

**Fractal Volatility Index for IBM : 0.556. 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 0.556

Analysis Period: 2021-04-29 to 2026-04-29

### 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): 1.365

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: 0.556 (Fractal Volatility Index FVI)

DFA Result: 0.5280 (Detrended Fluctuation Analysis)

Lyapunov Exponent: 0.0163 (Measures chaos and predictability)

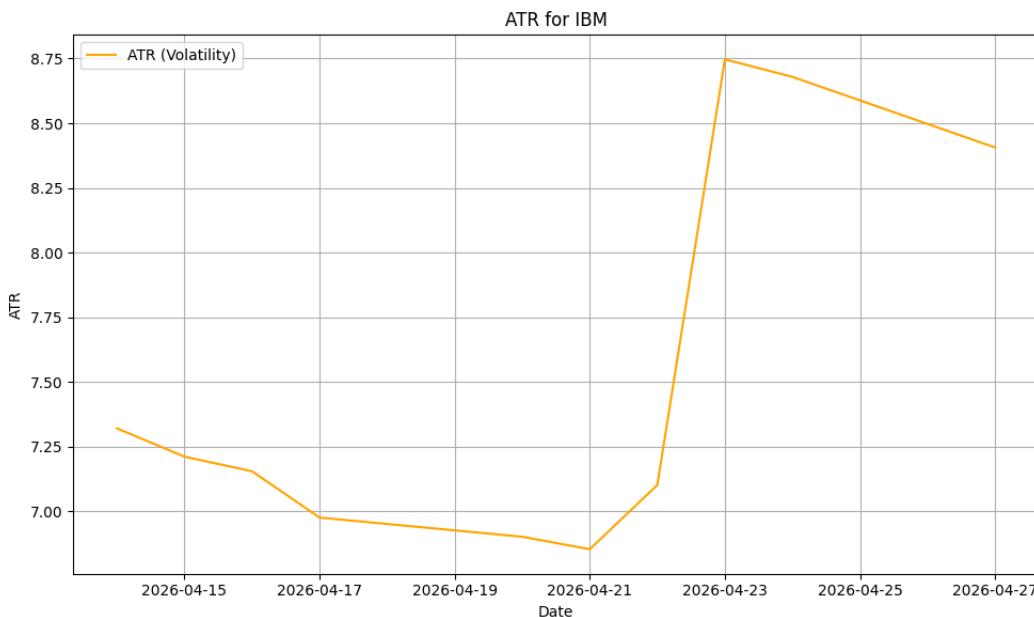
Hurst Exponent: 0.5315 (Indicates trending or mean-reverting behavior)

### Breakout & Recent Price Change Analysis

Breakout Statement: No strong breakout signal detected: The latest closing price of 228.05 is within the Bollinger Bands range (226.40 - 258.81).

Latest ATR: 8.4064

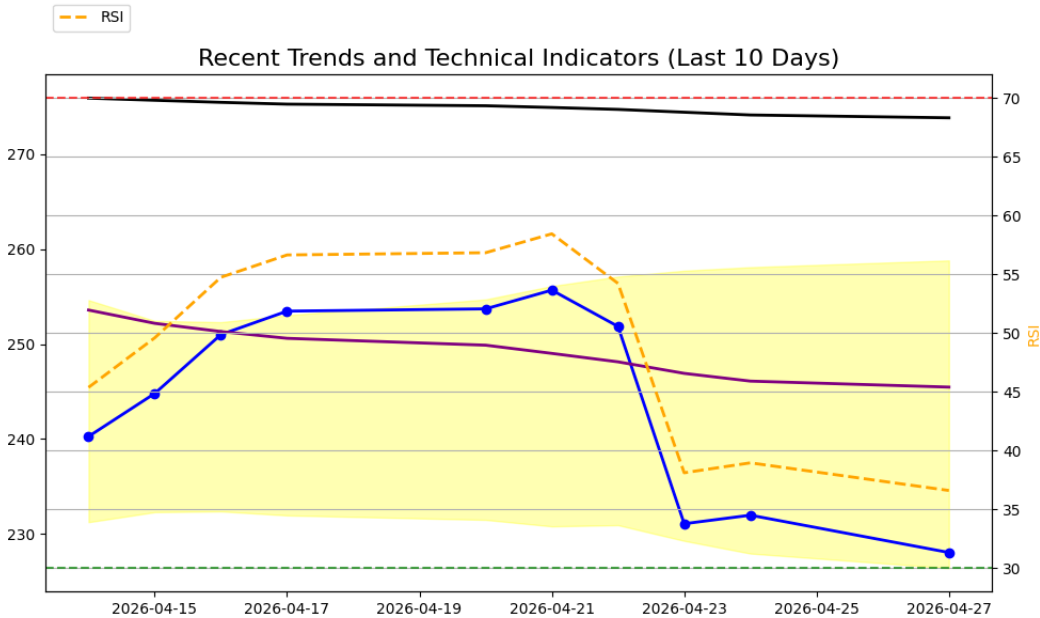
### Average True Range (ATR)



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 Fractal Volatility Index (FVI) of 0.556 points towards moderate volatility. The Lyapunov score of 0.016 is relatively low, suggesting that the stock is currently in a regime of stability rather than chaos. The Bollinger Bands are neither expanding nor contracting significantly, indicating a stable trend. The recent volume change of 56.28% does not confirm a strong price move.

