THE IMPACT OF BEHAVIOURAL BIASES ON MAKING INVESTMENT DECISIONS DURING THE COVID-19 PANDEMIC PERIOD: EVIDENCE FROM SRI LANKA

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INTRODUCTION

The decision-making process of investors was based on more complex financial models. In the field of investment, numerous behavioural elements influence decision-making. The psychological make-up of investors and how it influences their choices with their financial decisions is one of these particularly significant factors. Most people buy stocks because they want to be part-owners of a company and want to gain when the company pays dividends or when the stock price rises. Nonetheless, most people buy stocks because they want power over the companies they work for. Behavioural finance theories, based on psychology, try to figure out how emotions and cognitive errors affect individual investors' decisions. (Luong & Ha, 2011). Behavioural finance is the current focus of most investment management research. It investigates the logically inconsistent rational conduct of individuals and organizations involved in financial market transactions. Traditional finance believes that while making a decision, investors examine all available information and act rationally (Szyszka, 2013). The COVID-19 pandemic provided another ideal scenario for investigating investors' behaviour (Ortmann et al., 2020). Furthermore, some of the recent studies have explored the turmoil brought on by the epidemic in the financial markets and its effects on investors, highlighting the importance of better-comprehending investor behaviour (Al-Awadhi et al., 2020; Okorie & Lin, 2021). On this regard, it is also noted that behavioural factors and associated cognitive errors should be used to study the severe volatility and market meltdown during COVID-19. In response to these concerns, the current study examines the behavioural biases of investors and how those biases affect the investors' investment decisions during the COVID-19 pandemic.

METHODOLOGY

The study aims to identify behavioural factors' impact on investment decisions during the COVID-19 individual investors living in Kurunegala district, Northwestern Province, Sri Lanka. The independent variables are Representativeness (RP), Overconfidence (OC), Herd Effect (HE), and Market Factors (MF), while investment decision-making (ID) is the dependent variable. After Performing a Comprehensive literature survey, the following hypothesis was developed to examine the impact of behavioural factors on making investment decisions during the COVID-19. The findings of Rehan et al. (2021)**;** Cao et al. (2021) and Wijaya (2021) were mainly based on developing the following hypothesis.

H_1: There is a significant positive impact of Representativeness on Investment Decisions of CSE investors during the COVID-19period.
H_2: There is a significant positive impact of Overconfidence on Investment Decisions of CSE investors during the COVID-19period.
H_3: There is a significant positive impact of the Herding Effect on the Investment Decisions of CSE investors during the COVID-19period.
H_4: There is a significant positive impact of the Market Factor on Investment Decisions of CSE investors during the COVID-19period.

The results of this study were subjected to quantitative analysis, in which statistical methods such as descriptive statistics, correlation analysis, and multiple regression analysis were utilized. The primary data were collected through the use of a structured questionnaire that was based on a Likert scale with five points. The questionnaire was given to a random sample of 155 individual investors who live in the Kurunegala district of the northwestern province of Sri Lanka. The operationalization of variables for the present study is as follows;

Table 1 Operationalization of the Variable

Variable	Measurement	Past Studies
Independent variables		
Representativeness	- Historical earning of the company - Past performance of the stock - Consistency of firm - Buy hot stocks and avoid stocks that performed poorly in the near past.	Cao et al., (2021)
Overconfidence	- Experienced investor - Expert knowledge and skills - Self-confident over others - Satisfaction with the benchmarking' position - Willingness to get consultations	Cao et al., (2021)
Herding Effect	- Choice of stock to the trade of other investors - The volume of stocks to the trade of other investors' decisions - Buying and Selling decisions of other investors - Speed of herding	Rehan et al., (2021); Rajeshwaran 2020); Cao et al., (2021)
Market Factors	- Price changes - Market information - Past trends of stocks - Customer preferences - market fundamentals	Rehan et al., (2021); Rajeshwaran (2020)
Dependent variable		
Investment Decisions Making	- Return and expectation - Satisfaction with investment decisions - Choosing stock volume - Risk diversification	Rehan et al., (2021); Rajeshwaran 2020); Cao et al., (2021)

RESULTS AND DISCUSSION

The reliability of the questionnaire was at a satisfactory level since all Cronbach's alpha values of variables meet the standard for internal consistency at a value of 0.70 or above (Hair et al., 1998). Table 2 shows that all constructs in this study are reliable to conduct the study with Cronbach's alpha figure above 0.70.

