THE IMPACT OF PSYCHOLOGICAL FACTORS ON STOCK BUYING DECISION: A CASE STUDY FROM PAKISTAN STOCK (PSX) & INDONESIAN STOCK MARKET (IDX)

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ABSTRACT

Investors stock buying decision always play a key role in the market growth, in which many of the investors focus on the multiple sources information to take investment decision making for this purposes we have apply both qualitative and quantitative approaches, we examine whether or not investors fall prey to three heuristics; namely, anchoring and adjustment, representativeness, and availability, while investing in stocks. For the data collection, a self-constructed questionnaire was administered to investors in the Malaysian and Pakistani stock exchanges. Data has been analyzed through description, correlation and regression analysis. The results indicate that all three heuristics are likely to affect the investors' stock buying Decisions. The effect of heuristics is similar across the sample countries.

Keywords: *Anchoring & Adjustment, Representativeness, Availability and Stock buying decisions.*

INTRODUCTION

Decisions always play a key role in the multidimensional way especially in terms of individual investment basis in which these individuals make decision with the distinctive view with multiple choices in which some decisions based on the substantial or consequences based. Many of the decision views are simple and some are based on the complications that might be required multiple decision making steps to achieve subjective result, basically human being decisions are referred toward there intuitions and multiple experiences that they got instead of those information's that are present in the market which encourage them toward making batter decisions. If we take a look of the finance theories on that basis all decision are rational in the financial markets like we talk about efficient market Hypothesis theory (Fama, 1970) & Modern Portfolio Theory (Markowitz, 1952) in the literature they told us that individual investors are rational which try to make those decisions which make them away from

the risk factors or minimize them to get maximize returns.

Behavioral finance is another aspect of the investment decision making in which researchers found that the human beings do not make decisions on the rational basis because there all decision are influenced by the psychological spirits, according to the behavioral finance every individual investor have its physiological effects which make them away from the rational decision makings on another point of view which relate to behavior finance towards the decision making is the shortcut of the mental point for the decision making is the heuristics which leads to oppose the gathering of the information and analysis as well (Tversky, 1973), there are many of the behavioral and economical finance literature available which gave the recognized effect on the decision makings view of the heuristics for example to check the literature { (Barnes, (1984),), (Bernard, 1989).There are many of the literature also available who point out the bad decision makings in which

identify that investors hold for long time those which are losers and very early selling of the winners in the form of the excessive trading's (Odean, 1998) there is under diversification also a part of it (Goetzmann, 2008), these type of the behaviors are totally against the traditional type of the finance theory and there is no explanations are given by these theories that why these type of the behaviors are exist in the market. Behavior finance theory try to provide understanding regarding the basic fundamental motivations behind the not regular pattern of the market. (Subrahmanyam, 2008).Many of the studies are there in which shows that investor's goes influenced by the behavioral characteristics in the context of the stock market. (Ariely, 2006) Says that the basic fundamental asset values are the hard task for these reasons investor's anchors towards the previous prices relevant to its buying. Many of the investors tends to buy the previous relevant stock because for them it is very easy to recall these stock's and also have the tilt towards the attention grabbing or the views in the news (Barber, 2009).

There are many of the studies are done in the area of the develop markets in which heuristics has significant role in the buying and selling of the stocks but if we call about the developing countries there are no linkage still has established the relationship between heuristic's and buying of the stocks. There are many of the reasons behind that which cause main difference in the economies of the developing and the developed economies are difference of education level, technology developments, level of the financial structures, level of the income, difference in the informational technologies including political & law and order positions, In the same context investors and the stock markets are also has the differences as well. The environmental factors influence the investor's attitudes and behaviors which also reflects in multiple decision makings. Education emerged as a tool which effect and overcome the heuristics in multiple biases, so we can say that the level of the education can play a key role of the to make difference in behaviors in developing and developed countries, many of the literature in the behavior finance mainly focused on the single handedly operation of the heuristic's (Pompian, 2006).

At this present time behavioral finance decision theory specify that different types of the heuristics operates collectively and also effect the decision making and predictions as well (Czaczkes, 1996) (Ganzach, (1991).).There are many of the methodologies in the context of the behavioral finance based on the qualitative approach in which examine the impact of the different bias and heuristics on the financial decisions making and these such finding have not go through the testing statistical method. In the subjective study there are three main heuristic's (availability, representativeness & anchoring) are going to examine under the umbrella of Pakistan's stock exchange (PSX) and Indonesian stock exchange market (IDX), In this study we used both approaches quantitative and qualitative as well to make study on below;

- The effect of these three heuristic's on the buying decision of the investors for stocks.
- Have Pakistani and Indonesian investors' sensitivity towards these heuristics biases.
- If the investors of both countries makes decision for buying for themselves or their clients its make's difference under the shadow of heuristics.
- Check the vulnerability of demographic factors (level of education, level of experience and income level as well) towards these three heuristics.

