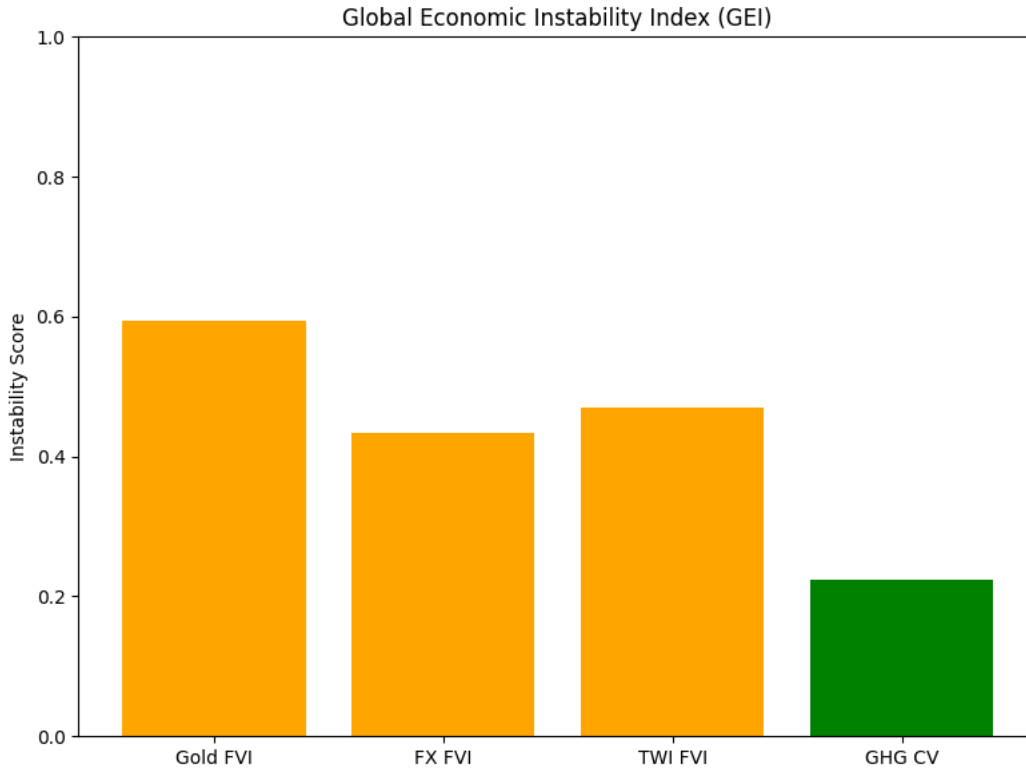


Fractal Volatility Index for IBM : 0.563. Market Wide FVI:0.478
(0 - 0.33: Stable, 0.33 - 0.66: Moderate Volatility, 0.66 - 1: High Volatility)



Global Geopolitical Volatility



Red: High Risk FVI zone, Orange: Medium Risk FVI zone, Green: Low Risk FVI zone

Verv Stock Analysis Report: International Business Machines IBM FVI 0.563

Analysis Period: 2021-05-27 to 2026-05-27

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): 0.906

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: 0.563 (Fractal Volatility Index FVI)

DFA Result: 0.5278 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0161 (Measures chaos and predictability)

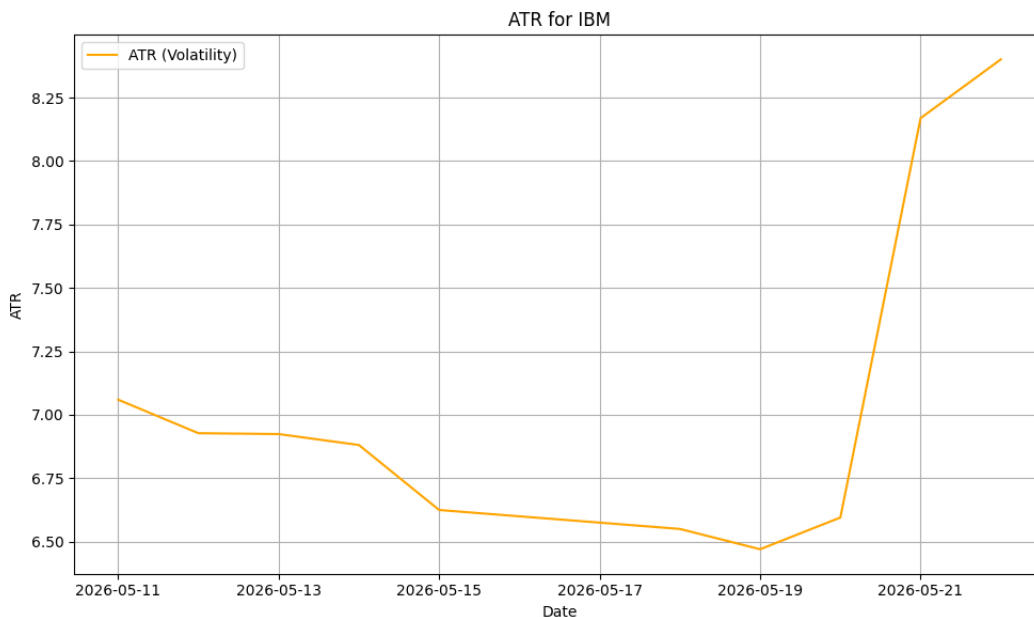
Hurst Exponent: 0.5191 (Indicates trending or mean-reverting behavior)

