

Article

# Differentiation between Heuristic and Meticulous Domain of Financial Risk Taking Propensity

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**Abstract:** Relaxing the assumption of rational human being, this study examined the risk taking aspect of financial decision making. In this study financial risk taking propensity is explored with altogether new facet and classify it in two domains. First domain highlights advantageous aspect for wealth and economic prosperity while second can be a menace for wealth and prosperity. Literature is precisely collected to sharpen this peculiarity and to reach on imperative determinants of each domain. Objective is to create differentiation (distinction, discrepancy, peculiarity) between Affective (heuristic) and Cognitive Domain of financial risk taking propensity using empirical approach. Our results predict that in heuristic domain the bias of Dispositional Affect and propensity to rely on emotions are significantly dominant factors to take risky investment. Whereas, in beneficial risk taking domain (called cognitive), financial literacy, financial self-efficacy, stock market knowledge and thoughtful analytical processing style found to have significant impact. The evidences reported in this study not only support insightful investment decisions but also elaborate risky behavior of renowned financial players.

**Keywords:** Risk Taking, Decision Making, Cognition, Emotions, Financial Literacy, Financial self-efficacy, Market knowledge, Dispositional Affects.

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## 1. Introduction

The theory of decision making believes that people are not perfectly rational but they are normal therefore select satisfactory option rather than best one (optimal). Humans have limited cognitive abilities and rely on emotions to make decisions (Forgas & George, 2001; Aren & Hamamci, 2020). This study aims to contribute in behavioral decision making using cognitive and affective factors that may impact on financial decision making and risk taking. Investment behavior can be best captured from the following three dimensions: Risk taking propensity, Investment satisfaction and Level of diversification. As importance of understanding risk is irrefutable hence parallel is to understand risk taking behavior. In long term financial decisions risk taking has considerable impact on lives by improving or deteriorating individual's financial stability (Xiao, Chuanyi and Shim, 2009) and family well-being. Financial strain results into low marital satisfaction (Archuleta, et al., 2011), lower work productivity (Kim, Sorhaindo and Carman, 2006) and even poor academic performance (Joo, Durband and Grable, 2008).

On the way of intense literature assessment, individual differences in reasoning and decision making become obvious. These differences occur due to the limitations to process

information and decision quality can improve through improvement in cognition processing. Due to presence of error term in financial theories implication, quantitative finance is shifted towards behavior finance wherever facing deviation from normative performance (as expected under assumption of rational processing).

The ambition is to observe the impact of neurological processing type (rational vs. emotional) on financial risk taking behavior of investors. Factors are distributed between two domains as cognitive (financial literacy, stock market knowledge, financial self-efficacy, Need for Cognition) vs. affective (Dispositional Positive and Negative Affect, Emotion Base decision making). Moreover, it elaborates differentiation (distinction) between Affective (heuristic) and Cognitive (meticulous) domain of financial risk taking propensity using the pragmatic approach. The premier aspiration of this research is to sharpen the differentiation line between heuristic and meticulous risk taking for coming research strands.

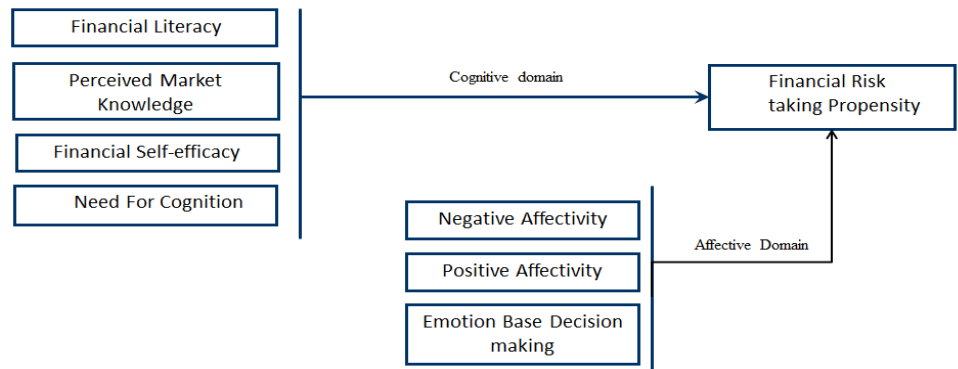
In addition to separate Financial Risk Taking propensity into Affective and Cognitive domain, we made an incipient and motivational attempt to address improvement in this maladaptive domain of financial risk taking. For this purpose moderating role of dual processing system is examined in Affective domain of decision making. We used emotion base decision making variable as a proxy of system1 processing and Need for cognition variable as a proxy of system2 processing. Previous studies mostly consider maladaptive and undesirable facet of risk taking (Combrink & Lew, 2020) whereas this study differentiated heuristic and meticulous attributes to achieve particularity. After making an extensive research only one study of Zaleskiewicz (2001) found pertinent which made distinction between instrumental (“goal-oriented behavior driven by the potential rewards”) and stimulating (thrill-seeking behavior driven by the excitement). Financial Risk taking under the influence of biases and without deliberation would result into harmful risk taking that would even decrease financial welfare.