On the basis of this type of the mixed approach in which qualitative and quantitative both a part of it has contributed in the behavioral finance literatures with the context of the approach of methodology & developing countries base as well. The implication of this study to make financial decisions makers in Indonesian & Pakistani market (in which included financial consultants, brokers relate to finance, private investors, manager of fund & brokers that are involved in financial decision makings) because in the subjected paper heuristic knowledge make preventive measures from falling prey to these heuristic biases, for the subjected study to collect the data self-constructed questionnaire is administered to the investors in the Pakistani and Indonesian stock exchange market on that basis result shows that these three heuristics influence the investors decision makers for stock buying, it is also influence similar

to the cross borders sample country for income group and type of the investor basis, but main thing is that those investors in both countries which have good experience & education have less chances to be effected which has been briefly explained on below regarding heuristics and their effect on the investors decision makings.

Anchoring & Adjustments

The term "anchoring and adjustment" leads to the cognitive heuristic guess which makes by the investors at the initial stage when they makes the decision of the investment that will be after adjusted towards the final estimates which makes adjustment against those decision which makes on the initial time, basically this (initial guess; anchor) comes from the multiple of the sources such as the current value, past experience via historical averages & computations. On the regardless basis of the earlier mention sources for anchoring the adjustments always move it further for the up or down of the estimation that makes the difference which done on initial guess basis. These are those estimates that has done to make financial decision making on that basis investors deviates from the traditional finance "rational" norm. The main cause of the given below consequences is anchoring and the adjustment.

- In the form of the general decision making for the market based forecast investors likely to stay anchored towards the values of the current market and close to them.
- In the anchoring process it is not allow the investors or relevant analyst to take adjustment of the newly information and to focus for continue adhering that closely to original estimates.
- Investors use the current information (anchoring) for making forecast of the rising and lowering value percentage of the asset.
- Normal the present economic condition of the multiple countries or different companies might be used as anchor for the future forecast of them.

In terms of the financing and relevant decision-making process investors should be aware of the anchoring bias and its multiple effects because it is very common biased that they have.

Availability

The term availability can be define to rely on those information which already exist that is relate to the cognitive heuristics, it can be peoples rely on the ease with the relevant past experiences and information's that's make them close to assess the relevant probability of the event (Tversky A. &., (1974).). In the given context of the stock market regarding availability it leads to the over and under-reaction expectations and in the asset prices (Chiodo, 2003).

There are four types of availability in which experienced based on the narrow ranges, resonance, categorization and retrievability as well. "Narrow range of experience" leads to the relevant restricted framework of reference information (came from the set of restricted information's) which make the decision for the future investments, "Resonance" leads to the individual investment tendency in which investor see the situation and match it with his characteristics that might be a dangerous in term of the investment decision making, "Categorization" based on the new information that came to the investor and he match it with the relevant reference in other words we can say that investor fit the new information in present relevant classification of the references and " retrievability " leads to investors tendency to retrieve the credible information's but might be some information's out of them not reliable for the evaluating the investment purpose.

Representativeness

Cognitive heuristics also have representativeness bias which refers to the people's tendency to consider the characteristics which represent the whole of the phenomena weather it might be or not a part of the whole phenomena, there are main two primary interpretations are available regarding the representativeness first is neglecting of the base rate (tendency of the investor in which he contextualized the venture in a manner in which it make easy to understand when making the investment decisions for company) when making the judgment it is likely to ignored all those other factors which might be effect the investment value, the basic reasons behind it to rely the such stereotype is that because investors take it as an alternative for the required research in the evaluation of the investment. Second interpretation is to neglect the sample size (the

tendency of the investor to base their judgment on the basis of the inadequate sample of the data when making analyzing of the particular investment), in this period investor take small number of the sample size data as a representation of the population which called the law of the small numbers so we can say that these number might be show the current trend but not as whole the properties of the whole population, on that basis investors can make erroneous investments or might be disinvestment of the decision in particular stock which might be effect it as whole.

In the above section (1) in which heuristics types has been explained and rest of the sections of the subjected study has divided total four sections in the second (2) section we have discussed the relevant literature of the heuristics (anchoring and adjustment, availability heuristics & representativeness) in section third (3) leads to the methodology working including instrument development, Section fourth (4) shows the discussion on the description part and regression as well & in last section which section five (5) shows the conclusion of the study discussion and implications with the future directions that we get from it .