Table 2 Reliability Tests

Variable	Cronbach's Alpha
Representativeness	0.866
Overconfidence	0.893
Herding Effect	0.827
Market Factors	0.904
Investment Decision	0.871

The study's validity was investigated through the Kaiser–Meyer–Olkin (KMO) test and the Bartlett test of sphericity. These tests are used to determine the adequacy of the item correlation matrix, which is the basis for factor analysis. The values derived from these two tests are presented in Table 3.

Table 3 Validity Test

Variable	KMO	Bartlett's Test		
		Chi-Square	df	Sig.
Representativeness	0.801	292.262	6	0.000
Overconfidence	0.879	421.140	10	0.000
Herding Effect	0.797	221.670	6	0.000
Market Factors	0878	553.692	15	0.000
Investment Decision	0.771	317.439	6	0.000

The KMO coefficient for this dataset fell at the meritorious level between 0.8-0.9, exceeding the recommended value of 0.6 (Kaiser, 1960), indicating that the sample is adequate. The Kaiser–Meyer–Olkin measure of sample adequacy (KMO) satisfied the assumptions of exploratory factor analysis (EFA). The approximate Chi-square is 6 degrees of freedom, and Barlett's Test of Sphericity is significant at 0.000, which is less than 0.05 (Cerny & Kaiser, 1977), indicating that the properties of the correlation matrix justified factor analysis to be used. Hence, Factor Analysis is considered an appropriate technique and valid for further data analysis. The data were statistically analyzed using descriptive, correlation, and regression analysis. Table 4 shows the descriptive statistics of the variables.

Table 4 Descriptive Analysis

	Mean	SD	Skewness		Kurtosis	
			Statistic	Std. Error	Statistic	Std. Error
Representativeness	4.301	0.640	-3.448	0.195	14.686	0.387
Overconfidence	3.767	0.855	-1.023	0.195	0.708	0.387
Herding Effect	4.212	0.627	-2.835	0.195	10.542	0.387
Market Factors	4.386	0.609	-3.517	0.195	15.946	0.387
Investment Decision	4.303	0.691	-2.895	0.195	9.655	0.387

Descriptive Analysis indicates that the average of Market Factors is 4.386 with a standard deviation of 0.608 and high relative importance. Market factors have the highest mean value. Three independent variables of Representativeness, Overconfidence, and Herding Effect also have high relevance importance with the mean value of 4.301, 3.767, and 4.212 with a standard deviation of 0.640, 0.855, and 0.627 in orderly. Since all selected variables are relatively high, the respondents agreed with the statements.

Table 5 Correlation Analysis

Variables	RP	OC	HE	MF	ID
RP	1				
OC	0.191*	1			
HE	0.787**	0.257**	1		
MF	0.843**	0.196*	0.810**	1	
ID	0.769**	0.225**	0.783**	0.807**	1

Note:* Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (1-tailed)

According to Table 5, overconfidence and investment decisions are correlated significantly and weak positively, with a coefficient value of 0.225. On the other hand, the correlation between representativeness, herding effect, and market factors with individual investment decisions reported a significant and strong positive relation (0.769, 0.783, and 0.807), respectively.

Table 6 Multiple Regression Analysis

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	-0.053	0.243	-0.218	0.828
Representativeness	0.205	0.093	2.196	0.030
Overconfidence	0.027	0.037	0.725	0.470
Herding Effect	0.340	0.089	3.832	0.000
Market Factors	0.442	0.103	4.281	0.000

Note: R 0. 843; R^2 0.710; SE = 0.376

As shown in Table 6, the results indicate that overconfidence (B = 0.27, sig= 0.470) has no significant impact on individuals' investment decisions. The result was consistent with Gamage et al. (2021). With a significance value of 0.03, representativeness significantly positively impacts individual investment decisions on the CSE. The Herding Effect's impact on individual investors' investment decisions is also significant and positive. This is similar to the conclusion drawn by Rehan et al. (2021). Individual market factors have more impact on investment decision-making at CSE. The impact is positive by 44.2%. Similar outcomes are demonstrated by Cao et al. (2021).

The COVID-19 pandemic has increased the volatility of funds used chiefly for investments in hazardous assets, such as stock instruments traded on the capital market. Understanding human behaviour, especially investor behaviour, is a crucial component of behavioural finance (Wijaya, 2021). Post COVID-19 Financial markets around the world have altered,

which has had a variety of effects on investor decision-making. Traditional investments, such as storing money in banks, purchasing fixed-term deposits, and purchasing prize bonds or gold bars, are now obsolete in the current environment. Investors are now more cautious than before COVID-19; they choose to sell stocks that fell during the epidemic and want to take advantage of the chance for more significant returns now that these markets are picking up steam (Rahim et al., 2021). According to the findings of many other scholars in this field, it has been revealed that behavioural factors or the nature of investors' perceptions highly affect investment decision-making. The present study demonstrates a positive relationship between behavioural factors and investor decision-making.