Some psychologists tried to access risk behavior towards health and safety issues (Nicholson, et al., 2005) but did not consider the role of emotions specifically for financial risk taking propensity. Integrating feelings and emotions with individual financial risk taking propensity is quite novel in its nature. This research would help financial advisors to accurately address customers’ needs by having clear idea of their risk tolerance and would make important contribution in financial risk taking behavior literature by dividing financial risk taking as consistent (meticulous) and inconsistent (heuristic) behavior.

This research basically finds a set of determinants that creates differences in processing capability and risk behavior of investors. It is universal truth that individuals are not identical in their capabilities so does are their competencies. On the basis of this fact we assumed that financially educated, well informed and confident individuals can make better investment decisions than that of ignorant and those lacking self-confidence. Summarizing Risk taking literature we identified that risk taking behavior could result from following two reasons:

1. Due to some heuristics
2. Due to low perception of risk (perceiving less uncertainty of outcomes)

In the first case people may become over optimism, over confident or may come under emotions and resulted into cognitive mistakes (Combrink & Lew, 2020). In this case risk taking could bring valuable loss although sometimes accidentally even leads to accurate financial decisions but leads your finances downsides in long run. In Affective domain this study found the impact of dispositional affective bias and Emotion base decision making on financial Risk Taking. While in the second case people perceive risk as low due to many reasons (Kybernetes, 2017). They may found less uncertainty in available risk as compare to others, may be good in judgments and analytical processing to access better probabilities, may have better market and finance knowledge (Ayndymir & Aren, 2017) also better information search and processing. In cognitive domain this study considers the impact of financial literacy, financial self-efficacy, stock market knowledge and thoughtful analytical processing (Need for cognition) on financial risk taking propensity.



**2. Literature Review**

Risk propensity speaks of a person’s potential willingness to welcome or avoid risk. Hence, financial risk taking is a person’s potential willingness to welcome or avoid risk in financial matters. Before starting research on risk taking propensity one should clear that either risk taking propensity is considered as a personality trait (stable over situation and time) as defined by Fischhoff et al., (1981) or as behavior tendency (affected by context and is modifiable). Thus recent studies consider risk taking propensity as behavior tendency (e.g. Choa and Lee, 2006) analogous to this study and modifications can be expected in behavior by altering highly relevant factors. Therefore, this is of high importance that these relevant factors become evident. Moreover, planning and counseling services provided by financial industry are highly dependent on appropriate understanding of risk taking behavior so that they can design and recommend best and suitable investment opportunity at a particular risk level (Rattiner, 2004). In 2011, the Financial Industry Regulatory Authority and the Securities and Exchange Commission of United States ratified a rule according to which financial advisers should attain precise valuation of financial risk taking (Financial Industry Regulatory Authority, 2011; McAree, 2012) and this rule is also followed in Australia and United Kingdom as well (Britt and Grable, 2011).

**2.1 Psychometric and Neuropsychological Aspects of Risk Taking**

Research in hand incorporated both paradigm of risk taking research: psychometric (e.g. Nicholson, et al., 2005) as well as neuropsychological. According to psychometric paradigm risk behavior is associated with personality traits while neuropsychological paradigm emphasis on difference in neuropsychological processing system (Zuckerman, 1994). Some resent studies incorporated both paradigms individual differences and processing dynamics in order to properly explore decision making under uncertainty (Franken and Muris, 2005; Soane and Chmiel, 2005). Peters and Slovic (1996) seemed to Categorizing “psychological” dimensions of risk as due to dread and due to risk of the unknown. Indeed, individual has low control and strongly perceived catastrophic prospective. In second, degree of undefined, unobserved and degree of newness is more for individual. So to ensure these two aspects in cognitive domain factor of unknown and factor of control both are incorporated .Behavioral finance literature provide explanations for normatively deviated behavior basically comprise of following two sets of factors: first affective disposition (Aren & Hamamci, 2020; Forgas and George, 2001) and second is cognitive limitations (Dohmen et. al, 2018). Therefore, many studies recommend considering cognition and affecting reactions together to get better understanding (e.g; Ding and Beaulieu, 2009; Kida, Moreno, and Smith, 2001).

