# Effect of Trading Companies Share on Investors Attitude and Financial Behavior

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# Abstract

Pakistan is under developing country and it has an unpredictable market nature of shareholder-investors observe the company's performance. This research could help to companies in understanding financial behavior, attitude and investors' satisfaction in stock trade. Financial behavior is comparatively new subject in Pakistan therefore; this study has examined the financial behavior and attitude of investors. The behavioral finance that has been attempt to understand the positive experiences influences investors' financial behavior. This study has find out that investor satisfaction is strongest in influence of positive financial behavior of investor and trader in stock trading; positive experience and investors satisfaction are strengthens the investment decision of investors and increases behavior loyalty to prefer over competitor. The findings of this study has showing that investment gains results in more positive financial behavior and experience which leads investors satisfaction and preference the company over competitor. However negative financial behavior and complain induce by loss and loss also results decrease in behavior and attitudinal loyalty which leads the disappointment and regret.

**Purpose** – The main purpose of this study is to find factors that effects the positive experiences with stock trading on investors' and trader's satisfaction, attitudinal loyalty and financial behavior in Pakistan.

**Design /methods and approach** – The research framework links with experiences in stock trade for positive (negative) experiences, attitude and financial behavior is developed. The research framework is measured with data from sample of Karachi; the data is analyzed in smart PLS which is variance based structural equation modeling using partial least square path modeling, non-parametric software.

**Research Limitation** – This study is focused on trading experience with company's active investors and traders in banking industry in Pakistan. The future research could be research in other sectors with inter-related issue of investors and traders in stock trade.

**Originality**/ **Value** – This is the first study in this research area; this study is determined the experiences with positive (negative) financial behavior, attitude and investors satisfaction of investors and traders in stock trade. Therefore adding in this area of study, which will help in understanding the investors and traders attitude and financial behavior in financial market.

**Keywords** – Financial Behavior, Investor satisfaction and Attitudes, Traders or Brokers and Investors Behavior, Positive and negative Experience.

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#### 1. Introduction

Investing with company's stock and expectations of return of individual's investors is based on their experiences and it is a risky for the individual investors, through various authors and publishers to finding customer's behavior in a way of negative (positive) experience of the shareholder and individual customers. The investor's behavior determines the asset price behavior and market behavior, (Ahmad, Ibrahim &Tuyon, 2017). Hence, it is important to make financial markets operate efficiently by effectively controlling the behavioral biases that causes the anomalies, (Cuthbertson, Nitzsche, & O'Sullivan, 2016). Further; study shows that behavioral biases are sum of organized problems in understanding and judgments (Pompian, 2006). Though Shefrin describe that bias is not more than inclination towards problem taken by the shareholders towards their investment decision (Shefrin, et al., 1985). According to a study that the behavioral finance distributes with how a behavioral factor creates the differences in term of shareholders' investment process. Further he describe that for a long-term it has been observed that the shareholders think rationally and take a proper and accurate investment decisions based on traditional finance theories. Throughout above statements and other a number of researches suggest that most of investment decisions are taken based on institutions emotions and cognitive biases on trading of stock in market.

The recent study where evidence show that investors who invest for their own selves give a greater preference to seeking guidance from experts (Asad Humaira, et al., 2018). In the context of Pakistan, where most of the

investors take decisions on the basis of their institutions rather than relying on the information available from different sources, (Shahid M. Naeem, et al., 2018). The study from Bangladesh have found that relationship between the affecting factors and investment decisions, the factors which including risk taking, political, return earning, etc. these factors are damaging and de-motivating the investors decisions in stock trading (Surajit S. et al., 2018).

It is more important to understand the investor's behavior and attitude while they have taking decision to invest in the same company or moving to another in stock market. As per Mark KY Mak, et al., they have stated about investment behavior or preference over companies. They have described few factors of investment behavior which investor's psychological, sociological and demographical factors are significant predictors of their investment behavior or preference (Mark KY Mak, et al., 2017). According to Statman, that expected returns follow behavioral asset pricing theory, where risk is not measured and expected returns are determined by more than risk. And behavioral finance explains about why and how emotions and cognitive biases create risks about stock market for investors, (Asab M. Zulqarnain, et al., 2014). As per another author from Pakistan stated that psychological factors have dominating influence upon the decision of the investors, (Islam S. 2012). Adding more about the factors of psychological, he described some factors like cognitive dissonance, regret aversion, gamblers fallacy and etc.

Aspara J. (2009) who investigate that investors who invest in by purchasing company's products (stocks) and services in terms of support to the company. Contributing more to this statement and further described by Shefrin (2001) who stated that investors' frequently cause that "good stocks are stock of good companies". Further he described that most of company's Chief Financial Officers (CFO's) recommend smooth and unconformable earnings in trade of stock.

Researchers in behavioral finance have expended considerable effort in trying to understand investment decisions. Decision making behavior of the brokers involved in the financial markets, particularly the institutional investors who has account for the bulk of the activity (Gabaix et al., 2006; Gompers and Metrick, 2001). In the finance and marketing interface, has investigated the effect of brands and brand variables in investment choices and decisions, both for individual and institutional investors (Frieder et al. 2005; Huberman, 2001; Keloharju et al. 2012). The enough confirmation of shareholders-customers; they have long-term relationships with companies are mostly like to purchase company's share and becomes long-term investors (Keloharju et al., 2012). In the contrast of above reasons which addresses that why individual investors may prefer brand name stocks, such kind of investments could also be regarded as safer bets by institutions in the context of their fiduciary and legal obligations to clients (Frieder L. et al. 2005).

Pakistan recently developing strategy for getting attention of investors thought stock market where external investors to trade and invest their capital in Pakistan throughout shares of different companies in Pakistan. According to a study behavioral finance claims that investors are normal behavior during purchasing of shares from market, although researchers investigate that shareholders and traders may not behave reasonably during their investment decision making (Babajide, et al. 2012). From all decision of Pakistan, investors' behavior would be grace in terms of investment purpose. Thus the current study of author and examined the impact behavioral on investors' decisions at Pakistan Stock Exchange and this research would be helpful for individual investors and traders to take reasonable decisions and able to analyze stock market trends while they have taking decision for investment (Shahid M. Naeem, 2018).