Review of the literature

Basically the idea that we have derived in terms of the heuristics given by (Tversky A. &., (1974).), In which told that individuals tends to the rule of thumb and mental shortcuts for making decisions under the uncertain situation of the market, these terms (mental shortcut & rule of thumb) are based under the heuristics which turns the relevant complex situations into the simple cognitive operations, there are many of the cases are there in which the mental shortcuts play an important role to dealing with the uncertain situations but there are many chances to lead the biased decisions. There are some contributions of the heuristics which are highlighted in multiple literatures but there are many of the researchers are far from the reaching to the consensus with the effect of the heuristics on the decision makings for example {((Carmines, 2015), (George, 2004) (Kurz-Milcke, (2007).) }.

In below given section we have discuss the multiple type of the finding that we have got from multiple sources of the relevant literature review of three type of the heuristics that are representativeness, availability & anchoring and adjustments. There are multiple dimension of the heuristics has been given in the multiple literature but regarding the representativeness bias there are some limited resources are present as compare to anchoring bias but some of the literature given clear role of the representativeness in the financial decision making in one of the study , use the heuristics representativeness and found that bankruptcy probability judgment directed by the assessment of the relevant similarity of the financial data of the corporate because in which he use the representativeness for the judgment for the prediction of the corporate bankruptcy (Johnson, (1983).).Furthermore base rate neglected and the sample size neglected which are the forms of the heuristics has been tested by the (Jacobs, (1991).) Findings relate to the judgment biases that have the adults are get from the social domain which they developed over the passage of time.

However multiple time usage of the base rates are develop at the same time in the given of the multiple object of domain, on other hand (Cox, (1992).) Found that representativeness may lead to the misunderstanding of the multiple statistics concepts even if the relevant participant are also a witnessed of that unreasonable approach towards the situations even after the answer changing to appropriate information incorporate relevant to the current situation and found the presence of the representativeness after the post testing revealing. Further ((Pham, 1998)) has discover that heuristics comes when representativeness of the target has existence in the mind and it generates the feeling as well actually in term of this he defines that how do I feel about the heuristics that is present in the decision making, representativeness also applied in the field of the sports world (Kahneman, 1982), which can also be used in the financial decision making as well (Pompian, 2006).For example this concept of allowing the game "need to go longer" in this back concept is that probability of the stronger player can win it can also apply to the investor in the form of the time diversification, in which get the idea that investors need to spread their assets multiple ventures operating with multiple market cycles with

giving them maximum allocation of the plenty time to work properly.

Basically time diversification also help to reduce the risk of the investors in a particular investment or a given category which have disadvantageous point in the present economic cycle. It is also relevant to the particular highly volatile investment like in which included long term bonds & stocks whose relevant prices can be fluctuated in the short term basis but if it is long term purpose it will effected softly of such type of the fluctuations.

Availability is one of the main heuristic which is relate to a coming cognitive strategy to making human decision in which provide the explanations that how the judgment making process influence the evaluation of the process, the judgment of the probability and the frequency of the events are based which came into the mind example of the those events (Tversky A. a., 1973).Basically the relevant availability of the heuristics effect the relevant decision making in multiple domains of the life, for instance (Folkes, (1988).)Argue that availability influence the judgment of the performance of the product. In another way (Barber B. M., 2002) it has determined that investors tends to invest in the attention grabbing stocks due to the relevant choosing options or some stocks in the multiple presents stocks needs to considerable effort and time as well and investors tends to the limit there research with the only attention grabbing stocks. Purchasing of the stocks find nearly twice in it as compare to the normal days of the trading during high trading as aspects, and investors more focused to buy those stocks which are especially in news.

They also find the stocks which are attention grabbing which buy by the investors are not beat the market and also not earn the profit in the abnormal form, similarly (Folkes, Recent attribution research in consumer behavior: A review and new directions. , 1988)) argue with given of the practical example of the availability bias in the individual type of the finance, in which shows that investors basically tied to deviate the rational way there are some reasons are present (lack of the resources, skills and time) to make process the huge present data ought to contextualized which make him rational for the purchase of the stock. Those information's that are present to investors is not always the cognitive so

