

Fractal Volatility Index for APP : 0.488. 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 0.488

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): 0.679

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: 0.488 (Fractal Volatility Index FVI)

DFA Result: 0.5390 (Detrended Fluctuation Analysis)

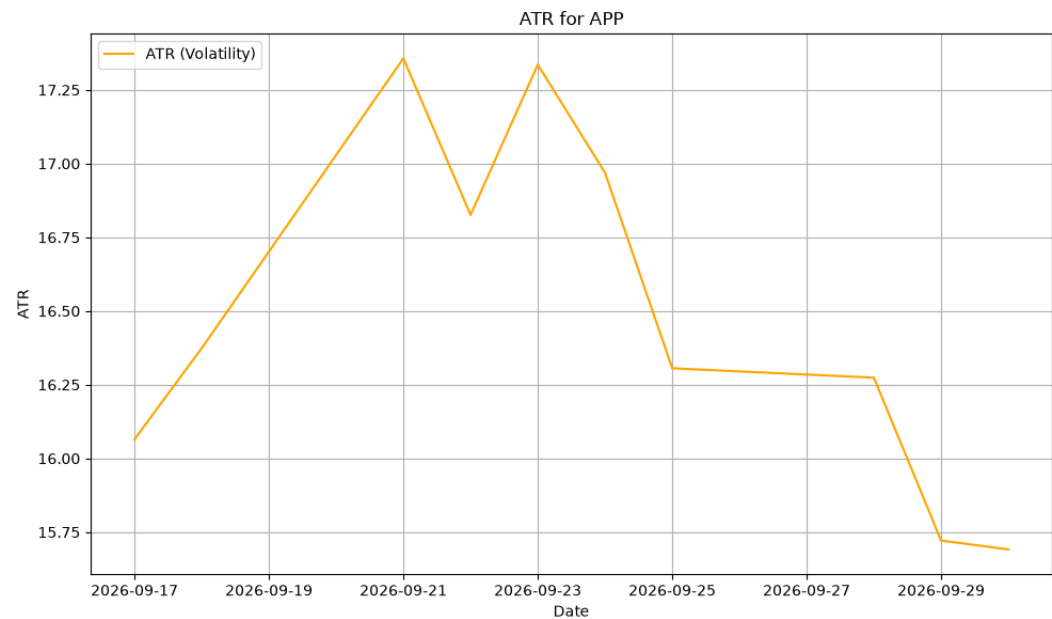
Lyapunov Exponent: 0.0155 (Measures chaos and predictability)

Hurst Exponent: 0.4818 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: Potential negative breakout: The latest closing price of 290.43 is below the Bollinger Lower Band 295.49. This may indicate bearish momentum.
Latest ATR: 15.6912

Average True Range (ATR)



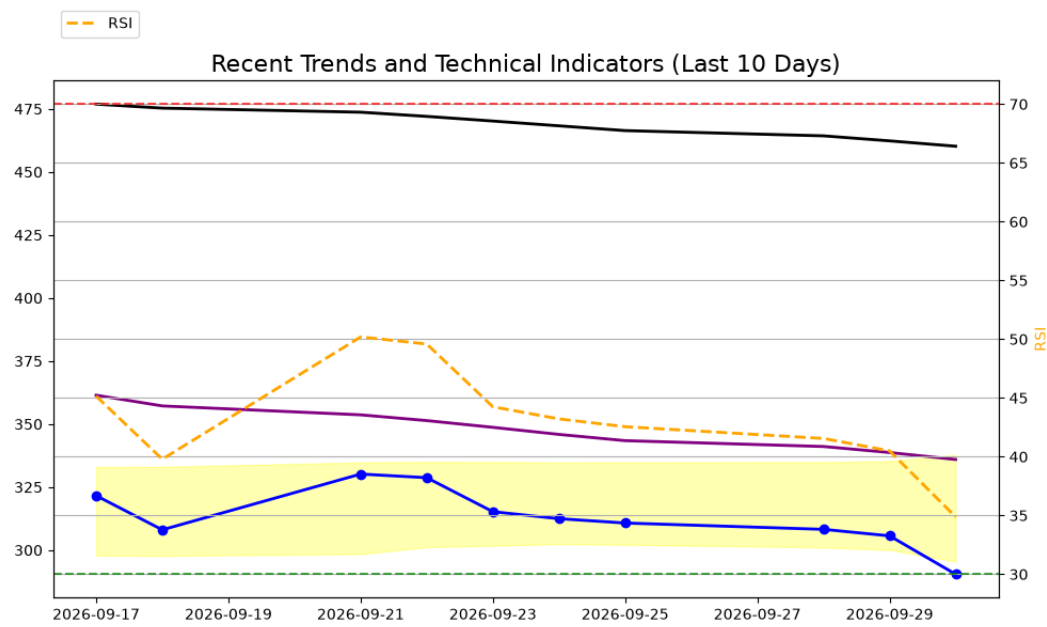
The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

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) of Applovin Corp (APP) is 0.4878686740753879, slightly higher than the market-wide FVI of 0.478. This suggests that APP's price structure may be slightly more unstable than the overall market. The Hurst Exponent of 0.4817736444533741 is close to 0.5, indicating weak evidence of either persistency or anti-persistency in the price series. The Lyapunov Exponent of 0.015499332643782978 indicates a degree of sensitivity and divergence within the system, but without a supplied threshold, historical comparison, or market-wide equivalent, it's difficult to interpret its significance. The DFA of 0.5389538765156536 measures the scale-dependent correlation structure, but it doesn't independently predict a breakout, volatility surge, or price direction.

