Financial Behaviour, Financial Self Efficacy and Intention to Invest in Cryptocurrency

M. Kurnia Rahman Abadi
Department of Management, Faculty of Economics and Management,
University of Darussalam Gontor, JL. Raya Siman Km 6, Siman, Ponorogo, Indonesia
Email: didikkurnia@unida.gontor.ac.id

Hairul Azlan Bin Annuar
Department of Accounting, Kulliyyah of Economics and Management,
IIUM, Malaysia
Email: hazalan@iium.edu.my

Abstract

The Theory of Planned Behaviour is used in this study to investigate the investment intentions of young potential investors in Indonesia. As supplementary dimensions, financial self-efficacy, risk-taking proclivity, and inclination for innovation are offered. A questionnaire-based survey was utilised to collect responses from 276 potential investors, and AMOS and SPSS were used to identify correlations between the components. Financial self-efficacy appears to play a dual function in the association between personality characteristics and investment intention, according to the data. The study only looks at investing intentions, not actual investment behaviour or demographic characteristics. The findings might help financial service providers create "behavioural portfolios" based on their clients' personality attributes, fostering financial confidence in individuals. This research is one of the first efforts in the Indonesian cryptocurrency market to introduce financial self-efficacy as a dual construct within the TPB framework.

Keywords: *Theory of planned behaviour, financial self-efficacy, cryptocurrency*

A. INTRODUCTION

In the current era of technological advancement, various types of digital assets such as cryptocurrencies are growing rapidly. Digitalisation and the industrial revolution are the main causes of the popularity of cryptocurrencies around the world, including in Indonesia as an investment instrument. Individual investment in financial sectors has also expanded dramatically in the past few years (Al-Gamrh et al., 2020; Yuliansyah et al., 2016). This can be attributed to the ease of access to the internet and information technology facilities that can reduce investment costs compared to previous capital. In addition, Internet-Based Investment also offers Robo-Advisor, and mechanized platform that put on algorithms to provide investment recommendations to individuals. With the ease of access and information technology, investing in financial markets has become easier for individuals. Less experienced investors can easily invest without in-depth knowledge of the financial markets. Financial markets offer opportunities to generate returns on invested capital. In addition, education and awareness about investment is increasing. The suppleness of financial sector mechanisms allows one to quickly cash out funds that have been invested. There is also a diversity of financial assets that allows investors to discovery belongings that suit their investment objectives.

However, the decision to invest in financial markets, especially cryptocurrencies, requires rational thinking and careful research. Investors should have a sound investment plan and understand the risks involved before engaging in investment activities. In addition, investors should be wise in managing finances and invest according to personal financial goals. Many investors fail to recognise their investment purposes and get entangled between their sights and financial advisors. Investors are also often deceived and affected by market trends. Prior researches have exposed that young investors have difficulty managing their return expectations with their risk tolerance (Abadi & Hamdan, 2023; Park & Park, 2017). Furthermore, around 43% of investors believe they are capable of making sound investment decisions, yet they fail to attain the investment purposes due to a lack of a solid understanding of investment science (Otoritas Jasa Keuangan, 2023). As a result, it is critical to understand how people plan their investments and what variables impact their decision to invest in the digital currency.

Many studies have addressed investment decisions made by individual investors (Dinç Aydemir & Aren, 2017; Pandey & Jessica, 2019; Raut et al., 2020). But in Indonesia, which is one of the largest developing countries, little research on individuals' willingness to participate in financial markets has been conducted, but not on cryptocurrencies. The aims of this research is to understand the motivations of people investing in the Indonesian cryptocurrency market. Overwhelming of young Indonesians are not involved in financial markets as users or investors, despite the advancements taking place there. Based on the data found, the growth of cryptocurrency in Indonesia in 2022 is significant. From October 2022 to August 2023, the sum of cryptocurrency players in Indonesia reached 17.91 million people, but the growth never exceeded 1 per cent during that period. In 2022, the physical market trading of crypto assets in Indonesia recorded a transaction value of IDR 296.66 trillion. This indicates significant interest and participation in cryptocurrencies in Indonesia. The number of investors increased by 0.67 per cent or about 12,000 people compared to the previous month, which was August 2023 with a total of 17.79 million people. However, when viewed from an annual perspective, the growth is more striking. In the span of one year, from September 2022 to September 2023, there were an additional 1.64 million crypto investors (Otoritas Jasa Keuangan, 2023). As a result, the option of investing purpose appears to be more appropriate in this case.

The Theory of Planned Behaviour (TPB) is used in this study to examine the intention to invest of young Indonesian potential investors. Previously, this approach was used to assess investment intentions. Some previous studies using TPB include those conducted by Fatima Akhtar et al. (2019), Sreeram et al. (2017), Yusuf Abdulkarim et al. (2023), J.S Kumar et al. (2022) and Abadi and Hamdan (2023). According to this idea, a person's purpose is a direct cause of their action. Three essential components determine intention namely attitude, subjective norms, and perceived behavioural control. In the context of this enquiry, TPB is used to understand the factors that affect the investment intentions of young Indonesian potential investors.

Investing in crptyocurrency in Indonesia

Crypto exchanges have been officially launched on 17 July 2023. It is proved by the Decree of the Head of Bappebti Number 01/BAPPEBTI/SP-BBAK/07/2023. In the last decade, digital evolution has changed the transaction behaviour of economic agents to digital, and currencies are no exception. One of these digital currencies is cryptocurrency. It is a medium of exchange in which transactions are conducted virtually or over the internet. Bitcoin, Ethereum, Litecoin, and Dogecoin are some examples of the thousands of cryptocurrencies that exist in the world today. In some countries, cryptocurrencies are rapidly growing as an alternative to cashless transactions, such as cross-border remittances (El-Chaarani et al., 2023). In 2020, there were 10 countries whose citizens owned large amounts of cryptocurrency. These 10 countries are Nigeria, Vietnam, the Philippines, Turkey, Peru, Switzerland, China, the United States, Germany and Japan.

