Indian Journal of Economics and Business Vol. 21 No. 2 (April, 2022)

Copyright@ Ashwin Anokha Publications & Distributions <a href="http://www.ashwinanokha.com/IJEB.php">http://www.ashwinanokha.com/IJEB.php</a>

# Impact of Availability Bias Effect on Investment Decisions of South Asian Stock Market Individual Investors during Covid-19 Pandemic

## Dr. Adeel Rahim

Corresponding Author, Lecturer Finance, FATA University Dara Adamkhel, Kohat, Pakistan, adeel.rahim@fu.edu.pk

## Dr. Romana Bangash

Assoc. Professor Finance, Institute of Management Sciences, Peshawar, romana.bangash@imsciences.edu.pk

#### Ms. Hanana Khan

Universiti Teknologi PETRONAS, Malaysia and Lecturer, Deptt of Economics, KUST, Pakistan, hanana 17005179@utp.edu.my

Received: 07th January 2022

Revised: 14th February 2022

Accepted: 13th March 2022

Abstract: In this study researchers analysed impact of Availability effect bias on investment decisions of South Asian Stock market during Covid-19 pandemic. Financial markets post Covid-19 changed the dynamics all over the World and affected investor decision making. Conventional investments like keeping money in Banks, buying Fix term deposit, buying Prize bonds or gold bars is now outdated in current scenario. Investor now invest more wisely than before Covid 19 they prefer to encash those stock markets which sinked in Covid-19 pandemic and try to capitalize the opportunity of higher returns now when these markets are gaining momentum again. South Asian stock markets are one of those gaining momentum markets where now not only local but first World foreign investors are investing and buying shares due to Availability effect bias and it has raised the different index from 1st July- 10th November-2020. Researchers made an attempt to address post Covid-19 influence of Availability effect bias on investment decision of South Asian stock investors by taking Availability effect bias along with its sub variables as an independent variable and investment decision of these investors as dependent variable and evaluated the impact of both variables in post Covid-19 South Asian stock market performance. Researcher used stratified random sampling technique by dividing South Asian stock markets such as: National stock exchange India(NSE), Shanghai Stock Exchange(SSE), Hongkong Stock Exchange(HSE), Colombo Stock Exchange(CSE) and Karachi Stock exchange(KSE). The study is quantitative in nature, so questionnaire survey technique was employed for data collection from South Asian stock market individual investors of NSE, SSE, HSE and CSE. Theory of mental accounting of behaviour finance is backing this study and has served the base for this study. Researcher used descriptive statistics, rank correlation and its analysis, association method and applied logistic regression model. Findings of this study suggest that Impact of Availability effect bias on investment decisions of South Asian Stock market during Covid-19 pandemic have positive impact on individual investors decisions at South Asian Stock markets.

Keywords: National stock exchange India(NSE), Shanghai Stock Exchange(SSE), Hongkong Stock

Exchange(HSE), Colombo Stock Exchange(CSE) and Karachi Stock exchange(KSE), individual investors, investment decisions and Availability effect bias.

#### INTRODUCTION

"Investor biases are often referred as capacity of irrational financial decisions that are caused by emotions". Recent studies show that investor biases play a vital role in influencing investment decisions. Researchers evaluated availability effect bias influence and impact on individual investor decisions at South Asian Stock markets during Covid-19.

## BEHAVIORAL FINANCE IN ASIA AND SPECIFICALLY IN PAKISTAN

This part will provide an overview on importance of behavioural finance in Asia in general and Pakistan in particular. Asia is the largest continent in the world by a considerable margin, and it is rich in natural resources, such as petroleum, forests, fish, water, rice, copper and silver. Several trade blocs exist, with the most developed being the Association of Southeast Asian Nations which is famous for its variety of capitalist economy. Asia is the largest continent in the world and has the two most populated countries in the world, China and India. The largest economies in Asia in terms of PPP gross domestic product (GDP) are China, India, Japan, South Korea, Indonesia, Turkey, Iran, Saudi Arabia, Taiwan, Thailand, Pakistan, Malaysia and Philippines and in terms of nominal gross domestic product (GDP) are China, Japan, India, South Korea, Russia, Indonesia etc. Well, keeping aside these universally known facts about Asia and Asian countries, it is an interesting place for studying behavioural finance. Although some economies are still at the developing stage, some others have been developed for a long time.