### 2. Market Sentiment

- The high volume of 218034586000 suggests institutional investors are driving the market behavior. Given the moderate volatility and the absence of a strong breakout signal, the investor mood seems cautious.

### 3. Geopolitical Risk Assessment

- IBM has a low GHG impact score (0.048) for the Technology sector, suggesting a low exposure to sectoral emissions risk. The current market-wide volatility, driven by macroeconomic instability and trade war signals, does not indicate a high geopolitical risk for IBM.

### 4. Sector and Supply Chain Exposure

- As a technology company, IBM could have some level of exposure to Asia or U.S. risk factors, although these aren't substantial. The company is not highly dependent on resources or exports, thus it may not be significantly vulnerable to tariffs, shipping disruption, or climate-related regulation.

--- STRATEGY RECOMMENDATION ---

- Trading phase: The stock seems to be in a consolidation phase.  
- Optimal strategy: Given the moderate volatility and the absence of a strong breakout signal, a trend-following strategy may not be optimal at this time. Investors should consider a hedging strategy to manage potential risks.

--- FINAL TAKEAWAY ---

"IBM shows moderate volatility with low geopolitical risk. In the current market regime, it's a time for caution and defensive positioning."

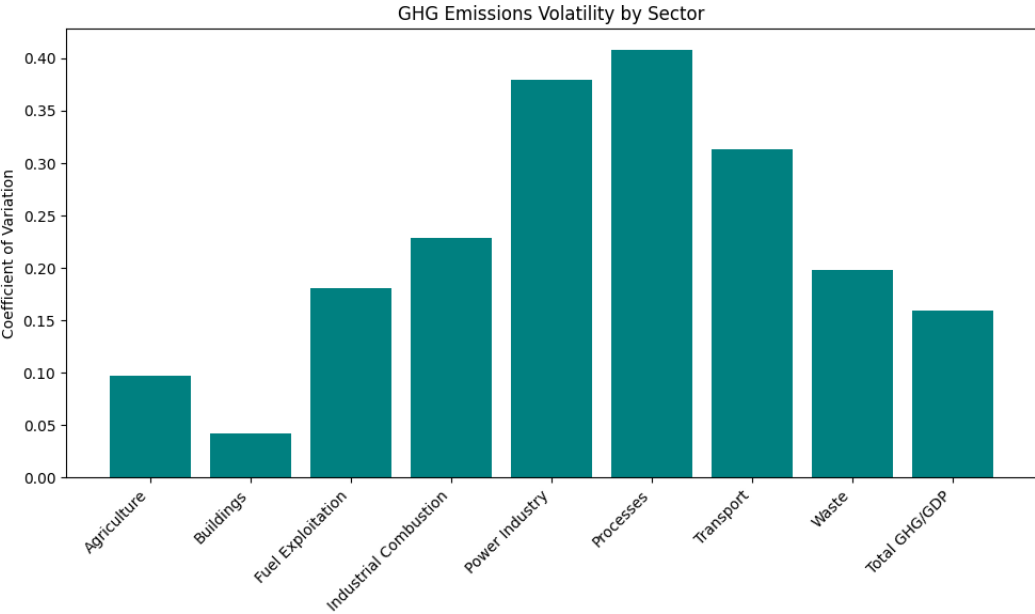
Market Capitalization: 218034586000, Industry: INFORMATION TECHNOLOGY SERVICES, Latest Volume: 8060665, Description: International Business Machines, Sector: TECHNOLOGY, Price to Book: 6.61, Trailing PE: 20.53, Forward PE: 18.76, Enterprise to Ebitda: 15.66, Enterprise to Revenue: 4.006, Profit Margins: 0.156

The trading volume has changed by 56.28% 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: 0.69

Beta of 0.69 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": 0.307,  
  "Price_Volume_Divergence": 0,  
  "Volatility_Dissonance_Index": -0.386,  
  "Deception_Risk": 0.769,  
  "Trumpery_Alert": true,  
  "Summary": "The bridge is open—just ignore the termites and missing planks."  
}
```

Reasoning:

The rising U.S. debt and deficit levels, coupled with changes in U.S. Treasury bond yields and issuance, indicate a significant disconnect between the economic narrative and the underlying fiscal reality. The reported declining foreign demand for U.S. bonds further exacerbates this disconnect.

Central bank interventions such as rate cuts and quantitative easing (QE) have been used to stimulate the economy, but these measures may not be sustainable in the long term, and they contribute to the disconnect between the economic narrative and the actual fiscal and monetary situation.

The use of tariffs and sanctions as economic tools can distort the economic narrative and may not reflect the underlying geopolitical realities. This is particularly true given the current trend towards de-dollarization in the BRICS+ countries.

The inflation versus official interest rate policy also indicates a disconnect. Despite low official interest rates, inflation remains stubbornly high, suggesting that the underlying economic reality may not match the narrative.

Gold volatility and geopolitical hedging further underscore the disconnect between the economic narrative and the underlying realities. As geopolitical tensions rise, investors may flock to gold as a safe haven, causing volatility in gold prices.

Overall, the SYABI system indicates a significant disconnect between the economic narrative and the underlying fiscal, monetary, and geopolitical realities. This disconnect is evidenced by the Trumpery Alert, which suggests that manipulative or performative policymaking may be at play.

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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 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** \_\_\_\_\_