Publications of international organisations such as the World Bank and IMF discuss cryptocurrencies as part of digital currency or virtual currency. Cryptocurrencies have three specific characteristics, which are that they are not backed by an underlying asset, have zero intrinsic value, and do not represent an obligation to any institution. The exchange of cryptocurrencies is done through a distributed ledger and does not rely on any particular institutional arrangement or intermediary for peer-to-peer exchange. Cryptocurrencies rely on cryptographic techniques to achieve consensus. Earns and Young (2018) in their publication related to accounting for cryptoassets explain cryptocurrency as a part of crypto-assets that are used for peer to peer transactions as a substitute for government-issued fiat currencies, and are used for various purposes and are independent of central banks (Ozili, 2023). While crypto-asset itself is defined as digital assets recorded in a distributed ledger Earns and Young categorises cryptocurrency as one type of cryptoasset.

Referring to the aforementioned definitions, there are several elements that characterise cryptocurrencies. Firstly, cryptocurrency is not regulated by any particular institution or government agency. Second, cryptocurrencies are not supported by underlying assets. Third, cryptocurrency trades are documented through a distributed ledger, called blockchain. Fourth, cryptocurrencies can be used for a multiplicity of goals, including as a means of payment and an investment instrument. Cryptocurrencies are created through a chain of code or blockchain, which is the data structure used in the distributed ledger. Blockchain uses cryptographic methods and algorithms to record and synchronise data in a network. Data that has been recorded and synchronised in a blockchain cannot be changed (Yeoh, 2017). In addition, cryptocurrencies cannot be duplicated and their owners cannot be traced. The way cryptocurrencies are stored and used is also different from traditional currencies or what cryptocurrency players call 'fiat'.There are several parties involved in a cryptocurrency transaction, including the issuer as the party that issues the cryptocurrency, the miner as the party that validates the transaction into the blockchain, the exchange as the intermediary for buying and selling, and the user of the cryptocurrency.

In Indonesia, the government through the Ministry of Trade issued regulations to legalise the trading of crypto assets as amount of article of trade assets. This means that cryptocurrencies have been deemed acceptable as commodities in Indonesia within February 2019 relying on the Commodity Futures Trading Supervisory Agency Regulation Number 5 of 2019 concerning Technical Provisions for the Implementation of the Physical Market for Crypto Assets on the Futures Exchange. This decision is part of the development and history of cryptocurrency in Indonesia. Moreover, Bappebti also requires that the types of crypto assets that can be traded must at least meet three criteria, namely based on ledger technology, in the form of crypto backed assets, and have the results of an assessment using the Analytical Hierarchy Process (AHP) method determined by Bappebti (Novita & Imanullah, 2020). Especially for the AHP method assessment, players must consider the provisions regarding the value of the crypto asset market capacity and whether or not it is included in the transactions of major crypto asset exchanges in the world.

In contrast, Bank Indonesia, using the term virtual currency in its regulation, emphasises the prohibition of the use of virtual currency as a means of payment because it is not in accordance with Law 7/2011 on Currency. In addition, it also prohibits payment system service providers from processing payment transactions with virtual currency (PBI No. 18/40/PBI/2016). Financial technology providers are also prohibited from conducting payment system activities with virtual currency (PBI No. 19/12/PBI/2017). Even the Minister of Finance showed support for the Bank Indonesia regulation.

Through a Press Release dated 22 January 2018, among others, it was stated that one of the risks of owning and/or trading virtual currencies that have unclear underlying assets that underlie their value, speculative virtual currency transactions can pose a risk of inflating the value (bubble) which is not only detrimental to the community but also has the potential to disrupt financial system stability.

In Indonesia, cryptocurrencies entered the trading market in 2013, with only three 'exchangers' conducting Bitcoin transactions. But in its development, cryptocurrency grew rapidly in the Indonesian market. According to Bappebti's records, there are currently 229 recognised cryptocurrencies in Indonesia and 13 companies registered as physical traders of crypto assets. Based on Bappebti data, the number of crypto asset investors in Indonesia reached around 9.5 million investors as of October 2021. Meanwhile, crypto investment transactions in Indonesia reached IDR 478.5 trillion as of July 2021, an increase of 5 times. Meanwhile, the transaction value in the Indonesian crypto market can reach an average of IDR 1.7 trillion per day. Some types of crypto assets that are in high demand in Indonesia include bitcoin, ethereum, and cardano. However, crypto transactions in Indonesia are still relatively small, at only one per cent of global volume transactions.

B. LITERATURE REVIEW

Icek Ajzen (1985) presented the TPB, which evolved from the Theory of Reasoned Action (Ajzen and Fishbein, 1980). The TPB is one of the most widely used models to analyze the impact of knowledge and motivation on human conduct (Ajzen, 1991). The theory explains conduct in the context of motivating elements, which capture intents, such as attitude, subjective standards, and perceived behavioural control. Attitude may be described as the degree to which an individual receives a favorable or negative evaluation of executing a specific activity (Bizri et al., 2018), a subjective norm is described as societal pressure that drives a person to engage in a specific conduct (Ajzen, 1991). The TPB also seeks to evaluate and predict nonvolitional behaviours of its components, such as perceived behavioural control (Ajzen, 1991). TPB assesses a person's perceived ease or difficulty while doing a certain activity (Ajzen, 1991).There are a number of studies that apply the TPB to predict individuals' intention to invest in financial markets. These research laid the groundwork for the use of the TPB in investing intentions.

As a result, if a person has a good attitude towards a certain activity, they are more likely to have a favourable intention to do that behaviour (Kirbrandoko, 2018). A significant amount of research have shown that attitude influences intention in a favourable and substantial way (Akhtar & Das, 2019; Baihaqqy et al., 2020; Kirbrandoko, 2018; Rasheed & Siddiqui, 2019; Raut et al., 2020). Individual attitudes towards investing in financial markets may have an essential role in establishing the intention to invest in order to reach the required degree of financial stability in the overall setting of the current study (Elia et al., 2022).

According to TPB, individuals are more inclined to join in the cryptocurrency market if those close to them recommend or believe that they should (Shaikh et al., 2020; Widyastuti et al., 2021). Therefore, a person may advance an intention to perform a precise behaviour under social force, even though they want to achieve the behaviour (Raut et al., 2020).