when intelligence information is not present than decision which make investors are ultimately flawed. If we talk about the capital market in the literature the anchoring and adjustment is not matures in it, but three are many of the other financial area present in which it has significant role of it for making financial decisions. (Degeorge, 1999) argue that If the executive teams have aim to enhance the earning per share (EPS) than particular earning per share EPS will be anchor for the executive which will be turn influence of their decision, further investors will not ready to make bid for the stock till it will gain it peak level that was anchor through historical highest (George, The 52-week high and momentum investing. , (2004).).(Cen, (2010).)Argue that whenever executive estimating the level of the success of the firm, than the investors anchor the historical average including they finds the adjusted-median forecasted earnings per share, further more return of the stock will be higher than firm with low median adjusted forecast of the EPS. We can say that it is lead to the cross sectional forecasted anchoring EPS effect.(Johnson J. E., (2009)) Found on the anchoring and the adjustment in the relevant financial market with the comparison of the horserace. In which they also explains that the advantage given by the horse barrier position serve as anchor for the horse of the batters given probability judgments. Anchoring and adjustment has significant effect on the long term future stock returns that estimated in the Scandinavian (Stockholm Stock Exchange) stock market (Kaustia, (2008)). Stock prices basically depends on the four different things one of them is anchoring level that present in the given market (Williams, (2010).). Basically anchoring effect relate to the historical point of the views in the prediction of the macroeconomics data like CPI (Consumer price index) or we can say that non form employment payroll by the professional that's make significant error of the forecast (Campbell, 2009), and corporate type of the acquisitions are also be effected by the given anchoring type of the bias (Baker, (2009).).Heuristics (anchoring and adjustment) effect the forecast for the earning with extreme point (Amir, (1998).).

There are many of the other context that we have in which anchoring influence the multiple decisions in

which sentencing decision of judicial (Englich, (2006).)Another decision which is personal injury verdict (Chapman, (1996).). With the relevant estimation of diseases of the likelihood (Brewer, 2007).)Another factor that we have is relevant to the job performance evaluations in it (Latham, (2008).). Other factor relevant to the competition which is judges ranking in the competitions (Ginsburgh, (2003).).In which also add the acquisition of the real state (Northcraft, 1987)intuitive numerical also have the influence of the anchoring process estimation (Wilson, (1996).) Other factor in which is relate to the choices that we have between the product categorization (Davis, . (1986).) Outcome of the different negotiations (Ritov, (1996).)In which the role of the sales prediction also have importance (Hogarth, (1981).)All factors that we have in which the role of the risk assessment also have the importance (Lichtenstein, (1978).)Other factor that add is relate to the estimates in the form of the probability (Plous, (1989).).there are we have not found the direct relation of the linkage on the anchoring bias to investors decision to invest in the sticks but its market studies suggest that anchor influence such decisions.

If we talk about the overall three heuristics there are many of the evidences are present in which we found that anchoring, availability & representativeness likely to effect the investors when making the stock buying decisions, another aspect of the heuristic is that it has found limited literature in the developing type of the economics in the early introduction it has already mention that these biases may affect investors differently in the developing economies, one more thing that relate to literature that there are maximum qualitative approaches has been followed the heuristics influencing checking on the investment for the investors but these has not been tested in the literature in this study, we will focused to fill the gap to fill using both qualitative and quantitative approaches for all three heuristics that we have in this study with the Pakistani stock exchange PSX and Indonesian stock exchange IDX context.

Conceptual Framework

Where;
DV (Dependent Variable) = Stock buying Behavior
IV 1 (Independent Variable 1) = Anchoring & Adjustment
IV 2 (Independent Variable 2) = Availability
IV 3 (Independent Variable 3) = Representativeness

Independent Variables
Dependent Variable
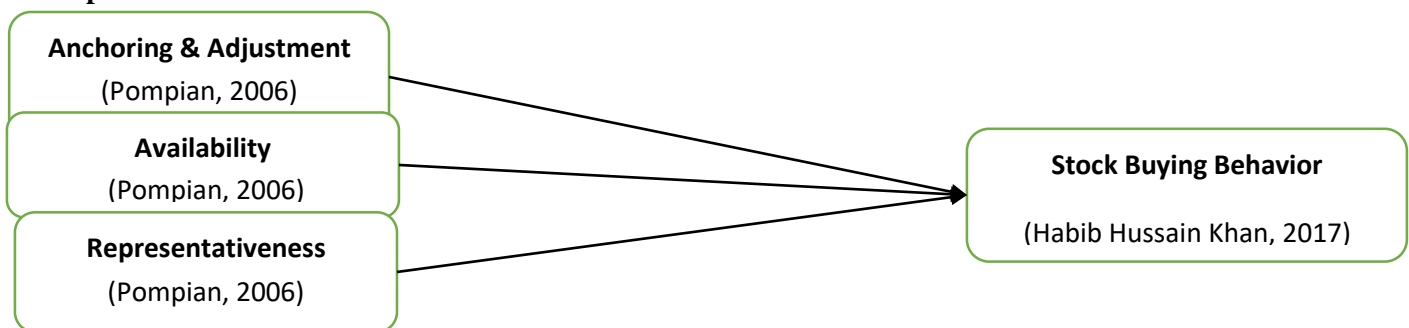
Figure#01: Conceptual framework.