In context of business rather than health, risk taking most of the time is considered to be beneficial for financial welfare of the society by increasing firm welfare. As Sprinkle, Williamson and Upton (2007) argued that people having risk aversion select safe options which in turn reduce firm welfare. So, in financial decision we can consider risk taking

behavior beneficial for economic prosperity by adding value to firms. However, there are wide examples of bankruptcy and financial crisis as well where over optimism (proxy of risk taking) contributed to some extent. So this study classified risk taking domains where risk taking is beneficial (add value- high risk high return concept) and where it is precarious for financial status (destroy wealth). Many researchers found that heuristic base decisions and affection reactions sometimes lead to correct decisions but these decisions have negative impact on firm and society in long run due to biases and errors in judgments. (Sprinkle, Williamson, & Upton, 2007) So, risk taking on the base of heuristics and bias judgments will reduce welfare.

## 2.2 Affective Domain of Financial Risk Propensity

In Affective domain of financial risk taking propensity we explore the impact of dispositional affect (positive as well as negative) on financial risk taking propensity along with emotion base decision making. The universality of emotions (affects) can be guessed by the fact that decision making without affect are reported to be rare by Forgas (1995). Difference in direction and strength of influence in different circumstances make it difficult to standardize the research on affect (Connelly, et al., 2004). Hence, researchers going to focus on task base differentiation and resulted into emerging context dependency belief (Lowe and Reckers, 2012). Recently research start incorporated affect in behavioral finance especially in domain of investment decision making (Aren & Hamamci, 2020). Moreover, Forgas and George, (2001) reported that limited cognitive capacity motivates individuals to rely high on affects in complex (uncertain) decision environment.

In literature of emotions Impact of mood on risk taking is highlighted by following two different and opposing theories: "Affect Infusion Model" positive mood favors to take more risks (Forgas, 1995) and "the Mood Maintenance Hypothesis" in positive mood people would avoid risk to maintain pleasure and positive mood (Isen, 1987) but great support is present for first theory i.e. Positive affect leads to risky decisions while negative affects leads to less risky decisions. The main justification of positive Affect and risk taking is that in positive mood and emotions individual perceive its environment as safe or threat less that ultimately demotivated him to indulge in thinking. Adjectives related to positive affect include: enthusiastic, content, inspired, excited, satisfied, happy, and pleased.

In negative mood (presence of negative emotions) people go to adopt analytical style of decision making. Gambetti and Giusberti (2012) reported that individuals experiencing anxiety are prone to reduce risk. Adjectives related to Negative affect are; feelings of anger, depression, anxiety, fear frustration. Yuen and Lee (2003) also supported the same relation examining the influence of emotions and found risk taking conservativeness during depressed mood but not in positive and neutral mood. Schwager and Rothermund (2013) in their research experiment found that affecting processing which induces positive bias produced risk taking behavior while negative bias will produce risk averse behavior.

Emotion base decision making is propensity to make decisions on the basis of feelings. Emotion base decision makers do not waste time to gather facts and not indulge in thoughtful processing, make decisions based on intuitions or simply follow system 1 processing. Fischer and Smith (2004) predict that Decisions which are made in absence of or with less deliberation (thought) are positively related to real life financial risk taking but have adverse consequences. It means lack of deliberation leads into injurious Risk taking. Hence, we can conclude that:

Hypothesis: 1. Dispositional positive affect is positively associated with Financial Risk taking.

Hypothesis: 2. Dispositional Negative affect is negatively associated with Financial Risk taking.

Hypothesis: 3. Emotion base decision making is positively associated with Financial Risk taking.