Financial self-efficacy (FSE) replaces perceived behavioural control. Bandura (1977) explains self-efficacy as "an individual's ever- beliefs about their capacity to plan and carry out particular steps towards accomplishing particular objectives" (Shaikh et al., 2020; Singh et al., 2017). As it enhances one's sense of confidence, it is one of the greatest predictors of particular behavioural performance (Shaikh et al., 2020; Singh et al., 2017). Greater confidence in obtaining desired positive results is frequently related to a greater acceptance for financial risk at the price of investment returns, as a result of excessive trading and unrealistic expectations of outcomes (Limbu & Sato, 2019)

A choice about whether or not to make investments in the financial sector is considered "risky" because decision-makers are unsure of the repercussions of their actions. This amount of uncertainty is frequently quantified by "perceived risk", (Lemieux, 2016) which is defined as the risk that inspires a decision-maker to participate in a specific pattern of behaviour. Because perceived risk is a biased appraisal of a dangerous circumstance (Haapamäki & Sihvonen, 2019; Parn & Edwards, 2019), it is heavily influenced by two psychological variables to consider: self-efficacy and wealth status. People with a high degree of self-efficacy believe they are capable of investigating (Konakll, 2015), digesting (Shaikh et al., 2020), and drawing suitable conclusions (Akhtar & Das, 2019b) from limited and ambiguous information. According to pertinent studies, self-efficacy impacts financial knowledge,

investing behaviour, wealth building, portfolio choice, savings, gender disparities, and retirement saving techniques.

One of the most contentious issues in the TPB literature, however, is whether perceived behavioural control can be substituted with self-efficacy. This topic has received a lot of attention in research on entrepreneurial inclinations (Sivaramakrishnan et al., 2017). According to research, self-efficacy is a clearer construct with a greater association with intention than perceived behavioural control. Intention to invest. Before we define investing intention, we'll define "behavioural intention" as an explicit precursor of behaviour (Ajzen, 2002). Intention is a representation of an individual's readiness to engage in a specific activity (Mishra et al., 2023). If all of the prerequisites of intention, specifically attitude, subjective norm, and perceived behavioural control, are good, an individual is more likely to undertake a certain behaviour.

The TPB model is frequently utilised in behavioural studies, but research on investment behaviour is still inadequate. For instance, East (1993) used TPB to figure out intentions to invest in the UK private sector and discovered that intentions were primarily affected through variables such as suggestions from associates as well as the availability of resources (Xiao & Porto, 2017); Phan and Zhou (2014), in contrast, discovered that emotional variables such as excessive trust, confidence, and collection bets were largely influenced by factors such as overconfidence, optimism, group bets.

In this study, we attempt to investigate how people view the potential of investing in the stock market. As a result, we present our initial hypothesis as follows:

H1. Cryptocurrency investment intention is positively connected to attitude (H1a), subjective norm (H1b), and FSE (H1c).

Incorporation of additional constructs into the TPB

Domain-specific elements can be added into the TPB to boost predictive power, according to previous research (Yadav & Pathak, 2016). To evaluate investment intention among potential investors, two new constructs, namely financial knowledge and personality characteristics, have been integrated into the TPB's fundamental constructions. Financial knowledge is taken into account since it plays a significant role in shaping financial conduct. (Khan et al., 2017).

Personality is a further consideration since studies on behavioural finance have demonstrated that personal qualities influence investing decisions (Fraser et al., 2015). Prior study has shown that self-efficacy (also known as FSE) is a powerful predictor of investing risk-taking (Akhtar & Das, 2019a; Shaikh et al., 2020). Krueger and Dickson (1994) demonstrated that self-efficacy promotes risk-taking by altering perceptions of opportunities and risks. Furthermore, Badunenko et al. (2009) and Montford and Goldsmith (2016) discovered that women had a lower degree of FSE than males, therefore they opted for lower-risk investments, which leads to poorer long-term returns. According to this research, FSE aids in the discovery of fresh investment prospects.

Furthermore, studies on behavioural finance have proven that an assortment of knowledge and data solely cannot transform a person into an investor (Okello Candiya Bongomin & Munene, 2020); truth, certain psychological aspects, such as personality traits, perform an extremely significant part in assessing investment intentions (Mamidala et al., 2023) and financial choice-making (Misra et al., 2019).

This study focuses on investor personality qualities such as a predilection for innovation (PI) and risk-taking proclivity (RTP) (El-Chaarani et al., 2023). According to the literature, PI is defined as the capacity to monitor and respond to essential environmental innovations (Hossain, 2021). In the meantime, RTP may be characterized as an individual's proclivity to take risks when making conclusions. For three key reasons, these two personality qualities have been employed as indicators of investing intentions. First, these personality traits have been employed to describe the conduct of individual investors. Second, RTP has been used to assess people's desire to make decisions; moreover, FSE has been linked to RTP; and, finally, the PI characteristic has been used to assess people's inclination for investing in hazardous stocks and trading extensively (Safa et al., 2015).

Based on the preceding explanation, FSE serves as a dependable indicator for both investment intention and personality traits. Consequently, we propose that while personality traits can forecast investment intentions, FSE exerts a significant impact, whether positive or negative. Moreover, we contend that individuals possessing the two aforementioned personality traits, namely PI and RTP, are more inclined to express an intent to engage in financial markets when they possess an extremely high

level of confidence in their abilities, and conversely, when their FSE is exceptionally low. Additionally, we acknowledge the findings of Baron and Kenny (1986), who suggest that exploring a model that considers potential mediation and moderation could provide a more comprehensive understanding of how the third variable (in this case, FSE) influences the dependent variable, specifically investment intention. From this reasoning, we hypothesise:

H2a. The connection between investment intentions and personality traits is mediated by FSE.

H2b. FSE plays a moderating role in the relationship between personality traits and investment intentions, with a stronger association observed when FSE is high compared to when it is low.

Research Framework

Upon the reason above, the relationship and hypotheses of the study variables can be defined in the following figure:
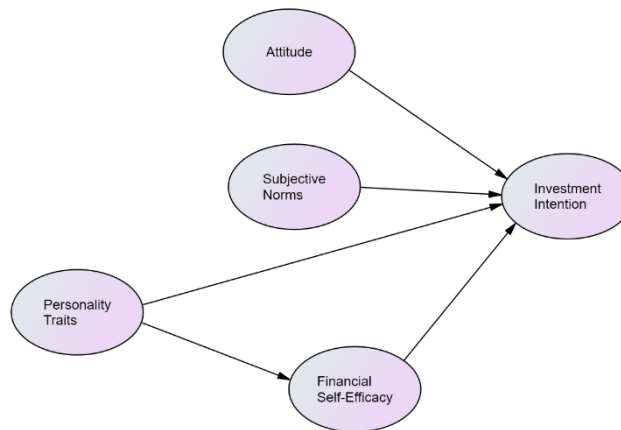

Figure 1. Research Framework.