Breakout & Recent Price Change Analysis

Breakout Statement: Potential positive breakout: The latest closing price of 253.84 is above the Bollinger Upper Band 247.80. This may indicate bullish momentum.

Latest ATR: 8.4005

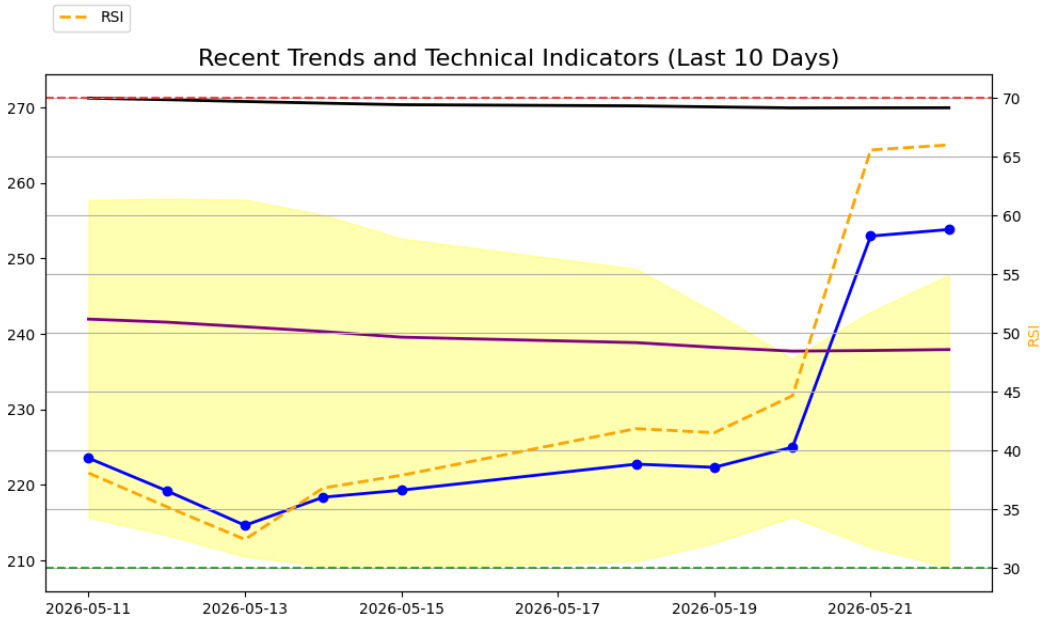
Average True Range (ATR)



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

IBM's FVI of 0.563 suggests moderate volatility, indicating a state of relative stability. The Lyapunov value of 0.016, when compared to market-wide values, suggests a lower relative instability. The Bollinger Bands are expanding, suggesting increased volatility, and the recent breakout above the upper band signals bullish momentum. However, a 209.90% increase in volume confirms the strength of this price move.

2. Market Sentiment

The significant volume change suggests institutional-driven behavior, indicating strong market sentiment towards IBM. The volatility and breakout dynamics suggest a bullish investor mood.

3. Geopolitical Risk Assessment

IBM's low GHG impact score of 0.048 indicates a lower risk exposure to sectoral emissions. However, the high market-wide Gold FVI of 0.594 suggests increased hedge demand and geopolitical tension. IBM's exposure to global stress indicators should be evaluated in the context of its sector sensitivity score and potential tariff exposure.

4. Sector and Supply Chain Exposure

As a technology company, IBM is likely to have some level of exposure to Asia or U.S. risk factors. However, its low GHG impact score suggests a lower risk exposure to energy price shocks and supply-side inflation. IBM's sector and supply chain risks should be evaluated in the context of its volatility pattern and potential hidden global input risks.

4. Strategy Recommendation

Given the current market conditions and IBM's performance metrics, the optimal strategy would be trend-following. The alignment of high BPS and moderate FVI suggests a potential breakout, making it a good time for bullish investors to consider entering the market.

--- FINAL TAKEAWAY ---

IBM's stock exhibits moderate volatility, bullish breakout signals, and strong volume confirmation, making it an attractive investment for trend-following strategies. However, investors should remain cautious of potential geopolitical and sector-specific risks. In summary: "High momentum and breakout signals aligning—buy setup emerging."

