Fractal Volatility Index for WMT : 0.519. 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: Walmart Inc. WMT FVI 0.519

Analysis Period: 2021-11-18 to 2026-11-18

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): -0.697
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

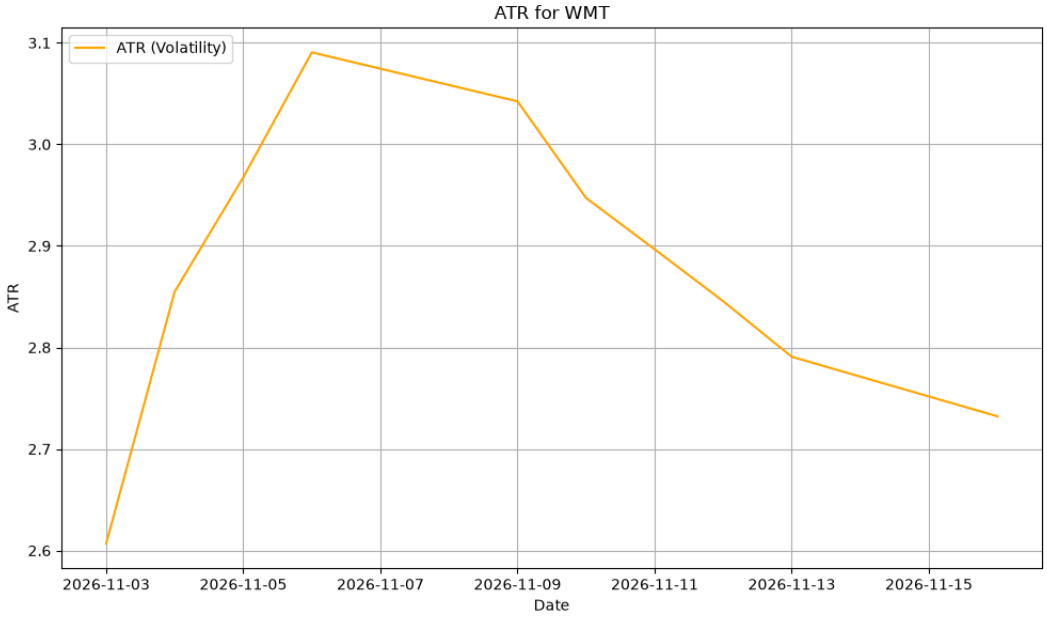
Fractal & Statistical Analysis

FVI Score: 0.519 (Fractal Volatility Index FVI)
DFA Result: 0.5187 (Detrended Fluctuation Analysis)
Lyapunov Exponent: 0.0159 (Measures chaos and predictability)
Hurst Exponent: 0.4829 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 128.41 is within the Bollinger Bands range (116.28 - 131.16).
Latest ATR: 2.7322

Average True Range (ATR)

