

Fractal Volatility Index for GOOGL : 0.398. 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: Alphabet Inc Class A GOOGL FVI 0.398

Analysis Period: 2021-10-02 to 2026-10-02

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): -0.017

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: 0.398 (Fractal Volatility Index FVI)

DFA Result: 0.6020 (Detrended Fluctuation Analysis)

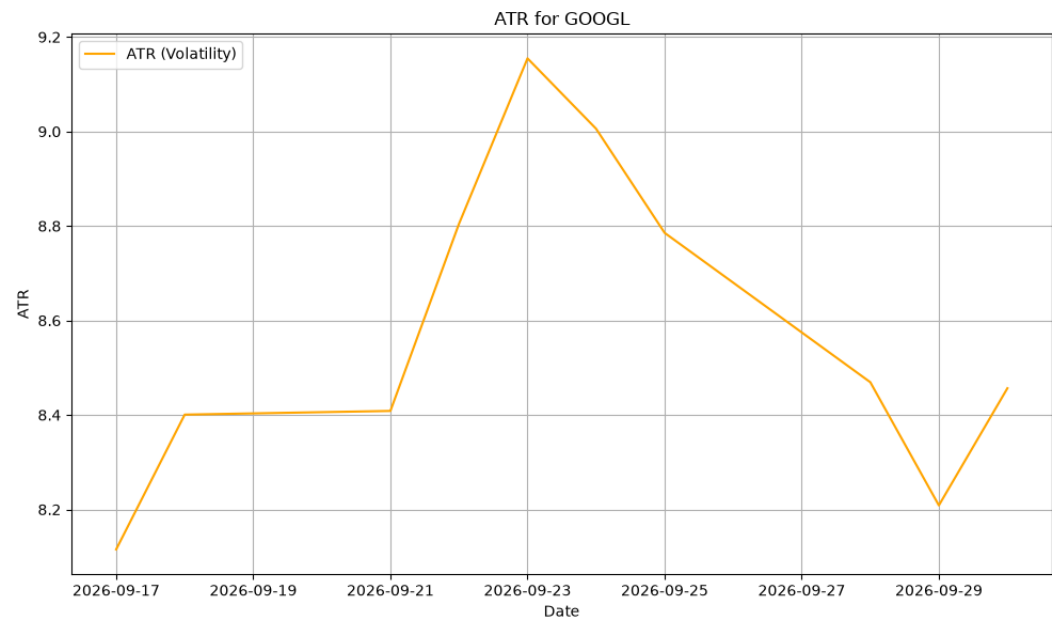
Lyapunov Exponent: 0.0136 (Measures chaos and predictability)

Hurst Exponent: 0.4793 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 344.08 is within the Bollinger Bands range (330.66 - 354.37).
Latest ATR: 8.4566

Average True Range (ATR)



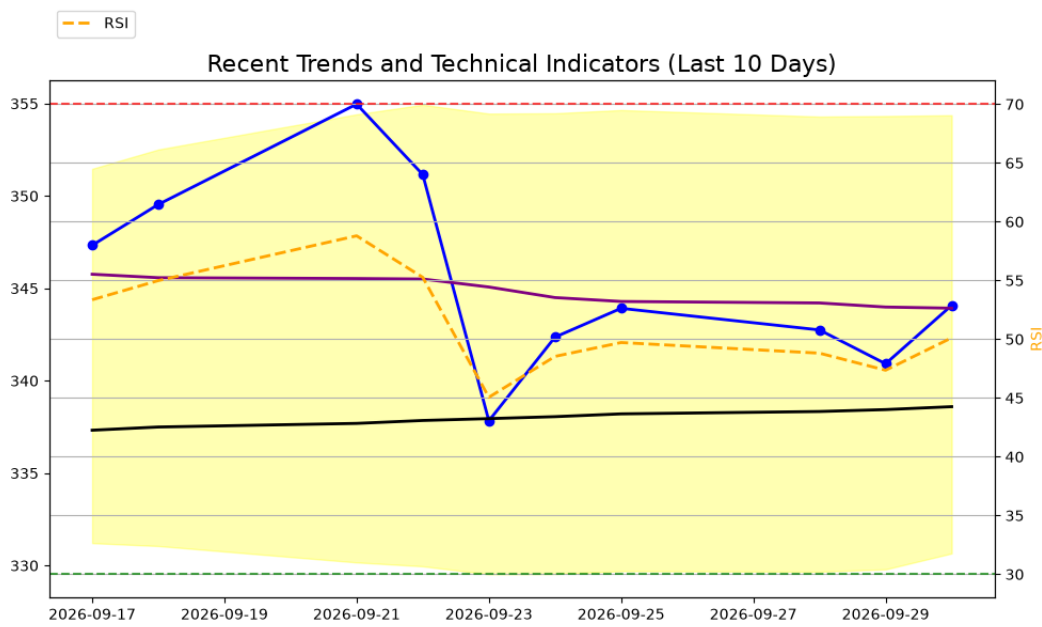
The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

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.

