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The determinants of investment decisions: Evidence from Hanoi, Vietnam

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A B S T R A C T

The aim of the research is to identify the determinants of investment decisions of individual investors - the empirical evidence of Hanoi, Vietnam. Conducting a survey of 210 individual investors and using quantitative analysis through SPSS software, the research results showed that market stability and project profitability have the greatest impact on investment decisions. Research results also showed that corporate image and investor psychology have no impact on individual investment decisions. However, research results confirmed the positive impact of business growth on investment decisions, so growing businesses have many advantages for investors, so they have many opportunities to attract financial resources from investors to expand production and business.

1. Introduction

Investment activities are considered as one of the typical activities of individual or institutional investors to seek profits. At the same time, investment is a process that helps economies attract large financial resources to serve economic development. Investment helps businesses have the ability to mobilize capital, especially businesses (Ahmad Zaidi & Tahir, N.2019). long-term capital to allocate to investment projects that have long-term spillover properties and meet the country's economic development requirements (Hemalatha, 2020). Therefore, countries always create favorable conditions to help businesses and investors make their investment decisions and at the same time businesses have the ability to mobilize capital for development investment (Nguyen, 2017). Among decisions, the investment decision is one of the most important decisions for any investor. When investors make the right investment decisions, it can help them achieve high investment results and thus have the ability to accumulate assets and ensure future investment plans. However, when investors make unreasonable investment decisions, it can affect profit plans and therefore affect the ability to accumulate profits and develop in the future. Vietnam is a developing country in Southeast Asia and is considered to have an increasingly friendly investment environment, so Vietnam has the ability to create a good business environment to attract investors. Domestic and foreign investors make business decisions (Le et al., 2022). At the same time, the property investment market in Vietnam is developing, creating a diverse amount of goods to help investors choose to invest in the country. Research on factors affecting investment decisions has been conducted by a number of scholars in recent times and it is believed that there are many factors that can potentially influence investment decisions, as confirmed by Surya Bahadur (2019) uses surveys from 106 individual investors, and collected through a structured questionnaire survey conducted between January and April 2019. Using the kernel analysis discovery factor, research identifies six common factors affecting stock investment decisions: income and image, corporate governance and positioning, prestige and market share, competition and industry size, basic market factors and determinants. Another possibility, Obamuyi (2013) indicated that socio-economic characteristics such as age, gender, marital status and education level significantly affect investment decisions in Nigeria. In addition, Alquraan et al. (2016) suggested that Fear of Loss, overconfidence, and perception of risk have a significant influence on investment decisions.

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Therefore, this study is conducted to identify factors that affect investment decisions of individual investors in Vietnam. The research results also aim to clearly identify which factors influence investment decisions, as a basis to help investors and policy makers understand the rules of investors' activities in the market, and The basis helps businesses understand the general rules of investors and policymakers understand the movement and development process of the market.

2. Literature Review

Setting out to research the factors affecting individual investors' decisions on the Nepalese stock market, Surya Bahadur (2019) used a survey from 106 individual investors, collected through a survey. Structured questionnaire survey was conducted from January to April 2019. Using exploratory factor analysis, the study identified six general factors that influence stock investment decisions: earnings and image, corporate governance and positioning, reputation and market share, competitive factors and industry size, basic market factors. The analysis showed that of these six factors, market fundamentals was rated as the most important by investors in the sample. Previously, Obamuyi (2013) also looked for the main factors affecting investors' investment decisions and their relationship with the socio-economic characteristics of investors in the market. securities, in the case of Nigeria. The study focused on individual investors, and using a convenience sampling method to collect data from 297 participants using a modified questionnaire based on the study of Al-Tamimi (2005). The independent t-test, analysis of variance (ANOVA), and tests were used for the analysis. The results showed that the five factors that most influence investment decisions in Nigeria include past performance of a company's stock, expectations of stock split/capital increase/bonus, dividend policy, company profits and get-rich-quick schemes. In contrast, the five least influential factors include religious beliefs, rumors, loyalty to the company's products/services, family opinions, and expected losses in other investments. Additionally, the study also determined that socio-economic characteristics such as age, gender, marital status and education level significantly influence investment decisions in Nigeria. Notably, with respect to the past performance of a company's stock as a rating factor, different groups of investors demonstrated statistical differences in their assessments.