C. METHODOLOGY OF RESEARCH

This study investigated the personality traits, financial behaviour, and investment intentions of young Indonesians in cryptocurrency. Between December 2021 and March 2022, 276 subjects were surveyed through the convenience sampling method. Three graduate students and five undergraduate students volunteered to help collect the questionnaires; they collected the data voluntarily. Volunteerism is the basis of this survey. The survey involved people from various cities, especially Jakarta, Bandung, Yogyakarta, Surabaya, and Malang. The selection of these locations was based on the large number of undergraduate, postgraduate, and doctoral students living in these cities. The study involved 276 participants, with 204 (74%) men and 72 (26%) women. Of these, 76 (27.5%) were married, and 100 (72.5%) were single. The majority of participants, 197 (71.4%), had a bachelor's degree, while 58 (21%) had a master's degree, and 21 (7.6%) had a doctorate. In terms of age, 106 (38.4%) participants were between 20 and 30 years old, while 116 (42%) were between 31 and 40 years old. The remaining 54 (19.6%) participants were aged 41 years and older. This is due to the fact that the researcher used an already-available group of respondents, namely S1-S3 students.

Questionnaire design

Given that this study is based on replies from potential investors who are familiar with cryptocurrencies, the questionnaire structure was then pre-tested by seven financial specialists.

Measurement of independent variables

Personality traits were assessed using a rating system developed by Hyrsky based on the Jackson Personality Inventory (Aren & Nayman Hamamci, 2020). Participants received feedback on their agreement or disagreement with six phrases describing their traits. Objective financial knowledge was measured using four statements related to key concepts in financial decision-making (Pangestu & Batara Daniel Bagana, 2022). Participants rated their responses on a scale of one to five. The investing attitude

of the Theory of Planned Behavior (TPB) was evaluated using three measures from Taylor, Todd, and Chen. Participants indicated their agreement or disagreement with three statements. Subjective norms were assessed with three questions adapted from Taylor and Todd, while perceived behavioral control over investment was evaluated using the Financial Self-Efficacy (FSE) scale (Widjaja et al., 2020). Thus, six statements were modified from the FSE scale, and defendants were requested to rate their answers on a five-point scale.

Measurement of dependent variables

To evaluate investment intent, three expressions based on Chen's (2007) research were employed. Participants were instructed to indicate their degree of concurrence or disagreement with their inclination to engage in the cryptocurrency market and encourage their acquaintances to do the same. Additionally, they were asked if they intended to invest in digital currency in the future. The survey included specific questions to mitigate common method bias (CMB) and guarantee coherence in the findings. Table I presents the scales, subscales, items, response options, and Cronbach's alpha for the variables being examined.

In addition, the assessment of investment intent involved the utilisation of three phrases derived from Chen's (2007) study. Respondents were prompted to express their level of agreement or disagreement with their interest in participating in the cryptocurrency market and persuade their friends and family to do so. They were also asked about their plans to invest in digital currency in the upcoming years. The survey included certain questions to minimise common method bias (CMB) and ensure the consistency of the results. Table I displays the scales, subscales, items, answer choices, and Cronbach's alpha for the variables under scrutiny.

Thus, in order to gauge investment intent, three phrases originating from Chen's (2007) research were employed. Participants were instructed to indicate their level of agreement or disagreement with their willingness to engage in the cryptocurrency market and encourage their social circle to do the same. They were also asked if they intended to invest in digital currency in the future. The survey included specific questions to reduce common method bias (CMB) and ensure coherence in the outcomes. Table I presents the scales, subscales, items, response alternatives, and Cronbach's alpha for the variables being investigated.

Sampling and data collection

The information collected for the present research came from self-administered questionnaires completed by 276 participants from different parts of Indonesia. The sample size was determined using a sample calculator at the 95% confidence level after taking into consideration the general population size. The sampling technique involved identification through a combination of "probability (stratified) and non-probability (purposive) sampling methods" (Vrontis and Papasolomou, 2007). The respondents were undergraduate, postgraduate, and doctoral students in Jakarta, Bandung, Yogyakarta, Semarang, Surabaya, and Makassar who responded via Google Form or direct questionnaire.

In addition, the sample obtained based on these demographic attributes is young, highly educated, and together in terms of gender and marital status. In fact, these characteristics reflect the Indonesian model and explain the characteristics of emerging markets. This study, which is the first of its kind that we are aware of, includes questions on the level of investment intentions and investment preferences, including cryptocurrencies. Table II shows the scales used in this study. The next step uses structural equation modelling (SEM) based on the data collected to determine the validity of the model built from this study.

D. RESULT AND DISCUSSION

According to the structural equation modelling (SEM) test outcomes, the CMIN/DF values were less than 5, and the RMSEA value was less than 0.05 (Table 1). In addition, all other metric values were above the criterion of 0.90. As a result of these figures, the model is adequate and has high usability. Table 2 shows how the research factors, which include the independent variables of personality traits, attitudes, subjective norms, and financial self-efficacy, play a mediating function. To measure the mediating effect of financial self-efficacy, this study uses the bootstrapping method (Table 2). The findings show that the relationship between personality traits, financial self-efficacy, and the intention

to invest in digital currency is 0.083 and 0.072, respectively. The 95% confidence intervals are the same for both variables, indicating that the relationship between them and investment intention is statistically significant.

Mediation analysis

We suggested a mediation-related hypothesis in the constructed conceptual model, in which FSE mediates the association between personality characteristics and investment intention. The proposed model was examined using the methods presented by Hoyle and Smith (1994) and Baron and Kenny (1986), which revealed a direct relationship between personality factors and investing intentions. This is followed by another strategy in which mediating factors, specifically personality characteristics (FSE) and investment goals, are included to examine the indirect impacts. The direct link between personality characteristics and investment intention was not significant in the second mediation analysis (Personality traits-Investment intention 0.07, $p = 0.001$). At this point, when the mediating variable (FSE) is included, the relationship between personality traits and FSE is shown to be positively significant (Personality traits-FSE 0.59, p 0.05). This data suggests that FSE completely mediates the influence of personality traits on investing intention.

