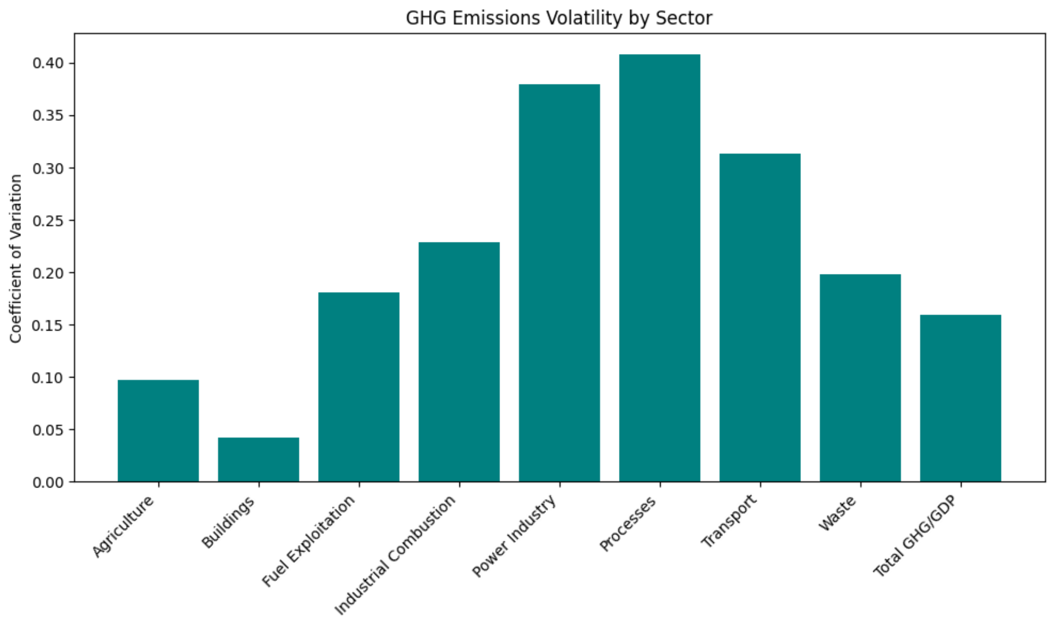
Global Geopolitical Fractal Volatility (Gold, Forex, TWI (Tariffs) and GHG Emissions)
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Low FX volatility indicates relatively stable currency markets
FVI_TWI: 0.469352 => Moderate trade-weighted volatility indicates some external-sector adjustment
GHG_CV: 0.223036 => Moderate GHG sector variability indicates some sector-level carbon-risk dispersion

Primary Risk Driver: Gold volatility is a good proxy for global geopolitical risk. 0.593608.

Global Geopolitical Volatility



Volatility Indicators of GHG Emissions by Industry and GDP



Low GHG impact (0.042) for theEnergy 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.

__________END OF REPORT__________