A similar situation in the Pakistani market appears in (Farooq & Sajid, 2015). The authors used 100 responses collected from individuals and equity fund managers. Correlation analysis and regression analysis techniques were used to achieve the research objectives. The results showed that experience factors, the use of financial instruments and corporate governance at the company level have a positive and significant influence on investment decisions, while risk avoidance have a significant and negative impact. Furthermore, all behavioral factors, firm-level corporate governance, and investment decisions have a positive and significant relationship. Alquraan et al. (2016) continued their research for the case of the Saudi stock market. The main objective of this research is to study the behavioral finance factors that influence the investment decisions of individual investors in the Saudi stock market - an important emerging market in the Middle East. To conduct the study, questionnaires were distributed to 140 randomly selected participants. Cronbach's Alpha was used to assess the validity of the instrument, and Multiple Linear Regression and ANOVA methods were used to test the hypotheses. The results of the study show that behavioral finance factors such as fear of loss, overconfidence, and perception of risk have a significant influence on investors' decision to invest in the Saudi stock market while the influence of crowd behavior is considered insignificant. For demographic variables such as gender, age, income and experience, no significant differences were observed in investors' decisions, except for education, which showed fluctuations. significantly in investors' investment decisions.

Also researching the case of Nepal, Adhikari (2020) argued that information structure and different market factors affect both individual investment decisions and market outcomes. The main objective of the investigation is to identify the factors influencing the decisions of individual investors on the Nepal Stock Exchange. The study analyzed 214 responses obtained from individual investors through random sampling. The study found correlations between factors identified for the average stock investor by behavioral finance theory and previous empirical evidence. The study identified a number of important factors that influence individual investment decisions, including statements from government officials, expected capital growth, the status of companies in the industry, and their goals. diversification goals, attractiveness of non-equity investments, ease of access to debt, strategic shareholders' views, family views, recent price movements in the company's stock companies, changes in stock indices, rumors, expected corporate performance, stock market liquidity, results of technical analysis, dividend payments, perceived corporate ethics, the company's shareholder reputation, and feelings toward the company's products and services. Meanwhile, Atikah et al. (2019) hypothesized that both information structure and market factors systematically influence individual investment decisions and market outcomes. Investors' investment behavior in the market originates from psychological decision principles, to explain why people buy or sell stocks. These factors mainly focused on how investors interpret and react to information when making investment decisions. The authors aimed to identify factors that influence investment decisions of potential individual investors in Malaysia. Three behavioral factors were identified as potential causes: accounting information, company image coincidence, and personal financial needs. A questionnaire was issued to 384 potential investors in Malaysia. Empirical results show that there exists a positive relationship between accounting information, company image coincidence and personal financial needs in investment decisions. Among these factors, accounting information is considered the most important.

With the same idea as Surya Bahadur (2019), but studying the Indian context, Mathew & Kumar (2022) used independent t-tests, Analysis of Variance (ANOVA) and post-tests. study. Empirical results show that individual investors mainly consider returns, risks, and past performance when making investment decisions. This research contributes to the understanding of behavioral finance at a microscopic level, focusing on the minds and motivations of individual investors, especially in emerging markets. Researching at the city level, Hemalatha (2019) also agreed that there are many different factors that influence each individual's investment decision, with demographic characteristics playing an important role. Therefore, this study aims to explore differences in attitudes regarding factors influencing investment decisions based on the demographic profile of individuals. The survey collected data from 374 individuals in Chennai, Tamil Nadu. Descriptive statistics (t-test and F-test) are used to determine the mean, standard deviation, standard error and median value of factors affecting individual investment decisions. The results show that investment choices vary according to gender, age, occupation, internet use, computer literacy and use of online transactions. Along the same idea as Hemalatha (2019), Sugandha et al. (2023) argued that there are three main factors - natural events, social factors and economic environment - that are hypothesized to have an impact on investment decisions. invest in the stock market. The research sample consists of 98 individual investors collected through a convenience sampling method. A structured questionnaire survey was used to determine which factors most influence investment decisions in the stock market. Regression and correlation analysis were used as statistical tools. Economic Environmental Factors and Social Factors are identified as factors that greatly influence investment decisions in the stock market. In addition, the results also show that the natural event factor has the least impact.