Moderation analysis

A structural diagram was developed to evaluate the hypothesised moderation of H2b, and the two interaction variables of personality traits and FSE were computed using SPSS 20 before being entered into the model. The fit index was then calculated using the interaction moderation structural model. According to the results of the moderation model, FSE positively moderated the link between RTP and investment intention, as demonstrated by the standardised impact of the interaction term RTP_X_FSE (0.06, p 0.05). Similarly, as demonstrated by the standardised coefficient of the interaction term PI_X_FSE (0.09, $p=0.01$), FSE positively moderated the link between PI and investment intention. Furthermore, it was observed that higher levels of FSE, RTP, and PI were associated with greater levels of investment intentions in financial markets. Thus, FSE reinforces the positive relationship between RTP-investment intention and PI-investment intention in potential individual investors, thereby providing support for H2b.

Therefore, an investigation into potential differences in behavioural values and investment intentions by oldness was conducted. Six ANOVA analyses were conducted to assess age-related differences, followed by a Duncan's test if there were significant differences. Age did not affect collectivism or power distance. Notably, the 41–50 age group showed the highest levels of uncertainty avoidance and masculinity while exhibiting the greatest long-term orientation. In contrast, individuals in the 51-year age group showed the lowest intention to invest in cryptocurrencies. In addition, based on Table 3, this study found that the significance value of attitude on investment intention is 0.093, or >0.05. This means that hypothesis 1a in the findings of this study is rejected. The same was found for hypothesis H1b. This is because the significance value is 0.002, but in the negative direction. In contrast, hypothesis H1c is supported. The same thing happens in the mediation and moderation variables. FSE can both mediate and moderate the relationship between personality traits and Indonesian youth investment intention in cryptocurrency. This means that hypotheses 2a and 2b are accepted.

Discussion

Although risk-taking is related to the goal of investing in cryptocurrencies, the two are distinct thoughts. Aydemir and Aren (2017) stated that each person might take dissimilar risk recognition based on financial, social, and health factors. The variable of investment intention in cryptocurrency is used in this study. The aim is to consider the components that determine the investment intentions of potential individuals.

Table 1.

Goodness of fit values

CMIN/DF	RMSEA	GFI	IFI	CFI	TLI	NFI	RFI
3,016	0,02	0,985	0,958	0,966	0,934	0,928	0,917

As seen in Table 1, there are several factors that can influence Indonesian youth's investment intentions in cryptocurrency, and it cannot be generally concluded that attitude does not play a role. However, several reasons may explain why attitude is not always the dominant factor in Indonesian youth's investment intentions in cryptocurrency. Youth may lack understanding of cryptocurrencies and the underlying blockchain technology. If this lack of knowledge is not addressed, youth may tend to avoid investing in assets they do not fully understand (Abadi & Hamdan, 2023). The perceived high risk is also a consideration. While attitudes towards investing can be positive, the high perceived risk of cryptocurrencies can be a deterrent. Youth may view cryptocurrencies as risky and less stable than traditional investment options.

In addition, uncertainty regarding the regulation of cryptocurrencies in Indonesia may make some hesitant to invest. Youth who have a positive attitude towards investing but are concerned about laws and regulations may delay their investment decisions. Other researchers found that the cryptocurrency market is known for its high volatility (Aftab et al., 2023). Youth who have a positive attitude towards investing may be hesitant to enter a market that can experience significant price fluctuations. Also, youth may be more influenced by peers and social media than by general attitudes towards investing. If their social circle is less interested in or has a negative view of cryptocurrencies, this may influence their investment intentions (Mili & Bouteska, 2023).

Some youth may not have sufficient funds to invest, regardless of their attitudes towards investing. Personal finances can be a major factor in determining investment intentions (Sivaramakrishnan et al., 2017). They may also have different investment goals. For some of them, cryptocurrency may not suit their long-term or short-term goals. For this reason, it is important to remember that attitudes and investment intentions may vary among individuals. Some youth may remain positive towards cryptocurrency and choose to invest, while others may have other considerations that are more dominant in their investment decision-making. The finding that subjective norms have a negative effect on the investment intention of Indonesian youth in cryptocurrency (Table 3) shows that the higher the value of their subjective norms, the lower their investment intention. High values of subjective norms, or social norms perceived or assumed by individuals, can have a complex impact on the investment intentions of Indonesian youth in cryptocurrency. Some researchers have found that the main contributing element is the negative influence of the social environment. If the social norms around youth tend to be negative towards investing in cryptocurrency, this can make youth feel uncomfortable or hesitant to engage in the activity. Negative opinions and views from family, friends, or society can be a barrier to investment intentions.

Whereas other researchers suggest the fear of social rejection, youth may fear facing rejection or criticism from their social environment if they decide to invest in cryptocurrency. The fear of not being accepted by their social group can be a significant deterrent. This is due to a lack of understanding in the social environment. If a young person's social environment lacks understanding of cryptocurrency and sees it as risky or illegal, this may influence the young person's investment intentions. Lack of understanding among friends or family can create distrust towards investing in cryptocurrencies.

Another finding is the Social Compliance Theory. This theory states that individuals tend to conform to social norms in order to gain social support and approval. If social norms are against investing in cryptocurrencies, youth may be inclined to follow the norms in order to maintain their social relationships (Alam et al., 2019). In addition to financial risk, youth may also experience social risk if the surrounding norms are against investing in cryptocurrencies. They may avoid activities that are perceived as controversial or outside the norm in order to maintain their social reputation.

In this context, it is important to understand that these factors can vary across individuals and social groups. Some youth may be able to overcome negative norms and still engage in cryptocurrency investment according to their beliefs and knowledge, while others may be more influenced by the social norms around them.

Table 2.

