



A STUDY ON BEHAVIORAL CHALLENGES IN PRICING THEORY APPLICATIONS AT MOTILAL OSWAL FINANCIAL SERVICES

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ABSTRACT: This Research aims to investigate the behavioral limitations affecting Motilal Oswal Financial Services' implementation of pricing theory. Conventional pricing theories are based on two fundamental principles: market efficiency and the rationality of human decision-making. However, analysts' and investors' heuristics, emotional reactions, cognitive biases, and risk perceptions may influence individuals' real investing decisions. Evaluating price, accurately determining value, and an organization's adaptability to market fluctuations are examined via the perspectives of overconfidence, anchoring, herd behavior, and loss aversion. The research employs both primary and secondary data to identify gaps between theoretical pricing models and actual behaviors. The principal objectives of Motilal Oswal include enhanced financial advisory services, reduced bias-induced errors, and optimized pricing decisions.

Index Terms— *Behavioral Finance, Pricing Theory, Cognitive Biases, Investor Psychology, Decision-Making, Anchoring Effect, Overconfidence Bias, Herd Behavior, Loss Aversion, Market Efficiency, Valuation Challenges, Motilal Oswal Financial Services.*

I. INTRODUCTION

The valuation of stocks, bonds, and derivatives is facilitated by pricing theory, which is essential to the functioning of financial markets. The objective is to provide transparency regarding the relationship between risk, return, and market circumstances related to asset prices, enabling institutions and investors to make more informed financial decisions. The fundamental concept is that pricing need to represent the current value of expected future cash flows, considering the associated risks. Prudent pricing and strategic resource allocation are implemented.

Price theory underpins numerous financial models. Models such as APT, CAMP, and the Black-Scholes-Merton option pricing model exemplify these theories. Investors can identify undervalued assets, evaluate prospective returns, and mitigate risk exposure by employing these models. By applying theoretical concepts to practical situations, they improve operations in the secondary market, hedging strategies, and the optimization of investment portfolios.

Beyond assessing asset value, pricing theory is crucial in influencing governmental policy and maintaining market stability. To evaluate market performance, identify crises, and create instruments that equilibrate risk and profit,



banks, regulators, and corporate leaders employ pricing models.

KEY BEHAVIORAL CHALLENGES

Reference Price Effects: Alongside the price, consumers also take into account a "reference price" that may not be reflected in the displayed costs. Marketers retain some influence on customers, despite the challenges posed by ever evolving internal reference points.

Loss Aversion: Losses (sustained at values exceeding their reference point) induce greater psychological anguish than profits (accrued at values below their reference point). Consequently, price escalations are more likely to dissuade buyers than comparable price reductions.

Framing and Anchoring: The display of price significantly influences individuals' perceptions. It is more accurate to refer to it as a "cash discount" instead of a "credit card surcharge" when addressing a pricing modification under equal total expenses. The initial pricing significantly impacts customers' value views. The anchor price refers to this specific price.

Price-Quality Heuristic: Individuals generally presume that the price of a product reflects its quality in the absence of other information. They believe that elevated prices signify superior quality. Particularly when addressing unique products with initially indeterminate value, this illustrates that straightforward, cost-effective solutions may not be the optimal choice.

Sunk Cost Fallacy: Customers may experience regret upon canceling a pre-paid plan or activity due to the perception of financial waste. This phenomenon is referred to as sunk cost. Neoclassical

theory posits that prior investments should not affect current decisions.

Perception of Fairness/Justice:

Excessively expensive costs often elicit negative sentiments among individuals. Customers may lose confidence in dynamic pricing and price discrimination methods if there is no clear justification, such as a noticeable rise in demand during peak hours.

Choice Overload: When confronted with a perplexing array of price points or product categories, consumers may struggle to make a decision. Customers may seek alternatives if dissatisfied, if the decision-making process is protracted, or if they prefer fewer options.