Commenting on the impact of financial fraud on individuals' stock investment activities, Johannes and Amedeus (2022) provided that, after the disclosure of financial fraud by a fund manager, a large pension, two-thirds of affected investors did not divest. These passive investors tend to be younger, have lower socioeconomic status, and are more influenced by default options. The majority of those divesting moved their money to the only state-regulated option available in the fund portfolio. Fraud detection also prompted a small shift of investors from fraud-free private funds to state funds. Yong et al. (2023) affirmed that improving the financial health of individual investors is a steadfast goal of policymakers and researchers, because of their important role in the capital market. Using data collected from a nationwide survey of individual investment behavior in China, the authors study the link between individual investors' level of financial education and performance. of their stock portfolios. The results indicate that financially educated individual investors tend to increase their returns in the stock market, as they apply investment knowledge into prudent and active investment practices. Able to endure risks skillfully. Furthermore, the impact of financial education on stock market returns is emphasized more than using experience to invest especially in areas with limited investor protection mechanisms. mechanism. Chen et al. (2023) found that a significant portion of investors primarily buy stocks that attract their attention. Using survey data from Chinese individual equity investors, the authors find that the total return of attention-based buyers is about 4% lower than that of other investors. Through two-stage regression analysis (2SLS), it was found that ordinary least squares (OLS) regression analysis underestimated the decline in profits. Additionally, attention-based buyers are more influenced by news and tend to rely more on online information. These investors are more speculative and clearly demonstrate the bias effect. To study the relationship between personality traits and investment choices, Zhengyang et al. (2024) conducted a survey of thousands of large investors in the US. The Big Five personality traits are related to investors' views on the stock market and economy, risk tolerance, and propensity for social interaction. Among these characteristics, neuroticism and openness are especially important in explaining investments in stocks. Investors with high Volatility and low Openness tend to invest less in stocks. Another possibility, Tosin et al. (2024) focused on psychological factors affecting investment decisions in the Nigerian real estate stock market, through a survey conducted among investors. Registered stock broker linked to the Nigerian stock index (NGX). The study used the principal components method (PCF) and least squares method (OLS). Experimental results showed the influence of psychological factors on the choice of investing in real estate securities on the stock market. In particular, investors often prefer to invest in stocks during growth periods but are inclined to sell when the market declines. Six key behavioral factors were identified. The “investor responsiveness” factor sheds light on the dynamics of decision-making in rising stock markets, while the “herd effect” factor predicts Investor behavior in declining market conditions. The phenomenon of emotion-based trading emphasizes the importance of psychological factors in achieving investment efficiency in the real estate industry on the stock market and ensuring optimal investment decisions. Researching in the context of the Covid-19 pandemic, Jun (2024) indicated the evidence of a significant decline in the previously existing positive association between investors' purchasing activities. individuals and profits from stocks after the Covid-19 pandemic. The data studied includes daily stock transactions classified by investor groups, taken from the Korean stock market. Using a difference-in-difference regression model, the author posits that stocks are affected by an increase in novice investors or post-mortem attention. pandemic.

3. Data and methodology

3.1. Data

According to Hair et al. (2019), the minimum sample size should be 5 times the number of observed variables in the model. In this study, we have about 25 observed variables, so the minimum sample size is about 125. Therefore, to ensure the accuracy of the analysis of estimated results, the study will survey a sample size of 210.