HYPOTHESIS

H1: Anchoring & adjustment have significant effect on stock buying behavior.
H2: Availability have significant effect on stock buying behavior.

H3: Representativeness have significant effect on the stock buying behavior.

Methodology

Population, Sample, Analysis technique
In the population point of view Indonesian (IDX) and Pakistan stock exchange (PSX) investors a part of it

due this type of typical population of the study, we have taken convenient sampling in the subjected study in which total 500 questionnaires has served to both of the stock exchange investors and we have received approximately 350 response (185 from the Pakistani stock exchange (PSX) & 165 from the Indonesian stock exchange (IDX)) response rate was approx. 87%, out of these 350 questionnaire we used only 300 questionnaire(from the Pakistani stock exchange 160 and from Indonesian stock exchange was 140) remaining was uncompleted and improper filling data. Regarding analysis point of view only items descriptive analysis has been used to analyze the data in it whereas regression and correlation a part of it as a supplementary approach to making support of the findings that came from the descriptive analysis of the data.

Instrument for data collection

In the subjected study we have also focused that how can we measure the presence or absence of the relevant to heuristics for that purpose, we have adopted a questionnaire with the help of the (Pompian M. M., (2006).).In this study additionally questions adopted relevant to the type of the heuristics (representativeness, availability &

anchoring and adjustment) makes the construction of the different variables to check the investor's inclinations towards the stock instead different opportunity of the bonds etc. (Khan, 2017).In the subjected study the questionnaire that we adopted has 27 questions each of the item capture the response on 5 Likers scale (from the strongly disagree to the strongly agree).

Data analysis

In this part to check the most frequent responses relevant to the heuristics by different investors further its correlations and regression analysis has been done to make robustness checking. Basically the descriptive analysis in this study use to analyze the frequency of the investors response regarding presence and absence of the particular bias and frequency of items to a particular question from investors. For instance, if we received more frequency response of the five Likert scale (from strongly disagree to strongly agree) relate to 4 or 5 so it can be explain in the form of presence of the particular bias, each items descriptive analysis explain in the following of the section.

Table#01
Percentage responses to questions an anchoring and adjustment for PSX.

Q#	SDA %	DA %	N %	A %	SA %
1	1.45	7.2	36.5	51.3	3.8
2	1.45	5.9	3.8	53.1	36
3	4.5	10.7	5.3	46.8	32.8
4	4.5	7.3	40	42	5.9
5	0.8	47.5	40.6	9.3	1.9
6	17	5.2	3.2	70.4	4.2
7	2.4	4.6	4.5	86	2.6

Table#02
Percentage responses to questions an anchoring and adjustment for IDX.

Q#	SDA %	DA %	N %	A %	SA %
1	1.3	6.4	36.5	48.9	6.9
2	0	3.2	0	56.2	41
3	1	14.5	10.4	42.7	31.9

4	1	9.3	40.6	44.8	4.2
5	3.4	44.6	39.8	11.5	0.8
6	17.6	6.5	3.2	66.6	5.9
7	0	6.3	4.4	85.2	4.6

Items' descriptive analysis

From Pakistan and Indonesian stock exchanges we received responses which shows in the table #01&02; the sum of the strongly agree and agree dominates of the strongly disagree and disagree will means that a particular heuristics is present among the investors. In the first question we have check the investor's tendency for relevant market forecast which are too close to the current level, in which agree versus disagree numbers that are present in the (%) form are 55.1 and 8.65 respectively for Pakistan and for the Indonesia they are 55.8 and 7.7, further in second question we measure the tendency of the investors to anchor their forecast on the basis of the historical minimum and maximum of the prices.in which responses that received from Pakistan against this question are 89.1 (agree) 7.35 (disagree) from Pakistan and from the Indonesia 97.2 (agree) 3.2 (disagree). In third we measure it on the basis of the investor's tendency for making forecast percentage of increase or decrease of the particular asset for current level of the returns and also capture the tendency of the anchor their forecast of the prices on the basis of the historical percentage increase or decrease, for Pakistan in the form of agree (79.6) and disagree (15.2) and for Indonesia in the form of agree (74.6) disagree (15.5). If we call about in question number four in which investors are likely to anchor on the current relevant economic conditions of a particular country to measure the tendency the responses came from the Pakistan in the form of agree (47.9) and disagree (11.8) and from Indonesia (49) agree , (10.3) disagree. In question five measure the phenomena in which investor who are biased with anchoring and adjustment tend to anchor on historical maximum or minimum stock prices in which responses from Pakistan are (11.2) agree and (48.3) disagree , from Indonesia (12.3) agree and (48) disagree. In question six there are five point measurement scale has use in which option (4 and 5) are very close to the given value 900,000 which representing the high level of the anchoring and other option are away from it and option one is 10% less of the given value. From Pakistan response get for 74.6 (agree) 22.2 (disagree), from Indonesia (72.8) (24.1) respectively. In question seven focus on the phenomena in which investors are exposed to anchoring are tends to current economic condition of the company against it from Pakistan responses came (88.6) agree , (7) disagree and from Indonesia (89.8) agree (6.3) disagree.