Pakistan is an emerging economy in Asian with many cultural characteristics similar to other Asian countries. As the difference level of knowledge and experience leads to the difference in decision making, Asia is a perfect platform for studying behavioural finance. Moreover, Asia people seem to suffer from cognitive biases more than Western people do and Asian individual investors are considered as mere gamblers (Kim & Nofsinger, 2008).

Theoretically, social scientists and psychologists believe that tendencies toward behavioural biases can be nurtured by culture although the levels may vary (Yates, Lee & Bush, 1997). Kim and Nofsinger (2008) explains the differences among cultures through an individualism collectivism continuum. Asian cultures are supposed to belong to socially collective paradigm, which has been argued for causing investors' overconfident resulting in behavioural bias. Cultural difference, more specifically, life experiences and education can affect behaviours, thus, it is believed that behavioural inclinations can differ among different cultures. Some evidences have been found to prove that Asian people exhibit more behavioural biases than people raised in Western countries or the United States (Yates et al., 1997).

Although there are some literature about the behavioural biases difference between Asian people and Western people, the literature is still sparse (Kim & Nofsinger, 2008). According to Weber and Hsee (2000), the bottom line is that the topic of culture and decision making has not received much attention from either decision researchers or cross cultural psychologists. In addition, a systematic literature about behaviours of Asian people and their effects on investment decision making is provided by Chen, Kim, Nofsinger and Rui (2007). In support of this theory, they find that Chinese investors suffer from an

overconfidence bias and disposition effect more than U.S investors do (Kim & Nofsinger, 2008). Although behavioural finance is still a controversial topic, financial analysts now have better understandings of human behaviours, and it is accepted that these behaviours can influence financial decision-making. Many researchers also agree that arbitrage is limited hence, these behaviours can affect prices (Shleifer & Vishny, 1997).

Researches in behavioural finance have enhanced the knowledge of financial markets, it is more promising in the future. Recently, sessions on behavioural finance in finance conferences seems to have more attendants who are usually the young scholars of the academic profession (Kim & Nofsinger, 2008). Thaler (1999) wishes to have behavioural finance research bringing institutions into their models, more research on corporate finance, and more data on individual investors in the future. Kim and Nofsinger (2008) add one more on the wish list: more behavioural finance researches on Asian markets. This paper is backed by theory of mental accounting which is explained as under:

## Theory of Mental Accounting

This theory states that its in human nature that they categorize information into different mental compartments in their mind and they retrieve the required information whenever it is required. Best example of mental accounting investors invest to get high returns but when they are unable to get higher returns due to market deflation or economic conditions they refer to mental compartments where they have kept the profit once they earn in boom stock market situation so they wait for the boom market situation to sell these stock (Thaler, 2005).

Investment decisions, "decisions which are related to financial matters and profit making are known as Investment decision". After lapse of more than six decades in South Asian Stock markets investment decisions are still difficult to be taken even if it is taken by investors or by stock market analyst. Many global financial organizations or even best security companies failed to take best on investment decisions which are less risky and more rewarding. If we start from Pakistan Stock exchange(PSX) main index KSE100 before Covid-19, it was roaming around 43000 points many security companies and brokers on media (Express Tribune, 5th, January 2020) were confident and predicted that KSE-100 Index would go up further but actually it does not happened and PSX faced severe dips in stocks movement after impact of Availability effect bias on investment decision till October 2020(Rahim. A, 2020). Therefore, we can clearly state that conventional financial theories are out dated in today's stock market volatility of South Asian Stock markets specially when evaluating investor biases impact on investment decisions of individual South Asian Stock markets investors. Behavioural finance which is based on psychological factors, emotional factors, investor biases including feelings: fear, panic, anxiety, envy, euphoria, greed, satisfaction, ambition or vanity can be helpful in this case as it can best explain behavioural biases impact while trading(Waweru et al., 2008). Birau (2011) found that investment decision is influenced by emotions in a large while taking decision in behaviour finance.