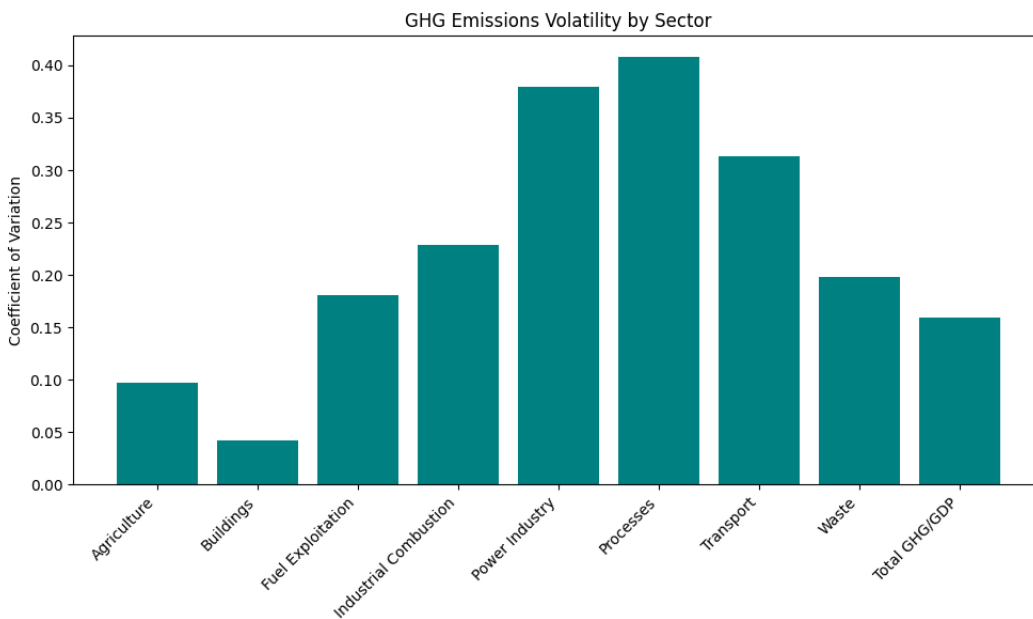
Market Capitalization: 238580482000, Industry: INFORMATION TECHNOLOGY SERVICES, Latest Volume: 19072873, Description: International Business Machines, Sector: TECHNOLOGY, Price to Book: 7.24, Trailing PE: 22.46, Forward PE: 20.58, Enterprise to Ebitda: 16.83, Enterprise to Revenue: 4.304, Profit Margins: 0.156

The trading volume has changed by 209.90% 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: 0.58

Beta of 0.58 suggests low volatility compared to the market.

Volatility Indicators of GHG Emissions by Industry and GDP



Low GHG impact (0.048) for the Technology 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": 0.437,  
  "Price_Volume_Divergence": 0.387,  
  "Volatility_Dissonance_Index": -0.319,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "Welcome to the economy where logic took early retirement."  
}
```

Based on the current global and U.S. financial landscape, the following analysis is provided:

The rising U.S. debt and deficit levels, along with changes in U.S. Treasury bond yields and issuance, suggest a potential disconnect between economic narratives and underlying fiscal realities. The reported decline in foreign demand for U.S. bonds could be a sign of decreasing confidence in the U.S. economy and its ability to manage its debt.

Central bank interventions, such as rate cuts and quantitative easing, are typically used to stimulate economic growth. However, they can also distort the financial markets and create a disconnect between economic narratives and underlying monetary realities.

The use of tariffs and sanctions as economic tools can have significant economic and geopolitical implications. While they may be effective in achieving certain policy objectives, they can also lead to trade wars and economic instability.

Inflation and official interest rate policy are closely linked. If inflation is high and interest rates are low, it could indicate a disconnect between economic narratives and underlying monetary realities.

The influence of BRICS+ and trends towards de-dollarization could challenge the dominance of the U.S. dollar in the global economy. This could potentially lead to a shift in global economic power and create a disconnect between economic narratives and underlying geopolitical realities.

Gold volatility and geopolitical hedging are typically seen as indicators of economic uncertainty. If gold prices are volatile and there is a high level of geopolitical hedging, it could suggest a disconnect between economic narratives and underlying geopolitical realities.

Based on these indicators, the following response is provided:

```
{  
  "NRDI": 0.7,  
  "Trumpery_Alert": true,  
  "Satirical_Summary": "If you believe this is market forces, we've got a bridge to sell you."  
}
```


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 NRDIndex 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 trumperry 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: Trumperry derives from a French word meaning to deceive, in many dictionaries showy but worthless.

_____ **END OF REPORT** _____