



Assessing the Mediating Role of Behavioral Finance Decisions in determining the Investors Motivations on Patronage; An Empirical Analysis among the Commodity Market Investors

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Abstract

The commodity market in India has significant role in the economic development of the country. A commodity market is considered to be a physical or virtual marketplace for buying, selling and trading of raw or primary products. There are six major commodity markets in India which facilitate the investors to invest in approximately 100 primary commodities. The commodity market has been divided in to two types as hard and soft commodities. Hard commodities are typically natural resources that must be mined or extracted (such as gold, rubber and oil), whereas soft commodities are agricultural products or livestock (such as corn, wheat, coffee, sugar, soybeans and pork) (Investopedia, 2018). The current study focused on investors motivations like, utilitarian, hedonic, behavioral and attitudinal

motivations which may evoke the re patronage intensions among the customers through behavioral finance decisions. Based on the derived results of the study we conclude that this study may help both for the industry and academia for the better understandings of the investors investors motivations and its impact on behavioral finance decision and then on patronage decision of the commodity market investors.

Key Words: Investors motivations, patronage intentions, behavioral finance decisions, commodity market.

1 INTRODUCTION

The Indian commodity futures markets in India is still to be considered as predominantly remain underdeveloped (Ramaswami and Singh, 2007). The Indian commodities market has a long history of commodity derivatives trade compared to the US and UK markets, (Vashishtha and Kumar, 2010). The commodity markets evolution is started in the year of 1875, with the setting up of the Bombay Cotton Trade Association Ltd. Later a separate association named Bombay Cotton Exchange Ltd is constituted in the year of 1983 following widespread discontent among leading cotton mill owners and merchants over the functioning of the Bombay Cotton Trade Association (Agnihotri and Sharma, 2010; Barua and Mahanta, 2012; Bose, 2008; Harri et al., 2009; Ahuja, 2006; Kothiwala and Goel, 2012; Malyadri and Kumar, 2012).

Expanding its coverage of agricultural commodities, along with silver, the committee submitted its report in September 1994, championing the reintroduction of futures, which are banned in 1966. The Government of India appointed an expert committee on forward markets under the chairmanship of Prof. K.N. Kabra in June 1993 following the introduction of economic reforms in 1991. The National Agricultural Policy 2000 conceived of external and domestic market reforms and disassembling of all controls and regulations in the agricultural commodity markets in order to encourage the agricultural sector. To minimize the wide fluctuations in commodity prices and for hedging the risk arising from extreme price volatilities it also proposed an expansion of the coverage of futures markets.

The commodity trading experience various regulatory decisions

during the post-independence period. Under the ministry of consumer affairs, the forward contract (Regulation) Act was enacted in 1952 and the FMC or the forward market commission was established in 1953. FMC acts as a regulatory body, which governs the commodity markets in India. During the mid-1960s, it was witnessed that an unprecedented rise in the prices of major oils and oilseeds as an outcome of a sharp fall in output. Futures trade was banned in most commodities to certain speculation, which the government attributed to rising inflation.

Research Problem

The term motivation has been appeared since 1880s in the psychologists vocabularies. Early functionalist philosophers and psychologists used the term motivation usually in reference to voluntary action behaviors that show direction (Forges et al, 2005). According to the Websters dictionary, a motive and a motivation is defined as the act or process of motivating. Thus, motivation is the act or process of providing motive that causes a person to take some action. Shasank, 2011, mentioned that motivations come from some need that leads to behavior that results in some type of reward when the need is fulfilled. Motivation is the driving force within individuals that impels them to action (Baumeister & Vohs, 2007). It is also defined as the stimulation of any emotion or desire operating upon ones will and promoting or driving it to action. Many theories revealed that, motivation may be rooted in a basic need to minimize physical pain and maximize pleasure. The studies of Bloch & Richins, 1983, Westbrook & Black, 1985 directed attention to the emotional aspects of shopping and to understand the investors motivations from both utilitarian and hedonic perspective. In the utilitarian perspective shopping is viewed as a positive experience and the hedonic aspect of shopping has been documented and tested as excitement, arousal, joy, festive, fantasy, adventure etc (Bloch & Richins, 1983, Westbrook & Black, 1985). The different observations suggest a need to understand this concept better. Therefore, this paper aimed to provide empirical evidence that how the commodity market investors are influencing by the different motivations like, utilitarian, hedonic, behavioural and attitudinal motivations. This study further investigates the mediating impact of behavioral finance decisions on patronage intentions of Indian commodity market investors.

