Fractal Volatility Index for APP : 0.533. 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: Applovin Corp APP FVI 0.533

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): 0.266
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

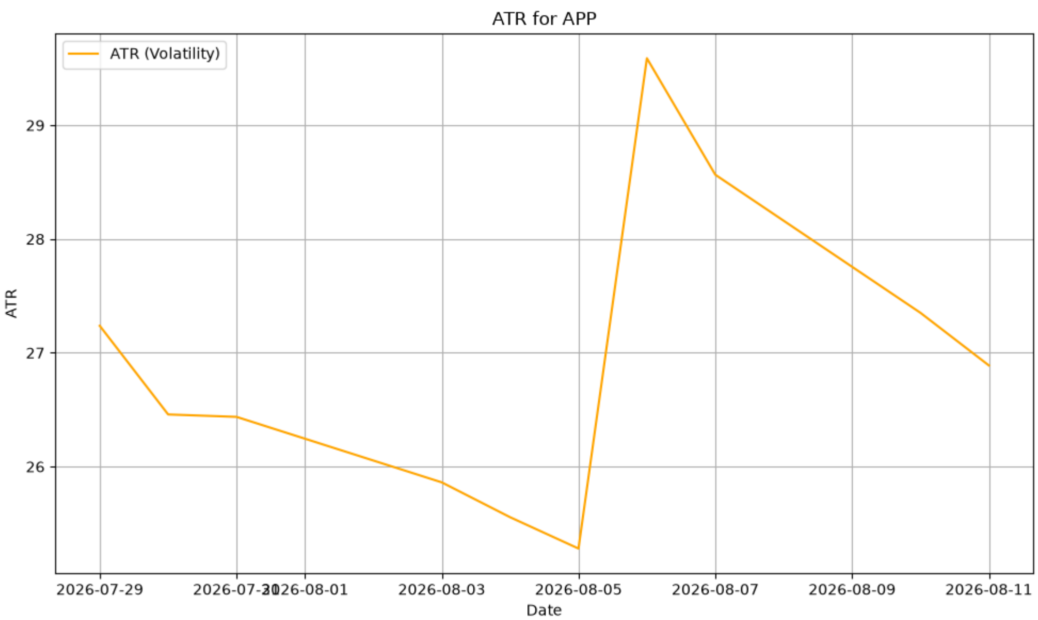
Fractal & Statistical Analysis

FVI Score: 0.533 (Fractal Volatility Index FVI)
DFA Result: 0.5328 (Detrended Fluctuation Analysis)
Lyapunov Exponent: 0.0161 (Measures chaos and predictability)
Hurst Exponent: 0.4800 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: Potential negative breakout: The latest closing price of 318.68 is below the Bollinger Lower Band 328.72. This may indicate bearish momentum.
Latest ATR: 26.8891

Average True Range (ATR)



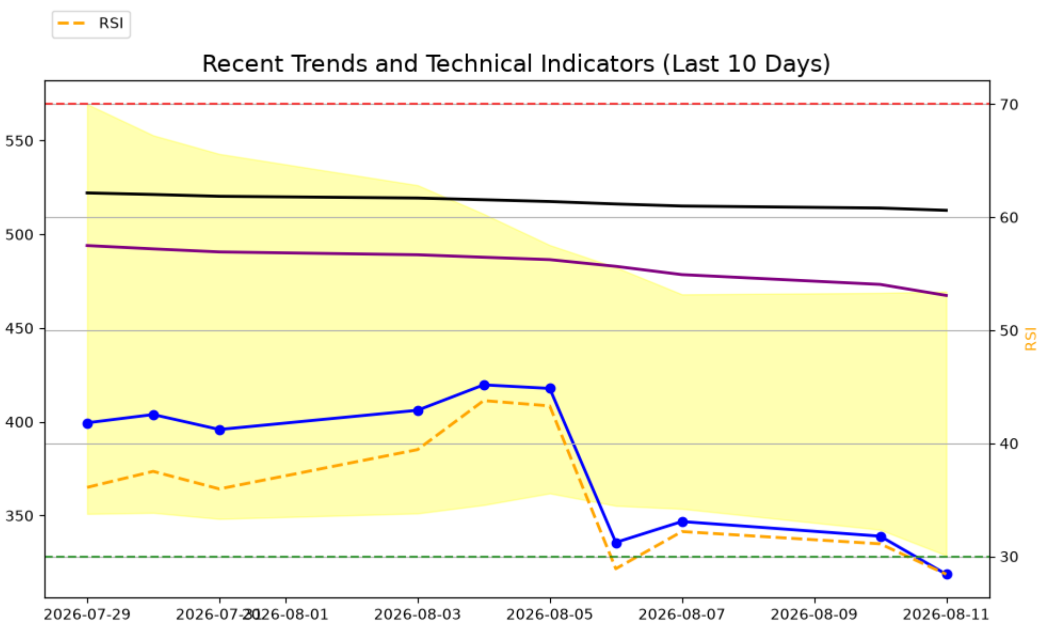
The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

