ACCEPTANCE OF AN INITIAL COIN OFFERING FOR INVESTMENT IN A DEVELOPING ECONOMY

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Abstract

Initial coin offerings (ICOs), or token offerings, play a critical role in the digital economy as they are blockchain-based smart contracts used to raise funds by issuing cryptocurrency tokens (Momtaz, 2020). This research aims to study the factors affecting the acceptance of ICOs for investment and to study whether cognition in ICO investment affects decision-making in investment in Thailand. In this quantitative study, the data were collected from online questionnaires completed by a sample group of 402 Thai investors who currently invest in financial instruments, and then the data were analyzed using binary logistic regression. The findings revealed that income, the value of investing in financial instruments, saving, perception towards media, and cognition in investment have an influence on the acceptance of ICOs. The paper suggests that investors who are interested in investing in ICOs should study the risks of investment thoroughly before investing. Besides, relevant government agencies should clearly set the rules and regulations in order to protect the inventors and, in the meanwhile, the fundraising could not be obstructed as well.

Keywords: Initial Coin Offering (ICO), Financial Instrument, Cryptocurrency, Fundraising, Decision-Making, Thailand

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1. INTRODUCTION

Recently, the importance of blockchain technology has increased in global economic systems; therefore, blockchain has been applied worldwide to improve national economic systems. As a result, a brand-new investment method, the initial coin offerings (ICO), which is a fundraising mechanism in which crypto tokens are sold to a crowd of investors (Fisch, 2019), was introduced. However, new financial technologies (fintech), such as ICOs, have always been difficult to undertake because there is always high risk and uncertainty when implementing new financing technologies and those fintech founders have only limited collateral to minimize the risk (Lipusch, 2018; Limna & Kraiwanit, 2022).

ICOs or token offerings are smart contracts based on blockchain technology designed to raise funds by issuing cryptocurrency tokens. Smart contracts are transaction protocols that execute value-exchange transactions automatically between sellers and buyers (Momtaz, 2020). The popularity of this financing has increased dramatically recently. Filecoin, a US-based start-up, is an outstanding

example that is able to raise $257 million through an ICO currently. This amount exceeds amounts raised through other funding methods, for example, crowdfunding. The Pebble smartwatch crowdfunding campaign can raise $20.3 million which is the highest amount of money to date. In general, such a high amount of investments usually attract numerous imitators who take the chance to gain advantage from this recent trend; therefore, many new coins have been introduced into the markets day by day, for example, a coin basically represents a token. As the number of cryptocurrency tokens grows, there is an emergence of a whole ecosystem around this phenomenon. Hence, many websites have discussed the newest ICOs and coming ICOs. To keep oversight of an increase in the number of tokens, the cryptocurrency rates of some websites are set in order to protect buyers against potential frauds of blockchain start-ups (Lipusch, 2018; Romero-Castro et al., 2022). According to the entrepreneur's point of view, the attractiveness of ICOs is that they offer every stage of funding with an outreach of worldwide investors at close-to-zero transaction fees, despite the domination of ICOs created by entrepreneurial firms. According to an investor's point of view, the attractiveness of ICOs is that they potentially offer quicker exit choices due to liquid token exchanges. However, utility, security, and cryptocurrency tokens are distinct regulatory (Momtaz, 2019, 2020).

In Thailand, ICOs have been used by some companies, and many ICO laws were established which cause conflict between the ICO investors and the corporate governance. For example, only Thai baht or cryptocurrency approved by the Securities and Exchange Commission (SEC) are allowed for ICO funding. Besides, ICO fundraising has to be processed through approved e-wallets and know your customer (KYC) guidelines, the process of a business identifying and verifying the identity of its clients, needs to be followed because the SEC acts to prevent money laundering. It could be said that Thailand has accepted ICOs gradually; however, strict laws are probably blocking some of the best cryptocurrencies from being invested in Thailand, leading to the loss of investment opportunities. Currently, bitcoin and ethereum are the only cryptocurrencies accepted globally; therefore, it is interesting to study the understanding of ICO investment and the investors' interests regarding the acceptance of ICOs for investment in the Bangkok metropolitan (Jossthong & Pisitchinda, 2018).