Need for the Study

The Indian commodity sector, consumers patronage a variety of commodity market avenues to purchase their future market needs and this is consequence for cross shopping (AC Nielsen, 2010). Adding to this the changes in the lifestyle of the customers caused for the cross shopping i.e the investors are not confining for one avenue (Carpenter and Moore, 2006). This context posed a big challenge for the commodity marketers to retain the existing customers and to have patronage. However, few studies of investors motivations revealed the utilitarian and hedonic motivations (Bloch & Richins, 1983, Westbrook & Black, 1985), whereas the other studies (Bloch & Richins, 1983, Westbrook & Black, 1985) compared the advantages and disadvantages of both hedonic and utilitarian investors motivations.

Jones and Taylor, 2007 noticed the behavioral motivations including repeat buying intentions or customers chain buying behavior. Behavioral motivations evoke the feelings of repurchasing from the same service provider (Zeithmal et al., 1996, Jones et al., 2000), it is also observed that the behavioral motivations will lower the switching intentions (Bansal & Taylor, 1999; Dabolkar and Walls, 1999) and behavioral motivations arouse the feeling of making of all purchases in a particular category from a single service provider (Reynolds and Beatty, 1999, Reynolds and Arnold, 2000). Dick and Basu, 1994, Prichard et al, 1999 proposed that the attitudinal motivations inducing the emotions towards the service provider. With the aroused emotional feelings the existing customers recommend the service provider to others (Butcher et al., 2001, Javalgi and Moberg., 1997). The high attitudinal motivations enhance the strong preference towards service provider (Mitra and Lynch, 1995). Fournier, 1998 stated that attitudinally motivated customer will possesses a feeling of sense of affiliation with the organization.

But there is no a comprehensive study on all the investors motivations like, utilitarian, hedonic, behavioral and utilitarian motivations and how they are influencing the customers for their patronage in the Indian commodity marketing. Hence there is a need to fill this research gap in academic literature on investors motivations in the future market behavioral finance decisions.

Objectives of The Study

The objectives of the study are as followed:

- ★ To explore the commodity market investors motivations like hedonic, utilitarian, behavioral and attitudinal motivations in the Indian context.
- ★ To examine the impact of investors motivations on behavioral fianc decisions of the commodity market investors.
- ★ To assess the impact of behavioral fianc decisions on patronage intentions of commodity market investors.

Theoretical Framework

There is an extensive literature in both marketing and retailing on the concept of investors motivations. The earlier studies (Anic & Vouk, 2005, Arnold, Oum & Tigert, 1983; Arnold & Reynolds, 2003; Dawson et al., 1990; Geuens et al., 2002; Groeppel et al., 1999; karande & Ganesh, 2000) stated the diversity of investors motivations. Among all of them Tabuer (1972) will be considered as the pioneer in studying shopping motives and more over he concluded that, shopping is often driven by personal and social motives. In the past researchers assume that investors motivations are mainly utilitarian or hedonic (Babin, Darden & Griffin, 1994; Bellenger & Korgaonkar 1980; Dawson et al., 1990; Westbrook & Black 1985). According to Babin, Dardin & Giffen (1994), when investors motives are utilitarian, shopping is task-oriented and rational. Investors are qualified as functional or economic seekers and their shopping nears as a work-task. Kim(2006) adds that utilitarian motivation include two dimensions; efficiency and achievement. Efficiency refers to consumer needs and goal to save time and resources, while achievement is more concerned about the shopping goal embodied in the success in finding specific products. Based on the research evidences in this domain a conceptual framework is proposed by the researcher which shown in the following.

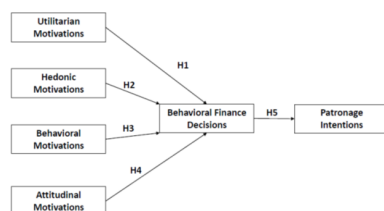


Figure 1: Conceptual model of the study

Hypotheses Development

H1. Utilitarian Motivation will positively influence customers Patronage Intentions:

H2. Hedonic Motivation will positively influence customer behavioral finance decisions.

H3. Behavioral Motivation will positively influence customers behavioral finance decisions

H4. Attitudinal Motivation will positively influence customers behavioral finance decisions.

H5. Behavioral finance decisions will positively influence customers patronage.

