



The Effect of Demographics on Investment Choice in Digital Currencies: An Empirical Study of Thai Investors

Pathompong Kookkaew and Watcharaporn Thiprapan*

Faculty of Business Administration and Information Technology, Rajamangala University
of Technology Suvarnabhumi, Thailand

Abstract

The purpose of this study is to compare the differences in Thai investors' demographic characteristics that influence their decision to invest in digital currencies. This study was quantitative research. The samples of this study were 400 Thai investors who invest in digital currencies, using non-probability sampling by convenience sampling method. We employed a questionnaire as our research tool, demonstrating content validity of 1.00 and reliability of 0.70 across the entire questionnaire. We analysed the data using a one-way analysis of variance. The research discovered that different demographic factors of Thai investors, such as their age, average monthly income, duration of investments, and amount of money invested, influenced different investment decisions in digital currencies. However, the various demographic factors of Thai investors, such as their gender and level of education, did not influence different investment decisions in digital currencies. Digital currency investment providers can use these research results to develop strategies that accurately and successfully target or qualify investors.

Keywords: characteristics, decisions, invest, investment providers, strategies

1. Introduction

Currently, the digital currency is in a rapidly growing phase in both Thailand and around the world. Investment experts anticipate that investments in digital currencies will play a more important role in the future, which may well replace the currency that is currently in use. Investment models are rapidly changing and evolving, leading to the invention and development of advanced technology to increase ease and speed in financial transactions. Such a change has led to a new form of financial innovation: the use of digital currencies, or cryptocurrency, which is the home of blockchain technology as an intermediary in the system's currency exchange. (Miraz & Ali, 2018). However, past-world uncertainty, influenced by uncontrollable external factors such as epidemics and warfare, caused the price

of digital currencies to fall in value. The number of accounts in the database of digital currency trading providers that were continuously declining was a sign that the situation impacted investments in Thailand as well (The Securities and Exchange Commission, Thailand, 2022).

So, in order to create more new accounts, securities providers and shareholders associated with digital currencies must find ways to build investor confidence. This includes devising strategies to encourage former investors to continue investing in digital currency securities despite the current uncertainty. This review of the literature revealed that the demographic factors of investors play a fundamental role in influencing investment decisions, a topic that has been extensively studied. Researchers such as Nurbarani & Soepriyanto (2022) and El-Chaarani et al. (2023) have conducted extensive studies on this topic. Another study by Metawa et al. (2019) found that demographic characteristics such as age, gender, and education level can also play a positive role in investment decisions made by investors in the capital market. Senkardes & Akadur's (2021) study reinforces the notion that psychological and demographic considerations broadly shape people's conventional financial investment decisions. We will explore age, gender, income status, and education as individual demographic factors that influence cryptocurrency investments. This research also discusses individual cryptocurrency investments based on these criteria.

This is why, in the case of Thai investors, the researchers are interested in examining demographic aspects that impact digital currency investing decisions. These findings will be helpful to securities companies, as they can help them create and improve strategies for offering investment services in the right way. As a result, in the future, more Thai investors will purchase digital currencies.

1.1 Research purpose

We aim to examine the variations in the demographic traits of Thai investors that impact their choice to invest in digital currencies.

1.2 Research hypothesis

Different demographic factors of Thai investors influence different investment decisions in digital currencies.

2. Research Methodology

Quantitative research investigates the effect of demographics on investment choice in digital currencies: an empirical study of Thai investors.

2.1 Population and Sample

The population consisted of Thai investors who invested in 2,915,372 digital currency securities accounts. The researchers referred to data from the number of invested user accounts in the digital currency securities trading provider's database. The data was sourced from the Securities and Exchange Commission, Thailand, in 2022. Yamane's formula, with 95 % confidence and 5 % error, determines the sample size. The researchers determined a sample size of 400 accounts. The researchers employed a two-step non-probability sampling strategy, using the quota sampling method to segment the ratio by region and a convenient sampling method to disseminate information to Thai investors nationwide.