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

Investment Report:

--- INVESTMENT REPORT ---

1. Volatility & Breakout Potential
- APP shows signs of instability with a Lyapunov score of 0.016, suggesting system chaos. Its FVI of 0.533 implies noise rather than acceleration.
- The stock's lower closing price compared to the Bollinger Lower Band indicates a potential bearish momentum.
- An increase in stock volume by 12.31% could be confirming these price moves.

2. Market Sentiment
- The stock's behavior seems to be driven by institutional investors. The volatility and breakout dynamics suggest a cautious investor mood.

3. Geopolitical Risk Assessment
- The elevated global FVI indicators and the stock's sector (communication services) which lacks a GHG score, raise concerns about the stock's exposure to geopolitical risks.
- The company's potential exposure to tariffs should also be considered, especially if it's highly globalized or supply-chain dependent.

4. Sector and Supply Chain Exposure
- Without detailed supply chain data, it's difficult to assess the company's risk exposure. However, if the company operates in a sector with global inputs, some level of exposure to Asia or U.S. risk factors can be assumed.

Strategy Recommendation
- Given the stock's bearish momentum, a hedge strategy may be optimal. The BPS and FVI pattern suggest a negative breakout could be imminent.

--- FINAL TAKEAWAY ---
The APP stock is showing signs of instability and potential bearish momentum, with indications of institutional-driven behavior. Given the current market-wide volatility and geopolitical risks, a defensive position is recommended. The stock's volatility suggests exposure to potential trade disruption risks and tariff exposure. Proceed with caution.

Stock Information

Market Capitalization: 107057201000, Industry: ADVERTISING AGENCIES, Latest Volume: 8030057, Description: Applovin Corp, Sector: COMMUNICATION SERVICES, Price to Book: 35.87, Trailing PE: 26.04, Forward PE: 21.23, Enterprise to Ebitda: 20.52, Enterprise to Revenue: 16.68, Profit Margins: 0.646

The trading volume has changed by 12.31% 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: 2.53
Beta of 2.53 suggests high volatility compared to the market.

Stock Investment Character Report

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

Investment Character: Unclear / Mixed

Resilience: 48%
Momentum: 22%
Structural Stress: 28%
Narrative Dependence: 38%
Confidence: 55%

Calculated Metrics:
- Price-Volume Divergence: -0.252
- Volatility Dissonance Index: -0.994

Evidence:
- Fractal Volatility Index 0.533 vs market 0.478 indicates above-market volatility
- Beta 2.529 and ATR 26.89 signal high sensitivity and large price swings
- Breakout Probability Score 0.266 is low while price closed below Bollinger Lower Band (bearish momentum signal)
- Profit margin 0.646 suggests strong current profitability
- Valuation rich: EV/EBITDA 20.52, EV/Revenue 16.68, P/B 35.87; P/E 26.04 trailing and 21.23 forward
- Hurst Exponent ~0.48 and Lyapunov 0.016 indicate largely non-trending, mildly chaotic dynamics
- Recent volume up 12.31% to 8,030,057 shows elevated trading interest

Assessment:
Signals are mixed: profitability is strong and may support resilience, but valuation is elevated and the stock exhibits high volatility with a recent bearish technical signal and low breakout probability. Statistical measures imply a non-trending, noisy regime rather than sustained momentum. Overall, the profile blends operational strength with market sensitivity and valuation risk, yielding an unclear/mixed character at present.

