Impact Of Psychological & Economic Factors On Investment Decision-Making In Pakistan Stock Exchange

¹Adeel Mumtaz*, ²Nadeem Munir, ³Raheel Mumtaz, ⁴Muhammad Farooq, & ⁵Muhammad Asif

¹Department of Business & Management Sciences, the superior university, lahore, RYK Campus, Pakistan.
²Additional Registrar, the superior university, lahore, RYK Campus, Pakistan.
³ Lyallpur Business School, Government College University, Faisalabad, Pakistan.
⁴Department of Management Sciences, The Islamia University, Bahawalnagar campus, Bahawalpur, Pakistan.
⁵ Department of Management Sciences, Federal Urdu University, Art, Science & Technology, Islamabad, Pakistan.
Email: adeelmumtaz87@gmail.com

Abstract

The design of this study is to comprehend how psychological and economic factors influence how individual investors make investment decisions. The researchers employed questionnaires to obtain primary data from Pakistan Stock Exchange (PSX) individual investors. The researchers used 219 samples in this study's analysis. Moreover, factor analysis was performed in this study to analyze the data. The findings showed that psychological and economic aspects significantly influence individual investors' decision-making. The regression analysis shows that psychological factors are more influential than economic ones. This research will help people understand how individual investors behave in the PSX.

Key Words: Psychological factors, Economic factors, Investment decision-making.

1. Introduction

Stock Exchange is a place where investors can purchase or sell shares, bonds, and other security of companies. Individual investors play an important role in the PSX because the overall investment size of individuals contributes more than 25% of the total capitalization. However, it may face profit or losses (Riaz, et., 2020). So, individual investors must be aware of these aspects, which influence their investment decision-making. However, there are many factors, which impact on individual investors' investment decision-making. Specifically, economic and psychological factors play a vital role in the individual investor's investment decision-making in PSX (Naveed, et. al., 2020).

Firstly, the individual investors considered the economic factors e.g. financial position of the companies, risk & return, and currency movement etc. before investing (Andersson, et., al. 2022). Secondly, psychological factors have crucial effects on individual investors' investment decision-making (Raut, 2020).

Currently, behavior finance plays a vital role in investment decision-making (Gill, et.al., 2018). So, researchers consider behavior finance to know the behavior of individual investors in their investment decision-making. This research purpose is to compare the economic & psychological factors.

2. Literature review

2.1. Psychological factors

Psychological elements include thoughts, feelings, and other intellectual traits that influence a person's attitude and conduct (Sharafutdinova et al., 2021). But, human objects and their investing decision-making are influenced by psychological variables (Yuniningsih & Taufiq, 2019). Hence, psychological issues include overconfidence, cognitive bias, attitude, and fear of loss (Hidajat, 2019).

Hypotheses 1: Psychological considerations have no impact on the investment choices made by individual investors in PSX.

2.2. Economic factors

The economic factors influence the economy of the countries, which include laws, tax rates, policies, interest rates, and wages (Song & Zhou, 2020). However, economic factors directly affect the investment value in the future time (Binda et al., 2020). The basic purpose of this analysis to check the performance of the organization, and how to meet its objectives and desired goals. It may be considered the shareholder value, market performance & financial performance of the firms (Vieira et al., 2019).

Hypotheses 2: Economic considerations have no effect on the investment choices made by individual investors in PSX.

3. Research methodology

3.1 Date collection & Sample

This study will provide information about the individual investor's decision-making process which plays a vital role, which invests in PSX. The researchers used convenience sampling techniques for the collection of data. The data collection was accomplished from October 2022 to December 2022. Therefore, the scholar distributed 333 questionnaires but received back 219 completed questionnaires with a response rate of 66%. The basic purpose of this study to identify economic & psychological factors affecting individual investors in PSX.

3.2 Measures

The scholars used the adopted scales to measure the constructs. The constructs are phycological factors, economic factors, and investment decision-making used in this research. All the items measure on 5-point Likert scale. The researchers used SPSS for data analysis.