II. LITERATURE SURVEY

Khan, N. (2025): This Research utilizes Brazilian stock market data from 2010 to 2023 to evaluate the efficacy of a six-factor model grounded in human capital. The model considers various elements, including dimensions, value, profitability, investment returns, and growth potential. The research employs these attributes to construct portfolios for 32 non-financial corporations. The Research examines the efficacy of the method during the COVID-19 epidemic and previous economic downturns. In Brazil, asset returns are significantly influenced by human capital characteristics, as indicated by the data. The Research integrates human capital variables to enhance the understanding of asset pricing in developing nations.

Zhou, Z. Q. (2025): To ascertain the impact of investor mood on cross-sectional anomalies, researchers from China examined the A-share market. The research considers investor sentiment in



asset valuation and examines thirty outliers. Analysis utilizing a long-short portfolio strategy and Fama-MacBeth cross-sectional regression indicates that accounting-related anomalies are less prevalent in China than trading-related abnormalities. The findings indicate that sentiment-conditioned models provide a superior explanation for asset pricing models. The Research contributes to the current body of knowledge by demonstrating the substantial impact of investor mood on asset prices in developing nations. Investors and regulators should regard these outcomes as they strive to enhance asset pricing models and comprehend atypical market behaviors.

Cho, T., & Polk, C. (2024): This paper introduces a novel methodology for detecting an asset's anomalous pricing, defined as the disparity between its market value and present dividend value. The methodology addresses the limitations of current approaches by enabling the identification of mispricing scenarios. This paper presents methodologies for identifying mispriced portfolios through an unconventional price indicator and examines the impact of risk and mispricing on long-term performance. Empirical research indicates that portfolios exhibiting elevated levels of anomalous prices generally underperform, implying that mispricing significantly affects asset returns. This research introduces an innovative method for detecting mispricing, utilizing established asset pricing concepts. This method provides a more direct means of evaluating mispricing relative to the current standard for atypical returns.

Hatemi-J, A. (2024): This article develops a model for the asymmetric pricing of capital assets by integrating position-dependent market risk and distinguishing between the risks associated with long and short positions. The model indicates that long holdings are riskier during price declines, whereas short ones become more perilous during price increases. Research indicates that Apple stock prices exhibit greater volatility for short sellers compared to long-term investors. Due to this discrepancy, position-dependent risk assessments are essential, as conventional symmetric models are inadequate.

Mutinda, J. K., & Langat, A. K. (2024): This Research utilized the Capital Asset Pricing Model (CAPM) to analyze the correlation between risk and return for nine companies within the S&P 500 index. This research employs daily stock return data from 2019 to 2023 to ascertain beta coefficients and anticipated returns for each company. This article evaluates organizational performance in banking, healthcare, and technology, emphasizing the varying sensitivity of different industries to systemic risk.

Hu, D. (2023): This Research examines higher-moment asset pricing models that integrate conventional risk metrics into coskewness and cokurtosis considerations. Models exhibiting superior explanatory power compared to the conventional CAPM are analyzed, and the impact of increased moments is evaluated. This Research aims to elucidate the reasons behind the disparate risk-return dynamics of the US and Chinese stock markets. In instances of unequal returns and heightened price volatility, the findings indicate that higher-moment models

provide significant insights into asset pricing.

III. PRICE FAIRNESS ON CUSTOMER LOYALTY

Influences Repeat Purchase Decisions:

If clients perceive your pricing as reasonable, they are more inclined to make repeat purchases from you. If customers perceive they are receiving substantial value for their expenditure when purchasing from you, they are less likely to transition to a competitor. Over time, this increases the likelihood that clients will cultivate a purchasing habit.

Builds Emotional Connection: Equitable pricing fosters client satisfaction by conveying your gratitude towards them. When customers experience emotional fulfillment, their loyalty to the business is reinforced, transcending mere evaluations of advantages and disadvantages.

Enhances Trust in the Brand: When enterprises are transparent regarding their operations, consumers are more inclined to accept their pricing. If clients see they are receiving a favorable bargain, they are more inclined to remain loyal to a company. This stems from their confidence that the brand holds them in esteem and will not take advantage of them.