Table #03

Percentage responses to questions on representativeness for PSX.

SDA%	DA%	N%	A%	SA%
1.6	7.3	8.6	11.3	70.9
0	7.3	6.2	83.6	3.2
0	7.3	10.1	47.6	35.3
1.6	1.9	34.6	54.6	7.3
2.6	8.6	3.2	47.3	38.6
5.1	10.3	5.6	74.3	4.9
1.2	6.2	66.9	21.9	3.6

Table#04

Percentage responses to questions on representativeness for IDX.

Q#	SDA%	DA%	N%	A%	SA%
1	3.2	6.2	5.3	17.9	67.9
2	3.1	2.1	11.2	79.8	3.2
3	3.1	4.2	4.2	54.1	34.6
4	0	7.3	36.5	52.3	3.9
5	0	6.3	7.3	51.3	35.7
6	1.2	13.2	6.3	78.6	1.3
7	1.2	5.9	71.4	13.6	7.3

In table #3&4; shows the representativeness questions responses from the Pakistan and Indonesia, in these tables same explanation given as anchoring and adjustment. In the question number eight measure that when investor making the judgment of the likelihood of the particular outcome of the investment the investor fail to consider accurately the size of the data on that basis they make judgments. The responses that come from Pakistan 82.2 (agree) and 8.9 (disagree) & from Indonesian investors responses are 85.8 (agree) and 9.4 (disagree) , in question number nine the phenomena that check that those investors which are biased by representativeness tends to neglect the sample size while analyzing the stock performance, responses from Pakistan are 86.8 (agree) 7.3 (disagree) from Indonesia 83 (agree) 5.2 (disagree), in question number ten we measure the whole scenario in which representativeness heuristics can lead investors to making ignorant of the reality and consider its characteristics against it responses from Pakistan are 82.9 (agree) 7.3 (disagree) from Indonesia 88.7 (agree) 7.3 (disagree). In question number eleven in

which gauge the investors tendency in which he determine the success which relate to investment in a company contextualizing the venture in the familiar way which focus too easy to understand classification scheme known by rate neglecting, from Pakistan response got 61.9 (agree) and 3.5 (disagree) and from Indonesia 56.2 (agree) and 7.3 (disagree). In question number twelve gauge the tendency of the investors in terms of the ignorance of the base reality from Pakistan 85.9 (agree) 11.2 (disagree) from Indonesia 87 (agree) 6.3 (disagree).In question number thirteen rate neglect was further confirmed from the investors from Pakistan 79.2 (agree) 15.4 (disagree) and from Indonesia 79.9 (agree) 14.4 (disagree). In question number fourteen focus on the investors wrong conclusions about the performance of the analyst or money managers by taking narrow sampling period of the performance record in which sample size neglected response from Pakistan 25.5 (agree) 7.4 (disagree) from Indonesia 20.9 (agree) 7.1 (disagree) .

Table#05

Percentage responses to questions on Availability for PSX.

Q#	SDA%	DA%	N%	A%	SA%
1	2.9	5.2	2.5	46.3	43.2
2	1.6	4.5	3.2	56.9	33.9
3	5.3	8.6	4.6	79.9	1.9
4	2.9	6.6	9.3	79.6	1.9
5	5.2	8.3	70.1	14.3	1.9
6	0	7.3	7.3	83.4	1.9

Table#06

Percentage responses to questions on Availability for IDX.

Q#	SDA%	DA%	N%	A%	SA%
1	1.3	4.1	5.2	56.3	33.6
2	1.3	9.3	1.3	48.9	39.6
3	4.1	2.1	7.9	82.3	3.6
4	5.2	6.9	7.3	76.9	3.6
5	3.1	16.7	69.9	8.9	1.9
6	0	7.3	3.2	87.6	1.9