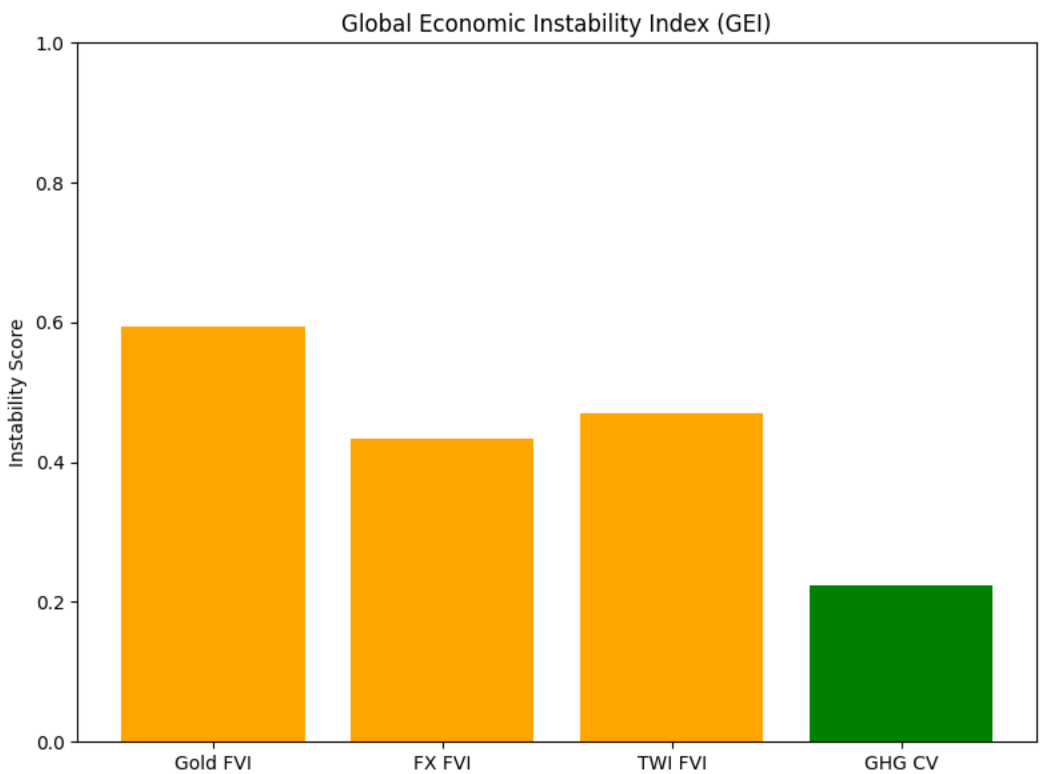
Medium-Term Fit:
May suit an investor with an independent thesis favoring high-margin adtech platforms and sector consolidation, who accepts elevated volatility and valuation sensitivity in exchange for potential operating persistence if the thesis holds..

Fractal Volatility Indices

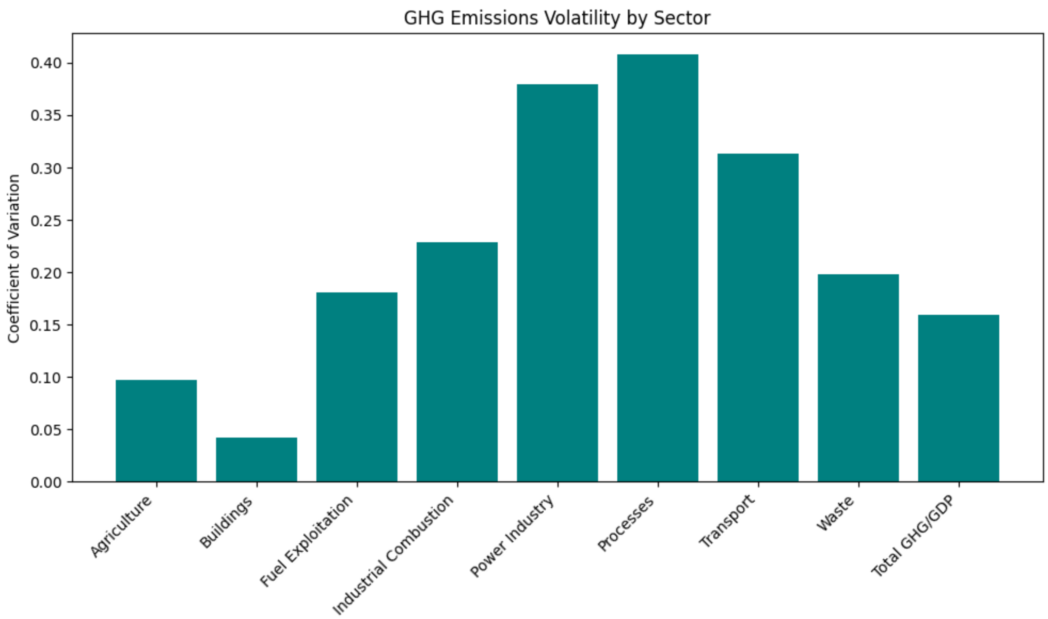
Global Geopolitical Fractal Volatility (Gold, Forex, TWI (Tariffs) and GHG Emissions)
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Low FX volatility indicates relatively stable currency markets
FVI_TWI: 0.469352 => Moderate trade-weighted volatility 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



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__________