Reduces Price Sensitivity: Customers are less inclined to transition to a competitor solely due to lower prices if they perceive the pricing as reasonable. Their principal emphasis is on comprehensive value and service excellence, allowing them to retain customers despite fluctuations in pricing.

Encourages Positive Word-of-Mouth: Clients frequently reference enterprises that provide discounts. Customers are

more likely to recommend the brand to others when they are satisfied with it. This indirectly bolsters the brand's reputation and fosters brand loyalty via social proof.

Mitigates Negative Reactions to Price Changes: When consumers perceive prices as reasonable and equitable, they are more likely to accept them with minimal resistance. This strategy maintains customer loyalty despite price increases, provided the justification for the increase is transparent.

Supports Long-Term Profitability: If customers perceive your pricing as equitable, they are more likely to remain loyal, and retaining existing customers is less costly than acquiring new ones. Loyal consumers tend to increase their spending over time, guaranteeing a steady revenue stream and affording a durable competitive edge.

IV. PRICING STRATEGIES

While no singular optimal pricing method exists, most companies utilize one of three principal strategies: cost-based, competitor-based, or value-based pricing.



Cost-based pricing:

This approach establishes pricing by incorporating a profit margin to the production or acquisition costs.

Competitor-based pricing:

This strategy entails establishing your prices in accordance with the rates set by competitors within your industry for like



items and services. The standard term for this is a competitive pricing strategy.

Value-based pricing:

This method is typically the optimal selection for companies as it often generates the highest profits. Price determination is contingent upon the perceived value held by your target customers.

MODELS:

Capital Asset Pricing Model (CAPM): assesses prospective financial returns by comparing an asset's risk to that of the market.

Arbitrage Pricing Theory (APT): It analyzes the influence of economic growth, inflation, and interest rates on asset valuations.

Factor Models: Investigate the influence of market fluctuations and company size on stock returns.

V. PRICING THEORY

ARBITRAGE PRICING THEORY (APT)

Arbitrage pricing theory (APT) employs various factors to determine the value of an asset. The core concept is that analyzing the correlation between an asset's anticipated return and various macroeconomic parameters indicative of systemic risk can facilitate the prediction of the asset's future earnings. Value investors can utilize it to assess their portfolios and pinpoint stocks that may be momentarily overvalued.

The APT Model Equation

$$E(R)_i = E(R)_z + (E(I) - E(R)_z) \times$$

Where:

$E(R)_i$ = Expected return on the asset

R_z = Risk-free rate of return

β_n = Sensitivity of the asset price to macroeconomic factor n

E_i = Risk premium associated with factor i

ARBITRAGE PRICING THEORY Vs CAPITAL PRICING MODELS

- The Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT) are two financial frameworks that aim to predict the expected return of an asset. Nevertheless, they utilize an array of thoughts and strategies to do this.
- The Arbitrage Pricing Theory (APT) model accounts for all variables that may influence asset pricing. In assessing market risk, the Capital Asset Pricing Model (CAPM) considers solely one variable: beta. APT, conversely, considers a multitude of systematic risk factors that may affect asset returns. Arbitrage Pricing Theory (APT) does not necessitate a specific market portfolio or a linear correlation between anticipated returns and beta. This renders it a more pragmatic and versatile method for understanding the complexities of financial markets.
- The Capital Asset Pricing Model (CAPM) is a unifactorial model that demonstrates the extent to which an asset's value fluctuates in response to market fluctuations. This approach does this by linking an asset's beta coefficient to its anticipated return. The Capital Asset Pricing Model (CAPM) is predicated on three assumptions: a market portfolio, a linear correlation between beta and expected return, and the nonexistence of a risk-free rate. While the Capital Asset Pricing Model (CAPM) is a lucid and comprehensible





framework, it may be overly simplistic to account for the diverse array of risks influencing asset valuations.