### 2.3 Cognitive Domain of Financial Risk Propensity

Personal cognition resulted into the persistency of the behavior and to find out the consistent risk taking behavior we incorporated cognition related variables e.g Financial self-efficacy, financial literacy, perceived stock market knowledge and need for cognition. Here, literacy and efficacy have potential to improve the perception about risk. Whereas, low risk perception favors Risk taking behavior as believed, People made decision not on the basis of actual risk but on the basis as they perceived (Kybernetes, 2017). Moreover, Schunk (1989) mentioned that self-efficacy without sufficiency in basic skills will never produce better result in performance. So, Presence of financial literacy, financial self-efficacy and perceived market knowledge may cause "The better-than-average effect" (Taylor and Brown, 1988) which motivate individuals to take risk. Individuals feelings towards activity (controllable or not) collaborate to make judgments. Hence, favorable feelings resulted into perceiving risk as low hence in turn will increase risk taking propensity (Kybernetes, 2017).

Cognitive domain emphasis on the fruitful role of financial literacy trainings and programs on enriching financial behavior especially significant positive influence of financial education on retirement savings and volunteer participation (Bernheim and Garrett, 2003). This view is coherent with results of Bayer, Bernheim and Scholz (2009) while investigating impact of offered education programs on employee participation. Meier and Sprenger, (2007) found that after getting financial education participants of research become future orientation and responsible in making financial decisions. Whereas, Iyer, McBride and Reckers (2012) work on efficiency of decision aid to lessen individual risk aversion attitude and find significant impact of decision aid on tolerance of ambiguity. Studies suggest that decision aid reduce the impact of biases when uncertainty or risk is being faced (Ghosh and Crain, 1993). Therefore, in presence of financial literacy and market knowledge, potential biases (cognitive as well as affective reactions) will not contribute in risk taking. Perceived knowledge is "knowledge which people believe they hold irrespective of what they actually know" (Salmon, 1986). And Perceived Market Knowledge is Individual's perception about One's ability to understand stock market knowledge.

Confidence is significantly related to individuals' belief of awareness as Literature of Behavioral finance advocates that investors and decision makers grow into much assured in their decisions when have faith in their knowledge and report their selves as knowledgeable decision makers (Graham, Harvey, and Huang, 2009). Importance of Perceived knowledge is vigilant by the study of Konana and Balasubramanian (2005) that report that subjective assessments (perceived) of knowledge exceeds the objective assessment (actual) of participants' knowledge. Graham, Harvey, and Huang (2009) postulated that feeling of competence resulted into overconfident investors that have faith in accuracy of decisions made by them. Therefore, higher the perception about knowledge and financial skill the more will be the risk taking propensity.

Moreover, one's ability of risk assessment depends on one's psychological characteristics in which self-efficacy is studied at very initial stages by many researchers (Locander and Hermann, 1979). Self-efficacy in general sense is the perceived control and confidence one feels on one's behavior (Linan, 2008) also refers to as perceived competency and ability to control a situation. Cho and Lee (2006) reported that such people believe that they can make decisions accurately from few and ambiguous information. Zajacova, Lynch, and Espenshade (2005) studied domain specific self-efficacy and reported that academic self-efficacy negatively correlated with perceived task related stress and self-efficacy is robust predictor of academic performance than stress.

Similarly, Cho and Lee (2006) significantly founded that high self-efficacy lower the perceived risk for investing in the stock market. Lower perception of risk will eventually result into taking greater risk as compare to one that have low self-efficacy and similar risk level perceived to be high for such individual and he will avoid to take risk. So we can say that individual trait self-efficacy would lead to higher risk taking propensity.

Work of Dulebohn (2002) on self-efficacy found that for a person high in self-efficacy, the uncertainty of an investment scenario would be low because he evaluate it and go for a riskier investment.

Additionally, need for cognition reduce the occurrence of behavioral biases that may happen in decision making (Carnevale, Inbar, & Lerner, 2011). There is evidence of Positive relationship of cognitive awareness and risk taking explaining as for improved cognitive awareness, risk deems to be acceptable (Gerrard, et al., 2003). Considering the Myers-Briggs Type Indicator, Markiewicz, and Weber, (2013) found individuals with strong preference to thinking are risk taker while people with slight preference to think are risk averse. Hence in purview of above arguments we can conclude that:

Hypothesis: 4. Financial literacy is positively associated with Financial Risk taking.

Hypothesis: 5. Perceived Stock Market Knowledge is positively associated with Financial Risk taking.