Methodology

Mall intercept survey method was used to collect the primary data with the help of a structured questionnaire. The data has been collected from 230 commodity market investors in the supermarkets and hypermarkets of Guntur and Krishna districts in the state of Andhra Pradesh. Both descriptive statistics (Mean and Standard Deviations) and statistical techniques such as multiple linear regressions, Chi-square and ANOVA were applied to test the formulated hypotheses from research framework.

Data Analysis

The descriptive statistics and factor analysis was shown in Table 1, Factor analysis results and the KMO results were exhibited in Table 2 & 3. Inferential statistical techniques like Chi-square, Correlations, Multiple Regressions (stepwise method) and ANOVA were used for testing the formulated hypotheses. The inferential statistics were described below tables and paragraphs.

Table No1: Demographic details of the respondents

Variable	Description	Frequency	Percent	Mean	S.D
Gender	Male	62	27	--	--
	Female	168	73		
Age	20-30 years	68	29.6	37.26	11.47
	30-40	82	35.7		
	40-50	48	20.9		
	50 & above	32	13.9		
Marital Status	Married	214	93	--	--
	Un-married	16	7		
Education	SSC/Diploma	18	7.8	--	--
	Graduation	100	43.5		
	PG & above	112	48.7		
Occupation	House wife	68	29.6	--	--
	Employment	102	44.3		
	Business	38	16.5		
	Others	22	9.6		
	(students/retired)	4	1.7		
Monthly Household Income	< Rs 20,000	4	1.7	Rs 33,304	Rs 10925
	Rs 20,000-30,000	104	45.2		
	Rs 30,000-40,000	64	27.8		
	> Rs 40,000	58	25.2		

Table No2: KMO and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.702
Bartlett's Test of Sphericity	Approx. Chi-Square	5047.1
	Df	82
	Sig.	.000

The regression models shown in Table 3 contributed significantly and predicted 67.5 percent variation by utilitarian motivations in Mode-1, 83.7 percent variation by utilitarian motivation & hedonic motivation in Model-2, 89.4 percent variation by utilitarian motivation, hedonic motivation & behavioral motivation in Model-3, 90.8 percent variation by utilitarian motivation, hedonic motivation, behavioral motivation & attitudinal motivation in Model-4 towards customers patronage.

The four emerged regression models for customers patronage yielded a significant statistic ($F=477.654$, $p=0.000$; $F=590.961$, $p=0.000$, $F=645.570$, $p=0.000$ and $F=563.738$, $p=0.000$ with utilitarian motivation ($\beta=0.793$, $t=21.853$, $p=0.000$), utilitarian motivation & hedonic motivations ($\beta=0.551$, $t=18.192$, $p=0.000$ & $\beta=0.459$, $t=15.109$, $p=0.000$), utilitarian motivation, hedonic motivations & behavioral motivations ($\beta=0.380$, $t=13.160$, $p=0.000$, $\beta=0.362$, $t=13.903$, $p=0.000$, $\beta=0.331$, $t=11.006$, $p=0.000$), utilitarian motivation, hedonic motivations, behavioral motivations & attitudinal motivations ($\beta=0.351$, $t=12.818$, $p=0.001$, $\beta=0.332$, $t=13.351$, $p=0.000$, $\beta=0.257$, $t=8.397$, $p=0.000$, $\beta=0.278$, $t=5.844$, $p=0.000$) as its significant predictors shown in Table 4.

It indicated that independent variables such as utilitarian motivations, hedonic motivations, behavioral motivations and attitudinal motivations were related to dependent variable i.e., customers behavioral fianc decisions. Hence, the following regression models:

$$Y = 1.291 + 0.793X_1 \quad (1)$$

$$Y = 0.031 + 0.551X_1 + 0.459X_2 \quad (2)$$

$$Y = 0.419 + 0.380X_1 + 0.362X_2 + 0.331X_3 \quad (3)$$

$$Y = 0.238 + 0.351X_1 + 0.332X_2 + 0.257X_3 + 0.278X_4 \quad (4)$$

$$(5)$$

Whereas, Y =Customers Patronage; X_1 =Utilitarian motivations; X_2 =Hedonic motivations; X_3 =Behavioral motivations; X_4 = Attitudinal motivation

The hypothesis of relationship between behavioral finance decisions and patronage intentions are tested by using multiple regressions. The regression results shown in Table - 3 revealed that the predictor variables contribute significantly and had moderate impact on the patronage intentions ($R^2 = 0.239$). The corresponding ANOVA value ($F = 256.359$, $p=0.000$) for the regression models had indicated the validation with patronage intentions.