The Mediation Effect of financial self-efficacy on the Effect of Personality Traits

Line	Relationship	β	SE
1	Personality Traits → financial self-efficacy	0.01	0.034
2	financial self-efficacy → investment intention	0.002	0.042
	Indirect effect	0.02	(0.021-0.124)

Note(s): * < 0.05; ** < 0.10; *** < 0.001; β 5 standardized regression estimate values were taken into account; 5,000 bootstrap samples; percentile confidence intervals = 95

The influence of personality traits on the financial self-efficacy of Indonesian youth in investing in cryptocurrency can be explained through several psychological and behavioural factors. Personality traits, such as levels of courage or caution, can influence how much a person is willing to take risks. If a person has a more risk-averse nature, they may feel more confident in investing their money in volatile assets such as cryptocurrencies. In addition, psychological resilience, which consists of psychological traits such as resistance to stress and uncertainty, can play an important role in dealing with the often high price fluctuations of cryptocurrencies. A person with good psychological resilience may be better able to cope with the emotional stress associated with investing, which in turn may increase their level of financial self-efficacy.

Other researchers have found that a person's interest in innovation and technology is also influential. A person who has a personality trait that is attracted to innovation and technology may be more inclined to take risks in investing in cryptocurrencies, which are assets that are closely related to blockchain technology and innovation in the financial world. Another reason is openness to experience (Mishra et al., 2023). Individuals who are more open to new experiences tend to be more willing to try new things, including investing in digital assets such as cryptocurrencies. This trait can increase financial self-efficacy as one feels more confident in exploring new and rapidly evolving financial domains (Ahmed et al., 2023). And last but not least, personality traits can also influence how much someone is interested in improving their knowledge of finance and investment. A curious person may be more inclined to understand and learn how to invest properly, which in turn can increase their level of financial self-efficacy.

It is important to note that the relationship between personality traits and financial self-efficacy is not always direct and can be influenced by many other factors, including life experience, education, and social environment. In addition, investment decisions always involve risk, and it is important for each individual to conduct in-depth research and understand the potential consequences before engaging in cryptocurrency or other financial asset investments. Therefore, it is very important to recognise that investing in cryptocurrencies carries significant risks, especially due to the unpredictable nature of the market. Therefore, investment decisions should be based on thorough analysis and a comprehensive understanding of the cryptocurrency market, rather than relying solely on a desire to avoid uncertainty. Regardless of cultural or other factors, it is highly recommended to conduct thorough research and seek advice from a qualified financial advisor before making any investment choices.

Financial self-efficacy, or financial confidence, can have a significant influence on the decision of young Indonesians to invest in cryptocurrency. Financial self-efficacy creates confidence in financial decision-making. Youth who are confident in their ability to plan and manage their personal finances may be more likely to seek out investment opportunities, including investments in cryptocurrency. Other researchers have suggested that the level of financial self-efficacy can influence one's perception of financial risk. Youth who have high levels of financial self-efficacy may feel more comfortable facing risks, including those associated with cryptocurrency price fluctuations (Sinlapates & Chancharat, 2023). They may be more inclined to see opportunities rather than risks. Moreover, cryptocurrencies are often associated with uncertainty and high price volatility. Individuals with high levels of financial self-efficacy may be better able to cope with this uncertainty with better strategies, including long-term investment

planning and a deep understanding of financial markets. Furthermore, financial self-efficacy is often related to the ability to set and achieve financial goals.

Youth who have good levels of financial self-efficacy may be better able to formulate clear investment goals, including short-term and long-term goals in the context of cryptocurrency investment. The issue of resilience to failure for youth is particularly important. Financially confident youth may be better able to cope with investment failures or losses. They can see failure as part of the learning process and not be emotionally shaken (Miskam, 2018), thus staying focused on their investment goals. The role of youth literacy in the context of cryptocurrency is also very influential. High levels of financial self-efficacy may encourage youth to improve their financial literacy. They may be more inclined to seek out investment-related information and education, including understanding more about cryptocurrencies before engaging in them.

Table 3.

Hypothesis Pathway

	Hypothesis Pathway			Estimate	S.E.	C.R.	P	Label
H1a	Investment intention	<--	Attitude	0,24	0,065	3,686	***	Supported
H1b	Investmet intention	<--	Subjective norms	0,089	0,046	1,922	0,025	Supported
H1c	Investment intention	<--	Financial self efficacy	0,4	0,088	4,533	***	Supported
H2a	FSE	<--	Personality traits	0,738	0,185	3,985	***	Supported
H2b	FSE	<--	Personality traits	0,097	0,038	2,55	0,011	Supported

It is important to note that, while financial self-efficacy can provide a positive boost, smart investment decisions still require good research and understanding of the market, as well as awareness of the risks involved. Therefore, it is important for young Indonesians to combine their financial confidence with a careful and knowledgeable approach to investing, especially in a dynamic market like cryptocurrency.

The concept of a mediating variable refers to a variable that explains how or why the relationship between two other variables occurs. In this context, financial self-efficacy can act as a mediating variable between personality traits and investment intention of Indonesian youth in investing in cryptocurrency. This study found the Effect of Personality Traits on Financial Self-Efficacy in Cryptocurrency. Personality traits, such as the level of self-confidence, risk tolerance, and tendency to take initiative, can affect one's level of financial self-efficacy. Youth with personality traits that support self-confidence and readiness to take risks may have higher levels of financial self-efficacy.

As for the effect of Financial Self-Efficacy on Investment Intention, Financial self-efficacy can affect the extent to which a person has the intention to invest. The level of self-confidence in the ability to manage finances and make investment decisions can increase investment intention. Youth with high levels of financial self-efficacy may tend to be more motivated to seek and take investment opportunities, including in the cryptocurrency market.

Other studies have found that mediation can be through perceived control. Financial self-efficacy may mediate the relationship between personality traits and investment intention through perceived control. Perceived control refers to an individual's belief that they have control or power to influence their life outcomes (Aren & Nayman Hamamci, 2020). Personality traits that favour self-control and

initiative may help shape financial self-efficacy, which in turn increases perceived control, and in turn, increases investment intention.

The importance of self-confidence in dealing with investment challenges was also a finding. Personality traits such as uncertainty or anxiety may influence one's ability to deal with investment challenges. And financial self-efficacy, which includes confidence in overcoming problems and failures, can be a mediator between these personality traits and intention to invest. This level of self-efficacy can help overcome psychological barriers related to investing in cryptocurrency.