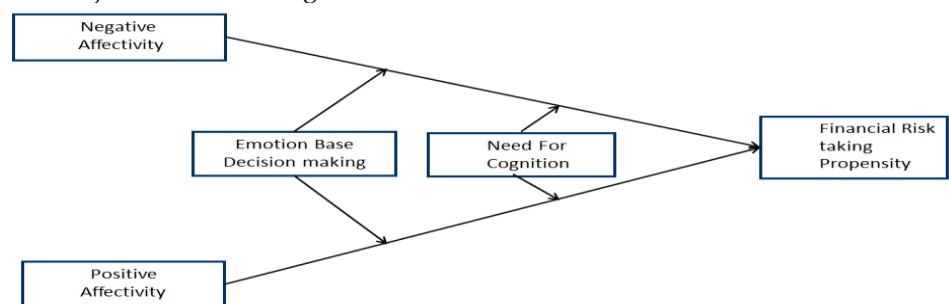
Hypothesis: 6. financial self-efficacy is positively associated with financial Risk taking.

Hypothesis: 7. Need for cognition is positively associated with financial Risk taking.

**2.4 Interaction Effect of EBDM and NFC in Affective Domain**

Capacity to express and used a particular emotion is as important as emotion itself and Darwin (1872) reported that expression of each emotion requires some rational explanations which means both are inter related concept. We cannot categorize a man as pure rational or pure emotional rather amalgamation of both. Presence of NFC can distinguish between risk taking under biased assumptions or as solid calculated and thoughtful act. It may classify contribution of Affect as bias or helper that enable decision making.

People choose EBDM usually have high investment concentration which is a risky decision. In presence of negative affect aid is less influential so it can be more influential in case of positive affect (Iyer, McBride & Reckers, 2012). Propensity to rely on system1 and system2 processing mechanism is also important (Evans, 2008) does individual differ in processing mechanism strongly impact individuals propensity to take financial risk in Affective domain. Emotion base decision making is used as proxy of System 1 processing and Need for Cognition as of System 2. Fischer and Smith (2004) predict that Decisions which are made in absence of or with less deliberation (thought) are positively related to real life financial risk taking but have adverse consequences. It means lack of deliberation leads into injurious Risk taking.



Hypothesis: 8 (a). Emotion base decision making will strengthen the relationship between positive affectivity and financial risk taking. (b). Emotion base decision making will weaken the relationship between negative affectivity and financial risk taking.

Hypothesis: 9 (a). Need for cognition will weaken the relationship between positive affectivity and financial risk taking. (b). Need for Cognition will strengthen the relationship between negative affectivity and financial risk taking.

### 3. Methodology

Study setting is NON-CONTRIVED (field study with minimal researcher interference) and data collection is Cross sectional (at one point of time and only once from each respondent) .In collecting primary data three main cautions are made to avoid biasness, Minimal researcher interference, Bundle of reverse questionnaires and Screening of nebulous responses. Moreover, collected data is analyzed for instruments health, reliability and validity. The researcher applied correlation and multiple regression analysis to validate theoretical models of this study. Sample of the study consists of individuals with actual investment experience therefore targeted sampling is being used. We received back 280 questionnaires out of 300 and after careful screening 180 were considered for analysis. Hence, response rate is 52% and Valid Cases Ratio is 25.71 to 1.

**Table 1: Sample Details**

		N	Percentage
Age	Below 30	80	44.4
	Above 30	100	55.6
Gender	male	135	75
	female	45	25
Qualification	Graduation	27	15
	Master	129	71.7
	MS or Higher	24	13.3
Financial Degree	Yes	78	43.3
	No	102	56.7
Investment type	Bond	73	40.6
	Stocks	66	36.6
	more than one	41	22.8

### 4. Result and Discussion

Results of correlation analysis predicts significant correlation between risk propensity and cognitive processing, financial efficacy, financial literacy and affectivity. Table 2 below reports the means, standard deviations and correlations of all variables used in this study. Some explanatory variables are seemed to be significantly correlated with each other but no multicollinearity was found. VIF detects the degree of multi collinearity and General rule is VIF should not increase of 10 (Robinson and Schumacker, 2009). VIF for variables is ranging from 1.03 to 1.78 which predicted absence of multicollinearity problem.