Availability effect bias, happens when people make excessive use of all the easily available information of the stocks in their investment decisions. In Pakistani stock market this bias has a strong impact as investors invest a lot in local companies shares than in foreign companies shares because of easily obtainable information (Waweru et al., 2008).

Nofsingera & Varmab (2013) checked the effect of availability biasness on the process of decision making by the investors of stock market and he came to know that due to this biasness investors buy stocks on basis of their own know how, means that they are not following the trend in the market rather they use their own knowledge to follow.

Past researches shows, that there is evidence of availability effect bias during the global financial crisis from 2008 till now and investor behaviour seems to have been rational for the European Countries and there stock exchanges in Covid-19 and till now its impact is witnessed in stock Spanish and the Italian stock markets (Rahim.A,2020).

## RESEARCH OBJECTIVES

- \* To find, impact of availability effect bias on individual investor decision at South Asian Stock markets during Covid-19 pandemic.
- \* To analyse, impact of availability effect bias on individual investor decision at South Asian Stock markets during Covid-19 pandemic.
- \* To enable individual investors, to avoid availability effect bias negative impact on individual investor decision at South Asian Stock markets during Covid-19 pandemic and to enable them to get long term regular returns on their stock investments.

## **RESEARCH GAP**

In South Asian Countries, so far no study is carried out on this topic during Covid-19 pandemic according to the best of my knowledge. No doubt there are some Foreign studies under process to analyse Covid-19 influence of investor biases on investment decisions but not specifically on impact of availability effect bias on individual investor decisions during Covid-19 pandemic in South Asian Stock Markets .This paper will address the research gap of finding impact of availability effect bias on individual investors decisions at South Asian Stock markets during Covid-19 where availability effect bias is taken as independent variables and Investment decision as Dependent variable which are never analysed before in South Asian Countries.

#### PROBLEM STATEMENT

Individual Investors could not avoid influence of investor biases specially availability effect bias at South Asian Stock markets during Covid-19 pandemic on daily basis while taking investment decisions. To neutralize and buffer this availability effect bias problem researcher analysed its influence on individual investor decisions at South Asian Stock markets during Covid-19.

## RESEARCH METHODOLOGY

This research is quantitative in nature and primary data was collected through Questionnaire survey technique and then stratified random sampling technique was employed to the five strata's of South Asian Stock markets: National stock exchange India(NSE), Shanghai Stock Exchange(SSE), Hongkong Stock Exchange(HSE), Colombo Stock Exchange(CSE) and Karachi Stock exchange(KSE), From Literature review some hypotheses were proposed on impact of availability effect bias on individual investor investment decisions in South Asian Stock markets during covid-19 pandemic and these hypotheses were tested through self-administered questionnaires. Researcher created sample profile of individual investor on some characteristics such as: Experienced Stock Investors, above than 30 years of age and 1-5 years' experience. Young Stock Investors, below 30 years with less than 1 year investing experience.

#### **HYPOTHESIS**

Null Hypothesis H<sub>o</sub>: The availability effect bias have No influence on individual investor decision at South Asian Stock markets during Covid-19 pandemic. Hypothesis H<sub>A</sub>: availability effect bias has influence on individual investor decisions at South Asian Stock markets during Covid-19 pandemic.

#### DATA ANALYSIS AND INTERPRETATION

Table 1.1 Distribution of sample size gender-wise

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Male	412	89.2	89.2	89.2
Female	50	10.8	10.8	100.0
Total	462	100.0	100.0	

Above table explains distribution of total sample size of 462 respondents gender wise in data collected for the this study in which Male respondents were 89.2% (412)of the total population. Female respondents were 10.8 % (50) of the total population.