The impact on financial planning is part of the mediation of these two variables. Personality traits can influence the way individuals plan and manage their finances. Financial self-efficacy, which includes financial planning skills, can be the link between these traits and the decision to invest. Youth who have personality traits that support high financial planning and skills may have better financial self-efficacy, which in turn, increases the desire to invest in cryptocurrency. By understanding the role of financial self-efficacy as a mediator, we can better investigate and understand the psychological processes involved in the association among personality traits and investment intention of Indonesian youth in the context of cryptocurrency investment. However, it is important to remember that this relationship is complex, and there are many other factors that can also play a role in investment decision-making.

In this context, financial self-efficacy can be considered a moderating variable between personality traits and the investment intention of Indonesian youth in investing in cryptocurrency. In terms of the influence on the association between personality traits and investment intention, there are several reasons. Researchers found that personality traits such as level of risk, openness to new experiences, and level of self-confidence can influence youth investment intentions. In addition, financial self-efficacy can moderate the influence of these personality traits. For example, someone who has a high level of risk but low financial self-efficacy may not feel confident enough to actually implement their investment intentions.

As for the influence on decision-making, financial self-efficacy plays a role in the financial decision-making process. Individuals with high levels of financial self-efficacy tend to be more confident in evaluating financial information and making investment decisions. Personality traits influence the way a person assesses and processes information (Low & Tan, 2020). Financial self-efficacy may moderate the way these individuals apply their personality traits in the investment decision-making process. In addition, financial self-efficacy is also related to the ability to cope with financial challenges and investment failure. In the context of personality traits that may have a negative impact on investment decisions (such as impulsivity or emotional instability), financial self-efficacy may act as a factor that helps individuals overcome these challenges and maintain their investment intentions.

Furthermore, the importance of personality traits in cryptocurrency investment is due to the fact that investing in cryptocurrency often involves high levels of uncertainty and volatility (Maxson et al., 2019). High financial self-efficacy can help youth feel more confident in facing these challenges. Personality traits that may tend to be detrimental in an investment context, such as a tendency to be highly emotional, can be mitigated by high levels of financial self-efficacy. Other researchers have found that financial risk readiness is required. Personality traits influence one's readiness to face financial risk. The level of financial self-efficacy can moderate the influence of these traits on investment decisions. Youth with personality traits that tend to be more conservative or cautious may still be willing to take risks if they have high levels of financial self-efficacy and feel able to manage those risks.

It is important to note that the moderating variable does not limit itself to financial self-efficacy; other variables may also play a role in this context. Furthermore, the interaction between personality traits, financial self-efficacy, and other factors is dynamic and complex, and each individual may have a unique combination of variables in their investment decision-making. Furthermore, it should be noted that the cryptocurrency market is relatively new and does not have a long history comparable to stocks or bonds. Therefore, the limited accessibility of historical data may lead investors to prioritise short-term analysis over long-term considerations. Nevertheless, individuals with a long-term orientation may still see cryptocurrencies as part of their long-term investment portfolio and may have long-term profit expectations. However, given the relative newness and high volatility of cryptocurrencies, it is likely that most investors will still consider short-term profit expectations when making investment decisions.

E. CONCLUSION

The results showed that the Theory of Planned Behaviour, as measured by attitude, subjective norms, and financial self-efficacy, has differences in influencing Indonesian youth to invest in cryptocurrency. In addition, financial self-efficacy can also act as a moderating variable and mediate the relationship between personality traits and investment intentions. It should be noted that this study is a pioneering effort to look at the combined value of individual financial behaviours on the intention to invest in cryptocurrency, particularly among young Indonesians.

The results of this study show that most individuals who expressed interest in investing in cryptocurrencies focus on short-term gains and tend to follow trends. Notably, the majority of respondents in this study are young people who exhibit a tendency to imitate. The reasons behind an investor's decision to invest in cryptocurrencies are often inclined by external elements, likes the opinions of influencers or prevailing trends. Potential profitability is a significant factor that influences investment intentions. As a result, investors tend to prioritise following trends over assessing the viability of cryptocurrencies as a business opportunity. Moreover, the researcher believes that this study will add to the literature on this characteristic. In addition, this research also has significant relevance for investors, financial institutions, and regulatory bodies. Investors should be aware of the possibility of childhood expectations. Investment choices are influenced by these expectations. Similarly, financial institutions and investment managers should realise that their clients and they may have different return expectations. They should realise that the decisions they make and the advice they give will impact the subconscious in addition to the cognitive and affective. Additionally, characteristics, like an individual's values, influence their risk and investment predilections. Lastly, governments should pay attention to profit expectations. Profit expectations can arise at the individual level or at the market level. In this case, information is not enough to explain the decisions and trades made. Of course, emotions influence However, we must remember that insentient procedures also take a role.

The recent occurrence of financial bubbles and Ponzi schemes has enlarged attention in insensible methods in financial decision-making. Therefore, understanding the correlation between profit expectations and various variables is crucial to understanding financial market behaviour. In addition, individual values, which define individuals and influence their choices, have been minimally studied in relation to decision-making. Investigating the antecedents and influences of individual financial behaviour will contribute to the literature.

F. REFERENCES

Abadi, M. K. R., & Hamdan, H. Bin. (2023). *Individual Cultural Values and Profit Expectations on Investment Intentions in Crypto Currency : Religiosity as a Moderating Variable*. 62–84.

Aftab, M., Haq, I. U., & Baity, M. (2023). The COVID-19 pandemic, economic policy uncertainty and the hedging role of cryptocurrencies: a global perspective. *China Finance Review International*, *13*(3), 471–508. https://doi.org/10.1108/CFRI-06-2022-0108

Ahmed, M. S., Alsamman, A., & Chebbi, K. (2023). Feedback trading in the cryptocurrency market. *Studies in Economics and Finance*. https://doi.org/10.1108/SEF-02-2023-0096

Akhtar, F., & Das, N. (2019a). Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. *International Journal of Bank Marketing*, *37*(1), 97–119. https://doi.org/10.1108/IJBM-08-2017-0167

Akhtar, F., & Das, N. (2019b). Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. *International Journal of Bank Marketing*, *37*(1), 97–119. https://doi.org/10.1108/IJBM-08-2017-0167

Al-Gamrh, B., Ku Ismail, K. N. I., Ahsan, T., & Alquhaif, A. (2020). Investment opportunities, corporate governance quality, and firm performance in the UAE. *Journal of Accounting in Emerging Economies*, *10*(2), 261–276. https://doi.org/10.1108/JAEE-12-2018-0134

