

Fractal Volatility Index for APP : 0.575. 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: Applovin Corp APP FVI 0.575

Analysis Period: 2021-04-22 to 2026-04-22

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): -0.132

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: 0.575 (Fractal Volatility Index FVI)

DFA Result: 0.5310 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0166 (Measures chaos and predictability)

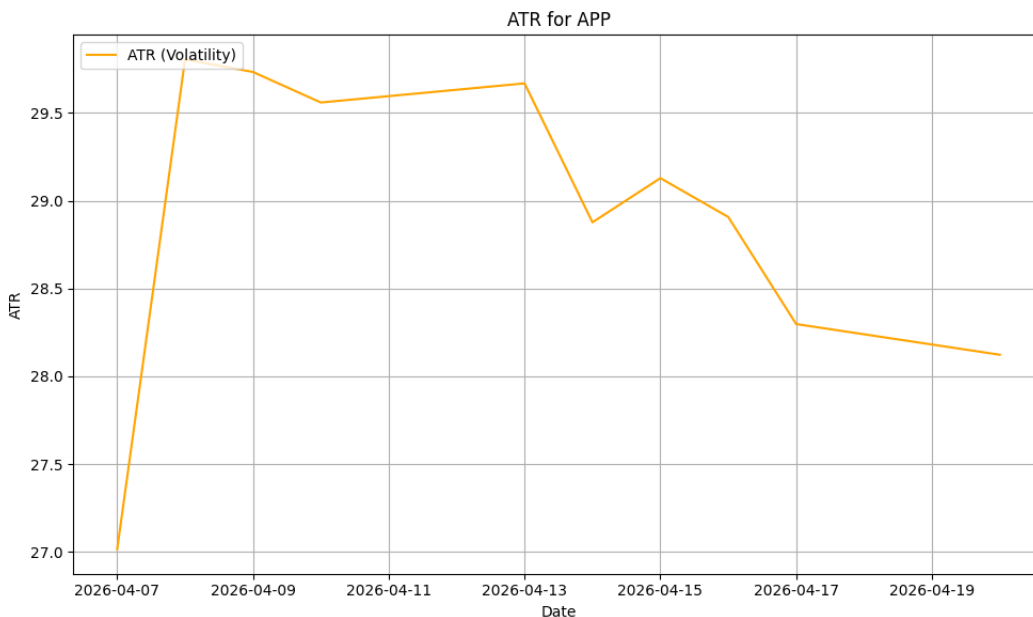
Hurst Exponent: 0.5017 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: Potential positive breakout: The latest closing price of 490.96 is above the Bollinger Upper Band 490.41. This may indicate bullish momentum.

Latest ATR: 28.1231

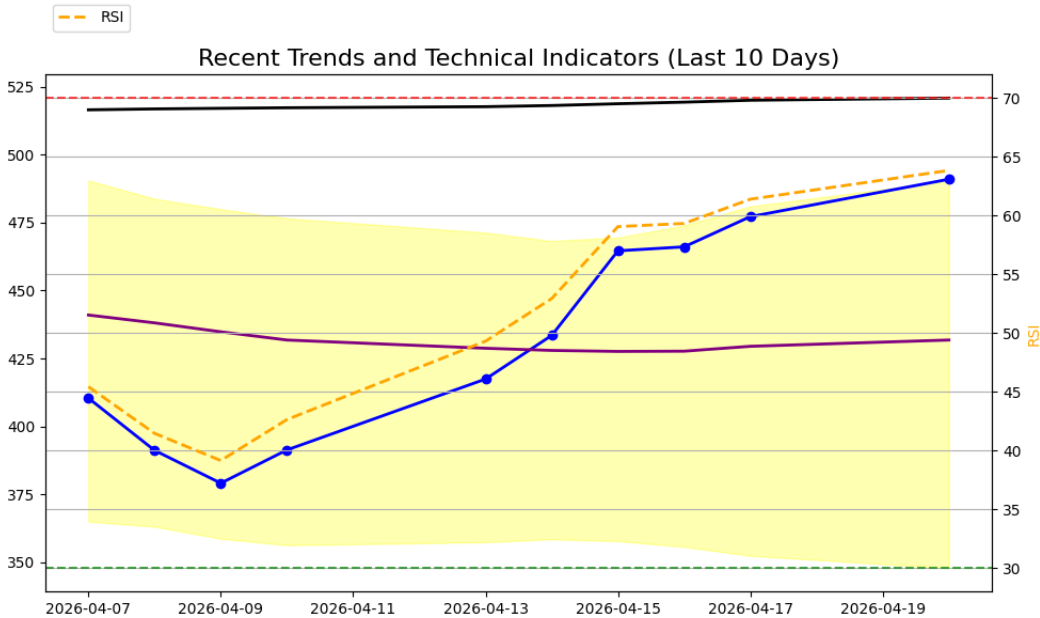
Average True Range (ATR)



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

APP's Fractal Volatility Index (FVI) of 0.575 indicates a moderate level of price volatility. The stock's Lyapunov exponent of 0.017 suggests that the system is relatively stable, with a low level of chaos. The Hurst exponent of 0.502 slightly leans towards a trend-following behavior. The BPS score of -0.132 suggests a lower breakout potential. However, the recent closing price above the Bollinger Upper Band indicates bullish momentum. Yet, the significant drop in volume (-30.98%) raises concerns about the sustainability of this momentum.

2. Market Sentiment

The volume of 161272136000 suggests institutional-driven behavior, which often indicates a more stable and less speculative market environment. However, the mixed signals from volatility and breakout dynamics suggest a cautious investor mood.