#### 2.Literature Review

A lot of literature available on financial behavior, shareholders loyalty investment satisfaction and investors' behavior loyalty in trading of stock, but less observed in Pakistan to examine the financial behavior of shareholders, brokers and traders while taking decisions of investment in stock market, here are some contributions of authors in literature from different perspectives.

Lanlan C. et al. (2018), in trading of shares and stock market responds actively and positively to mobile app addition this is why technology innovating day by day and development of technology help the investors who understand the trend of market. While the many literatures suggest that mobile app additions carry benefits and threats in market, and it has shown that the benefits outweigh the threats from an investor's perspective. Asad Humaira, et al. (2018), technology plays an important role but investors also prefer suggestions and advise from experienced person. The sufficient evidence to show that investors who are investing for their own selves give a greater preference to seeking guidance from the expert. Shahid M. N. et al. (2018), described that the investment decisions of the majority of the investors at Pakistan's Stock Exchange have been influenced by their behavioral biases.

Bagher A. et al. (2017), in term of stock trading the investors and shareholders focus on the factors of social, psychological and financial behavior are studied and affect the behavior of investors and traders and taken into significant external factors in trading of stocks. The impact of external factors was measured on risk and return; attitude towards products and investment purpose were calculated with moderating role of brand information.

Shafeeq Ahmad, 2017, stated that factors, broker recommendation and preference are highly influence the investors' behavior making financial decisions and trading stock in Pakistan.

Hoffmann A.O.I. et al. (2015) described in his research that gain increases the positive emotions. While loss lead the negative emotions and this relationship is not significant in statically. The satisfaction and behavioral loyalty decreases due to experiencing negative emotions as measured by buying frequency and volume and increases the tendency of shareholders to record complaint.

According to Aspara, et al., 2015, stated that traditional finance theory refers that traders and investors select the stock to increase risk adjusted returns. Therefore; investors not only assume normal goal of maximum return and they also drive the background goal likewise self analyzed stocks by investors in stock trading. Using the theory of planned behavior as a tool, that individual's intention to perform behavior is guided by their general feelings indicating their favorableness or un-favorableness toward the behavior

Khoa C. P. J.Z., et al., (2014). Define that it's a concluded that Behavioral finance and Traditional finance influence investors decision of investment. And Aspara J. (2013), found that periodically study showed evidence that shareholder-investors buy stock of company they have knowledge and like it. Following the Author, Shafi, (2014), define the traders and shareholders behavior analyzed in four categories which includes economical, social, demographical and last one is psychological.

Strahilevitz, et al. (2011), define that repurchasing of stock not favor in decision making when investors was sold a stock in low price and after that going to repurchasing on high price of share on this situation investors avoid and disappointed such kind of decision. While those investors who bought share in a low price comparative in their past purchasing history and sold it for positive experience and joy high price that share in stock market and this increase positive emotions satisfaction, and behavior loyalty in trading of stock. Rita Martenson, (2008), have described that customer contact persons have increase behavioral and attitude loyalty and the impact is more for more complicates than for low complicates. Further author define that the role of contactors differs for different investors groups. Contact person bring a understanding able influence on investors' decisions as well as on their behavioral and attitudinal loyalty.

Taking investment decision is difficult in terms of trading of shares in stock market. According to Doya K. (2008), introduce financial behavior in terms of trading and investment that is a complex process based on some steps of decision making. Financial decisions are followed by four steps which hereby here that individuals recognize the present state of stock market. Secondly, analyzing of reward or punishment (loss) would be given. On the third step author define that individuals evaluate personal need based investment. And the last step refers that out-come re-evaluated on based of investment in stock market.

Baker M. et al. (2007), it may have real consequences for the allocation of corporate investment capital between safer and more speculative firms. And Fogel, 2006, investors strive to keep away from negative experiences and feelings which are related with loss and to promote the positive experiences and feelings related to gain. Shefrin, (2001), added his conclusion in literature that behavioral finance analyzes the influence of human psychology on the investment decision making by shareholders and traders. Adding on this statement the experts of investment, they recognize a statement stated financial behavior believe that cognitive and psychological biases likewise overconfidence, informational biases, representative biases create financial markets expected.

#### **3.**Conceptual Framework

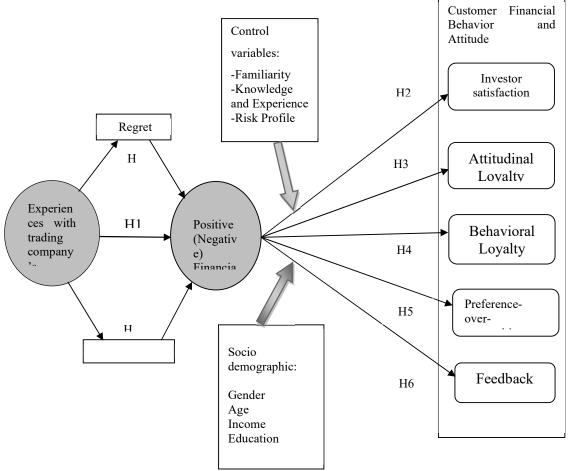
The research framework has been adopted from Hoffmann A.O.I, (2015). The conceptual model of this study is presented in Figure 1. The conceptual model proposes that selling and purchasing of share leads the shareholder's experience positive (negative) financial behavior. In this research proposal it is assumed that the shareholder to be trader and brokers of the respective companies either individual's investor in Karachi.

Inspired by Hoffmann A.O.I, (2015); research, firstly focuses on the shareholder customer's attitudinal and behavioral loyalty; investment satisfaction and preference, tendency to relate in positive financial behavior, and the likelihood of filing complaints. In particular, when an investor selling stocks for gain and positively affected becomes in engaging behavior loyalty and satisfaction; and when selling of stocks in loss; the investors thinking about switching and making complain which are negatively affected investors behavior. Preference intentions are increases when selling of stock for gain and strengthen satisfaction and loyalty to the company and positively affected investors. Investors liking to file complaints when selling of a stock in loss and affected negatively.

In the Figure below the independent variable is experience and on other hand positive (negative) financial behavior are dependent variables and also factors are given in the figure. The measurement is examined through these factors and hypothesis are examined the attitude and financial behavior of investor's attitude loyalty and purchasing behavior which related stock trade of a company.