3.2. Methodology

The study uses quantitative analysis. First, the study performed scale reliability analysis using Cronbach's alpha test, then studied exploratory analysis of the EFA factor, and finally performed regression analysis. Based on previous studies, the regression model is described as follows:

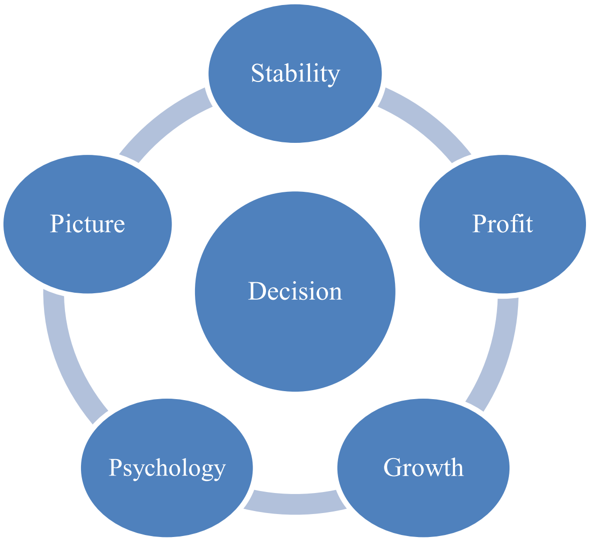

Fig. 1. Expected research model

Table 1 shows that the independent variables that affect investment decisions include:

Stability is a factor that shows that when the market is highly stable, it can help investors make better investment decisions. The second factor is the profitability of the business (Profit). When a business makes investments with high profitability, it helps make investment decisions more effective. The third factor is the company image (picture), when the company has the ability to create a development image, it will help the investment decision process become more effective. The fourth factor is market psychology (psychology), psychology and market movements have a positive impact on investment decisions. The fifth factor is the growth potential of the business (growth), when higher growth potential helps make investment decisions more effective.

3. Results and discussions

3.1. Descriptive statistics

Table 1 shows that the survey sample is mainly ordinary joint stock enterprises, accounting for 93.3% corresponding to 196 enterprises, while joint stock enterprises related to foreign capital account for 4.3%. corresponding to 15 businesses. Regarding the age of investors, most investors are under 35 years old, there are about 110 investors, corresponding to 52.4% of the observed sample. Investors aged 36 to 45 account for about 42.9% and correspond to 90 investors. Over 46 years old, there are only about 10 investors and accounts for 4.8%. Regarding work locations, most of the survey samples focused on Cau Giay district and Nam Tu Liem district, with only a small portion going into other areas. This is a relatively economically developed area in Hanoi City.

Table 1
Descriptive statistics

No.	Quantity	Ratio %
Joint stock companies	196	93.3%
foreign companies	15	7.1%
Others	9	4.3%
35 and under	110	52.4%
36 - 45	90	42.9%
46 - 60	9	4.3%
61 and over	1	0.5%
Cau Giay district	102	48.6%
Nam Tu Liem district	68	32.4%
Bac Tu Liem district	20	9.5%
Other districts	20	9.5%
Total	210	**100.00%**

3.2. Cronbach's alpha analysis

Analyzing the Cronbach's alpha to evaluate the reliability of the scale. Variables with this coefficient greater than 0.6 are considered to ensure a good level of reliability, and variables with coefficients that are too small are considered to not achieve the level of scale reliability. Research results show that all variables have Cronbach's alpha coefficient greater than 0.6, so it can be seen that the variables achieve a level of reliability and ensure satisfaction for EFA analysis.

Table 2
Cronbach's alpha analysis

No	Scale	Number of scales	Cronbach's alpha	No	Scale	Number of scales
1	Stability	4	0.783	4	Psychology	4
2	Profit	4	0.765	5	Growth	4
3	Picture	5	0.812	6	Decision	4

Then, the study performed KMO and Bartlett's tests, the results were as follows:

Table 3
KMO and Bartlett test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.781
Bartlett's Test of Sphericity	Approx. Chi-Square	3156.21
	Sig.	0

Source: Authors

KMO coefficient = 0.781 > 0.6, so the results of EFA factor analysis are appropriate. The analysis results show that the total variance extracted of the factor rotation matrix is 85.66% > 50%, meaning 85.66% of the variation of the data is explained by the factors. The Sig value of the Bartlett test = 0.000 < 0.05 ~ 5%, so the observed variables are correlated with each other on an overall scale.