Table 1.2 Distribution of sample size age-wise

	Frequen	ncy Percent	Valid Percent	Cumulative Percent
Valid .00	2	.4	.4	.4
18-25	39	8.4	8.4	8.9
26-30	187	40.5	40.5	49.4
36-45	105	22.7	22.7	72.1
46-55	56	12.1	12.1	84.2
55 above	73	15.8	15.8	100.0
Total	462	100.0	100.0	

This table explores distribution of age wise total sample size of 462 respondents. Respondents aged between 18 and 25 were 8.4%(39) of total population under study. Respondents aged between 26 and 30 were 40.5 % (187) out of total population and was found to be higher than other Age groups respondents. Respondents aged between 36 and 45 were 22.7%(105) which of total population. Respondents aged between 46 and 55 were 12.1 % (56) of total population. Respondents aged 55 and above were 15.8% (73) of total population under study.

Table 1.3 Distribution of sample size experience and gender wise

Variables	Years of experience		Male at	nd Female	
		Male		Female	
		Coun	t Table N %	Count	Table N %
	Less than 1 year	61	13.2%	14	3.0%
	1 to 3 years	233	50.4%	20	4.3%
	More than 3 years	118	25.5%	16	3.5%

The above table explains distribution of total sample size of 462 respondents on the basis of Experience and Gender wise data. Less than 1 year experience Male respondents were found to be 13.2%(61) of total population under study.1-3 years' experience Male respondents were found to be 50.4% (233) of total population was found to be higher than other groups of respondents. More than 3 years' experience Male respondents were found to be 25.5% (118) of total population under study. Less than 1 year experience Female respondents were found to be 3%(14) of total population under study. Female 1-3 years' experience respondents were found to be 4.3% (20) of total population was found to be higher than other groups of respondents. More than 3 years' experience Female respondents were found to be 3.5%(16) of total population under study.

Table 1.4 Descriptive Statistics of Availability effect Bias Factors

Sub Factors	Minimum	n Maximu	Mean	Std.	Skewnes	s Kurtosis
		m				
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Av1	1.00	5.00	3.2857	1.45077	-0.614	-0.751
Av2	1.00	5.00	3.6061	1.27406	-0.817	-0.232
Av3	1.00	5.00	3.9719	1.09290	-1.286	1.241
Av4	1.00	5.00	3.6017	1.21158	-0.912	0.212
Av5	1.00	5.00	3.0433	1.39657	-0.322	-1.224
Av6	2.00	5.00	3.9437	2.63488	1.749	1.932
Av7	1.00	5.00	3.7554	1.30189	-0.919	-0.293

In this table, results of descriptive statistics each factor and sub factors of availability effect bias is shown. It includes minimum, maximum, mean, standard deviation, skewness and kurtosis of each factor. Maximum negative skewness -1.286 was recorded in Av3 followed by Av4,Av2, Av1 and Av5 which shows that maximum values are in left side of the mean value 3.9719 or less from the mean while in Av6 positive skewness 1.749 has been recorded which shows maximum vales are in right side of mean 3.9437 or greater than from mean. The maximum positive kurtosis 1.932 were recorded in Av6 followed by Av3 and Av4 which shows that these factor has heavier tails or leptokurtic distribution as greater than zero. While in the rest of factors

negative kurtosis was observed which shows these factors have light-tailed or platykurtic distribution as less than zero.

Table 1.5 Descriptive Statistics availability effect bias

Variable	Minimu	Maximu	Mean	Std.	Skewnes	ss Kurtosi
	m	m				s
availability effect bias	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
	1.43	11.57	3.6011 (	0.67072	3.325	42.435

In this table, Mean value was found to be 3.6 which lies between 3 to 4 it shows that the availability effect bias have high influence on investment decisions of individual investor at South Asian Stock markets.