While ICOs have been discussed among experts globally, it is just the beginning of ICO research. Many existing empirical studies mainly examine the factors affecting ICO success, for example, the studies of Ante et al. (2018), Fisch (2019), Masiak et al. (2020), and Momtaz (2019), and investigate post-ICO performance, for example, the research of Benedetti and Kostovestky (2021) and Lyandres et al. (2019). Some studies evaluate ICOs from regulatory, societal, and geographical points of view, for example, the research of Cohney et al. (2019) and Huang et al. (2020). In contrast, the empirical research on the acceptance of ICOs in a specific country where ICO investment is new is non-existent.

Therefore, it is critical to study the understanding of ICO investment and the investors' attention regarding the acceptance of ICOs for investment in the Bangkok metropolitan, Thailand. This study aims to study the factors affecting the investors who are interested in ICO investment and to study whether cognition in ICO investment affects decision-making in investment. This study contributes to assisting investors who are interested in ICO investment in Thailand since the study examines the factors affecting ICO investors in Thailand and explores cognition in ICO investment affecting the decision-making of ICO investors in the Thai digital token market. Therefore, investors are able to explore the opportunities and risks of cryptocurrency investment in the Thai market.

To outline the structure of the paper, the research is divided into six major sections. The first section is an introduction. The second section is a review of the literature. The third section, research methodology, describes and discusses the methods used to carry out this study. The fourth section, results, summarizes the study's findings. The fifth section is a discussion, while the sixth section is a conclusion, limitations of this study, and research recommendations are presented in this section.

2. LITERATURE REVIEW

2.1. The use of ICOs

Since there are numerous companies developing blockchain technology, two examples of cryptocurrency are given to demonstrate the business models of ICOs and the disruption of ICOs to existing industries. Bitcoin is one of the most popular examples of industry disruption. It is a distinct crypto token running on its own blockchain and protocol and its design is special in order to facilitate the cryptocurrency exchange from one user to another user with no need for banks. This concept of this kind of digital token like bitcoin is called "a decentralized monetary system", which means that intermediaries like banks are not necessary for exchanging the value of digital tokens. A decentralized network of bitcoin users governed by the bitcoin blockchain and the bitcoin protocol provides computing power to facilitate and validate transactions; therefore, the token created on the bitcoin blockchain network is the medium of value exchange and it can be used to transfer money to other bitcoin holders. Bitcoin holders who provide computing power are bitcoin miners and these miners will earn bitcoin tokens based on how much effort they spent on the additional bitcoin tokens. A public ledger, such as a blockchain, keeps all validated and saved transactions of bitcoin users (Hsieh et al., 2018; Mendoza-Tello et al., 2018; Meunjak et al., 2018). Lipusch (2018) stated that although there are limited capabilities of bitcoin, for example, a low transaction volume compared to conventional payment systems, bitcoin provides an interesting perspective for a decentralized monetary system. The main benefit of this decentralized monetary system is excluding intermediaries such as banks from the exchange process leading to the independence of the token holders, for example, borderless and frictionless transactions. Since bitcoin transactions do not rely on intermediaries, the exchange fees are low or free.

Filecoin, another example, is a token running on its own blockchain and protocol and it was specifically developed to serve a service in the selling and buying of distributed cloud storage. The business model of Filecoin is believed to challenge well-known storage providers like Dropbox and Amazon. This kind of tokens like Filecoin can be used to purchase digital storage. Storage providers are called "miners" and they will increase their tokens by providing distributed cloud storage to their clients. In other words, clients hire miners to store or retrieve data by spending Filecoin. Therefore, miners have a powerful incentive to provide as much storage space as they can and rent it out to clients. Transactions between Filecoin's miners and clients are validated by the Filecoin blockchain and this blockchain serves as a record of their ledgers. Hence, anyone is able to rent out hard drive space and provide storage for the blockchain networks, leading to lower fees than existing centralized websites. One of the advantages of this blockchain model is safety because it is harder to temper with decentralized data. Cheaper costs are another advantage of this model as anyone is able to provide storage, so it is competitive among storage providers; therefore there are cost reductions (Lipusch, 2018; Howell et al., 2020).