2. Breakout Evidence

The Breakout Probability Score (BPS) of 0.6794814343030733 suggests some evidence of a potential breakout. However, the latest closing price of 290.43 is below the Bollinger Lower Band of 295.49, indicating a potential negative breakout. It's important to note that the BPS does not determine the direction of the breakout.

3. Participation and Technical Context

The volume of APP has decreased by 1.162869713299603%, and the latest Average True Range (ATR) is 15.691248321006473. Without any historical or price-normalised comparison, it's hard to infer any strong conclusions from these values.

4. Macro and Sector Context

The Gold, FX, and TWI FVI values are 0.593608, 0.434301, and 0.469352 respectively. These values indicate structural instability in their respective series, but without any supplied evidence, we cannot assign any specific geopolitical, policy, or investor-behaviour cause. The GHG score for the Communication services sector is not available, so we can't discuss any sectoral emissions-related variability.

5. Risk Interpretation

The slightly higher FVI of APP compared to the market, coupled with the potential for a negative breakout, suggests a state of moderate uncertainty. However, without any clear evidence of price direction, we cannot translate this structural risk into a specific price direction.

6. Monitoring Implications

The FVI, BPS, and the latest closing price relative to the Bollinger Lower Band merit continued observation. These indicators could provide further insights into the potential for a breakout and the volatility structure of APP.

FINAL TAKEAWAY

The strongest supported conclusion from the available data is that Applovin Corp (APP) is experiencing

a state of moderate uncertainty, as indicated by its slightly higher FVI compared to the market and the potential for a negative breakout. The most important uncertainty lies in the direction of the potential breakout, which would require further monitoring of the BPS and the price relative to the Bollinger Lower Band.

Stock Information

Market Capitalization: 97192550000, Industry: ADVERTISING AGENCIES, Latest Volume: 6734257, Description: Applovin Corp, Sector: COMMUNICATION SERVICES, Price to Book: 33.35, Trailing PE: 23.48, Forward PE: 15.43, Enterprise to Ebitda: 19.09, Enterprise to Revenue: 15.52, Profit Margins: 0.646

The trading volume has changed by -1.16% 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: 2.49

Beta of 2.49 suggests high volatility compared to the market.

Stock Investment Character Report

Analysis based on supplied stock characteristics and market context.

Investment Character: Valuation-Sensitive Quality

Resilience: 58%

Momentum: 42%

Structural Stress: 45%

Narrative Dependence: 30%

Confidence: 63%

Calculated Metrics:

- Price-Volume Divergence: 0.027

- Volatility Dissonance Index: -0.991

Evidence:

- Company FVI indicates moderate structural volatility, broadly in line with the market.

Indicators: Fractal Volatility Index=0.488, Market-wide FVI=0.478

Supports: Structural Stress

- Market-relative sensitivity is elevated and recent trading-range volatility is high per the provided ATR thresholds.

Indicators: Beta=2.488, Latest ATR=15.691248321006473

Supports: Structural Stress

- Evidence of a potential negative breakout suggests active bearish momentum.

Indicators: Breakout Probability Score=0.6794814343030733, Breakout statement=Price 290.43 below

Bollinger Lower Band 295.49

Supports: Momentum

- Strong profitability is present alongside demanding valuation multiples.

Indicators: Profit margin=0.646, Trailing P/E=23.48, Forward P/E=15.43, Price-to-book ratio=33.35, EV/

EBITDA=19.09, EV/Revenue=15.52

Supports: Resilience

Assessment:

Strong operating profitability supports a quality profile, but valuations appear demanding. Structural instability is moderate by FVI, while market-relative and recent trading-range volatility are elevated (high beta and ATR). Momentum signals tilt bearish with a potential downside band break, so momentum does not dominate positively. Overall, it fits a valuation-sensitive quality profile with heightened volatility considerations.

Limitations:

- Momentum indication is based on a single Bollinger band observation and may be transitory.

- ATR is an absolute measure and lacks price-normalized or historical context beyond the provided thresholds.

- Trailing EPS and Forward EPS are reported as 0, limiting clarity on earnings power metrics.

- No macroeconomic context is provided to condition sector-specific demand or risk.

Medium-Term Fit:

Potential fit for an independent thesis that the company's high-margin ad-tech platform can sustain profitability and improve operating leverage, while an investor is comfortable with elevated market sensitivity and valuation discipline during sector cycles.

