NOISE TRADING

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Contents

MEANING OF NOISE TRADER

- Noise Trader are those investor in the market who makes buy, sell, and hold decision without using fundamental data and end up taking irrational decisions in the market.
- The concept of noise trading was introduced by Fisher Black in his paper “Noise” (1986). He found that investors trade on the basis of limited information.
- Black (1986) termed those investors who do not have private information and behave irrationally as “noise traders”.

IMPACT OF NOISE TRADING

- They distort the mean variance efficient frontier, and thereby creating abnormal returns to securities.
- They create a link between market beta and abnormal returns.
- They create excess volatility in the risk premium on the market portfolio.
- They create a gap between subjective volatility implied in option pricing and its objective counter parts
- It is observed mispricing of stocks which causes substantial resource misallocation is partially the result of sentiment waves.
- Noise traders make the market unpredictable and risky.
- Unexpected boom and bust in the financial sector is the mere reflection of noise trading.

BEHAVIOURAL CAPITAL ASSET PRICING MODEL

- In the stock market there are noise traders and information traders, and they both affect each other. CAPM takes into consideration information traders, who obey Bayesian rule and do not make cognitive errors and are rational investors.
- BAPM focuses on noise traders in the market who commit cognitive errors are normal not rational investors and do not follow Bayesian rules.

BEHAVIOURAL PORTFOLIO THEORY (BPT)

- Shefrin and Statman (2000) gave Behavioural portfolio theory (BPT).
- This theory applies mental accounting where investors divide their money into many mental accounting layers of a portfolio pyramid based on their objectives like retirement, education etc.
- BPT suggest that investors see every mental accounting layer separately with respect to goals and risk.

INVESTOR SENTIMENTS – SENTIMENT INDEX

- Various studies have taken place to understand and capture investor sentiments in stock market. Few countries have started calculating sentiment index of their investors.
- Investor Sentiment Proxies used by Researchers:

Studies by	Measure of Sentiment
Lee et al. (2002)	Investor Intelligent Index
Brown and Cliff (2005)	Used survey of American Association of Individual investors
Kumar and Lee (2006)	Buy-Sell imbalance ratio
Schmeling (2009)	Consumer confidence index
Chuang (2010)	Trading Volume
Naik and Padhi (2014)	ADR, PER, MFNF, TV, TURN,NIPOS, PCR

INFORMATION ADJUSTED NOISE MODEL (IANM)

- **Information Adjusted Noise Model has been given by Ramiah and Davidson** to capture noise trading in stock market. They studied it on Shenzhen stock exchange.
- Information Adjusted Noise Model (IAMN), extracts information from behavioual error(BE). Where it is assumed that unexplained variations in BE reflects noise trading. They control firm specific information in BE.

$$\Delta BE_{it} = \alpha + \gamma IE_{it} + \varepsilon_{it}$$

RESEARCH REVIEW

- In **1989 De Long et al.** in their paper “Noise trading risk in financial market”, had tried to quantify the risk created by noise traders by using sentiment index.
- **Shefrin and Statman (1994)** developed the Behavioural capital asset pricing model known as **BAPM** model, which aim to analyses the effect of price efficiency, volatility, return anomalies, volume, and noise trader survival.
- **Baker and Wurgler** had explored different measures to quantify sentiment and called them sentiment index.

Thank You

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CONFLICT OF INTEREST IN BOARD OF MANAGEMENT

Continued…