2.2. Potentials and challenges of ICOs

According to a financial point of view, ICOs bear the potential to democratize the funding of current types of ventures together with innovation by opening up venture fundraising to worldwide cryptocurrency buyers who are willing to support blockchain companies where investors were previously reluctant to support because of selection biases (Mollick & Robb, 2016). Therefore, ICOs can fill these funding gaps of specific companies such as open-source technology companies and blockchain technology companies by matching them with proper investors. In addition, ICOs can help to distribute the high geographical concentration of venture capital. One of the problems of venture capital is that its distribution is uneven. Some areas, such as Silicon Valley, might experience an abundance of risk capital, whereas other areas face a chronic shortage of risk capital. ICOs, web-based funding, can connect investors and worldwide companies, regardless of the locations (Lipusch, 2018).

From a technological point of view, ICOs bear the potential to disrupt the web. They incentivise developers to develop new technologies and trigger blockchain protocols as well as their applications built on top of these protocols. This creates a paradigm shift since there was no previous mechanism incentivising the development of general-purpose technologies, for example, the Internet or the Blockchain. In the past, public institutions were the main developers of such technologies. Even though they bore the major costs of disruptive technology development, they could fail to fully capitalize on them. Private companies like Google and Facebook were the main organizations that derive advantages from the web. These companies could appropriate value by developing and selling applications that were built on top of web protocols; as a result, the innovations on these web protocols were improved slowly because of a lack of incentives. ICOs, in contrast, offer developers a new method to monetise new protocol innovations directly; hence, they facilitate the development of web protocols (Greenstein, 2015; Patrickson, 2021). Therefore, crypto token holders not only help to create new protocols but in the meanwhile, they also help to incentivise the development of new innovative applications on top of these protocols (Lipusch, 2018).

Even if ICOs contain various potentials, there are some challenges that need to be concerned for ICOs to become a reliable and proper investment option. First, the precarious legal status of ICOs is the most concerning as it is still not clear which types of digital tokens are defined as securities and which types are not (Lundy et al., 2017). This creates significant impacts on investor protection because certain legally enforceable rights of investors are guaranteed by securities, whereas other kinds of tokens such as utility tokens cannot grant such investors rights (Lundy et al., 2017; Tapscott & Tapscott, 2017). This uncertainty causes high risk to ICOs investors because it can lead to a number of problems from speculation and misinformation to misconduct and reduce trust in this type of funding in the long run (Kastelein, 2017). The ecosystem that develops around these ICOs can amplify this risk in the future. The obvious example might be digital currency exchanges which grant access to a broad market and are currently subject to only limited laws and regulations. Besides the legal risk, cryptocurrency exchanges are also characterized by system risks, for example, significant lag time and low-security standards, and this could lead investors to be a prominent target for cyber-attacks. Such risks are minimized by investors themselves, for example, by investing in a cryptocurrency company that provides adequate transparency (Lipusch, 2018; Piñeiro-Chousa et al., 2021).

3. METHODOLOGY

This study defines the investor acceptance of ICOs, a dependent variable, as the willingness to accept digital funding for new initiatives or goods of a startup. This startup will raise capital through crypto token exchanges. This implies that cryptocurrencies such as bitcoin and ethereum will be traded in return for new products or other advantages offered by a firm to investors who are interested in the respective projects. This strategy differs from an initial public offering (IPO) in that acquiring digital tokens does not entitle the holder to become a stakeholder in the company that develops the new cryptocurrency. According to concepts and theories of funding to develop a brand-new cryptocurrency, the aims for development in each cryptocurrency are distinct, so investors would invest in various new cryptocurrencies in which they have an interest and anticipate a short- and long-term increase in its value. This strategy is akin to purchasing IPO shares on speculative grounds. Consequently, this study may split the independent factors that influence the acceptance of ICOs in Thailand into three categories: 1) demographic factors, 2) information and news perception, and 3) investing and ICO investment knowledge.