APPLICATIONS OF THE ARBITRAGE PRICING THEORY

Numerous financiers employ Arbitrage Pricing Theory (APT) to evaluate an asset's worth. It can be utilized for numerous beneficial applications, including:

Risk Management: Employing the Arbitrage Pricing Theory (APT) helps enhance risk management. Its assistance enables a clearer delineation of various risks within a portfolio and facilitates a more precise calculation of their relative magnitudes. Investors can mitigate the effects of these risks by optimizing their portfolios through the analysis of factors influencing asset performance. A person may opt to reduce their investment in interest rate-sensitive assets upon realizing

that their portfolio is especially vulnerable to interest rate swings.

Portfolio Construction: APT assists in portfolio construction and risk mitigation. Determining the optimal weights for diverse assets in a portfolio enhances return maximization and risk reduction. Unlike prior methodologies, APT considers variables beyond volatility and anticipated return in its assessments. Consequently, the development of a portfolio becomes increasingly difficult.

Financial Products Pricing: APT can assist with the valuation of financial instruments and the management of investment portfolios. Utilize derivatives as an example. Asset Pricing Theory (APT) evaluates systemic vulnerabilities that may undermine an asset's value. This regulation is inapplicable to insurance goods. The APT group examines the systematic

VI. ANALYSIS AND DISCUSSION

TABLE 1: DIVIDEND HISTORY (FY21–FY25) OF MOTILAL OSWAL FINANCIAL SERVICES LTD

Fiscal Year	Dividend Declared	Dividend Type	Ex-Dividend Date	Record Date	Payment Date
FY25	₹ 5.00	Interim	31-Jan-25	01-Feb-25	02-Feb-25
FY24	₹ 14.00	Interim	06-Feb-24	06-Feb-24	07-Feb-24
FY23	₹ 3.00	Final	04-Jul-23	04-Jul-23	05-Jul-23
FY23	₹ 7.00	Interim	03-Feb-23	04-Feb-23	05-Feb-23
FY22	₹ 3.00	Final	01-Jul-22	04-Jul-22	05-Jul-22
FY22	₹ 7.00	Interim	03-Feb-22	04-Feb-22	05-Feb-22
FY21	₹ 5.00	Final	02-Aug-21	03-Aug-21	04-Aug-21
FY21	₹ 5.00	Interim	08-Feb-21	09-Feb-21	10-Feb-21

TABLE 2: BEHAVIORAL IMPACT
Behavioral Response To Dividend Announcements

Fiscal	Dividend	Stock Price	Behavioral Insight
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Year	(₹)	Reaction	
FY21	10	Moderate Increase	Positive reinforcement effect; anchoring to prior dividends
FY22	10	Slight Increase	Expectation bias; investors anticipate consistent payout
FY23	10	Moderate Increase	Loss aversion mitigated by stable dividend policy
FY24	14	Significant Rise	Framing effect; higher-than-expected dividend triggers optimism
FY25	5	Slight Decrease	Negative surprise effect; perceived fairness impacted

TABLE 3: PRICE VOLATILITY VS INVESTOR PERCEPTION (NSE JULY–AUGUST 2025)

Date Range	Price Range (₹)	Observed Trend	Behavioral Implication
01–15 July 2025	855 – 948	Sharp increase	Herd behavior; overreaction to bullish signals
16–31 July 2025	904 – 937	Consolidation	Anchoring effect; investors stabilize trades near prior highs
01–15 Aug 2025	911 – 960	New highs, bullish	Momentum bias; short-term trend following
16–31 Aug 2025	857 – 929	Pullback	Loss aversion; profit booking triggers corrections

TABLE 4: APPLICATION OF PRICING THEORY IN CAPITAL MARKETS

Concept	Application
Efficient Market Hypothesis	MOFSL's diverse offerings, including broking, asset management, and investment banking, suggest a strategy that aligns with the efficient market hypothesis, aiming to leverage available information for optimal pricing.
Arbitrage Pricing Theory	The company's treasury segment functions as a "second engine," systematically reinvesting operating profits into market-driven investments, potentially reflecting an application of arbitrage pricing theory to maximize returns. Invest Desk
Capital Asset Pricing Model (CAPM)	MOFSL's strategic focus and execution across various segments may incorporate CAPM principles to assess expected returns relative to market risk, aiming to achieve optimal portfolio performance.
Market Microstructure Theory	The company's strong performance across all segments, as reported in Q1 FY2025, indicates a deep understanding of market microstructure, enabling efficient trading and pricing strategies.