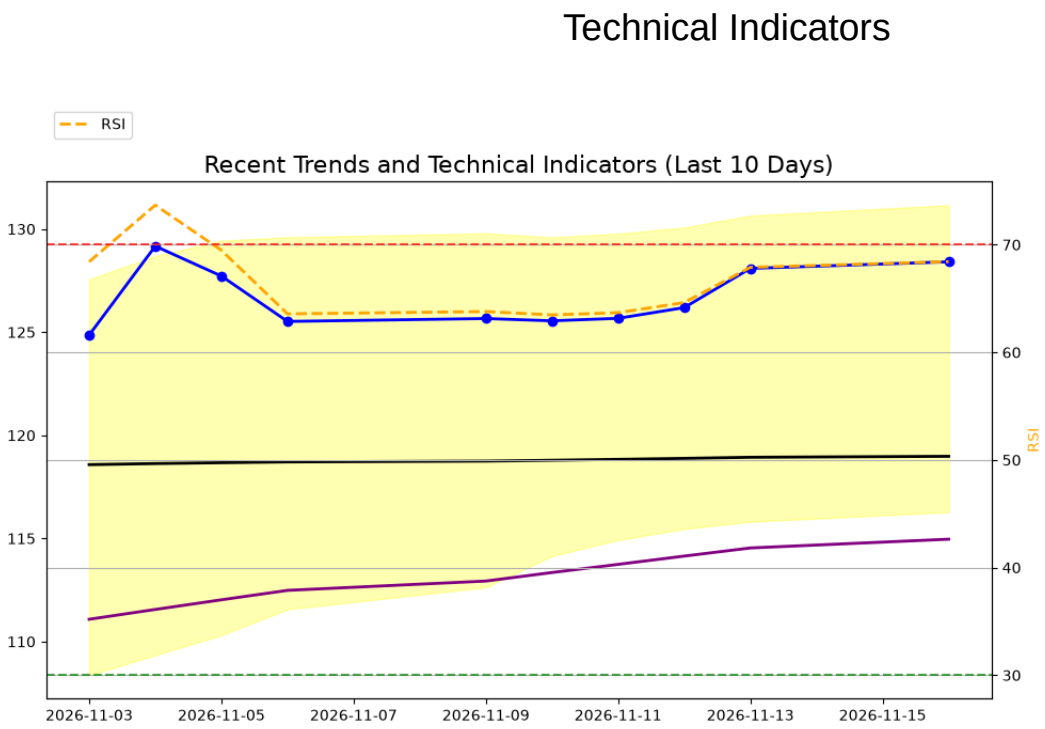


The ATR measures the recent price volatility of a stock, calculating the average range between its high and low prices over a given period (usually 14 days). A higher ATR indicates greater market volatility, and a lower ATR indicates less volatility.

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

1. Volatility Structure
- Observations:
  - Stock FVI: 0.5193 versus market-wide FVI: 0.478.
  - Hurst exponent: 0.4829 (near 0.5).
  - DFA: 0.5187.
  - Lyapunov exponent: 0.01591 (positive).
  - Beta: 0.526.
- Interpretation:
  - WMT's FVI is modestly above the market-wide FVI, indicating somewhat greater structural instability than the broad market, while still within a comparable range.
  - The Hurst value near 0.5 provides only weak evidence of anti-persistence; overall, it does not strongly support either persistent or mean-reverting behavior over the measured series.
  - DFA indicates a measurable scale-dependent correlation structure but, on its own, does not imply a breakout, volatility surge or direction.
  - A positive Lyapunov exponent indicates sensitivity and divergence in the system, but without a benchmark its magnitude cannot be classified.
  - A beta of 0.526 indicates lower systematic co-movement with the equity market than a beta of 1.0, a contextual rather than directional statement.
- Unknown:
  - The magnitude of Lyapunov- or DFA-implied risk relative to history or peers, given no thresholds or historical baselines.

2. Breakout Evidence
- Observations:
  - Breakout Probability Score (BPS): -0.6969.
  - Supplied breakout observation: No strong breakout signal; latest close (128.41) remains within Bollinger Bands (116.28 – 131.16).
- Interpretation:
  - The negative BPS together with the explicit "no strong breakout" observation indicates weak current breakout evidence. Breakout direction is not determined by these indicators.
- Unknown:
  - Direction, timing and magnitude of any future breakout.

3. Participation and Technical Context
- Observations:
  - Volume change: -25.394%.
  - Latest ATR: 2.7322 (about 2.1% of the latest close of 128.41).
  - Beta: 0.526 (as noted above).
- Interpretation:
  - The volume metric indicates reduced trading activity versus its unspecified comparison base; without a price-change context or time baseline, implications for participation are limited.

  - ATR is provided in price units; the percent-of-price context aids comparison, but without a historical series, it cannot be judged elevated or subdued.
- Missing comparisons required for stronger conclusions:
  - Historical ATR trend or multi-period ATR percent-of-price.
  - Volume trend with a defined lookback and concurrent price context.

4. Macro and Sector Context
- Observations:
  - Macro FVI proxies: Gold FVI 0.5936; FX FVI 0.4343; TWI FVI 0.4694.
  - GHG sector variability score: Not available for Consumer Defensive; company GHG sector sensitivity: Not available.
- Interpretation:
  - Among proxies, structural instability ranks: Gold (highest), then WMT (0.5193), then TWI (0.4694) and FX (0.4343). WMT's FVI sits below Gold's and above both FX and TWI, and above the market-wide FVI.
  - These macro comparisons frame relative structural variability across assets but do not assign causes or imply price direction for WMT.
- Unknown:
  - Any emissions-related variability specific to the Consumer Defensive sector or to Walmart, given the missing GHG metrics.

5. Risk Interpretation
- Evidence most strongly supports a state of moderate structural uncertainty: WMT's FVI is above the market-wide level, Hurst is near neutral (weak anti-persistence), DFA confirms a structured but non-predictive scaling pattern, and Lyapunov indicates sensitivity without a magnitude benchmark.
- Concurrently, breakout indications are weak per the negative BPS and the in-band price observation, tempering near-term breakout potential in the current setup.