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 Executive Assessment

1. Volatility Structure

The Fractal Volatility Index (FVI) for Alphabet Inc Class A (GOOGL) is currently at 0.3975, which is lower than the market-wide FVI of 0.478. This suggests that GOOGL's price movements are somewhat less unstable than the overall market. The Lyapunov Exponent of 0.0136 does not offer a clear indication of the system's sensitivity or divergence without further calibration data. The Hurst Exponent, at 0.4793, is just below 0.5, suggesting a weak tendency towards anti-persistent behavior. The DFA value of 0.6020 does not independently predict a breakout, volatility surge, or price direction.

2. Breakout Evidence

The Breakout Probability Score (BPS) for GOOGL is -0.0172, and the latest closing price of 344.08 is within the Bollinger Bands range (330.66 - 354.37). This indicates no strong evidence of a current breakout. The direction of any potential breakout is not determined by the supplied evidence.

3. Participation and Technical Context

The volume change for GOOGL is 5.05%. The Average True Range (ATR) is 8.4566. Without additional data for comparison, these values do not suggest a specific move or motive.

4. Macro and Sector Context

The FVI values for Gold, FX, and TWI are 0.5936, 0.4343, and 0.4694 respectively. These suggest varying levels of structural instability in their respective series. No company-specific GHG sector sensitivity score is available for Alphabet Inc.

5. Risk Interpretation

The evidence suggests moderate uncertainty for GOOGL, with its FVI lower than the market-wide FVI and a Hurst Exponent indicating weak anti-persistence. However, the absence of strong breakout evidence and the moderate DFA value contribute to this uncertainty.

6. Monitoring Implications

Given the current state, it would be prudent to continue monitoring the FVI, Hurst Exponent, and BPS for any significant changes. Additionally, the ATR and volume change could offer further insights in the context of broader market movements.

FINAL TAKEAWAY

The analysis suggests moderate uncertainty for Alphabet Inc Class A, with a lower FVI than the market-wide measure and weak anti-persistence indicated by the Hurst Exponent. It would be crucial to monitor the FVI, Hurst Exponent, and BPS for any notable changes, as these could provide further insights into the stock's volatility structure and potential breakout evidence.

Stock Information

Market Capitalization: 4208075997000, Industry: INTERNET CONTENT & INFORMATION, Latest Volume: 37373739, Description: Alphabet Inc Class A, Sector: COMMUNICATION SERVICES, Price to Book: 6.9, Trailing PE: 17.09, Forward PE: 22.83, Enterprise to Ebitda: 12.74, Enterprise to Revenue: 9.34, Profit Margins: 0.548

The trading volume has changed by 5.05% 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: 1.23

Beta of 1.23 suggests high volatility compared to the market.

Stock Investment Character Report

Analysis based on supplied stock characteristics and market context.

Investment Character: Operationally Resilient

Resilience: 66%

Momentum: 20%

Structural Stress: 30%

Narrative Dependence: 25%

Confidence: 63%

Calculated Metrics:

- Price-Volume Divergence: 0.000

- Volatility Dissonance Index: -0.972

Evidence:

- Reported profit margin is 0.548 with supplied valuation metrics: P/B 6.9, Trailing P/E 17.09, Forward P/E 22.83, EV/EBITDA 12.74 and EV/Revenue 9.34.

Indicators: profit_margin=0.548, price_to_book=6.9, trailing_PE=17.09, forward_PE=22.83, EV_EBITDA=12.74, EV_revenue=9.34

Supports: Resilience

- Company FVI of 0.398 falls in the Moderate volatility range and is below the market-wide FVI of 0.478.

Indicators: FVI=0.398, market_wide_FVI=0.478

Supports: Resilience

- Beta is above 1, indicating higher market-relative sensitivity, and ATR exceeds the 'Above 5: High' threshold for recent trading-range volatility.

Indicators: beta=1.225, ATR=8.456627623955614

Supports: Structural Stress

- No strong breakout is detected and the Breakout Probability Score is slightly negative; additional persistence measures are provided without confirming momentum.

Indicators: BPS=-0.017152090857267793, breakout_statement=No strong breakout signal detected, Hurst=0.47930343067419773, DFA=0.602039380956725

Supports: Momentum

Assessment:

High reported profitability indicates sturdy operations, supporting an operationally resilient profile. Structural measures show moderate FVI (below the market-wide level), but beta and ATR point to above-market and high recent trading-range volatility, respectively. Momentum is unconfirmed given the negative BPS and the absence of a band breakout. Valuation metrics suggest quality is priced with some premium without evidence that pricing relies primarily on narrative.

Limitations:

- EPS fields are non-meaningful (0) and there is limited historical context for trend strength or valuation comparison.

- ATR is absolute and, aside from the provided threshold, lacks normalization to price history for deeper context.

- Breakout and persistence measures do not establish future direction or duration of any move.

Medium-Term Fit:

May align with a thesis favoring large-scale internet platforms exhibiting strong margins and operational

durability, while accepting moderate structural volatility and periods without confirmed momentum.