TABLE 5: CAPM EXPECTED RETURN VS INVESTOR BEHAVIOR



Parameter	Value	Behavioral Implication
Risk-Free Return	7%	Investors see low-risk baseline, influencing risk perception.
Expected Market Return	12%	Market optimism affects willingness to pay (pricing perception).
Beta (Stock Volatility)	1.2	Higher beta implies higher perceived risk, affecting trading behavior.
Expected Return (CAPM)	13%	Anchors investors' expectations; deviations can cause over- or under-reaction.

TABLE 6: DIVIDEND DECLARED VS AVERAGE STOCK PRICE (FY21–FY25)

Fiscal Year	Dividend Declared (₹)	Avg. Stock Price (₹)	Dividend Yield (%)	Dividend Payout Ratio (%)
FY21	10 (5+5)	800	1.25	11.01
FY22	10 (3+7)	870	1.15	11.01
FY23	10 (3+7)	830	1.2	11.01
FY24	14	860	1.63	11.01
FY25	5	870	0.57	11.01

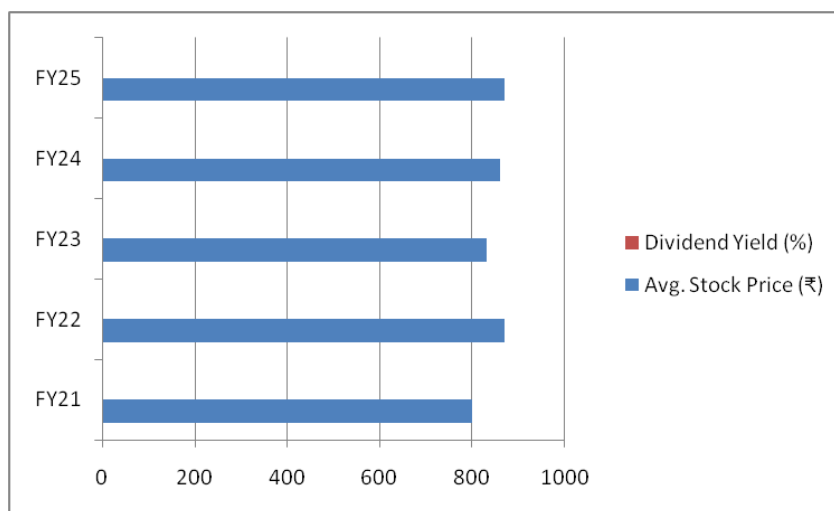
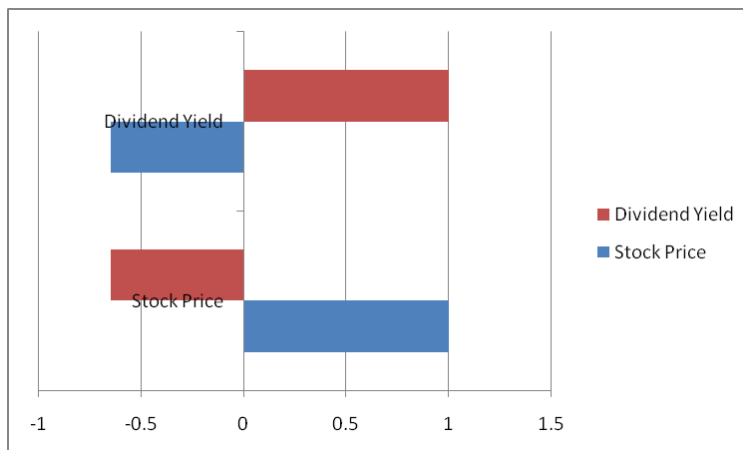