Table 5.80 Regression Model Summaries for the Behavioral finance decisions on Patronage Intentions.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	ANOVA			
					df1	df2	F-Value	Sig.
1	0.489 ^a	0.239	0.238	0.90496	1	815	396.090	0.000
a. Predictors: (Constant), Patronage Intentions								

Fig: 4 THD Minimization using PSO Algorithm

The coefficient summary shown in Table 5.41 revealed that beta values behavioral finance decisions ($\beta=0.559$, $t=16.011$, $p=0.000$) was significant with patronage intentions. The results were implicit that predictor variable was related with dependent variable. Hence, null hypothesis was disproved and alternate hypothesis (H6) was accepted as their p-values were less than 0.05.

Here the following simple linear regression model:

Patronage intentions (Y) = 2.150 + 0.559 (Behavioral finance decisions) X

Table - 4: Predictor effects and Beta Estimates (Unstandardized) for Behavioral Finance decision associated with Patronage Intentions

Model	Variable	Unstandardized Coefficients		Standardized Coefficients Beta	t-Value	Sig.
		B	Std. Error			
1	(Constant)	2.150	0.201	-	10.709	0.000
	Behavioral Finance Decisions	0.559	0.035	0.489	16.011	0.000
a. Dependent Variable: Patronage Intentions						

RESULTS

Null hypotheses: $H1_0$, $H2_0$, $H3_0$, $H4_0$ and $H5_0$ were disproved. Therefore alternative hypotheses Utilitarian motivations (H1), Hedonic motivations (H2), Behavioral motivations (H3) and Attitudinal motivations (H4) were proved to be the significant predictors of customers patronage.

Table - 3 Regression Model Summaries for the Effect of Investors motivations on Customers patronage

Model	R	R Square	Adjusted R Square	S.E. of the Estimate	ANOVA Results			
					df1	df2	F-Value	Sig.
1	0.823 ^a	0.677	0.675	0.35891	1	229	477.564	.000
2	0.916 ^b	0.839	0.837	0.25398	2	228	590.961	.000
3	0.946 ^c	0.896	0.894	0.20500	3	227	645.570	.000
4	0.954 ^d	0.909	0.908	0.19144	4	226	563.738	.000

a. Predictors: (Constant), Utilitarian motivations

b. Predictors: (Constant), Utilitarian motivations, Hedonic motivations

c. Predictors: (Constant), Utilitarian motivations, Hedonic motivations, Behavioral motivations

d. Predictors: (Constant), Utilitarian motivations, Hedonic motivations, Behavioral motivations, Attitudinal motivations

Table-4: Predictor effects and Beta Estimates (Unstandardized) for Investors motivations associated with the Customer patronage

Model	Variables	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.900	0.167	-	11.374	0.000
	Utilitarian motivation	0.670	0.029	0.614	22.914	0.000
2	(Constant)	1.155	0.163	-	7.109	0.000
	Utilitarian motivation	0.574	0.028	0.526	20.736	0.000
	Hedonic motivation	0.420	0.029	0.383	14.539	0.000
3	(Constant)	1.275	0.157	-	8.111	0.000
	Utilitarian motivation	0.417	0.029	0.383	14.579	0.000
	Hedonic motivation	0.362	0.029	0.332	12.577	0.000
	Behavioral motivation	0.342	0.029	0.314	11.887	0.000
4	(Constant)	1.012	0.155	-	6.523	0.000
	Utilitarian motivation	0.402	0.031	0.369	13.113	0.001
	Hedonic motivation	0.333	0.025	0.370	13.204	0.000
	Behavioral motivation	0.301	0.037	0.301	8.078	0.000
	Attitudinal motivation	0.236	0.026	0.262	9.144	0.000
a. Dependent Variable: Customer's Patronage						

2 CONCLUSION

Behavioral finance is a complex topic of research that has been studied from many different approaches. This paper tried to provide a comprehensive knowledge on which motivations are playing a key role in generating the patronage intentions through the behavioral finance decisions among the commodity market investors. It has been concluded that if marketers do not understand the motivational factors of customers properly they cannot understand the mediating role of behavioral finance decisions to tap the patronage opportunity among the commodity market investors.

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