Table 4
EFA

	Component				
	1	2	3	4	5
STA1	0.901				
STA3	0.876				
STA2	0.845				
STA4	0.832				
PRO1		0.872			
PRO2		0.841			
PRO4		0.812			
PRO3		0.788			
PIC2			0.865		
PIC3			0.834		
PIC1			0.821		
PIC4			0.802		
PIC5			0.782		
GRO1				0.821	
GRO4				0.802	
GRO2				0.788	
GRO3				0.762	
PSY2					0.789
PSY1					0.772
PSY3					0.765
PSY4					0.721

Based on the above analysis results according to the research process, the authors conducted a regression analysis as shown in the following table:

Table 5
Regression estimation

Indicator	**Regression coefficient**	**Sig.**
Intercept		
Stability	0.323	0.000***
Profit	0.31	0.000***
Picture	0.254	0.134
Psychology	0.265	0.321
Growth	0.11	0.003***

Number of observations 210 ANOVA (sig,) 0.000*** Adjusted $R2$=83.2%

*Note: *** is significant at the 1% level*

From the regression results, it shows:

Firstly, market stability has the greatest impact on individuals' investment decisions, when the estimated coefficient reaches 0.323 and with a positive sign and statistical significance. That is, when market stability increases, individuals' investment decisions in the market increase and therefore the market has the ability to attract idle capital to transfer to businesses to invest in production and investment. business. On the contrary, when the market has less stability, it reduces the ability of individuals to make investment decisions, so the market is less able to attract investment capital flows and the market becomes less attractive. Therefore, the results of this research suggested that Vietnam should have appropriate solutions to maintain market stability, thereby creating a suitable legal corridor for businesses to develop and stimulate investment expansion. private sector and the formation and development of capital markets.

Secondly, the research results showed that the profit of the investment project will determine the individual's investment ability. This means that investment projects with high profits are highly effective, and therefore the project becomes more attractive to investors, so investors will prioritize making investment decisions. Therefore, the results of this study supported the view that businesses need to operate more effectively so that they can attract investment resources and mobilize capital to fund their investment projects. .

Thirdly, the research results showed that corporate image has no impact on individual investment decisions, meaning that improving corporate image is not effective in helping investors make investments. At the same time, investor psychology has no influence on investment decisions, showing that investors often make independent investment decisions and are not influenced by market psychology or crowd psychology. However, the research results confirmed the positive impact of business growth on investment decisions, meaning that businesses in the growth stage are often highly appreciated by investors, so they often prioritize them. Deciding to invest in high-growth businesses, on the contrary, businesses entering a period of decline often find it difficult to convince investors to invest capital, and therefore are unlikely to attract social investment resources.

4. Conclusion

Investment activities are considered as one of the typical activities of individual or institutional investors to seek profits. Researching factors affecting investment decisions in Vietnam based on a survey of 210 individual investors with investment activities in the market and quantitative analysis through SPSS software, the research results showed that market stability has the greatest impact on individuals' investment decisions, then the profit of the investment project will determine the individual's investment ability and the second largest level of impact. Research shows that corporate image and investor psychology have no impact on individual investment decisions. However, the study confirms the positive impact of business growth on investment decisions.

References

Adhikari, P. L. (2020). Factors influencing investment decisions of individual investors at Nepal stock exchange. *Management Dynamics*, *23*(1), 183–198. https://doi.org/10.3126/md.v23i1.35578

Ahmad Zaidi, A. Z., & Tahir, N. S. (2019). Factors that influence investment decision making among potential individual investors in Malaysia. *Advances in Business Research International Journal (ABRIJ)*, *5*(1), 9-21. doi:10.24191/abrij.v5i1.9969

Alquraan, T., Alqisie, A., & Al Shorafa, A. (2016). Do behavioral finance factors influence stock investment decisions of individual investors?(Evidences from Saudi Stock Market). *Journal of American Science*, *12*(9), 72-82.