#### **CORRELATION ANALYSIS**

It is employed to know whether linear relationship exists between different factors of same variable or not if it exists then whether it is negative or positive and its statistically significant or not, for this purpose Researcher used Rank Correlation method in this study whose data is Categorical in Nature. Chaudhry and Kamal (2016) studies found that; when you have categorical data then apply rank Correlation which is the best method in this case.

Table 1.6 Rank Correlation in availability effect bias

Correlation between sub factors of availability effect bias

Factors	Av1	Av2	Av3	Av4	Av5	Av6	Av7
	1.000	.142**	.016	.078	.145**	.007	.033
Av1		.002	.731	.092	.002	.878	.477
	.142**	1.000	063	.100*	.004	033	035
Av2	.002		.177	.031	.934	.475	.453
	.016	063	1.000	.008	.031	067	.144**
Av3	.731	.177		.865	.506	.150	.002
	.078	.100*	.008	1.000	.196**	.115*	.021
Av4	.092	.031	.865		.000	.013	.655
۸ ۲	.145**	.004	.031	.196**	1.000	.192**	.024
Av5	.002	.934	.506	.000	•	.000	.601
<b>A</b> . C	.007	033	067	.115*	.192**	1.000	.070
Av6	.878	.475	.150	.013	.000		.132

Impact of Avalibilty Bias Effect on Investment Decisions of South Asian Stock Market Individual Investors during Covid-19 Pandemic

	.033	035	.144**	.021	.024	.070	1.000
Av7						.132	
	.477	.453	.002	.655	.601		
		icant at	the	-taile	d).		
	is sign	ific		-tailed	l).		

The above table explains; the strength of linear relationship among different factors used in availability effect bias through correlation matrix. As the data set involving these factors all are categorical type thus correlation matrix contains the results of rank correlation coefficients and p-value of significance and non-significance. It is evident that, factor Av1 is positive correlated with all others factors but positive and significantly correlated with Av2 and Av5 with p-value = .002 for both. Positive and significant correlation is recorded between Av2 and Av4, while positive but insignificant correlation between Av2 and Av5 were also noticed. Correlation between Av2 and other factors are recorded negative and insignificant. Correlation of Av3 with Av4, Av5, and Av7 are recorded positive but significant except with Av7 which is found significantly correlated with Av3, also correlation between Av4 and Av5 were recorded negative and insignificant. The results of correlation of Av1 with Av2, Av3 and Av4 showed positive and highly significant except Av7 which relation with HE4 is positive and significant. Similarly the correlation of Av5 with Av6, Av7 and Correlation of Av6 and Av7 are noted positive and significant.

#### ASSOCIATION METHOD

Here in this analysis Association method is used to evaluate hypothesis which are not justified by logistic regression model.

Table 1.7 Association of Individual investor decisions and gender

Status			Male an	d Female	Total
			Male	Female	
Individual	investor		68	6	74
		Disagree d	lecisions		
		Agree	344	44	388
Total			412	50	462

Chi square 0.673 P-value = 0.412

From the table 1.7 shows that out of total 462 respondents in which 68 are male and remaining 6 are female respondents all are disagree that availability effect bias influencing investment decisions. The remaining 388 respondents agreed that investor biases influencing investment decisions. But overall the association between gender and investor decisions are found insignificant with Chi-square = 0.673 and P-value = 0.412 > 0.005, which means that respondent gender have no significant impact on investment decisions.