**Table 2: Correlation analysis**

Variables	Mean	SD	1	2	3	4	5	6	7	8
Positive Affectivity	3.62	.752	(.87)							
Negative Affectivity	2.48	.747	-.388**	(.84)						
Emotion Base Decision making	3.00	.97	.086	.014	(.91)					
Financial literacy	3.18	1.09	.117	.139	.026	-----				
Perceived Market Knowledge	3.41	1.05	.045	-.139	.255**	.174*	-----			
Financial self-efficacy	3.39	.853	.284**	-.102	-.097	.038	-.049	(.75)		
Need For Cognition	3.04	.531	.221**	-.128	-.082	.092	.115	.357**	(.79)	

Financial Risk Propensity	3.31	1.10	.294**	-.188*	.346**	.289**	.546**	.201**	.258**	(.82)
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After examining the t-value for demographic variable only financial Degree is found to have positive significant relationship with financial risk taking propensity (beta=0.259, P<0.001). As according to results beta value is positive indicates People with financial Degree are found to be more likely to take high financial risks. The decision to control financial Degree variable from demographic was made after examining the results of ANOVA and regression model. Table 3 summarizes the results of multiple linear regression analysis indicating beta values, F statistics for generalization of model and t value to confirm the impact of each predictor in particular model with significance level <0.05.

**Table 3: Regression Analysis**

	Model 1	Model 2	Model 3
<b>Model 1: Affective Domain</b>			
Positive Affectivity (Hypothesis 1)	.278**		.759
Negative Affectivity (Hypothesis 2)	-.187*		-.056
Emotion Base Decision making (Hypothesis 3)	.382**		.525*
<b>Model 2: Cognitive Domain</b>			
Financial literacy (Hypothesis 4)		.228**	
Perceived Stock Market Knowledge (Hypothesis 5)		.534**	
Perceived Financial self-efficacy (Hypothesis 6)		.238**	
Need For Cognition (Hypothesis 7)		.231*	.307
<b>Model 3: Impact of Processing Style</b>			
Emotion Base Decision making* positive affect (Hypothesis 8a)			.245**
Emotion Base Decision making* Negative affect (Hypothesis 8b)			-.026
Need For Cognition * positive affectivity (Hypothesis 9a)			-.053
Need For Cognition * Negative affectivity (Hypothesis 9b)			.062
R	.470	.631	.537
F-statistic	12.4**	23.1**	14.084*
R Square	.221	.399	.288
Adjusted R Square	.221	.349	.268
Change in R Square			.027

**4.1 Results of Affective Domain Model**

In model 1, hypothesis related to Affective (heuristic) Domain of financial decision making were testified, the main effect of Positive Affect, Negative Affect, and Emotion Base Decision making on Financial Risk taking propensity were examined. Hierarchical multiple regressions used to predict strength of this model with controlling the effect of financial degree on financial risk taking propensity. The probability of the F statistic (12.40) for the affective (heuristic) domain model is less than level of significance of 0.001 that support the research hypothesis that there is a statistically significant relationship between the set of Affective (heuristic) base independent variables and the financial risk taking propensity.



The Multiple R for the relationship between the subset of independent variables in Affective Domain and Financial risk taking propensity variable is moderate (0.470). The results in Table 3 indicated that positive Affect increased the likelihood of Risk taking propensity ( $b = 0.278$ ,  $t = .158$ ,  $p < 0.005$ ) while Negative Affect had a significant negative effect on risk taking propensity ( $b = -0.187$ ,  $t = .135$ ,  $p < 0.005$ ). For the independent variable Emotion Base Decision Making, the probability of the t statistic (0.320) for the b coefficient (0.382) is also less than the level of significance of 0.05.

So, from this model we concluded that respondents experienced positive affect are more prone to take biased financial risks and those who experienced negative affect are more likely to avoid financial risks. Respondents exhibiting Emotion Base Decision Making are more likely to take biased financial risks.

#### 4.2 The Cognitive Domain Model

In model 2, thoughtful and advantageous cognitive domain of financial risk taking propensity was being examined. The main impact of financial literacy, perceived stock market knowledge, financial self-efficacy and Need for cognition were testified with controlling the effect of financial degree on financial risk taking propensity. The model overall is found to be significant ( $F = 23.10$ ,  $P < 0.05$ ). The Multiple R for the relationship between the subset of independent variables in Cognitive Domain that predict the financial risk taking propensity variable is strong (0.631). The value of R<sup>2</sup> for cognitive model is 0.399 that measures the variability in Financial Risk taking Propensity is accounted for by the under taken cognitive base variables i.e. 39.9%. The value of F test is significant ( $F = 23.10$ ,  $P < 0.05$ ) for advantageous cognitive model of Financial risk taking propensity. First, Financial literacy was found to have positive and significance influence on financial risk taking propensity ( $b = 0.228$ ,  $t = 4.010$ ,  $p < 0.05$ ). The results also supported hypothesis 5, indicating that perceived stock market knowledge has positive and significant relationship with financial risk taking propensity ( $b = 0.534$ ,  $t = 10.144$ ,  $p < 0.005$ ). People with higher numeric values for perceived stock market knowledge are likely to have higher numeric values for financial risk taking propensity.