Atikah, N., Susamto, A. A., Saleh, S., & Abdic, F. (2023). The cyclical behavior of capital buffer of Indonesian islamic and conventional banks. *International Journal of Islamic Economics and Finance (IJIEF)*, *6*(1), 1-20.

Chen, C., Lu, X., & Zhang, Y. (2023). Is attention-based stock buying profitable? Empirical evidence from Chinese individual investors. *Pacific-Basin Finance Journal*, *82*, 102120. https://doi.org/https://doi.org/10.1016/j.pacfin.2023.102120

Farooq, A., & Sajid, M. (2015). Factors affecting investment decision making: Evidence from equity fund managers and individual investors in Pakistan. *Research Journal of Finance and Accounting*, *6*(9), 2222-1697.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, *31*(1), 2-24.

Hemalatha, S. (2020) Factors Influencing Investment Decision of the Individual Related to Selected Individual Investors in Chennai City. *International Journal of Innovative Technology and Exploring Engineering (IJITEE), 8*(6), 457-461.

Johannes, H., Amedeus, M. (2022). Financial fraud and individual investment behavior. *Journal of Economic Behavior & Organization*, *203*, 593-626, https://doi.org/10.1016/j.jebo.2022.09.015.

Jun, H.K. (2024). Individual investor trading and stock returns after the Covid-19 pandemic: Evidence from Korea. *Finance Research Letters*, *61*, 2024, 105027, https://doi.org/10.1016/j.frl.2024.105027.

Le, T. T. H., Nguyen, V. C., & Phan, T. H. N. (2022). Foreign direct investment, environmental pollution and economic growth—an insight from non-linear ARDL Co-integration approach. *Sustainability*, *14*(13), 8146. https://doi.org/10.3390/su14138146

Mathew, R. L., & Kumar, S. R. (2022). Factors influencing investment decisions: A study of individual investors in the Indian stock market. *International Journal of Accounting & Business Finance*, *8*(2) 25 – 44.

Nguyen, H. Q. (2017). Business reforms and total factor productivity in Vietnamese manufacturing. *Journal of Asian Economics*, *51*, 33–42. https://doi.org/https://doi.org/10.1016/j.asieco.2017.06.003

Obamuyi, T. M. (2013). Factors influencing investment decisions in capital market: A study of individual investors in Nigeria. *Organizations and markets in emerging economies*, *4*(07), 141-161.

Sugandha, S., Bhavneet, K., Gaurav, D., Shivam, S. (2023). Factors Influencing Investment Decision to Invest in a Stock Market: A Survey of Individual Investors across Delhi NCR Region. *TuijinJishu/Journal of Propulsion Technology*, *44*(4), 5850- 5856.

Surya Bahadur, R. (2019). Factors affecting individual investors' stock investment decision in Nepal. *Tribhuvan University Journal*, 33(2), 103-124. DOI: https://doi.org/10.3126/tuj.v33i2.33615.

Tosin, B. F., Richard, B. P., Cyril, A. A. (2024). Behavioral factors influencing investment decision-making in the Nigerian real estate stock market. *Scientific African*, *24*, e02238, https://doi.org/10.1016/j.sciaf.2024.e02238.

Yong, Z., Xiaomeng, L., Jing, J. X. (2023). Does financial education help to improve the return on stock investment? Evidence from China. *Pacific-Basin Finance Journal*, *78*, 101940, https://doi.org/10.1016/j.pacfin.2023.101940.

Zhengyang, J., Cameron, P., Hongjun, Y. (2024). Personality differences and investment decision-making. *Journal of Financial Economics*, *153*, 103776, https://doi.org/10.1016/j.jfineco.2023.103776.