In table #5&6 section we have focused on the availability; means the tendency in which investor rely on the readily available knowledge rather that examine the other procedures or alternatives leads to availability biasness which further can be divided into four main categories; retrievability (this leads to information that recalls) question number fifteen connect to it in which response from Pakistan 89.5 (agree) 8.1 (disagree) from Indonesia 89.9 (agree) 5.3 (disagree). In question number sixteen investors categorize the data for information's that matches to the certain reference of information called categorization which measure from the Responses of Pakistan 90.8 (agree) 6.1 (disagree) and from Indonesia 88.5 (agree) 10.6 (disagree).Resonance deals with extent to which certain given situations match the individual own personal situation which can influence the judgment which measure in question number seventeen which response from Pakistan are 81.1 (agree) 13.9 (disagree) from Indonesia 85.9 (agree) 6.2 (disagree).Narrow range of experience is availability in which investor have the restricted framework from which they formulate the estimation with the narrow range of the experience basis which measure in question number eighteen responses from Pakistan 81.5 (agree) 9.5 (disagree) Indonesian response 80.5 (agree) 12.2 (disagree).In question number nineteen same narrow range further confirmed by the investors response from Pakistan 16.2 (Agree) 13.5 (disagree) from Indonesia response 10.8 (agree) 19.8 (disagree).In question number twenty it has further reconfirmed which response from Pakistan 85.3 (agree) 7.3 (disagree) 89.5 (agree) 7.3 (disagree).

If we analyze the all heuristics that has been check in each question the sum qty of the" agree and strongly agree" dominates the "disagree and strongly disagree" which means in every question heuristic is present. Means in which we can say that each heuristics have impact on the decision making, secondly if we check the average which are approx. the same of the both developing countries Pakistan and Indonesia on that basis we can say that both heuristic play a role the decision-making's and both countries investors have the approx. same way too thing regarding decision making under the umbrella of these heuristics.

Table#07

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660[a]	.535	.527	.86924

a. Predictors: (Constant), Availability, ANCHORING&ADJUST, RESPRESNT

In the table#07 in the overall summary model a measure of the explained variation result shows that about 53% of the total variation in stock buying decision (Y) is explained by the regression.

Table#08

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	125.792	3	41.931	55.495	.000ᵇ
	Residual	163.204	216	.756		
	Total	288.996	219			
a. Dependent Variable: Stock Buying Decision						
b. Predictors: (Constant), Availability, ANCHORING&ADJUST, RESPRESNT						

In the above given table the model significance has been shown in which F statistics is a test of significant for the entire regression, at $\alpha= 0.05$, this regression is statistically significant because p-value less than 0.05. On that basis we can say that this model has significant relationship with each other's.

Table#9

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.038	.338		3.073	.002
	ANCHORING&ADJUST	1.784	.305	1.171	5.849	.000
	RESPRESNT	-2.139	.525	-1.346	-4.076	.000
	Availability	1.275	.369	.811	3.454	.001
a. Dependent Variable: Stock Buying Decision						

On the basis of the table#9 a study was conducted to determine the various factors that can influence the stock buying decision, The hypothesis is that stock buying decision can be predicted by the three presented factors, namely anchoring & adjustment, representativeness & availability, result shows significant effect on stock buying decision (F (3) = 55.495), P<0.05), with R^2 = 0.435, suggesting that 43.5% of the variation predicted by the listed factors.

Conclusion

In the present study we have used the quantitative and qualitative approaches for study the influence of three heuristics (anchoring and adjustment, representativeness and availability) on the investors stock buying decisions in the context of Indonesia and Pakistan. The data has been collected through a self-constructed questionnaire from investors in the Indonesia and Pakistani stock exchanges. An items descriptive analysis has been used as the main approach to analyze the data, while correlation and regression analyses have been used as a supplementary approach to support the findings from the descriptive analysis.

The results from the descriptive analysis support the presence of all three heuristics, and are also supported by the Correlation and regression analyses where all three heuristics are significantly correlated to and have a strong influence on investors' stock buying decisions.

Heuristics are also likely to influence other areas of financial decisions making such as investing, financing, and asset Management, and dividend policy decisions. The study can be extended to cover these areas of corporate finance as well. Moreover, given the limitations of a primary data gathering technique such as questionnaire, it would be worthwhile to consider an alternative measure such as investors' trading data, to capture the heuristics.

Appendix

Questionnaire

Dear Respondent,

Assalam o Alaikum ,

This questionnaire aimed at investigating the impact of heuristics (anchoring and adjustment, representativeness and availability) investor's stock buying decision the information obtained through this questionnaire will be kept confidential and used solely for educational purpose within the scope of this study . We are grateful for your cooperation.

You are requested to read the questions and answer using scale 1 through 5.

Demographic Characteristics

Gender	
Age	
Experience (Years)	
Years of Education	
Monthly Income (Dollars$)	

Investor Type

Your decision to invest in stock applies to.

1. Yourself (Your Own Money) 2. Your Clients (Other People's Money)

Anchoring and Adjustment

1. Suppose that PSX -100 index is current at 13500 in your opinion PSX-100 index at the end of year 2012 would be somewhat closer to the current level.