Attitude in investment decision has been defined as evaluating the effect of investor positive (negative) feelings towards holding a particular behavior (Fishbein and Ajzen, 1980). Further defined that individual investor's favorable and unfavorable against psychological decision (Ajzen and Fishbein, 2000). In this study the financial behavior has defines by Bagher A. et al. (2017), in term of stock trading the investors and shareholders

focus on the factors of social, psychological and financial behavior are studied and affect the behavior of investors and traders and taken into significant external factors in trading of stocks. Shefrin, (2001), defined that behavioral finance analyzes the influence of human psychology on the investment decision making by shareholders and traders. Adding on this statement the experts of investment, they recognize a statement stated financial behavior believe that cognitive and psychological biases likewise overconfidence, informational biases, representative biases create financial markets expected.



#### Sources: Hoffmann A.O.I, (2015) Figure 1 Conceptual Model

The feelings are adopted by study of Watson et al. (1988) whereas positive emotions are given as determined, excited and enthusiastic. However negative emotions are as nervous, upset and distressed respectively. As Hoffmann A.O.I, (2015) used hierarchy of Heskett (2002) in his research, therefore adopted same hierarchy in this research that shareholder-customer attitude and financial behavior: loyalty and satisfaction, switching relate with positive word of mouth (POW) and preferring filling complain. Regret is increases by awareness and differentiate of choices would led a better outcome (Fogel et al. 2006). Hence regret comes from the bad outcome of stock results and investor blaming his/her self and thinking that responsible for bad outcome. Regret enhance to act and better investment decision in future (Zeelenberg et al. 1998)

# **3.1 Financial Behavior**

Financial behavior is defined as how good a household or individual manage financial resources that includes savings, budget, financial planning, insurance and investment (Yeti M.L. and Beby K.H., 2017). According to Joo S. and Grable J.E, that attitude and behavior of individuals in financial field is called as financial behavior.

# **3.2 Attitudinal Loyalty:**

The form of customer loyalty that is based on psychological process, resulting in repeatedly preferring one object (product, brand, retailer and etc) to other substitutive ones (Gonzalo Moreno W., 2017).

# 3.3 Behavioral Loyalty:

The form of customer loyalty that consists in the repetition of a purchase behavior, without any mental and/or psychological considerations justifying such kind of behavior and no clear preference for the purchased object (Gonzalo Moreno W., 2017). Behavior loyalty is when a customer continues to buy or use a particular product, service or brand (Encyclopedia, updated 2016).

# **3.4 Disappointment:**

Defined as an emotional response to a bad outcome experienced as a result of state of the world (Summers B. and Duxbury, 2012).

# 3.5 Investor Satisfaction:

Describes as the effects of emotions from stock return experiences on the long term engagement with company (Hoffmann A.O.I, 2015). Investor satisfaction is defined as a degree of similarity investments result that its expectations (Aleksandra Rutkowska, 2015).

# 3.6 Financial Knowledge:

Financial awareness and understanding about financial concepts and procedures as well as the use of this understanding to solve financial problems (Adriana B.V., 2017).

# 3.7 Familarity:

A good knowledge of something or the fact that individual knows it so well (Encyclopedia, updated 2016).

# 3.8 Regret:

A feeling of sadness about something wrong or about a mistake that individual have made and wish it could have been different and better (Encyclopedia, updated 2016).

# 1.2 Summary

This chapter is all about how to get aim and objectives of this study. Quantitative research approach is applied in this research. The primary data is collected through distribution of research questionnaire from Karachi and especially from Karachi Stock Exchange. This research covered 85 active investors, traders and brokers. The collected data initially should be normalized by using SPSS before analyzing in SmartPLS. This research divided into three parts i.e. 70% control variables, demographical and dependent variables, 15% validation and analyzing & testing respectively. Finally data has been analyzed in SmartPLS.

# 4. Research Design

# 4.1 Data Collection

In this study, we use quantitative tool, data is collected from primary sources from Karachi and especially from Karachi Stock Exchange. The key element of this study is Methodology and to achieve the study's aim and objectives. In this study mainly focuses on Karachi Stock Exchange where investors and brokers are ease way to collection of data. The data collection from active shareholders and brokers from Karachi Stock Exchange and some of are from different places of Karachi. The collected data as a primary data and validate and test the data to analyze the positive financial behavior of investors and brokers.

# 4.2 Sample

Population for this research is the investors and traders of the Karachi. However, it is difficult to collect the data from all the traders and investors, so the data is collected from a sufficient sample of 85 active investors, brokers and traders. Data collection is done through an adopted instrument and with simple random sampling with a mix of convenient sampling. The collected data has been analyzed through variance-based structural equation modeling using the partial least squares path modeling method.

# 4.3 Variable Selection/Questionnaire Design

The selections of variables for this study are taken as inputs of research. The input includes internal factors and dependent variables; the all variables are secondary and are adopted variables from Hoffmann A.O.I (2015) research work. The adopted variables previously is defined and analyzed in exploring the negative emotions of shareholders customer and now taken these inputs in this study to analyze the positive experiences of investors and brokers towards positive financial behavior and to invest in future and this also understanding shareholders investment decision towards company stock performance.

# 4.4 Research Hypothesis

The questionnaire and research hypothesis are taken from the study of Hoffmann (A.O.I, 2015) where author find the negative emotion of investors in investment decision of stock and achieved valid and acceptable results. Inspired from previous study of Hoffmann A.O.I, (2015) and applied his hypothesis in this study and finds the valid results of effects of positive experience on positive financial behavior, investors' satisfaction and attitude in financial decision making. The research is given bellow which used in secondary in this research.

H1-Favorable experiences trading with companies stock, such as selling of stock for a gain increases positive financial behavior of being excited, enthusiastic and determined (stress, sadness for negative).

H2-Investor's positive financial behavior cause an increase in investor satisfaction with company

H3-Investor's positive financial behavior cause an increase in attitudinal loyalty with company

H4-Investor's positive financial behavior cause an increase in behavioral loyalty with company

H5-Investor's positive financial behavior increases of investor like-hood of preferring shares from company individuals owned stock compared to shares from competitors

**H6**-Investor's positive financial behavior increases their tendency to file feedback or complain against company **H7**-Disappointment does not mediate the relationship between gain and loss; stock performance of company and positive financial behavior

H8-Regret does not mediate relationship between making gain and loss; stock performance of company and positive financial behavior

#### 4.5 Measures

The measurement scales are related to conceptual model are adopted from current literature (Hofmann, A.O.I. 2015) and do some changes in wording appearance to fix the context of this study. For wordings of all measures see in Table 1. The questionnaire distributed among the shareholders and traders sample of 250 and received 86 from respondents which based on likert scale of five points.