Table 1.8 Association of Individual investor decisions and Education

Status		Educati level	on			Total
		.00	Graduate	Masters	Other	
Individual						
1	Disagree	2	12	32	28	74
investor decisions	Agree	6	20	164	198	388
Total	rigice	8	32	196	226	462

Chi square 13.684 P-value = 0.003

From the table 1.8 it is recorded that out total 462 respondents 196 respondents having master's degree and above 164 of them are agreed to that investor biases influencing investment decisions and the remaining and 32 are disagree. Maximum number of respondents which is 226 having education degrees others in which 28 are disagree and the remaining 198 are agreed that investor biases influencing investment decisions. Overall 74 are disagree that investor biases influencing investment decisions and the remaining 388 respondents agreed to that. However the association between education and investor decisions are found significant with Chi-square = 13.684 and Pvalue = 0.003 < 0.05, which means that respondent education have significant impact on investment decisions of investor.

Table 1.9 Association of Investor decisions and Age

Status	Age						Total
	.00	18	-25 26-3	0 36-45	46-55 5	5	_
						above	
Investor Disagree 1 8 26 13	3 7 19 7	'4 decisi	ons Agr	ee 1 31	161 92	49 54 388	3
Total	2	39	187	105	56	73	462

Chi square 9.909 P-value = 0.078

Table 1.9 shows result of association between individual investor decision and age. Maximum number of respondents lie in the age group 26-30 are 187 in which 26 disagreed and 161 to that, that investor biases influencing investment decisions. However out total 462 respondents 74 are disagreed and 388 are agreed that investor biases influencing investment decisions. But overall the association between respondent age and investment decisions are found significant with Chisquare = 09.909 and P-value = 0.008 < 0.05, which means that respondent age have statistically significant impact on investment decisions.

Table 1.10 Association of Individual investor decisions and experience

Status			Total			
	Less year	_	than 11 to 3 years	More than 3 years		<del>_</del>
Investor decisions	Disagree	13	49	12	74	
mvestor decisions	Agree	62	204	122	388	
Total		75	253	134	462	2

Chi square 7.176 P-value = 0.028 Table 1.10 presents result of association between respondent individual investor decision and their experience. Total respondents having experience more than three years are 134 in which 12 disagreed and remaining 122 agreed to that. However out of total 462 respondents 74 are disagreed and 388 are agreed that, experience of respondents influencing investment decisions. But overall the association between respondent experience and investment decisions are found significant with Chi-square = 7.176 and P-value = 0.028 < 0.05, which means that respondent experience have statistically significant impact on investment decisions.

#### LOGISTIC REGRESSION

"The purpose of logistic regression is to identify the significant impact of each independent variable on dependent variables also to identify the positive and negative impact of independent variables on dependent variable". So researcher employed this in the current study and found these results:

Table 1.11 Logistic Regression Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	383.150a	49.547	64.764

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Table 1.11 explains results of model performance through -2 Log likelihood and two type's pseudo R Square to estimate the explained variance in the fitted model. The recorded values of Cox & Snell R Square = 49.547 and Nagelkerke R Square = 64.764, indicates that about 50 percent and 65 percent variation is explained in dependent variable on the basis of given independent variables, which are quite good.

Impact of overall availability effect bias on investment decision od South Asian Stock Markets during Covid-19 Pandemic

Table 4.15 shows summary of descriptive statistics for over all availability effect bias. The minimum and maximum values were recorded for over all availability effect bias 2.29 and 4.29 respectively. The mean value = 3.62 recorded for over all availability effect bias with standard deviation = 0.39677. The recorded mean value lies between in the range 3 to 4, indicates that, the availability effect bias have high impact on investment decisions of Pakistani stock investors. Also from table negative skewness and positive kurtosis were recorded for over all availability effect bias which shows that mostly values are lie lift side to the mean or less than from mean and the distribution has high peak or leptokurtic.

#### CONTRIBUTION TO THE FIELD

Findings of this study can help brokers, agents, individual investors, investment analysts, Mutual fund managers, financial advisors and portfolio managers on daily basis while taking investment decisions during Covid-19 pandemic. It will try to overcome influence and impact of availability effect bias while taking individual investment decision specifically in South Asian stock markets during and post Covid-19. It will help them to gain shareholders confidence and add value to the firms by increasing earnings per share of shareholders if availability effect bias and other biases are neutralized these investor biases even when they face pandemics like Covid-19 in future as well. As these pandemics are fortune breaker and changer at the same time. Financial market experts could capitalize these pandemics in both ways during pandemic exploitation of poor investors and after pandemic end by increasing prices of shares they bought from poor investor.