    1. Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree

2. Suppose you own a stock that now at 52 weeks highest price level you are likely to sell the security at this price level because in your option, it has achieved the maximum price level.

1. Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree

    3. Suppose price of a stock increased by 17% during the last year. Then the expected increase in this stock till the end of current year would be somewhat closed to 17%

    1. Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree

    4. Overall economic growth of Pakistan has been declining for the past many years. You foresee a similar trend of growth in coming year.

1   Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree

    5. Suppose you broth the stock of ABC Corporation at RS 12. Couple of months ago. The stock reached at RS 20. You thought to sell it then but somehow you

could not. Unfortunately the stock dropped to RS 15 and currently trading at 15. Now to sell this stock, you are likely to wait until it returns to Rs 20.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

6. Suppose you want to sell your house .your real estate agent price your home at 900,000.you did not receive any bids for some days. One day your agent tell you that local real estate prices are down by 10 % on average and that you must also revise your ask price. Your new price is most likely to be closer to

1.   810,000   2. 825,000   3. 840,000   4. 855,000   5.   870,000

7. Suppose that stock of ABC Corporation has outperformed the market for past several years, considering its past this stock Is expected to show similar performance in future.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

Representativeness

8. Suppose you are not satisfied with your analyst's tips about stock purchase. Your friend tells you about this own analysts that he give him three great stock picks over the past month. You are likely to consider your friends analyst as successful and decide to switch to this analyst.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

9. Suppose you analysed the performance of a stock for last 10 quarters. You found that its performance during the initial 4 and 5 quarters has been poor but for last 4 quarters it has been excellent so you expect the same excellent performance from the stock in future.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

10. Troubled steel companies can either be (A) The companies that will go out of business or (B) The companies that are likely to recover. In your opinion a 75 years old manufacturing company ,which is currently facing some business difficulties, belongs to category(A)because recently there have been many bankruptcies in steel industry.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

11. Suppose you are looking for a long-term investment stock. You are told by your friend about a new IPO Company ABC and that most firms have placed. A buy rating on this stock. You are likely to buy this stock.

1. **Strongly Disagree**   2. **Disagree**   3. **Neutral**   4. **Agree**   5. **Strongly Agree**

12. New IPOs can either be (A) the stocks constituting successful long term investment or (B) the stocks that will fail as long term investment. In your opinion, ABC Company (the new IPO) belongs to category A because IPOs are good long term investments

1. Strongly Disagree   2.Disagree   3.Neutral   4.Agree   5. Strongly Agree

13. AAA rated municipal bonds can either be (A) Safe municipal bonds or (B) Risky municipal bonds .In your opinion, AAA rated bond issued by inner city of a racially divided country belongs to (B) because of potential riskiness of country (racial disputes).

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

14.Analysis of track record of a money manager for past six months suggests that on average money manager has performed better .Thus you are likely to conclude that his performance is result of skilled allocation and security selection.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

AVAILABILTTY BIAS

15.Suppose you hear about a great stock tip from your friend who has a good market sense ,he recommends you to purchase the stock of ABC Company .You are likely to buy some shares because your friend is usually right about these things.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

16. Suppose you recently studied a success report about a generic drug maker company and you plan to purchase 100 shares of it .Right before you do, you hear on popular financial news that another drug maker company just reported great earnings and its stock is about up to 10%.You are likely to take this information as confirmation that generics are a good area for investment and proceed with the purchase.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

17. What type of music do you like? In your opinion, the percentage of people who have similar taste in music as yours, is more than the percentage of peoples who like the other types.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

18. In your opinion USA provides the best investment opportunities

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

19. Suppose during a visit to a Hi Tech Company, you meet many of your college fellows who studied mathematics at college and were very good at it. You can conclude from this experience that good mathematics students tend to join the Hi Tech Companies.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

20.Suppose you are working in a fast growing Hi Tech Company and you are asked which industry generates most successful investments ?You are likely to refer the Hi Tech Company because you have witnessed this industry generating very good investments in past.

1. Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

Stock Buying Decisions

21. With the given investment opportunities, you would prefer to invest in stocks rather than the fixed income securities.

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

22. You base your stock buying decisions on stocks historical informations such as historical returns, highest or lowest prices etc.

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

23. Your stock buying dictions are based on company's fundamentals such as dividend pay-out, cash flows and earnings growth etc.

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

24. You likely to buy the stocks that haven high trading volumes..

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

25. You prefer to invest in stocks that are frequently advertised or cited in news.

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

26. You are likely to buy the stock that recently outperformed the market.

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

27. You buy the stock that has been a loser in recent past because you expected it to recover in further...

1 Strongly Disagree   2.Disagree   3.Disagree   4.Agree   5.Strongly Agree

Thank you indeed.

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