Financial behavior of both condition are measured by distributing questionnaire them to please indicate how seeing the outcome of the performance of company's stock made you feel? (1 = very bad, 5 very good) based on Zeelenberg et al. (1998a, b). To measure the positive or negative financial behavior experienced by the participants, wording from the PANAS scale based on Watson, D. et al. (1988). Three wording of both conditions are taken from Hoffmann A.O.I. (2015) study which are determination, enthusiasm and excitement for positive financial behavior. And for negative financial behaviors are nervousness, upset and distress were taken from previous study and these wordings are selected for sustainability if this research. Based on the combination of Zeelenberg et al. (1998b) and Summers B. et al. (2012) three item scale the regret and disappointment are measured in this study. The study of Aspara et al. (2008), where author used the three item scale of customer satisfaction to measure the customer behavior and herein this scale adopted and used to measure the investors' satisfaction with company. Four items are adopted from Aspara et al. (2009) in which two for behavioral loyalty (purchase volume and frequency) and attitudinal loyalty is calculated from willingness of paying a price premium. The measurement scale of complain is used in three items scale which has taken from study of Zeelenberg and Pieters (2004) which had been used in previous work of Hoffmann A.O.I. (2015) and get valid results. The findings for socio demographic and control variables; familiarity is calculated based on two item scale from Aspara et al. (2010b) and two item scale were used for knowledge and experience from the work of Hoffmann and Broekhuizen (2010). And risk profile is measured by using same scale of Hoffmann and Broekhuizen (2010). Hereby, questions are mentioned in questionnaire where asks from respondents about their income in PKR (1 = 10,000-25,000; 2 =26,000-50,000; 3 = don't want answer; 4 = 51,000-100,000 and 5 = >100,000) and highlighted their education level (1= high school; 2= intermediate; 3= don't want answer; 4= bachelors and 5= higher than bachelor)

#### 4.6 Normalization of Variables and validation

Firstly, the survey questionnaire data has been normalized before analyzing the collected data. The questionnaire data has been normalized through SPSS in order to mitigate the biases. Normalizing all variables such as familiarity, financial knowledge, financial experience and risk profile and variables of dependent this becomes these all variable perfectly normal, once plot them on histogram and will shows normalized and distributed by using functions in SPSS.

Acceptability and reliability of findings are assessed; all the results are given in different validation and reliability of findings. In the discriminant validity, construct reliability and outer-loadings. In construct reliability, where cronbach alpha and composite reliability values greater than of threshold of 0.708 (>0.708; Hair, J.F et al. 2014 and Hulland, 1999). Thus both scales are reliable and meet the requirement of threshold of >0.708 are established. Average variance extracted is above threshold of 0.5 is valid and established (Hair, J.F et al. 2014; Bagozzi and Yi, 1988). Discriminant validity is higher than its square correlation with other constructs (Fornell and Larcker, 1981). According to Fornell and Larcker, (1988) the diagonal values of discriminant validity should be greater than 0.708; thus all values of discriminant are established (Hair, J.F et al. 2014; Fornell and Larcker,

1988) and it shows on given table. The outer-loading of all items above than AVE >0.5 are established (Hair, J.F et al. 2014). And the multicollinearity is no issue for variance inflation factor (VIF) is under five (<5) (Hair, J.F et al. 2011).

#### 5. Results and Data Analysis

The calculation of Research framework, it is the first examination of investor's positive financial behavior which worked as deliberated. However we calculated effect trading stock for a gain on positive financial behavior and share-owner investors' behavior and attitude, the making and separate tests for groups of conceptual framework for the gain and loss manipulating group. The structural equation model (SEM) and partial least square (PLS) are used for data analyzing. The conceptual model is similarly complicated and population size is smallest and like PLS approach as smartPLS (Ringle, et al. 2005), and based on SEM method is recommended over covariance (Hair, J.F et al. 2011). Therefore PLS-method had applied for 5000 sub-samples for process of bootstrapping and changes in sign (Hair, J.F et al. 2011). The table 3, summary of results of hypothesis tests.

Ground on the finding of Hoffmann A.O.I, (2015), the respondents are decide to recall a profit on the behalf of trading companies share were anticipated to growth in gain more positive experiences and attitudes than the respondents of the loss. The respondents are experiences to positive behaviors in trade. Independent sample t-test were carry to find the impact and effect of investors and traders groups on constructs of positive and negative financial behavior, regret and disappointment.

#### 5.1 Assessment of PLS Measurement Model

The groups are differ significantly on positive financial behavior, the independent sample t-test with large effect size ( $n^2 = 0.37$ ) shows groups are different regarding positive behavior. On the other hand negative behavior (t (62.3) =5.06, p=0.62). On the behalf of Cohen (1988), the n2 of 0.26 is acceptable large effect size. The mean for gain (M=0.05, SD=0.124) is importantly higher than the loss group. The independent sample t-test with the large effect size ( $n^2 = 0.37$ ) which shows that significantly differ the groups from each other on the bases of positive financial behavior. The respondents from gain group significantly greater positive financial behavior than the loss participants (t (45.0) = -6.63, p =0.015; M<sub>gain</sub> = 0.17, SD = 0.128; M<sub>loss</sub> = -1.16, SD = 0.105).

Accordance the Summers B. et al. (2012), and Strahilevitz, et al., (2011), participants who recall gain (M = 0.17, SD = 0.128) shows significance and regret than the loss participants gropu (M = -1.16, SD = 0.105; t (76) = 5.3, p = 0.062, n<sup>2</sup> = 0.27).

In the bellow table (Table. 01), we analyze the Cronbach Alpha value which are greater than the 0.708 of composite reliability is above threshold of 0.708 (Hair, J.F et al. 2014). The table showed all factors are under the threshold value which means the all factors analyzing are reliable except preference over competition (Alpha value 0.577), all other factors have more than 0.708 regarding Alpha value in the table. Therefore the Composite Reliability have valued over 0.708 of all factors are greater than the 0.708 they are reliable (Hair, J.F et al. 2014), the most of factors have valued 1 which larger and showed construct reliability of factors in the bellow table.