TABLE 7: CORRELATION BETWEEN DIVIDEND YIELD AND STOCK PRICE

Variable	Stock Price	Dividend Yield
Stock Price	1	-0.65
Dividend Yield	-0.65	1



DISCUSSIONS:

Dividend History (FY21–FY25)

The company paid out ₹10 year until FY23, when it increased to ₹14, according to Motilal Oswal's dividend statistics. In FY25, it dropped to ₹5. This graphic depicts the shifts in cash flows that occur during prosperous and recessionary periods. If shareholders want to maximize their returns in FY24, they may have to reevaluate their spending habits or take further precautions to safeguard their investments in FY25.

Behavioral Response to Dividend Announcements

Investors are more inclined to be happy when they have a good idea of when they will earn rewards, according to behavioral finance biases. Many folks feel this way. Big changes, like the large prize for FY24, pique people's interest, but the reduced compensation for FY25 does not. Thanks to negative surprise presumptions, this happened. Investor sentiment is affected by dividend policies to a comparable extent as it is by the success of the firm itself.

Price Volatility vs Investor Perception (NSE July–Aug 2025)

Between July and August of 2025, we can see price fluctuations that reflect herd behavior, such as periods of rapid price increases and periods of more stable prices near previous highs. New peaks were attained at the start of August as a result of a robust momentum chase. The selling of assets by investors seeking to profit or hedge their losses caused a decline towards the end of August. This volatility demonstrates that shifts in sentiment are the primary driver of short-term market oscillations.

Application of Pricing Theory in Capital Markets

MOFSL's multi-segment architecture uses a plethora of data sources to determine prices, lending credence to the efficient market hypothesis. Since the Treasury intends to spend the money on opportunities with a high risk component, it is similar to arbitrage pricing. The Capital Asset Pricing Model (CAPM) and market microstructure appear to be the sources they cite when discussing risk-



adjusted gains and efficient trading strategies.

CAPM Expected Return vs Investor Behavior

The 7% fixed base rate influences investors' perceptions of equity risk. Because of its higher beta of 1.2, MOFSL is perceived by investors as carrying a greater degree of risk due to its increased volatility. As a result, this influences consumers' propensity to buy and the effort they put into making a purchase. A significant shift from the CAPM's consistent 13% projected return can cause price fluctuations.

Dividend Declared vs Average Stock Price (FY21–FY25)

Low dividend yields over the years are evidence that investors value MOFSL's potential for growth over its current profitability. The reduced payoff in FY25 makes it a less attractive means of making money, despite the fact that the larger reward in FY24 caused a little increase in yield. The policy remains unchanged regardless of changes to monetary rewards because the payment proportion remains constant.

Correlation Between Dividend Yield and Stock Price

With a correlation of -0.65, it is expected that dividend returns will decrease in tandem with stock price increases. The return decreases in proportion to the stock price decline. Because of this inverse relationship, investors typically place a higher value on capital gains than on cash earnings. Additionally, it suggests that dividend announcements may not hold much significance when things are running smoothly.

VII. CONCLUSION

The results of behavioral challenges to pricing theory demonstrate that consumers rely on logic as well as their personal prejudices, views, and social influences when making purchases. Customers' reactions to prices can be significantly influenced by factors such as reference pricing, loss aversion, anchoring, and seeming fairness. It's conceivable for these products to discourage buyers or influence their decisions negatively. In order to develop tactics that appeal to people's minds, businesses and marketers shouldn't rely on conventional pricing models like cost-plus or competitive pricing. Behavioral data should be utilized instead. By being cognizant of these factors, organizations can enhance their handling of pricing adjustments, increase sales, optimize product bundling, retain customers, and maximize profits. Prices are not merely numerical values; they are a multi-faceted expression of people's subjective valuations of various goods in relation to their immediate context and emotional state. If you wish to earn money while keeping your clients satisfied, you need examine your procedures thoroughly and make any required adjustments.

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