4. Results and Analysis

4.1 Exploratory and Confirmatory Factors Analyses

We conducted both EFA & CFA in the current research environment, despite the fact that the scales utilized in the research. We first carried out EFA to ascertain the factor structure. Table 1 demonstrates that the KMO value, which indicates whether the data are suitable for factor analysis, is more than the cutoff value of 0.60. (Kaiser, 1974; Hair et al., 2010). Moreover, both scales' factor loadings are higher than the threshold value of 0.5 (Nunnally & Bernstein, 1978). So, it can be said that the chosen factor structure is suitable. We used CFA to validate this factor structure. The analysis shows that the goodness of fit analysis has values greater than the cutoff value (Wen et al. 2014). The CFA factor loadings likewise surpass the suggested amount of 0.50, validating the EFA factor structure's initial factor structure (see Table 1).

Table 01: Explanatory and Confirmatory Analysis

Constructs	Items	EFA loading	CFA loading	KMO
Psychological Factor	28	0.769-0.851	0.743-0.852	0.901
Economic Factor	23	0.757–0.817	0.765-0.896	0.835

Investment Decision-making	8	0.733–0.794	0.756-0.876	0.872

Table 2. Goodness of fit analysis

Constructs	CMIN/DF<5	RMR<0.05	CFI>0.90	RMSEA<0.80	GFI>0.95	AGFI>0.80
Psychological Factor	28	0.769-0.851	0.971	0.067	0.743-0.852	0.901
Economic Factor	23	0.757–0.817	0.965	0.065	0.765-0.896	0.835
IDM	8	0.733–0.794	0.983	0.073	0.756-0.876	0.872

4.2. Validity & reliability analyses

Before putting the study hypotheses to the test, we conducted validity & reliability evaluations for each measure. In this regard, we evaluated Cronbach's alpha of the constructs. The results of this analysis are within the allowed range of 0.70, ranging from 0.791 to 0.843 (Cronbach, 1951). To assess the discriminant and convergent validities, the values of the square root of AVE,

Composite Reliability (CR), were analyzed using the proposed criterion. The CR value, which falls within the range of 0.867 to 0.932, meets the 0.70 threshold requirement (Hair et al., 2009). According to Pallant (2000), the Average variance (AVE) values that were extracted are all greater than the recommended value of 0.50. As a result, the results provide strong support for the discriminant validity & reliability (Gefen et al., 2000).

Table 03: Results of Reliability Analysis

Constructs	Items	Cronbach Alpha	CR	AVE
Psychological Factor	28	0.843	0.921	0.721
Economic Factor	23	0.791	0.867	0.699
Investment Decision-making	8	0.821	0.932	o.987

4.3 Correlation Analysis

Correlation analysis is the method, which used to check the association between two variables. However, the sample correlation coefficient is denoted by r. The correlation value lies between -1 to +1 and identifies the direction & strength of

association between the two variables. Whatever, magnitude of the correlation shows the strength of the relationship between the variables. Therefore, the correlation matrix shows the relationship between all the variables. The correlation matrix shown in table 04.

Table 04: Correlation Matrix

	Investment Decision-making	Economic Factor	Psychological Factor
Investment Decision-making	(0.843)		

| Economic Factor | 0.432 | (0.894) | |
| Psychological Factor | 0.543 | 0.345 | (0.873) |

4.4 Hypothesis testing

The researcher used multiple regression analysis techniques for testing all the hypotheses.

The multiple regression analysis results show in table 5. So, R^2 adjusted R^2 are 0.559 and 0.563 correspondingly. Therefore, scholars used multiple regression analysis techniques to test all hypotheses (See table 5).

Furthermore, outcomes of beta coefficients show that all hypotheses are positively significant. The strongest relationship between psychological factors and investment decisions (B= 0.191, p= 0.000), whereas economic factors and investment decisions (B=0.154, p=0.000).

Table 05: Hypotheses Testing by Regression Analysis

Results of multiple regression model	
OLS Regression	**Coefficient**
Economic Factor	0.154***
	0.0032
Psychological Factor	0.191***
	0.0038
Content (B_o)	0.594***
	0.0031
Observations	219
R^2	0.559
Adj. R^2	0.563
F-Statistics	79.432
Durbin-Wasten	2.342

5.4. Discussion

This study looks at the variables that influence Pakistan's financial sector's investment choices. The results of the current study, however, significantly deepen our understanding of how these elements operate. First, the current argument that investors typically employ phycological aspects to make investment decisions is confirmed by the fact that phycological elements have a largely favourable impact on investment decision-making. Furthermore, these outcomes agree with those of earlier research (e.g., Hidajat, 2019; Sharafutdinova et al., 2021). As a result, hypothesis H1 is confirmed.