The sample consists of 402 Thai investors presently investing in financial instruments who reside in the Bangkok metropolitan area. These respondents were selected by convenience sampling. The data were gathered through the use of closed-ended questionnaires. Testing was used to determine whether measuring instruments were reliable and accurate. It is critical to understand that an instrument's validity refers to how well it measures the researcher's conceptual framework (Siripipattanakul et al., 2022). According to Sitthipon et al. (2022), a typical survey has a confidence level of 95%. Data collection employed non-probability sampling with a sample error of 5%, a precision level of 95%, and a minimum of 385 cases at p = 0.5. Hence, the sample size was set to 402 samples, over a minimum of 385 cases. The data were collected between January and April 2022. Then, a binary logistic regression analysis was employed for data analysis. The dependent variable was the acceptance of ICOs for investment in the Bangkok metropolitan, and two dummy variables were indicated as *accepted* (1) and *unaccepted* (0). The independent variables were divided into three groups: 1) Demographic factors including gender (*GENDER*), an education level (*EDU*), career (*CAREER*), monthly income (*INCOME*), saving (*SAVING*), and value of investing (*VALUE*); 2) Perception of information and news towards media (*NEWSPAPER, MEDIA, BOOK,* and *SEMINAR*); 3) Cognition in general investment and ICO investment including knowledge about ICOs and understanding about ICOs (*COG*).

4. RESULTS

Table 1 shows the adjusted scores in the percentage of weight scores arranged by significant levels of variables. Pearson Chi-square values were used in order to set the scores in percentage based on the significance of individual variables.

Table 1. The adjusted scores in the percentage of weight scores arranged by a significant level of variables

No.	*Variables*	*Pearson Chi-square*	*Score (%)*
1	Gender	141.072	5.42
2	Education level	293.536	11.28
3	Occupation	579.534	22.27
4	Average monthly income	632.658	24.31
5	Value of investing in financial instruments	427.532	16.43
6	Average monthly savings	528.175	20.39
Total score			100

Source: Processed data.

According to Table 1, the calculation focuses on only six significant demographic factors: gender; education level; occupation; average monthly income; the value of investing in financial instruments; and average monthly savings. The score of average monthly income is the highest score, accounting for 24.31%, followed by occupation, amounting to 22.27%, and average monthly saving, accounting for 20.39%.

The scores in Table 1 were replaced in the existing database and analyzed by binary logistic regression, and a score of each variable was calculated by multiplying the proportion of the number of participants by the highest score set for a variable. Independent variables in this analysis include demographic factors (gender, education level, occupation, average monthly income, value of investing in financial instruments, average monthly saving, and cognition in investment test), while the dependent variable is acceptance of ICOs for investment in the Bangkok metropolitan area.

As shown in Table 2, average monthly income shows the highest weight score, accounting for 24.31%. Moreover, there are two variables obtaining the highest weight score in this group, including income lower than 15,000 baht and income of 20,001 to 30,000 baht, and both variables weigh 6.32%. The second highest score group is occupation, amounting to 22.27%, and the student variable obtains the highest score in this group, accounting for 9.58%. The third highest score group is average monthly saving, accounting for 20.39%, and the variable of respondents who have saved 1,000 to 4,000 baht per month shows the highest score among this group, accounting for 9.94%.

Table 2. Weight scores for individual variables in each group of demographic factors

Variables	*Scores*
Gender	(5.42)
Male	2.11
Female	3.31
Education level	(11.28)
Lower than a bachelor's degree	1.35
Bachelor's degree or equivalent	8.35
Master's degree and higher	1.58
Occupation	(22.27)
Freelance	0.00
Government official/State enterprise employee	1.34
Company employee	8.46
Business owner	2.89
Students	9.58
Average monthly income	(24.31)
Lower than 15,000 baht	6.32
15,001–20,000 baht	4.13
20,001–30,000 baht	6.32
30,001–40,000 baht	1.94
40,001 baht or higher	5.59
Value of investing in financial instruments	(16.43)
10,000–30,000 baht	11.50
30,00–60,000 baht	1.97
60,001–90,000 baht	0.66
90,001–120,000 baht	1.31
120,001 baht or higher	0.99
Average monthly saving	(20.39)
1,000–4,000 baht	9.94
4,001–8,000 baht	4.87
8,001–12,000 baht	2.64
12,001–16,000 baht	1.22
16,001–20,000 baht	1.62
20,001 baht or higher	0.00

Source: Processed data.