CONCLUTIONS AND IMPLICATONS

The current scenario of the COVID-19 pandemic changes the economic environment worldwide. The study aimed to examine how different behavioural biases such as Representativeness, overconfidence, Herding Effect, and Market factors affect the investor's investing choices during COVID-19. The regression results show that overconfidence has no significant impact on the individual investment decisions of investors. Therefore, individual investors at the CSE should be overconfident at an acceptable level to utilize their skills and knowledge in certain circumstances to improve the investment results. Meanwhile, the Representativeness, Herding Effect, and Market Factors significantly impact the individual investment decisions of investors at CSE. In conclusion, investors make decisions using a rational approach, but psychological factors also influence their investment behaviour. The study contributes to the knowledge of behavioural factors on investment decision-making in the Colombo Stock Exchange. Further, it believes that the results of this study help to explore the existing knowledge of behavioural finance and widen the boundaries in understanding market functions and influencing forces for investment decisions. This paper demonstrates that policymakers should carefully examine and consider the relevant bias before making policy changes. Policymakers and administrators of the companies can identify which factors are focused on by investors to make their investment decisions. Policy commitment is needed to be in place to protect the welfare of the investors and the efficiency of the financial markets. The study can be valuable for building sustainable investment management practices that will benefit the investing society.

Keywords: COVID-19, herding effect, market factors, overconfidence, representativeness.

REFERENCES

Al-Awadhi, Abdullah M., Alsaifi, Khaled; Al-Awadhi, A., Alhammadi, S. (2020). Death and contagious infectious diseases: impact of the COVID-19 virus on stock market returns. *Journal of Behavioral and Experimental Finance*, *27*, 1-13. doi:10.1016/j.jbef.2020.100326

Cao, M. M., Nguyen, N. T., & Tran, T. T. (2021). Behavioural factors on individual investors' decision making and investment performance: a survey from the Vietnam stock market. *Journal of Asian Finance, Economics and Business*, *8*(3), 845–853. https://doi.org/10.13106/jafeb.2021.vol8.no3.0845

Gamage, R., Wijekumara, N., & Sugathadasa, K. (2021). The impact of behavioural factors on individual investment decisions of equity investors : a study in Kurunegala area. *Proceedings of the Annual Emerging Financial Markets and Policy Conference - EFMP-2021*, *January*, 43–50.

Luong, L.P. & Thu Ha, D.T. (2011). Behavioral factors influencing individual investors' decision-making and performance. a Survey at the Ho Chi Minh Stock Exchange. Unpublished *M.Sc. Thesis, Umea School of Business*.

Okorie, D.I., Lin, B. (2020). Stock Markets and the COVID-19 Fractal Contagion Effects. *Finance Research Letters*, *38* (c), doi:10.1016/j.frl.2020.1016

Ortmann, R., & Pelster, M., & Wengerek, S. T. (2020). COVID-19 and investor behavior. *SSRN Electronic Journal,* https://doi.org/10.1016%2Fj.frl.2020.101717

Rahim, A., Shah, M. H., Zahirullah, & Zeb, J. (2021). Post covid-19 influence of herding effect bias on investment decisions of pakistani stock investors. *Ilkogretim Online - Elementary Education Online*, *20*(5), 899–907. https://doi.org/10.34218 /IJM.11.9.2020.091

Rehan, M., Alvi, J., Javed, L., & Saleem, B. (2021). Impact of behavioral factors in making investment decisions and performance: evidence from Pakistan stock exchange. *Market Forces*, *16*(1), 22. https://doi.org/10.51153/mf.v16i1.435

Rajeshwaran, N. (2020). The impact of behavioural factors on investment decision-making and performance of CSE investors in the eastern province of Sri Lanka. *Sri Lanka Journal of Economic Research*, *8*(1), 27. https://doi.org/10.4038/sljer.v8i1.123

Szyszka, A. (2013). Behavioral finance and capital markets: how psychology influences investors and corporations. 10.1057/9781137366290.

Wijaya, L. I. (2021a). Factor analysis of investor behavior in Indonesian stock exchange during a covid-19 pandemic. *Journal of Hunan University Natural Sciences, 48*(8), 243-254.