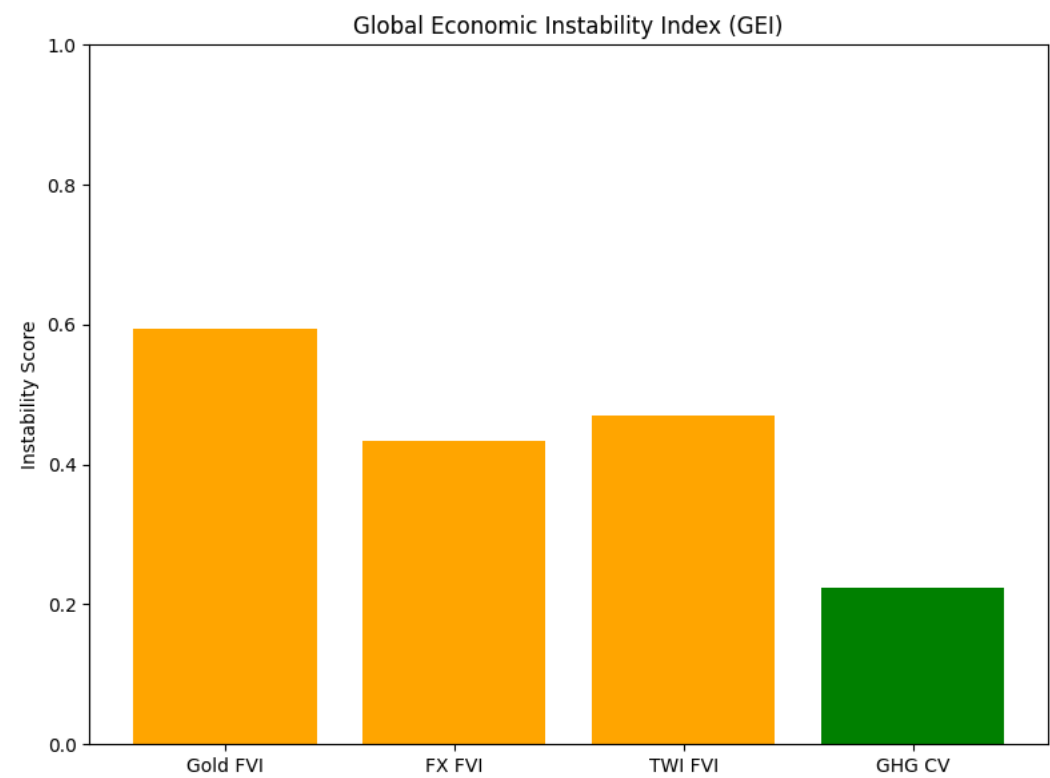
Fractal Volatility Indices

Global Geopolitical Fractal Volatility (Gold, Forex, TWI (Tariffs) and GHG Emissions)

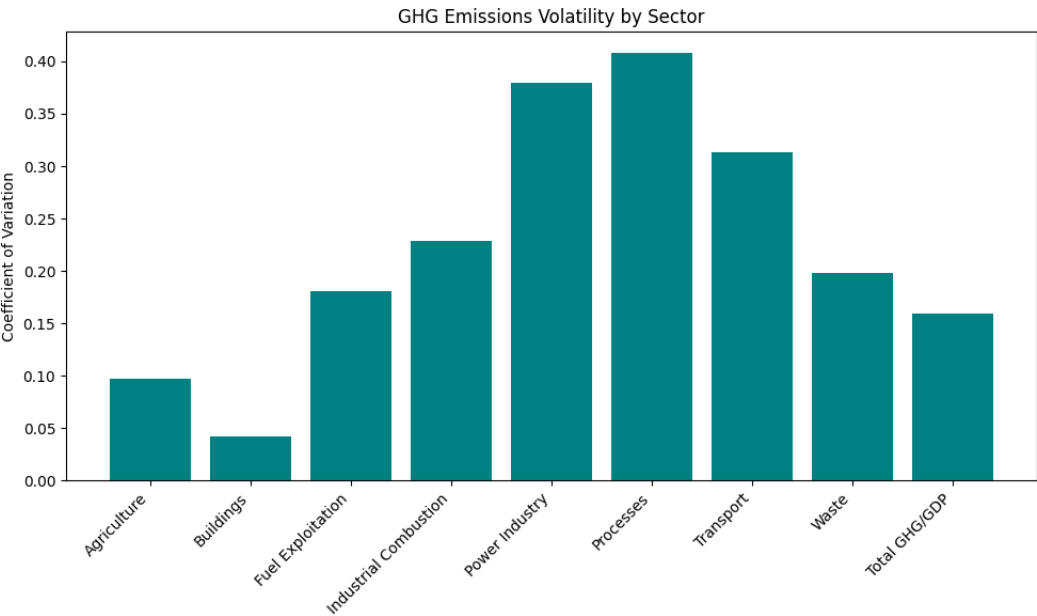
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Moderate FX volatility indicates ongoing currency-market adjustment
FVI_TWI: 0.469352 => Moderate trade-weighted volatility indicates some external-sector adjustment
GHG_CV: 0.223036 => Moderate GHG 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



No GHG score available for Communication services 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_____