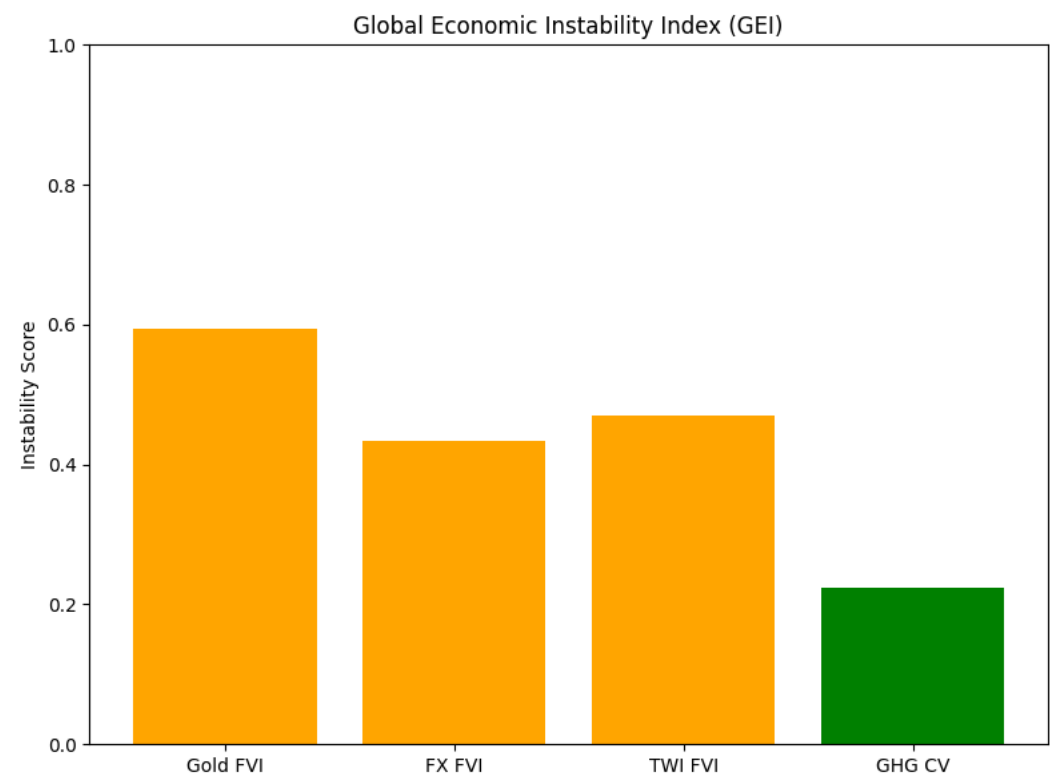
Fractal Volatility Indices

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

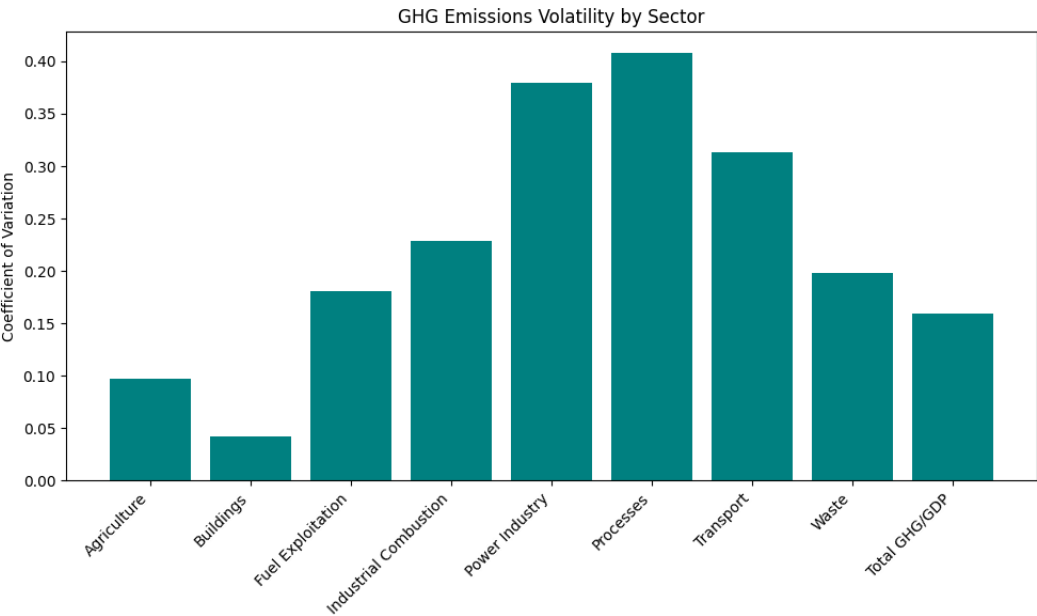
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Moderate FX volatility indicates ongoing currency-market adjustment
FVI_TWI: 0.469352 => Moderate trade-weighted volatility indicates some external-sector adjustment
GHG_CV: 0.223036 => Moderate GHG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