Second, considerations related to economics are crucial while making investment

decisions (Vieira et al., 2019). The findings of this study show that economic factors significantly and positively affect investment decision-making. So too is hypothesis H2 supported.

6. Conclusion

The purpose of this study is to identify the psychological & economic elements that influence the choices made by individual investors. Investment decision-making was the dependent variable in this study, whereas psychological and economic variables were the independent variables. Regression analysis's findings showed that psychological factors have a greater impact on individual PSX investors' investing decisions than economic factors do.

Because individual investors' investment decisions are more effectively influenced by human behavior.

6.1 Implications

This research can give individual investors some pointers for making investments on the Pakistani stock exchange. Nonetheless, it is asserted that individual investors require sound judgment. These elements influenced investment choices in Pakistan's financial sector, according to all respondents. Also, this study will be used to encourage different types of individual investors to invest in stock markets. The individual investors' confidence will grow as a result of this study.

References

1. Andersson, E., Hoque, M., Rahman, M. L., Uddin, G. S., & Jayasekera, R. (2022). ESG investment: What do we learn from its interaction with stock, currency and commodity markets?. International Journal of Finance & Economics, 27(3), 3623-3639.

2. Binda, J. B., Prokopenko, M., Ramskyi, A., Shuplat, O., Halan, L., & Mykhaylenko, D. (2020). Assessment of investment attractiveness of industrial enterprises. International Journal of Management (IJM), 11(2), 27-35.

3. Cronbach, LJ (1951). Coefficient alpha and the internal structure of tests, Psychometrika, 16(3), 297–334.

4. Cronbach, LJ (1951). Coefficient alpha and the internal structure of tests, Psychometrika, 16(3), 297–334.

5. Gefen, D, D Straub and MC Boudreau (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the association for information systems, Communications of the Association for Information Systems, 4, 1–77.

6. Gill, S., Khurshid, M. K., Mahmood, S., & Ali, A. (2018). Factors effecting investment decision making behavior: The mediating role of information searches. European Online Journal of Natural and Social Sciences, 7(4), pp-758.

7. Hair, JF, WC Black, BJ Babin, RE Anderson and RL Tatham (2010). SEM: An introduction. Multivariate Data Analysis: A Global Perspective, pp. 629–686.

8. Hidajat, T. (2019). Behavioural biases in bitcoin trading. Fokus Ekonomi: Jurnal Ilmiah Ekonomi, 14(2), 337-354.

9. Kaiser, HF (1974). An index of factorial simplicity, Psychometrika, 39(1), 31–36.

10. Naveed, M., Ali, S., Iqbal, K., & Sohail, M. K. (2020). Role of financial and non-financial information in determining individual investor investment decision: a signaling perspective. South Asian Journal of Business Studies, 9(2), 261-278.

11. Nunnally, JC and IH Bernstein (1978). Psychometric Theory. McGraw-Hill, New York.

12. Pallant, JF (2000). Development and validation of scale to measure perceived control of internal state, Journal of Personality Assessment, 75(2), 308–337.

13. Raut, R. K. (2020). Past behaviour, financial literacy and investment decision-making process of individual investors. International Journal of Emerging Markets.

14. Riaz, S., Ahmed, R., Parkash, R., & Ahmad, M. J. (2020). Determinants of stock market investors' behavior in COVID-19: A study on the Pakistan Stock Exchange. International Journal of Disaster Recovery and Business Continuity, 11(3).

15. Sharafutdinova, K. G., Kulmamatova, F. K., & Haydarova, S. (2021). The role of cognitive psychology in the elimination of destructive behavior. Asian Journal Of Multidimensional Research, 10(4), 957-964.

16. Song, L., & Zhou, Y. (2020). The COVID-19 pandemic and its impact on the global economy: what does it take to turn crisis into opportunity?. China & World Economy, 28(4), 1-25.

17. Vieira, E. S., Neves, M. E., & Dias, A. G. (2019). Determinants of Portuguese firms' financial performance: panel data evidence. International Journal of Productivity and Performance Management.

18. Wen, Z, HW Marsh, K-T Hau, Y Wu, H Liu and AJS Morin (2014). Interaction effects in latent growth models: Evaluation of alternative estimation approaches, Structural Equation Modeling: A Multidisciplinary Journal, 21, 361–374.

19. Yuniningsih, Y., & Taufiq, M. (2019). Investor Behavior In Determining Investmen On Real Asset. MIX: Jurnal Ilmiah Manajemen, 9(2), 293227.