2.2 Research instrument

This research uses a questionnaire as an instrument for collecting data. The questionnaire's constructs consisted of measuring Thai investors' demographic factors and digital currency investment decisions. Testing the content validity of the questionnaire using the item-objective congruence index found a value equal to 1.00, which is the criterion IOC of $\geq .50$. And tested the reliability with the alpha coefficient in Cronbach's method by conducting a questionnaire with non-Sample Thai investors in 30 accounts of research. Vanichbuncha (2017) discovered that the confidence level ranged from 0.70 to 0.87, indicating a high level of reliability. This form proves to be efficient and suitable for data collection in a study.

2.3 Procedure for Data Collection

Thai investors who made digital currency investments received the questionnaire via Google Forms. We initiated the collection process from March to May 2023. We check accuracy and completeness after collecting a total of 400 samples for further statistical analysis.

2.4 Statistical Procedure

Analyse the data on Thai investors' demographic factors by frequency and percentage. Analyse opinion-level data on investment decisions in digital currencies with averages and standard deviations and use one-way analysis of variance to examine the differences in the demographic characteristics of Thai investors that influence their decision to invest in digital currencies.

3. Results and Discussion

3.1 The data analysis focuses on the demographic factors of Thai investors.

According to Thai investors' demographic data analysis results, the majority of investors are women, with 265 people estimated at 66.25%. The age range of 30-39 years is represented by 207 individuals, accounting for 29.75% of the total population. A bachelor's degree, or the equivalent of 235 people, is the highest level of education, at 58.75%. An estimated 47.00% of 188 people earn an average monthly income between 25,001 and 35,000 baht. The duration of investments in digital currencies ranges from 6 months to 1 year for 170 people, estimated at 42.50%, and the amount of money invested in the digital currency ranges from 10,001 to 50,000 baht for 168 people, estimated at 42.00%.

3.2 An analysis of opinion-level data on investment decisions in digital currencies

Table 1 presents the findings of Thai investors' analysis of their digital currency investment decisions.

Table 1: results of the analysis of investment decisions in digital currencies by Thai investors

Investment decisions in digital currency	Average	Standard deviations	Level of opinion	Ranked
Investors are constantly investing in digital currency	4.26	0.82	highest	1
Investors will increase their investment in digital currency in the future	4.10	0.78	high	2
The introduction of a new digital currency will encourage investors to invest more.	3.93	0.92	high	3
overall	4.10	0.73	high	

Table 1 shows that Thai investors generally hold a high level of opinion regarding their investment decisions in digital currencies. Sorting the average from the highest to the lowest

reveals that the highest average indicates constant investment in digital currency by investors. In the future, investors are likely to increase their investment in digital currencies. The lowest average rating indicates that the introduction of a new digital currency will prompt investors to increase their investments.

3.2 Research Hypothesis Testing

Table 2 shows the results of research hypothesis testing to compare differences in Thai investors' digital currency investment decisions, classified by gender, age, educational level, average monthly income, duration of investment, and amount of investment.

Table 2: Results of research hypothesis testing

Factor		Sum of squares	df	Mean square	F	Sig
Gender	Between Group	1.600	2	.800	1.1517	.221
	Within Group	209.329	397	.527		
	Total	210.929	399			
Age	Between Group	5.194	4	1.298	2.493	.043*
	Within Group	205.735	395	.521		
	Total	210.929	399			
Educational level	Between Group	3.395	3	1.132	2.160	.092
	Within Group	207.543	396	.524		
	Total	210.929	399			
Average monthly income	Between Group	7.340	5	1.468	2.841	.016*
	Within Group	203.589	394	.517		
	Total	210.929	399			
Duration of investment	Between Group	17.413	4	4.353	8.886	.000*
	Within Group	193.516	395	.490		
	Total	210.929	399			
Amount of investment	Between Group	18.575	4	4.644	9.536	.000*
	Within Group	192.354	395	.487		
	Total	210.929	399			

According to Table 2, Thai investors of varying ages, average monthly income, investment durations, and amounts of money made different investment decisions in digital currencies, with statistical significance at the 0.05 level. However, Thai investors of varying genders and educational levels have not made different decisions to invest in digital currencies.