4.1. Testing all independent variables

Table 3 shows that for independent variables in three groups affecting ICO investment in Thailand, at least one factor includes gender (*GENDER*), education level (*EDU*), average monthly income (*INCOME*), the value of investing in financial instruments (*VALUE*), average monthly saving (*SAVING*), newspaper (*NEWSPAPER*), social media (*MEDIA*), book (*BOOK*), seminar (*SEMINAR*), and cognition in general investment and ICO investment (*COG*).

Table 3. Assumption test of independent variables by omnibus tests of model coefficients

		Chi-square	*df*	*Sig.*
Step 1	Step	244.425	11	0.000
	Block	244.425	11	0.000
	Model	244.425	11	0.000

Source: Processed data.

As shown in Table 4 below, after taking into consideration −2 log likelihood (deviance) and pseudo-R-square (Cox & Snell R-square, Nagelkerke R-square), pseudo-R-square values are 0.456 and 0.616; therefore, this model can explain the dependent variable 45.60% and 61.60%, respectively, at the significant values of 0.05.

Table 4. Model test

Step	*−2 Log likelihood*	*Cox & Snell R-square*	*Nagelkerke R-square*
1	296.838	0.456	0.616

Source: Processed data.

Table 5. Results of multivariate analysis (Method = Enter)

Variables		*B*	*S.E.*	*Wald*	*df*	*Sig.*	*Exp(B)*
Step 1(a)	*EDU*	0.405	0.072	31.244	1	0.000	1.499
	INCOME	0.248	0.125	3.975	1	0.046	1.282
	VALUE	0.301	0.057	28.198	1	0.000	1.351
	SAVING	0.457	0.088	26.882	1	0.000	0.633
	NEWSPAPER	0.972	0.206	22.299	1	0.000	2.642
	MEDIA	-1.912	0.351	29.640	1	0.000	0.148
	BOOK	2.436	0.362	45.194	1	0.000	11.425
	SEMINAR	0.836	0.175	22.766	1	0.000	2.308
	COG	0.758	0.210	13.036	1	0.000	0.469
	CAREER	0.014	0.067	0.044	1	0.835	1.014
	Constant	-5.633	2.055	7.515	1	0.006	0.004

Source: Processed data.

The model is:

$$P = \frac{1}{1 + e^{-z}} \quad (1)$$

where, P is the possibility of participants accepting ICOs for investment in the Bangkok metropolitan.

$$Z = -5.633 + 0.758COG + 0.836SEMINAR + 2.436BOOK - 1.912 + 0.206MEDIA + 0.972NEWSPAPER + 0.457SAVING + 0.301\begin{pmatrix} VALUE, SAVING, NEWSPAPER, \\ MEDIA, BOOK, SEMINAR, COG, CAREER \end{pmatrix} + 0.248INCOME + 0.405EDU \quad (2)$$

After taking Exp(B) into account, if an independent variable changes its value, acceptance of ICOs for investment in the Bangkok metropolitan will be as in the following patterns:

- If *EDU* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 1.499 times.
- If *INCOME* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 1.282 times.
- If *VALUE* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 1.351 times.
- If *SAVING* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 0.633 times.
- If *NEWSPAPER* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 2.642 times.
- If *MEDIA* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will decrease from 1 to 0.148 (1-0.148 = 0.852).
- If *BOOK* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 11.425 times.
- If *SEMINAR* changes, the chance in accepting ICOs for investment in the Bangkok metropolitan will increase 2.308 times.
- If *COG* changes, the chance in accepting ICOs for investment in the Bangkok metropolitan will increase 0.469 times.
- If *CAREER* changes, the chance in accepting ICOs for investment in the Bangkok metropolitan will increase by 1.014 times.