×	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	VIF
Attitudinal_Loyalty	1	1	1	1	1
Behavioral_Loyalty	1	1	1	1	1
Disappointment	0.83	0.86	0.921	0.853	2.015
Education	1	1	1	1	1
Familarity	1	1	1	1	1
Feedback	1	1	1	1	
Financial Behavior	0.846	0.867	0.907	0.764	1
Financial Knowledge	1	1	1	1	1
Financial_Kn	1	1	1	1	1
Investor Satisfaction	0.766	0.773	0.865	0.682	1.764
Preference over_Competition	0.577	0.599	0.823	0.7	1.196
Regret	0.688	0.952	0.851	0.743	1.379
Risk_Profile	1	1	1	1	1

#### 5.2 Constructs Reliability Table

#### Table No. 01

In this table we also measure the Average Variance Extracted value which is above the value of threshold of 0.5 are reliable. Thus the in the table we showed that all value are above the value 0.5 which means all factor of

Average Variance Extracted are above threshold of 0.5 thus all constructs are reliable (Hair, J.F et al. 2014). Mostly the factors have more than threshold value in all type of value in above figure which shows the construct reliability of hypothesis due positive value of all dependent variables. Average variance extracted could meet a small value of 0.50 (Hair, J.F et al. 2014; Limpin, 2018). Smart-PLS is used widely in social science and business research. The Smart-PLS analysis was managed by using Smart-PLS 4.0 software (Hair, J.F et al. 2013; Sarstedt, 2013). The size of this study is smaller but using the Smart-PLS reduce the limitation because of it could assist a minimum sample size (Arndt, 1967). With references of these researchers it has been stated that all values of constructs in above table are acceptable and reliable. The values of Average Variance Extracted (AVE) are greater than .5 identifying satisfactory level of validity of construct reliability (Hair, J.F et al. 2011; Ning 2014).

	AL	BL	Dis.	Education	Familarity	Feedback	FB	FK	FK	IS	PoC	Regret	RP
AL2	1												
BL2		1											
D1			0.941										
D2			0.906										
Education				1									
FBN1							0.849						
FBN2							0.926						
FBN3							0.845						
FBP1						1							
FE									1				
FK								1					
Familarity					1								
IS1										0.772			
IS2										0.84			
IS3										0.863			
POC1											0.878		
POC2											0.793		
R2												0.95	
R3												0.763	
RP													1

# Table No. 02

In this above table where value showed their results in the category of outer-loading table. The values are greater than 0.5 so thus value are reliable of all construct factors. According to Hair, J.F et al. (2014), stated the value should be greater than the 0.5 of findings of outer-loadings tables, it means the constructs factors reliable and acceptable. The finding confirms that all construct are > 0.5 which become the acceptable in this table attitudinal loyalty, behavioral loyalty, education, financial behavior in negative, financial knowledge, familiarity and risk profile (1) construct are more effective in stock trading towards investor's satisfaction and investment decision. Rests of construct factor are also acceptable they have behind the above factor's value. Their value is more than 0.5 so these remaining factors considerable as well. According to Hair, J.F et al. that lading of measurements of each factor on its correlate with construct should not be less than 0.5. The construct variables mostly value 1 and >0.5 which is considerable and acceptable (Norsis, 2008).

# 5.4 Discriminate Validity

Assesses of Discriminant validity by using Fornell Larcker criterion (1998). The tool used to measure differences of average variance extracted (AVE) of square root of square root of average variance extracted (AVE) with correlation latents constructs. The square root of all variable's average variance extracted (AVE) would higher value than the associations with other construct. According to Messick (1989), Discriminant validity is confirmatory that analyze does not related each other constructs and similar, even though distinct constructs. The connection coefficients between the findings of constructs and measure of supposed different constructs.

	AL	BL	Dis.	Education	Familarity	Feedback	FB	FK	FK	IS	PoC	Regret	RP
Attitudinal_Loyalty	1												$\square$
Behavioral_Loyalty	0.44	1											
Disappointment	-0.238	-0.342	0.924										
Education	0.14	0.132	-0.225	1									
Familiarity	-0.027	-0.008	-0.28	0.476	1								$\square$
Feedback	0.14	0.126	-0.381	0.255	0.515	1							
Financial Behavior	-0.153	-0.123	0.328	-0.053	-0.144	-0.324	0.874						$\square$
Financial Knowledge	-0.01	0.03	-0.207	0.423	0.771	0.441	-0.197	1					
Financial_Kn	0.089	0.019	-0.364	0.539	0.739	0.407	-0.189	0.795	1				
Investor Satisfaction	0.089	0.259	-0.231	0.398	0.515	0.579	-0.196	0.467	0.408	0.826			
Preference over_Competition	0.19	0.383	0.198	0.044	-0.151	-0.045	0.212	-0.164	-0.237	0.118	0.837		
Regret	-0.088	-0.222	0.527	-0.217	-0.196	-0.29	0.393	-0.217	-0.238	-0.127	0.153	0.862	
Risk_Profile	0.025	-0.044	-0.21	0.358	0.491	0.251	-0.082	0.618	0.66	0.357	-0.117	-0.212	1

### Table No. 03

In this table, we measure the Discriminant validity of all construct factors and values randomly are higher than 0.708 resulted as a reliable finding in above table of all variables in the table 03. According to Fornell Lacker C. (1988), that values of diagonal should be >0.708 are reliable, in reference of this statement the findings of this research that are diagonally are greater than value of 0.708. In this table (Table No. 03) all construct hypothesis values at diagonal are >0.708. Discriminant validity are given in each constructs' AVE is greater than squared correlation with any factor of construct (Fornell and Larcker, 1981) and each factor loads higher on the constructs are supposed to measure (Chin, 1998). Thus the table.03 results established that all construct meets the criteria of Discriminant validity regarding the value of 0.708 (Fornell L. C, 1988).

Following identify the findings and measurement model, the reliability and validity of results are assessed in the table. 03. We measure Discriminant validity of formative construct by identifying the variables loading and average variance extracted (AVE). Subsequently all variables load significantly (>0.70) on their individually fundamental constructs (Hulland, 1999).

#### 5.5 Assessment of Collinearity issues Model (VIF)

No collinearity among latent variables was found as a variance inflation factor (VIF) for all latent variables is smaller than threshold value of 5, Hair, J.F et al. (2011).