6. Monitoring Implications
- Indicators to watch:
  - Stock FVI versus market-wide FVI for shifts in relative structural instability.
  - BPS and whether the price persists inside or exits the Bollinger Band range in subsequent observations.
  - ATR as a percent of price over time to detect volatility regime changes.
  - Volume change alongside concurrent price behavior for context on participation (without inferring motives).
  - Hurst, DFA and Lyapunov for changes in memory, scaling, and sensitivity characteristics.
  - Macro FVI proxies (Gold, FX, TWI) for broader structural risk backdrop.

FINAL TAKEAWAY

WMT currently shows slightly higher structural instability than the market with weak breakout evidence, while memory and scaling metrics are near neutral and non-directional. The most important items to

monitor are changes in the stock FVI versus the market FVI and the BPS/price relationship to the Bollinger Bands for any emerging confirmation.

Stock Information

Market Capitalization: 1021896950000, Industry: DISCOUNT STORES, Latest Volume: 17780238, Description: Walmart Inc., Sector: CONSUMER DEFENSIVE, Price to Book: 10.34, Trailing PE: 46.53, Forward PE: 38.91, Enterprise to Ebitda: 23.06, Enterprise to Revenue: 1.466, Profit Margins: 0.03

The trading volume has changed by -25.39% 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: 0.53
Beta of 0.53 suggests low volatility compared to the market.

Stock Investment Character Report

Analysis based on supplied stock characteristics and market context.

Investment Character: Valuation-Sensitive Quality
Resilience: 62%
Momentum: 12%
Structural Stress: 22%
Narrative Dependence: 40%
Confidence: 64%

Calculated Metrics:
- Price-Volume Divergence: 0.000
- Volatility Dissonance Index: 0.040

Evidence:
- Structural volatility is moderate and slightly above the market-wide FVI; market sensitivity is below 1; recent trading-range volatility is in the stated moderate band.
  Indicators: FVI=0.519, Market-wide FVI=0.478, Beta=0.526, Latest ATR=2.7321581273898614
  Supports: Resilience
- Negative breakout probability and price remaining within Bollinger Bands indicate no strong breakout signal.
  Indicators: Breakout Probability Score=-0.696903595761218, Bollinger Bands range=116.28-131.16, Latest close=128.41
  Supports: Momentum
- Multiples are numerically large while reported profit margin is 0.03.
  Indicators: Trailing P/E=46.53, Forward P/E=38.91, Price-to-book=10.34, EV/EBITDA=23.06, EV/Revenue=1.466, Profit margin=0.03
  Supports: Narrative Dependence

Assessment:
Trading characteristics point to a steady profile, with below-market beta and moderate structural and range volatility. Momentum is not confirmed, as the breakout score is negative and price sits within Bollinger Bands. Valuation appears demanding relative to the modest reported profitability, suggesting quality perceived by the market but with sensitivity to valuation assumptions rather than momentum. There is little direct evidence of structural stress beyond moderate instability readings.

Limitations:
- EPS fields are zero/missing, and no revenue or cash flow growth data are supplied, limiting assessment of operational trajectory.
- ATR is absolute and only loosely classified by a generic band; no price-normalized or historical context is provided.
- No information on balance sheet leverage, competitive position, or catalysts is supplied, constraining conclusions about durability or future momentum.
- Price direction and causation cannot be established from the provided indicators.