The results from back testing in Table 6 show that calculation by this model offers an accuracy of 88.3% when the cut value is set at 0.500 or the scope of acceptance is 50%. This means that this model can predict the independent variable, acceptance of ICOs for investment in the Bangkok metropolitan, with an accuracy of 88.3%. However, when unaccepting is defined as 0.00, the accuracy is 83.9%, and when accepting is defined as 1.00, the accuracy is 91.3%. This means that there is a 91.3% chance that participants accept ICOs for investment in the Bangkok metropolitan area.

Table 6. Testing the forecasting model by back testing using all independent variables

Observed			Predicted		
			Accepted		Percentage correct
			No	Yes	
Step 1	Accepted	No	135 (33.58)	26 (6.47%)	83.9
		Yes	21 (5.22)	220 (54.73%)	91.3
	Overall percentage		38.81%	61.19%	88.3

Note: The cut value is 0.500.
Source: Processed data.

4.2. Testing only significant independent variables

Table 7 shows that for independent variables in three groups affecting ICO investment in Thailand, at least one factor includes education level (*REEDU*), average monthly income (*REINCOME*), the value of investing in financial instruments (*REVALUE*), average monthly saving (*RESAVING*), newspaper (*NEWSPAPER*), social media (*MEDIA*), book (*BOOK*), seminar (*SEMINAR*), and cognition in general investment and ICO investment (*COG*).

Table 7. Assumption test of independent variables by omnibus tests of model coefficients

		Chi-square	df	Sig.
Step 1	Step	244.381	10	0.000
	Block	244.381	10	0.000
	Model	244.381	10	0.000

Source: Processed data.

As shown in Table 8, pseudo-R-square values are 0.458 and 0.618. Thus, this model can explain the dependent variable (the chance of accepting ICOs for investment in the Bangkok metropolitan) 45.80% and 61.80%, respectively, at the significant values of 0.05.

Table 8. Model test

Step	–2 Log likelihood	Cox & Snell R-square	Nagelkerke R-square
1	296.882	0.458	0.618

Source: Processed data.

Table 9. Results of multivariate analysis (Method = Enter)

Variables		B	S.E.	Wald	df	Sig.	Exp(B)
Step1	*EDU*	0.406	0.072	31.492	1	0.000	1.501
	INCOME	0.245	0.124	3.900	1	0.048	1.278
	VALUE	0.297	0.052	32.484	1	0.000	1.345
	SAVING	0.450	0.082	30.485	1	0.000	0.637
	NEWSPAPER	0.961	0.199	23.315	1	0.000	2.616
	MEDIA	1.912	0.350	29.805	1	0.000	0.148
	BOOK	2.425	0.357	46.250	1	0.000	11.302
	SEMINAR	0.823	0.163	25.407	1	0.000	2.278
	COG	0.750	0.206	13.279	1	0.000	0.473
	Constant	−5.490	1.952	7.912	1	0.005	0.004

Source: Processed data.

The model is $P = \frac{1}{1+e^{-z}}$, where P is the possibility of participants accepting ICOs for investment in the Bangkok metropolitan.

$$Z = -5.490 + 0.750COG + 0.823SEMINAR + 2.425BOOK + 1.912MEDIA + -0.961NEWSPAPER + 0.450RESAVING + 0.297REVALUE + 0.245REINCOME + 0.406REEDU \quad (3)$$

After taking Exp(B) into account, if an independent variable changes one unit, acceptance of ICOs for investment in the Bangkok metropolitan will be as in the following patterns:

- If *REEDU* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 1.501 times
- If *REINCOME* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 1.278 times
- If *REVALUE* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 1.345 times.
- If *RESAVING* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 0.637 times.
- If *NEWSPAPER* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 2.616 times.
- If *MEDIA* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 0.148 times.
- If *BOOK* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase 11.302 times.
- If *SEMINAR* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 2.278 times.
- If *COG* changes, the chance of accepting ICOs for investment in the Bangkok metropolitan will increase by 0.473 times.