#### **FUTURE AVENUE**

The researcher carried study on impact of Availability effect bias on individual investment decision of South Asian stock markets investors during Covid-19 pandemic upcoming researchers can extend it to other areas such as: investor biases other than availability effect bias, Similar size stock markets of first and second World countries, pre and post Covid-19 analysis of investment decisions of institutional investors.

#### **CONCLUSION**

Findings of the current study shows that impact of availability effect bias have positive influence on individual investor decisions at South Asian stock markets during Covid-19 pandemic by accepting main Hypothesis and rejected Null Hypothesis and found availability effect bias have No influence on individual investor decisions at South Asian stock markets post Covid-19. Descriptive statistics mean value of availability effect bias was 3.60 which shows that the Herding bias have high level of influence on individual investors decisions. However, availability effect bias infected traders underestimate both systematic and unsystematic risks of stock market so best advice for individual South Asian Stock market investors during Covid-19 pandemic is availability effect bias can be avoided if prior information and knowledge about market volatility is fully available and we learn how to capitalize investments done in pandemics after end of pandemics. Therefore, South Asian stock markets individual investors will be Overconfident to an optimal level to utilize their expertise and experience to get rewarding investment decisions.

## REFERENCES

DeBondt, W., Thaler, R. (1985), Does the stock market overact? Journal of Finance, 40(3), 793805.

- Impact of Avalibilty Bias Effect on Investment Decisions of South Asian Stock Market Individual Investors during Covid-19 Pandemic
  - DeBondt, W. F. M., & Thaler, R. H. (1995). Financial Decision Making in Markets and Firms: A Behavioral Perspective, 385-410.
  - Evans, D.A. (2006). Subject perceptions of confidence and predictive validity in financial cues. *Journal of behavioral Finance*, 7 (1), 12–28.
  - Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica* 47(2), 263–291.
  - Kadiyala, P. & Rau, R. (2004). Investor reaction to corporate event announcement: Underreaction or overraction, *Journal of Business*, 77(1),285-292.
  - Kim, K., & Nofsinger, J. (2008). Behavioral finance in Asia. Pacific-Basin Finance Journal, 16(12), 1–7. http://dx.doi.org/10.1016/j.pacfin.2007.04.001.
  - Kim, K. & Nofsinger, J. (2003). The Behavior and Performance of Individual Investors in Japan. *John Wiley & Sons Inc.*
- Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo stock exchange, Srilanka. Asian Journal of Finance & Accounting 6(1), 1-23.
- Lim, L.C., (2012). The Relationship between Psychological Biases and the Decision Making of Investor in Malaysian Share Market. *John Wiley & Sons Inc.*
- Luu, T. B., (2014). Behavior pattern of individual investors in stock market. *International Journal of Business and Management* 9(1), 1-16.
- Maditinos, D. I., Sevic, Z., & Theriou, N. G. (2007). Investors' behavior in the Athens Stock Exchange (ASE). *Studies in Economics and Finance*, 24 (1), 32-50.
- Nofsinger, John. The Psychology of Investing, Third Edition (Prentice Hall, Englewood Cliffs, New Jersey: 2007).
- Nofsingera, J. R. & Varmab (2013). Availability, recency and sophistication in the repurchasing behavior of retail investors. *Journal of Banking & Finance* 37(7), 2572–2585.
- Oberlechner, Thomas, & S. Hocking(2004). Information sources, news, and rumors in financial markets: Insights into the foreign exchange market. *Journal of Economic Psychology* 25 (4), 407-424.
- Rahim, A., Khan, H., Ullah, Z., & Arafat, Y. (2017). Co-movement between Exchange Rate Fluctuations and Economic Factors in Pakistan's Economy (1990-2013). Sarhad Journal of Management Sciences, 3(01), 57-69.
- Rahim, A., Shah, M. H., & Aamir, A. (2019). Impact of conservatism bias effect on investment decisions of Pakistani stock investor. City University Research Journal, 9(1), 85-97.
- Rahim, A., Khurshid, A., & Aamir.(2020). Empirical Analysis of the Moderating and Mediating variables on the relationship between Corporate Social Responsibility and Firms' Financial Performance. *International Review of Social Sciences Journal*, 8(7), 54-69.
- Rahim, A., Shah, M. H., Sharif & Aamir, A. (2020). Post Covid-19 Influence Of