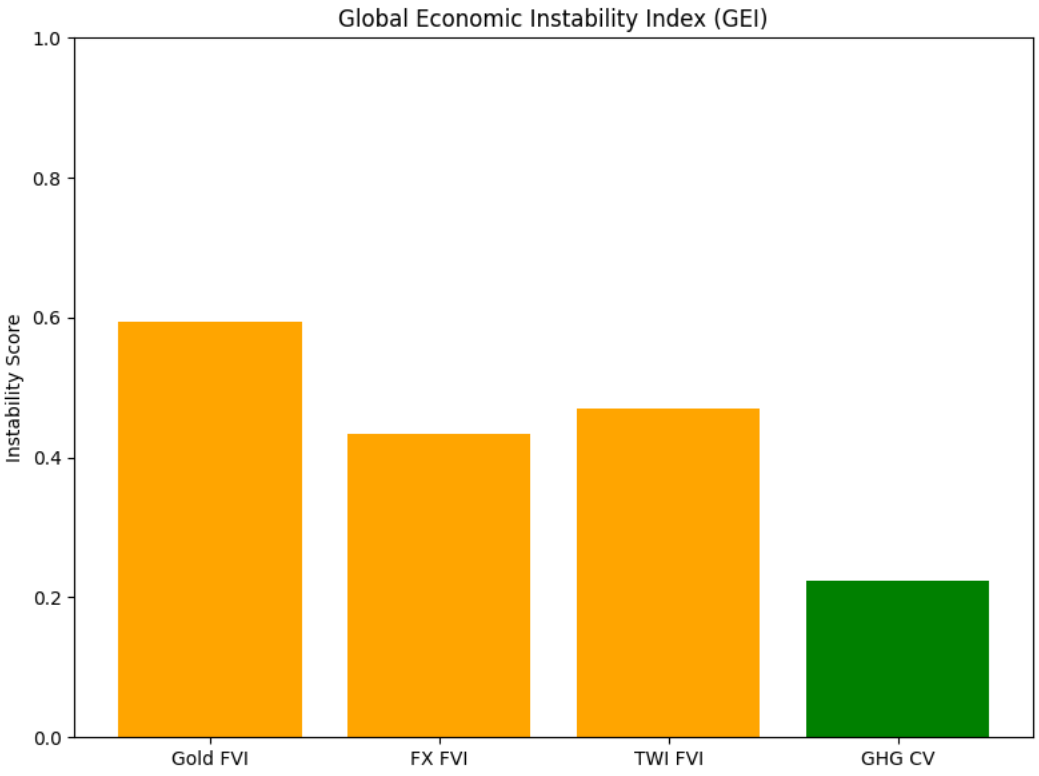
Medium-Term Fit:
Potential fit for an independent thesis favoring large-cap consumer defensive exposure with below-market sensitivity and consistent operations, where the investor is comfortable underwriting higher multiples in exchange for perceived stability.

Fractal Volatility Indices

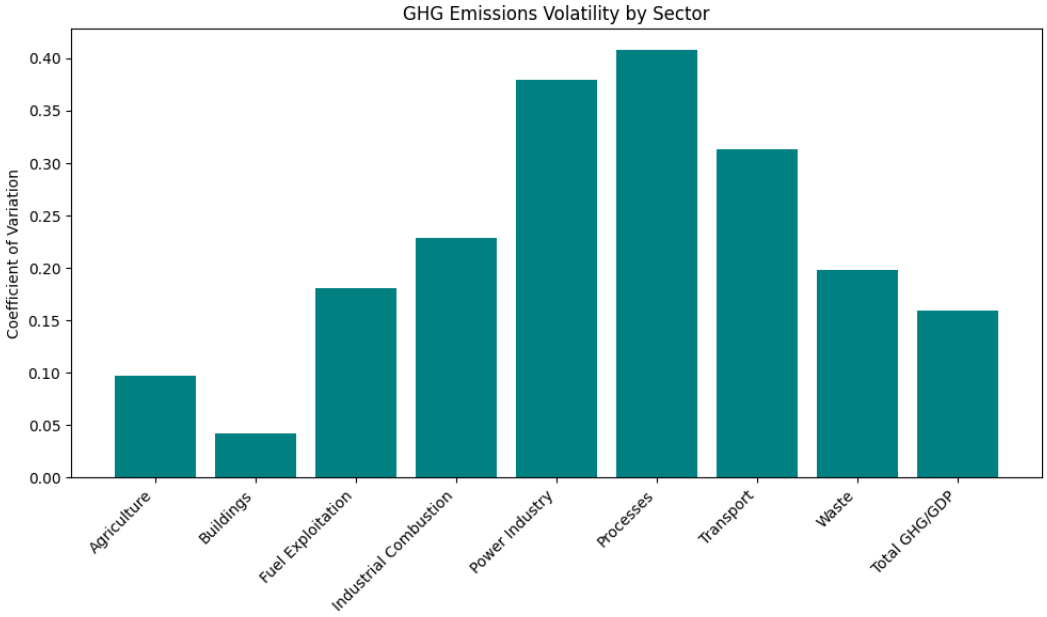
Global Geopolitical Fractal Volatility (Gold, Forex, TWI (Tariffs) and GHG Emissions)
FVI_GOLD: 0.593608 => Moderate gold volatility indicates increased investor caution
FVI_FX: 0.434301 => Moderate FX volatility indicates ongoing currency-market adjustment
FVI_TWI: 0.469352 => Moderate trade-weighted 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 Consumer defensive 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_____