The results from backtesting in Table 10 show that calculation by this model offers an accuracy of 89.56% when the cut value is set at 0.500 or the scope of acceptance is 50%. This means that this model can predict the independent variable, acceptance of ICOs for investment in the Bangkok metropolitan, with an accuracy of 89.56%.

Table 10. Testing of a forecasting model using only significant independent variables by back testing

Observed			*Predicted*		
			Accepted		*Percentage correct*
			No	*Yes*	
Step 1	Accepted	No	140 (34.83%)	26 (6.47%)	84.34%
		Yes	16 (3.98%)	220 (54.73%)	93.22%
	Overall percentage		156 (38.81%)	246 (61.2%)	89.56%

Note: The cut value is 0.500.
Source: Processed data.

To sum up, the accuracy of forecasting the acceptance of ICOs for investment in the Bangkok metropolitan using only significant independent variables (Table 10), 89.56%, is higher than that of using all independent variables (shown in Table 6), 88.3%.

5. DISCUSSION

According to the findings, income, the value of investing in financial instruments, saving, perception towards media, and cognition in ICO investment could forecast the acceptance of ICOs for investment in the Bangkok metropolitan significantly. The case studies from 2016 to 2018 could conclude that many features of ICOs affect ICO growth. Investors usually prefer to invest in ICOs that gain a large number of profits in short term rather than investing in ICOs earning profits in the long term because investors have insufficient knowledge in ICO investment, so they read only white papers prepared by a company for investment. Hence, investors should gain more knowledge in investment for improving their abilities. Cognition is defined as understanding the surrounding environment divided into two types, deep knowledge and wide knowledge (Bayne et al., 2019). Cognition could be the ability to apply facts, ideas, insight, and associating skills to any situation. According to the ideas regarding the perception of essential news, this information could be used for decision-making and when there is concern about some issue, the perception of information needs to be widened; for example, the sources of information should not be limited so that people could obtain interesting news and information from different sources such as media, online networks, and other people. The findings from this study indicate that books and magazines about investment and attending seminars or meetings have a relationship with the acceptance of ICO fundraising. Regarding the study in ICO investment in order to study factors affecting ICO investors, the study of Boreiko and Navroop (2018) indicates that successful ICOs could be from companies that obtain sufficient information and have excellent communication with investors leading to building trust among investors. These ideas agree with this study which finds that ICO investment will impact the economy and ICO funding is reliable. Since clear rules could increase the value of digital tokens, ICO legislations have been established in many nations such as Switzerland, Singapore, and Russia. In Thailand, ICO rules have not been solidified yet. Therefore, making the decision to invest in ICOs or not depends on national rules and laws as well.

6. CONCLUSION

In conclusion, factors affecting the acceptance of ICOs for investment in the Bangkok metropolitan include income, the value of investing in financial instruments, saving, perception towards media, and cognition in ICO investment. This study could lead to a better understanding of factors affecting the acceptance of ICOs for investment. It provides the existing literature on factors affecting the acceptance of ICOs for investment. Hence, it could be used to guide future research on factors affecting the acceptance of ICOs for investment. It may also aid academics in broadening their research by incorporating more potential elements. Moreover, this study contributes to assisting investors interested in ICO investment in Thailand by examining the factors affecting ICO investors in Thailand and cognition in ICO investment influencing the decision-making of ICO investors in the Thai digital token market. As a result, investors can investigate the opportunities and risks associated with cryptocurrency investment in the Thai market and beyond. The study's limitation is that the nature of this study is a self-administered questionnaire. Consequently, qualitative studies, such as interviews or focus group discussions, could provide insight for future research. Therefore, future research should explore additional variables influencing ICO investment in Thailand, such as the competence of ICOs in Thailand and the interest of overseas investors in ICO investment in Thailand. Moreover, for contemporary ICO investments, it is necessary to understand the Thai regulations governing ICO investments that have an influence on ICO investments in Thailand. The recommendation based on the findings is that, before investing in initial coin offerings, investors who are interested in ICOs are advised to conduct extensive research on the associated dangers. Involved government authorities should explicitly establish the norms to safeguard inventors, and in the meantime, funding should not be impeded.

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