- Overconfidence Bias On Investment Decisions Of Pakistani Stock Investor. *International Journal of Management*, 11(9), 973-981.
- Shefrin, H. (2000). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. New York: Oxford University Press.
- Shikuku, C.A. (2013). The Effect Of Behavioral Factors On Individual Investor Choices At The Nairobi Securities Exchange, School of Business, University of Nairobi, Kenya.
- Thaler, Richard J., (1999). Mental Accounting Matters, "Journal of Behavioral DecisionMaking" (12), 183-206
- Waweru, N., M., Munyoki, E., & Uliana, E. (2008). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1), 24-41.
  - Wamae, J. N.(2013). Behavioral factors influencing investment decision in stock market: A survey of investment banks in Kenya. *International Journal of Social Sciences and Entrepreneurship* 1(6), 68-83.

### **QUESTIONNAIRE**

This questionnaire is design to Collect data for this research publication all the information will be kept confidential and will be purely used for Academic purpose only.

Section A: PERSO		RSONAL I	SONAL INFORMATION				
1. Gender	Male Fe	male $\square$					
2. Stock Exch	ange						
a	. Islamabad.						
b	. Lahore.						
C	. Karachi.						
3. Education  High sch	level		Under-graduate		Bachelor		
Master		_	PhD degree	_	Others	_	

4. I have Professional Experience of:

Impact of Avalibity Bias Effect on Investment Decisions of South Asian Stock Market Individual Investors during Covid-19 Pandemic Less than 1-year. 1-3 Years. More than 3-years. 5. Age 18 -25 26 - 35 36 - 45 46 - 55 Over 55 Divorced Married **6.** Marital Status: Single □ IMPACT OF INVESTOR BIASES FACTORS ON INVESTMENT DECISIONS OF SECTION B: **INVESTORS** 7. Investor biases Influencing Investment Decisions, Herding Factors biases(buying and selling, choice and volume of trading stocks, speed of herding) when I take investment decision. Highly Disagree Disagree Neutral  $Agree \square$ Highly Agree. You avoid selling shares that have decreased in value and readily sell shares that have increased in value. Highly Disagree Disagree Neutral Agree Highly Agree. You consider the information from your close friends and relatives as the reliable reference for your investment decisions. Highly Disagree Disagree Neutral 

Agree Highly Agree.

**10.** Other investors' decisions have impact on your investment decisions.

Highly Disagree

Disagree

11. Other investors' decisions of stock have impact on your investment decisions.

- Highly Disagree
- Disagree

Highly Agree.

Agree □

Neutral

<b>12.</b> C	Other investors' decisions of selling stocks have impact on your investment decisions.  • Highly Disagree  • Disagree  • Neutral   Agree  • Highly Agree.
13. C	Other investors' decisions of the stock volume have impact on your investment decisions.  Highly Disagree  Disagree  Neutral  Agree • Highly Agree.
<b>14.</b> C	Other investors' decisions of buying and selling have impact on your investment decisions.  • Highly Disagree  • Disagree  • Neutral   Agree   Highly Agree.
	Availability bias , I take investment decision on basis of any readily available market information which I never authenticate from any reliable source when I take investment decision .  • Highly Disagree  • Disagree  • Neutral   Agree  • Highly Agree.