	VIF
Attitudinal Loyalty 2	1
Behavioral Loyalty 2	1
Disappointment 1	2.015
Disappointment 2	2.015
Education	1
Financial Behavior Negative 1	1.785
Financial Behavior Negative 2	2.875
Financial Behavior Negative 3	2.273
Financial Behavior Positive 1	1
Financial Experience	1
Financial Knowledge	1
Familiarity	1
Investor Satisfaction 1	1.414
Investor Satisfaction 2	1.645
Investor Satisfaction 3	1.764
Preference Over Competition 1	1.196
Preference Over Competition 2	1.196
Regret 2	1.379
Regret 3	1.379
Risk Profile	1

Table No. 04

Collinearity constructs has no issue for the constructs of variance inflation factors (VIF) is smaller than the

five, Hair, J.F et al. (2011). This means the finding of this collinearity constructs are reliable and valid. The most of factor that is the financial behavior negative (VIF=2.785) larger than the other factors of variance inflation factor in the above table and rest of construct are also valid and reliable because of collinearity construct's have low value and under five so these all constructs are valid and acceptable. All negative financial behavior are weak in this table and their values under the five and it has no issue with experiences of investors and traders in stock.

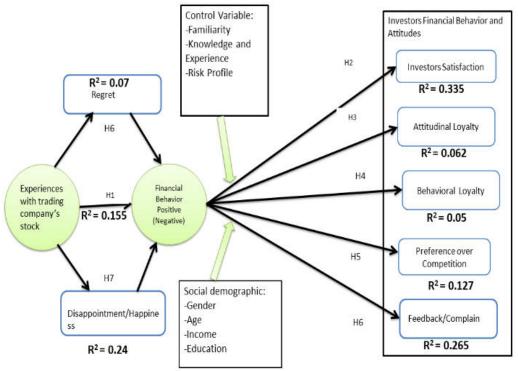
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Result
Disappointment -> Financial Behavior	0.167	0.175	0.112	1.498	0.134	NS
Education -> Attitudinal_Loyalty	0.139	0.137	0.125	1.111	0.267	NS
Education -> Behavioral_Loyalty	0.196	0.196	0.121	1.626	0.104	NS
Education -> Feedback	0.069	0.046	0.137	0.506	0.613	NS
Education -> Investor Satisfaction	0.221	0.211	0.115	1.917	0.055	S
Education -> Preference over Competition	0.233	0.228	0.137	1.696	0.09	S
Familiarity -> Behavioral_Loyalty	-0.132	-0.123	0.163	0.805	0.421	NS
Familiarity -> Investor Satisfaction	0.37	0.365	0.166	2.222	0.026	S
Familiarity -> Preference over_Competition	-0.021	-0.022	0.181	0.114	0.909	NS
Financial Behavior -> Attitudinal_Loyalty	-0.159	-0.16	0.105	1.511	0.131	NS
Financial Behavior -> Behavioral_Loyalty	-0.123	-0.119	0.132	0.938	0.348	NS
Financial Behavior -> Feedback	-0.242	-0.236	0.083	2.913	0.004	S
Financial Behavior -> Investor Satisfaction	-0.131	-0.13	0.101	1.307	0.191	NS

5.6 Assessment of Model for Path Coefficient or Hypothesis Testing	5.6 Assessment	of Model for Path	<b>Coefficient or H</b>	<b>Ivpothesis</b> Testing
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# Table No. 05

In the above table sample mean values are showed that six variables are accepted means the value have under the acceptable where three types of calculation as per Wetzels et al. (2009, Gof = 0.1 is smaller value which means weak value, Gof = 0.25 is medium and moderate value and last is Gof = 0.36 is larger and which means strong value of model fit. In this table the disappointment towards financial behavior (M = 0.17, SD = 0.112; T-statistics = 1.498, p = 0.134) has weak relationship with financial behavior, education has weak relationship with attitudinal loyalty (M = 0.137, SD = 0.125; T-statistics = 1.111, p = 0.267) which is non-significant. Education towards behavioral loyalty (M = 0.196, SD = 0.121; T-statistics = 1.626, p = 0.104) which has weak and non-significant relationship with behavioral loyalty. And also education has no significant relationship with feedback. While education has a strong relationship (M = 0.211, SD = 0.115; T-statistics = 1.917, p = 0.055) with investors satisfaction and significant. And education has a strong relation with preference over competition and significant as per effect size (M = 0.228, SD = 0.137; T-statistics = 1.696, p = 0.09). Familiarity has significant and strong relationship with investor satisfaction (M = 0.365, SD = 0.166; T-statistics = 2.222, p = 0.026). But familiarity has no relationship and no significant with behavioral loyalty (M = -0.123, SD = 0.163; T-statistics = 0.805, p = 0.421). The financial behavior has a strong relationship and significant with feedback (M = -0.236, SD = 0.083; T-statistics = 2.913, p = 0.004). According to Cohen, (1988), 0.01 = weak or smaller, 0.15 = medium or moderate and 0.35 = larger or strong also Wetzels et al (2009) is given in above statement. As per above table there has been showing the relationship of variables and no significant relationships between them.

#### 5.7 Assessment of R<sup>2</sup> Value



#### Figure No. 02

In social sciences and management there values of percentage are considered by criterions; in which 9% to 10% is considered as low variance; from 10% to 50% is considered as a medium size variance and 60% is strong variance effect of  $R^2$  size. According to Henseler et al. (2009), where he considered the values for  $R^2$  effect in social sciences as 9% is lower effect, up to 50% is medium effect and greater than 50% is strong effect. Hence Hair, J.F et al. who considered values of 10% is lowest, 50% is moderate effect and 60% is strong and largest effect of  $R^2$ . Here in above table experience effect brings 7% variance on regret while 24% on disappointment. Experience effect brings 15.5% on positive financial behavior brings; however its variables like investors satisfaction have 33.5% variation effect and consider moderate size and attitudinal and behavior loyalty have low effect variances of 6.2% and 5% respectively. Experience effect brings 12.7% variance on preference over competitor and 26.5% variance on feedback and both considered as moderate effect size according to criterion.

