

Deciphering Volatility-Understanding and Encountering Volatile Stock Markets

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If it is stagnant, it is not stock market! Volatility is an inevitable and significant characteristic of stock markets. Volatility can be understood as frequent, unpredictable and large movements in stock prices or return distribution in stock markets. At any point of time there are buyers and there are sellers in a particular stock, but with an opposite view and perception. For the same share, there are optimistic or bullish investors fueling demand for that share and there are pessimistic or bearish investors fueling supply or dampening the demand for that very share. This contrast in perception, and the consequent actions of these buyers and sellers, feeds volatility.

Traders trade because the stock is volatile, and because traders trade, the volatility of the stock increases! The first part of the statement is true because if that were not the case, then there would be not much interest in that stock; and the second part is true because as more traders enter the arena, the interest/speculation in that stock increases, and so does the volatility.

Market Volatility and Market Efficiency

The efficient market hypothesis contends that financial asset price provide rational assessment of fundamental values and future payoffs. By implication price changes should reflect the arrival and processing of all relevant new information. In general, it is understood that less volatile market reflects greater market efficiency. However, greater volatility is not necessarily a sign of less developed stock market. In fact, if volatility could be justified in terms of information, it signals the maturity and efficiency of stock market. To the extent the volatility, even if huge, is explained by significant information/events affecting the stock price movements, the informational efficiency of the stock markets is not diluted by volatility. In other words, volatile movements in stock prices or in values of market indices do not necessarily make stock markets inefficient. It is only when volatile swings take place without any correlation with the significant information, that such volatility puts a question mark on the

pricing efficiency of the stock markets. Thus ‘true pricing’ versus ‘distorted pricing’ of financial assets by the stock markets can be understood within the context of stock market volatility.

Although well informed and analytical investors can use volatility to their advantage, the naïve investor may burn his fingers if he is caught unawares. Regulators like SEBI adopt various measures to control and mitigate the potentially destabilizing effects of volatility e.g. suspension of trading in specific scrip(s), prescribing ‘special margin’ and activating circuit breakers.

How to smartly Use Volatility

The statistical properties and trends of stock return have long been of interest to financial decision makers and investors. Several efforts have been made by researchers to explain, and predict large market movements in return distribution. An investor can potentially take advantage of volatile price movements in stock markets, provided he understands the inherent risks and creates smart investment strategies according to his own **Risk-Appetite**.

First of all, every investor entering a stock market should understand that market could move either way. Therefore, he must accept an ‘acceptable’ level of volatility either in favour or against his forecast, even while he hopes for a favourable movement. This acceptable level of unpredictability needs to be embedded into his investment decision-making process, depending on the type of investor he is, i.e. whether he is a ‘risk-averse’ investor or a ‘risk tolerant’ investor or a ‘risk-seeking’ investor.

Statistical Tools like the ‘Control Chart Approach’ can be used to analyze and use the level of volatility by defining the tolerance zone of volatility in the form of three control limits, which form a continuum of risk, from a risk averse to a risk seeking investor. Average daily log return and standard deviation thereof for the entire period of analysis are to be taken into account for the purpose; and each subsequent control limit expands the tolerance zone by one standard deviation on either side of the average/expected returns. (Standard Deviation is a measure of ‘variation’ of something, here the stock price, from its average). Thus, a *three step trading strategy* can be prescribed for investor for hedging his risk based on his tolerance zone. Firstly, identify an abnormal return giving stock by comparing it with industry/market return. Secondly, check the reason for abnormality. If it is based on fundamentals, go for it otherwise use control limits for decision making. Finally, decide his own acceptable level of risk appetite and make the decision accordingly. The investor needs to assess his return and risk against his cost of hedging.

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