4. Discussion and Conclusion

4.1 Discussion

Researchers tested their hypotheses about how Thai investors' decisions about digital currencies changed based on their gender, age, level of education, average monthly income, length of investment, and amount of investment. They found that Thai investors of different ages, average monthly incomes, lengths of investment, and amounts of money invested had different decisions about digital currencies. This is due to the fact that investors may have to rationalise the risk of investing in a decision-making enterprise where the risk acceptance of age will be different. Investors perceptions of different investment avenues. Risk, return, market trends, and past performance are just a few of the factors that affect investment decisions. Demographic factors such as age and income influence investment decision-making (Patel & Modi, 2017). Additionally, the income of investors significantly influences their investment decisions and determines the amount of funds they will invest. However, out

of the demographic factors, only age, income, and investment experience affect investment decisions. Meanwhile, other demographic factors, such as gender and education, do not affect investment decisions (Senda et al., 2020). This may be due to the growing accessibility and democratisation of financial information, which diminishes the traditional gender gap in financial literacy and decision-making. This suggests that financial literacy mitigates gender differences in behavioural bias. (Hsu, Yuan-Lin, et al., 2021). Additionally, while education may enhance financial literacy, it does not necessarily translate to a higher propensity to invest in digital currencies, which are often perceived as speculative regardless of one's educational background, which means that education cannot enable the actions of investors to imitate the work of others, which means that if one investor (Nurbarani & Soepriyanto, 2022).

4.2 Conclusion

Researchers investigated how Thai investors' decisions about digital currencies changed based on their gender, age, level of education, average monthly income, length of investment, and amount of investment. They found that Thai investors of different ages, average monthly incomes, lengths of investment, and amounts of money invested made different decisions about digital currency investments.

References

- El-Chaarani, H., Mawad, J. L., Mawad, N., & Khalife, D. (2023, May 30). Psychological and demographic predictors of investment in cryptocurrencies during a crisis in the MENA region: the case of Lebanon. *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/jeas-07-2022-0165>
- Hsu, Y. L., Chen, H. L., Huang, P. K., & Lin, W. Y. (2021, July). Does financial literacy mitigate gender differences in investment behavioral bias?. *Finance Research Letters*, 41, 101789.
- Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2019, March 4). Impact of behavioral factors on investors' financial decisions: case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1), 30–55. <https://doi.org/10.1108/imefm-12-2017-0333>.
- Nurbarani, B. S., & Soepriyanto, G. (2022, January). Determinants of Investment Decision in Cryptocurrency: Evidence from Indonesian Investors. *Universal Journal of Accounting and Finance*, 10(1), 254–266. <https://doi.org/10.13189/ujaf.2022.100126>
- Patel, B., & Modi, V. (2017, December). Impact of demographic factors on investment decision: an empirical study from South Gujarat Region. *International Journal of Latest Engineering and Management Research*, 2(12), 31-38.
- Senda, D. A., Rahayu, C. W. E., & Tri Rahmawati, C. H. (2020, January 10). The Effect of Financial Literacy Level and Demographic Factors on Investment Decision. *Media Ekonomi Dan Manajemen*, 35(1), 100. <https://doi.org/10.24856/mem.v35i1.1246>.
- Senkardes, C. G., & Akadur, O. (2021, December 30). Research on the factors affecting cryptocurrency investments within the gender context. *Pressacademia*, 10(4), 178–189. <https://doi.org/10.17261/pressacademia.2021.1463>
- The Securities and Exchange Commission, Thailand. (2022, December). Digital Assets Available: <https://www.sec.or.th/digitalasset#list>

Wanichbanch, K. (2016). *Statistics for research* (16th ed.). Bangkok: Chulalongkorn University.