In this figure we have found out the  $R^2$  value of hypothesis and their constructs. The PLS approach as in smart PLS does not give statistic of all model fit (Chin, 1998). The model have evaluate by calculating the variables of  $R^2$ - values which shows the explanation of predictive factors on the respective constructs(Figure 3). Hence we work on a diagnostic tool, the Goodness of Fit (GoF) index by Tenenhaus et al. (2005). The figure 3 shows that selling of share for a loss explains ( $R^2 = 0.155$ ) is medium which means the financial behavior in negative affect the shareholders' and investors financial behavior in term of getting loss. According to measurement of  $R^2$  values are divided in three categories which are smaller, medium and larger. According to Tenenhaus et, al. (2005), the Gof = 0.1 is smaller, Gof = 0.15 is medium and larger is Gof = 0.36, so the values of all construct in  $R^2$  value are reliable and valid. The investors' satisfaction has strongly variances level in the experiences of investors in terms of trading stock.

#### 5.8 $f^2$ and Effect Size

The  $f^2$  effect size is measurement of a particular predictive construct on endogenous constructs. In accession to evaluate the size of  $\mathbb{R}^2$  value of endogenous constructs, the  $f^2$  effect size could be calculated. The  $f^2$  effect size measures the change in values of  $\mathbb{R}^2$  when a particular exogenous construct is omitted from the model. It has used to evaluate however the omitted forecast construct has a substantive impact on the value of  $\mathbb{R}^2$  of endogenous constructs.

The GoF measurement to calculate the global model fit is calculated as in Tenenhaus et al. (2005), GoF =  $(R^2 \times Communality)^{1/2}$ . It calculates the average of  $R^2$  of the endogenous variables and the average of communality of geometric mean. The gain model with main effects only has a GoF of 0.21 which shows that a smaller global model fit as per cut off values are proposed by Wetzels et al. (2009) are GoF= 0.1 is smaller, GoF= 0.25 is medium

#### size and GoF= .036 is larger.

Saturated Model	Estimated Model
0.068	0.104
0.975	2.266
0.473	0.743
245.513	336.896
0.733	0.633

Model Fit

#### Table No. 06

There are two author's guidelines for assessing the valid and reliable values of all constructs in this effect size and their calculation methods. The guidelines of Cohen, et al. (1988) for assessing  $f^2$  values for the exogenous latent constructs in forecasting the endogenous constructs are effect size = 0.02 is smaller, effect size = 0.15 is medium and effect size = 0.35 is larger.

In the bellow, we forecast the path coefficient and significant levels of major effects model (Table 5). Although, effect sizes ( $f^2$ ) are computed as suggested by Chin and Henseler (2010) to calculated the impact of a particular predictor construct on endogenous construct are  $f^2 = R^2_{included}$  -  $R^2_{excluded} / 1-R^2$ .

	AL	BL	Dis.	Edu.	Familarity	Feedback	FB	FK	FK	IS	PoC	Regret	RP
Attitudinal Loyalty													
Behavioral_Loyalty													
Disappointment							0.025						
Education	0.015	0.028				0.005				0.051	0.043		
Familarity		0.006								0.072	0		
Feedback													
Financial Behavior	0.026	0.015				0.075				0.025	0.029		
Financial Knowledge	0.021	0.004				0.044				0.01	0.003		
Financial_Kn	0.01	0				0.006				0.019	0.051		
Investor Satisfaction													
Prefernce over Competition													
Regret							0.081						
Risk Profile	0	0.007				0.003				0.015	0.001		

#### Table No. 07

In this table 07, the four constructs have no effect size computed which are attitudinal and behavioral loyalty towards any other constructs in effect sizes. On other hand investors satisfaction and preference over competition are also no effects calculated. The disappointment has small value ( $f^2 = 0.025$ ) towards financial behavior and its impact financial behavior of investors. Education has impact on attitudinal and behavioral loyalty, feedback, investors' satisfaction and preference and its smaller impact ( $f^2 = 0.015$ , 0.028, 0.005, 0.051 and 0.043). In last risk profile has small impacts with four constructs which same as for education ( $f^2 = 0.007$ , 0.003, 0.015 and  $f^2 = 0.001$ ). According to both above tables all construct of endogenous have valid and reliable and in table 07, all constructs values under smaller size of effect and investor satisfaction has strong variances as per  $\mathbb{R}^2$  values.

#### **5.9** Correlation Coefficient of Latent Variables

In the terms of latent correlation coefficients of endogenous and exogenous constructs found out the relations of all constructs which showing in table 8, given in bellow. The observed and underlying variables each have only two possible values, 0 for uncorrelated and 1 for strong correlation between exogenous and endogenous construct (Langeheine and Rost, 1988; Heinen, 1996).

	AL	BL	Dis.	Education	Familarity	Feedback	FB	FK	FK	IS	PoC	Regret	RP
Attitudinal_Loyalty	1												
Behavioral_Loyalty	0.44	1											
Disappointment	-0.238	-0.342	1										
Education	0.14	0.132	-0.225	1									
Familarity	-0.027	-0.008	-0.28	0.476	1								
Feedback	0.14	0.126	-0.381	0.255	0.515	1							
Financial Behavior	-0.153	-0.123	0.328	-0.053	-0.144	-0.324	1						
Financial Knowledge	-0.01	0.03	-0.207	0.423	0.771	0.441	-0.197	1					
Financial_Kn	0.089	0.019	-0.364	0.539	0.739	0.407	-0.189	0.795	1				
Investor Satisfaction	0.089	0.259	-0.231	0.398	0.515	0.579	-0.196	0.467	0.408	1			
Preference over_Competition	0.19	0.383	0.198	0.044	-0.151	-0.045	0.212	-0.164	-0.237	0.118	1		
Regret	-0.088	-0.222	0.527	-0.217	-0.196	-0.29	0.393	-0.217	-0.238	-0.127	0.153	1	
Risk_Profile	0.025	-0.044	-0.21	0.358	0.491	0.251	-0.082	0.618	0.66	0.357	-0.117	-0.212	1

#### Table No. 08

As we discussed in previous two tables where we find the values of endogenous constructs and exogenous construct where  $R^2$  values and  $f^2$  values are valid so this table 8, are related with these tables. The main thing in this table 8, we have value over the zero (1) in randomly of all endogenous construct and exogenous constructs

are true and valid. We evaluate the impact of socio-demographic variables and control variables as possible mediators on the relationship between gain magnitude and positive financial behavior, and the on the relationship of positive financial behavior and shareholder or investor behavior. The constructs are tested in SmartPLS (Ringle et, Al. 2005). According to researcher who investigate that values of variables are greater than zero (1) which means the finding is valid while in this tables we have findings regarding (Ringle et, al. 2005) are greater than zero in randomly of all constructs and analyze their correlation between both exogenous and endogenous constructs in above table.