For the independent variable Financial self-efficacy, the probability of the t statistic (2.865) for the b coefficient is less than or equal to the level of significance of 0.05. Also the b coefficient associated with Financial self-efficacy ( $b = 0.238$ ) is positive, indicating a direct relationship in which higher numeric values for Financial self-efficacy are associated with higher numeric values for financial risk taking propensity. Lastly, hypothesis 7 also confirmed as it is found that need for cognition had a positive and significant effect on the financial risk taking propensity ( $b = 0.231$ ,  $t = 2.258$ ,  $p < 0.05$ ).

So, the empirical analysis of Model 2 reveals that individual possess greater financial literacy, perceived stock market knowledge, better in financial self-belief and along with these have higher need for cognition (proxy of analytical decision approach) have better financial risk taking propensity than their counterparts lacking these qualities.

In cognitive domain we study that if an individual is confident about its knowledge and believe to have more financial control (self-efficacy) and have better cognitive ability then would be less risk averse and inversely will be more prone to take risks. Due to cognitive limitations and psychological characteristics individuals trapped in biased assessment of this uncertainty and avoid risk perceiving situation more risky than that perceived by others better in cognitive abilities.

#### 4.3 The Interaction Effect Models

Lastly, in Model 3 The overall model is significant ( $F = 14.054$ ,  $p < 0.05$ ) but individual interaction impact is partially supported. Hypothesis 8 is partially supported as interaction term for positive affect and emotion base decision making is significant ( $\beta = 0.244$ ,  $P < 0.05$ ) that means people with positive affectivity and process emotion base decision making are more prone to show biased financial risk taking propensity. While, Emotion

Base Decision Making did not have a significant interaction effect on the relationship between negative affect and risk taking propensity ( $\beta = -0.026$ ,  $P > 0.05$ ) hence rejecting Hypothesis 8b. Results are consistent to the work of Chan and Park (2013) in which moderating role of emotion base decision making for the relationship of negative affect and investment level of concentration was found to be insignificant. Results suggested that hypothesis 9 is not significantly proved, the coefficient for the interaction between positive affect and need for cognition ( $\beta = -.053$ ,  $P > 0.05$ ). And for the interaction between negative affect and need for cognition are not significant ( $\beta = .062$ ,  $P > 0.05$ ).

So, the b coefficient for moderating effect of EBDM was statistically significant while the b coefficient for moderating effect of Need for cognition was not statistically significant. Study cannot conclude that there was a significant relationship between interaction of Need for cognition and Dispositional Affect with financial risk taking propensity.

## 5. Conclusions

The aim of the present study was to examine specifically Financial Risk Taking Propensity by dividing it into consistent \ mature behavior and as impulsive \ immature behavior. Further it proved using various research findings that immature inconsistent Risk Taking behavior is based on heuristics and in long term caused to be harmful for financial prosperity, While risk taking behavior based on mature grounds in fact necessary for economic and wealth growth. So, considering this distinction we proposed set of determinants that are imperative for each domain of Risk Taking Behavior.

This research would help financial advisors to accurately address customers' needs by having clear idea of their risk tolerance and would make important contribution in literature by dividing financial risk taking as consistent (meticulous) and inconsistent (heuristic) behavior. Further implications include:

- Make important contribution by dividing financial risk taking as consistent (meticulous) and inconsistent (heuristic) behavior
- Provide implications for individual, managerial and organizational practices by addressing how to improve financial risk taking behavior
- Give means to encourage system 2 thinking resulting into improved financial decision making
- Suggested that course of financial training would also include behavioral trainings to improve perception and self-efficacy.

Due to time constrain we explored Affective Domain which can be a subset of heuristic or biased domain of risk behavior so, opportunity rest to explore it further. In addition of finding more determinants for biased domain, determinants that can help to improve this malicious domain can also be explored by forthcoming research.

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