3. Geopolitical Risk Assessment

The elevated market-wide FVI indicators, particularly in Gold and TWI, suggest increased global stress. The absence of a GHG score for the Communication services sector makes it difficult to assess the company's exposure to sectoral emissions risk. However, considering the sector's potential exposure to global trade disruptions and currency volatility, caution is advised.

4. Sector and Supply Chain Exposure

As APP operates in the Communication services sector, it may have some exposure to global inputs and U.S. risk factors. However, without detailed supply chain data, it's challenging to assess the precise level of risk.

5. Strategy Recommendation

Given the mixed signals from the volatility and breakout metrics, a cautious approach would be advisable. The stock's Hurst exponent suggests a trend-following strategy might be optimal, but the decrease in volume and negative BPS score raise concerns about the sustainability of the current upward trend.

--- FINAL TAKEAWAY ---

APP's recent bullish momentum, supported by a trend-following behavior, presents a potential buying opportunity. However, the significant drop in volume and negative BPS score suggest caution. The elevated market-wide FVI indicators and potential exposure to global stress factors also warrant a defensive positioning. In summary: "Moderate volatility with potential global stress exposure—exercise caution and position defensively."

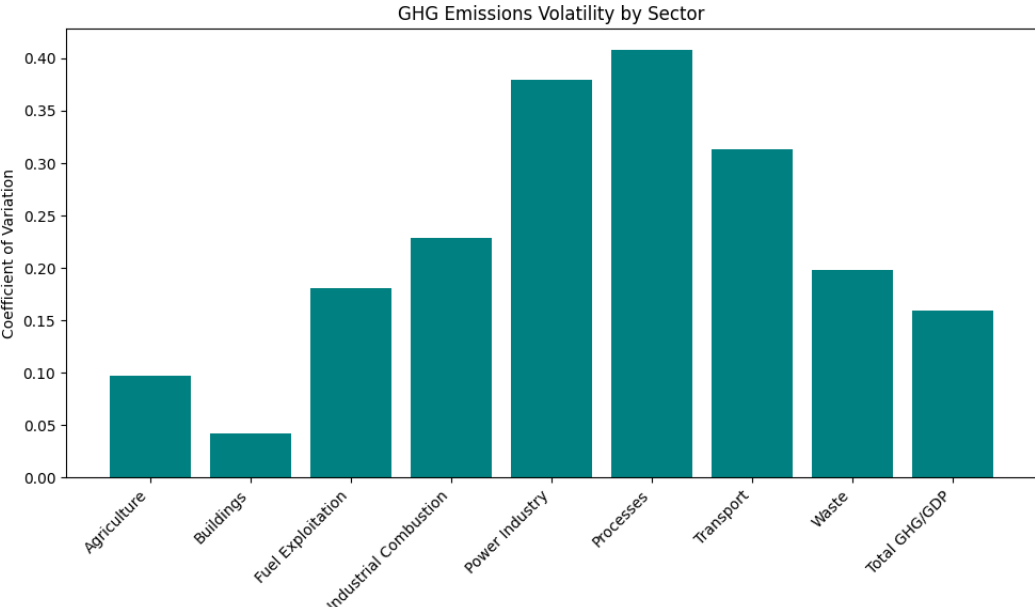
Market Capitalization: 161272136000, Industry: ADVERTISING AGENCIES, Latest Volume: 3795781, Description: Applovin Corp, Sector: COMMUNICATION SERVICES, Price to Book: 75.4, Trailing PE: 47.62, Forward PE: 30.86, Enterprise to Ebitda: 37.2, Enterprise to Revenue: 29.56, Profit Margins: 0.608

The trading volume has changed by -30.98% 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: 2.50

Beta of 2.50 suggests high volatility compared to the market.

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.

Stock Market Price Credibility Report

Analysis based on current global macroeconomic and geopolitical information.

Market_Price_Credibility_Analysis:

```
{  
  "Final_Score": 0.413,  
  "Price_Volume_Divergence": 0.583,  
  "Volatility_Dissonance_Index": -0.733,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "The bridge is open—just ignore the termites and missing planks."  
}
```

The NRD (Narrative Reality Disconnect Index) is set at 0.7, indicating a significant disconnect between the economic narratives and the underlying fiscal, monetary, and geopolitical realities. This is due to several factors:

1. The rising U.S. debt and deficit levels are not sustainable in the long run. Despite this, the narrative that the U.S. can continue to borrow indefinitely without consequences persists.
2. Changes in U.S. Treasury bond yields and issuance, along with declining foreign demand for U.S. bonds, suggest a shift in global confidence in the U.S. fiscal position. Yet, the narrative of the U.S. as a safe haven for investment remains.
3. Central bank interventions, such as rate cuts and quantitative easing, are being used to prop up the economy. However, these tools can lead to distortions in the market and are not a long-term solution.
4. The use of tariffs and sanctions as economic tools has increased, which can lead to trade wars and economic instability. This contradicts the narrative of free trade and global cooperation.
5. Despite low inflation, the official interest rate policy remains low. This disconnect suggests that the central bank is prioritizing economic growth over inflation control.
6. The influence of BRICS+ and de-dollarization trends challenge the dominance of the U.S. dollar. Yet, the narrative of the dollar as the world's reserve currency persists.
7. Gold volatility and geopolitical hedging are signs of uncertainty and risk in the market. However, these are often downplayed in the economic narrative.

The Trumpery Alert is set to true, indicating evidence of manipulative or performative policymaking. The Satirical Summary, "If you believe this is market forces, we've got a bridge to sell you," reflects the skepticism towards the economic narratives given the underlying realities.

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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 NRDI 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** _____