### 5.10 socio Demographic and Control Variables

In demographics of this research is basically concluded on shareholders and traders' age, education, income and employee status has been predicted in SPSS. the frequency and cumulative percent in terms of gender, while total no. of respondents are 85 in which 77 are males and 7 of females. This survey questionnaire distributed among investors', traders and officials of Karachi Stock Exchange, Pakistan. The cumulative percent (male = 90.6; female = 98.8) and valid percent (male = 90.6; female = 8.2) and 90.59% are males' respondents and 8.24% of female participants in this research. There are age frequencies where largest average of 36-45 age and their 48.24% and younger investors' under age of 26-35 and 24.71% while backward percentage of 46-55 age's percentage is 17365% and last 9.41% investors whose age greater than 56. In terms of education level, we have 46 participants who have education of higher than bachelor 54.12% and 44.71% are respondents who educated bachelor degree. The largest no. of respondents whose income >100,000 (in PKR) and their percentage stood at 40% and least 9.41% for income of 26,000-50,000 of respondents. Although in which 37.65% respondents are working in private sector job and 29.41 % are brokers/traders. The least 5.88% are investors who have their own running business.

In the familiarity, where 43.53% is the largest fact of very well familiar with financial calculations and least 5.88% respondents don't response such questionnaire. And 31.76% of respondents who extremely familiar with trading and financial calculations. The financial knowledge means financial education and awareness about company where shareholders are going to invest their capital for the purpose of gain. The most of shareholders have expertise knowledge (43.53%); traders have working knowledge (31.76%) which means they come for purchase and sale of shares in market they don't have much shares for longer period of time; And only 23.53% of investors' have little knowledge. The shareholders (investors') and traders they have extended financial experience of investment in stock market for profit they come under age of 40-55; extended experiences have percent of 47.06%. They are getting positive experiences in trade; investors' who purchase the stocks and sell it for a gain when stock price raise in market. And 15.29% of investors' and traders who took decision in very extended experience for stock trading while 30.59% those who are limited experiences of trading.

Investors' taking risk for the purpose of profit in trade 47.06% investors who invested their capital and take high risk in investment on the basis of their positive experiences of past, there average age of 48 and followed by 35.29% who took decision for the moderate risk and they under the age average of 35. The least figure of 1.18% who are under the age 30 and they newly invested in stock, their decision based on their brokers and relative suggestion to invest in stock trading so small portion of investment from younger side in market.

#### 6. Discussion and Conclusion

#### 6.1 Discussion

Therefore the conclusion is based on results and findings of this study, acknowledging about findings and now term is to discuss and conclusion of results. To the best knowledge this research study is originality that this is first to find link between positive experiences with stock trading of companies, the resulting financial behavior and investors satisfaction and their effect on investors attitude and behavioral loyalty. As per findings, the results make a few extensions to previous study on shareholders based customer regarding negative experiences increases dissatisfaction and switching of company's stocks over competitors and engage in negative emotions (Hoffmann et al. 2015; Heskett's et al. 2002).

The findings contribute to the study's literature, which put forward that gain making longer and positive experiences than losses. Specifically, finding that gain lead to positive experiences; attitudes and financial behavior, which is mediating between investors satisfaction and positive experiences. While losses increases the disappointment and sadness feelings and this relationship and does not significantly through statically. Experiencing positive financial behavior increases satisfaction, attitudinal and behavioral loyalty as measured by purchase frequency and volume based on experiences, and increases the tendency of shareholders and brokers to preference over competition and to suggest other in investment decision.

The results show that disappointment and regret has no relationship with positive financial behavior of investors' and traders. The positive experiences increases satisfaction loyalty and attitudinal loyalty and investors would feel positive due to getting positive experiences from selling of stocks; investors would appreciate themselves for having made a profitable decision. Further, this study shows that knowledge and familiarity with company and its stock strengthens the positive effect of experiences on financial behavior loyalty. According to

researchers that investors' in many cases purchase the stocks of companies on the basis of investors' know and familiar as investors' have more information about companies and their stocks and take it as easier to pursue the stock returns (Frieder and Subrahmanyam, 2005).

Finally, this study is performs the effect of trading experiences on financial behavior and attitudinal loyalty and satisfaction with company's performance. Investment gain results in more positive financial behavior and experience which leads to increment the investors' satisfaction and behavior loyalty and preference the base company over its competitor. Hence loss increases the negative financial behavior and experiences and decreases the satisfaction and behavior loyalty respectively. On the basis of findings of this study that the strongest variables are financial behavior towards feedback; familiarity towards satisfaction; education towards investors satisfaction and education with preferences over competitor. The study showing that major effect of Feedback, familiarity, investors' satisfaction and education are very important for trading stocks. The companies should focus on financial behavior and investors' satisfaction with regards of company's performance; all variables contribute to maximum variations on investors' satisfaction and financial behavior which are very high.

This study aligns the results of previous work of Hoffmann A.O.I. (2015) whose findings losses induces the negative emotions which results in lower satisfaction and behavior loyalty as well as increase in to file complain about company. However the gain result in more positive emotions which lead to increased preference over competitor and increased in positive word of mouth (WOM).

#### 6.2 Limitations

- This study has studied few factors.
- Limitation of time period.
- This study was limited to Karachi; Karachi Stock Exchange and Hyderabad it can be extended to other parts of stock market.
- This study was limited to investors; shareholders and brokers; other sectors could also be studied like stock market.
- This research was limited to positive experiences of investors.
- This study was limited to positive experiences of investors on financial behavior.

# 6.3 Research Recommendations

- There may be other factors that might be study like the role of brokers and institution actors in shareholders-investors financial decision making of stock trading.
- Overconfidence knowledge and miscalibration over stock experience.
- Future research direction could find the impact of brokers and institutions actor's suggestions and advices in investment decision of individual investors in stock trading.
- Future research is recommending that how affecting the company's performance to the investor's financial decision in stock trading.
- This study is directing the future research that effect of company performance in positive financial behavior of investors' decision.
- The future research could study on positive path of coefficient of disappointment on positive financial decision of investment.

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