Alam, N., Gupta, L., & Zameni, A. (2019). Digitalization and Disruption in the Financial Sector. In *Fintech and Islamic Finance*. Palgrave macmillan. https://doi.org/10.1007/978-3-030-24666-2_1

Aren, S., & Nayman Hamamci, H. (2020). Relationship between risk aversion, risky investment intention, investment choices: Impact of personality traits and emotion. *Kybernetes*, *49*(11), 2651–2682. https://doi.org/10.1108/K-07-2019-0455

Baihaqqy, M. R. I., Disman, Nugraha, Sari, M., & Ikhsan, S. (2020). The Effect of Financial Literacy on the Investment Decision. *Budapest International Research and Critics Institute-Journal (BIRCI - Journal)*, *3*(4), 3073–3083. https://doi.org/10.33258/birci.v3i4.1333

Bizri, R., Jardali, R., & Bizri, M. F. (2018). Financing family firms in the Middle East: the choice between Islamic and conventional finance. *International Journal of Entrepreneurial Behaviour and Research*, *24*(4), 842–865. https://doi.org/10.1108/IJEBR-10-2016-0349

Dinç Aydemir, S., & Aren, S. (2017). Do the effects of individual factors on financial risk-taking behavior diversify with financial literacy? *Kybernetes*, *46*(10), 1706–1734. https://doi.org/10.1108/K-10-2016-0281

El-Chaarani, H., Mawad, J. L., Mawad, N., & Khalife, D. (2023). 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

Elia, G., Stefanelli, V., & Ferilli, G. B. (2022). Investigating the role of Fintech in the banking industry: what do we know? *European Journal of Innovation Management*, *26*(5), 1365–1393. https://doi.org/10.1108/EJIM-12-2021-0608

Fraser, S., Bhaumik, S. K., & Wright, M. (2015). What do we know about entrepreneurial finance and its relationship with growth? *International Small Business Journal: Researching Entrepreneurship*, *33*(1), 70–88. https://doi.org/10.1177/0266242614547827

Haapamäki, E., & Sihvonen, J. (2019). Cybersecurity in accounting research. *Managerial Auditing Journal*, *34*(7), 808–834. https://doi.org/10.1108/maj-09-2018-2004

Hossain, M. S. (2021). What do we know about cryptocurrency? Past , present , future. *China Finance Review International*, *11*(4), 552–572. https://doi.org/10.1108/CFRI-03-2020-0026

Khan, M. T. I., Tan, S. H., & Chong, L. L. (2017). Perception of past portfolio returns, optimism and financial decisions. *Review of Behavioral Finance*, *9*(1), 79–98. https://doi.org/10.1108/RBF-02-2016-0005

Kirbrandoko, H. F. U. S. (2018). Integration of Technology Acceptance Model and Theory of Planned Behaviour of Intention to Use Electronic Money. *International Journal of Science and Research (IJSR)*, *7*(2), 711–716. https://doi.org/10.21275/ART201890

Konakll, T. (2015). Effects of Self-Efficacy on Social Entrepreneurship in Education: A Correlational Research. *Research in Education*, *94*(1), 30–43. https://doi.org/10.7227/RIE.0019

Lemieux, V. L. (2016). Trusting records : is Blockchain technology the answer? *Records Management Journal*, *26*(2), 110–139. https://doi.org/10.1108/RMJ-12-2015-0042

Limbu, Y. B., & Sato, S. (2019). Credit card literacy and financial well-being of college students: A moderated mediation model of self-efficacy and credit card number. *International Journal of Bank Marketing*, *37*(4), 991–1003. https://doi.org/10.1108/IJBM-04-2018-0082

Low, G., & Tan, T. (2020). Cryptocurrency – Is It Property? *Journal of Investment Compliance*, *21*(2/3), 175–179. https://doi.org/10.1108/joic-09-2020-0027

Mamidala, V., Kumari, P., & Singh, D. (2023). Should I invest or not? Investigating the role of biases and status quo. *Qualitative Research in Financial Markets*. https://doi.org/10.1108/QRFM-12-2022-0198

Maxson, S., Davis, S., & Moulton, R. (2019). UK Cryptoassets Taskforce publishes its final report. *Journal of Investment Compliance*, *20*(2), 28–33. https://doi.org/10.1108/joic-02-2019-0015

Mili, M., & Bouteska, A. (2023). Forecasting nonlinear dependency between cryptocurrencies and foreign exchange markets using dynamic copula: evidence from GAS models. *Journal of Risk Finance*, *24*(4), 464–482. https://doi.org/10.1108/JRF-04-2022-0074

Mishra, N., Srivastava, P., Mahato, S., & Shivani, S. (2023). Use and acceptance of crypto currencies in India: an evaluation of block chain application in financial sector using PLS SEM and ANN approach. *International Journal of Quality and Reliability Management*. https://doi.org/10.1108/IJQRM-03-2023-0093

Miskam, S. (2018). Catching the Fintech Wave in Islamic Finance : Regulatory Approach for Malaysia. *4th Muzakarah Fiqh & International Fiqh Conference (MFIFC 2018)*, *October*, 223–235.

Misra, R., Srivastava, S., & Banwet, D. K. (2019). Intuitive forecasting and analytical reasoning: does investor personality matter?: A multi-method analysis. *Qualitative Research in Financial Markets*, *12*(2), 177–195. https://doi.org/10.1108/QRFM-10-2018-0114

Novita, W. S., & Imanullah, M. N. (2020). Aspek hukum peer to peer lending (Identifikasi Permasalahan Hukum dan Mekanisme Penyelesaian). *Jurnal Privat Law*, *8*(1), 151. https://doi.org/10.20961/privat.v8i1.40389

Okello Candiya Bongomin, G., & Munene, J. C. (2020). Examining the role of institutional framework in promoting financial literacy by microfinance deposit-taking institutions in developing economies: Evidence from rural Uganda. *Journal of Financial Regulation and Compliance*, *28*(1), 16–38. https://doi.org/10.1108/JFRC-12-2018-0158

Otoritas Jasa Keuangan. (2023). *Statistik Layanan Pendanaan Bersama Berbasis Teknologi Informasi: Vol. Januari* (Issue 1).

Ozili, P. K. (2023). Central bank digital currency research around the world : a review of literature. *Journal of Money Laundering Control*, *26*(2), 215–226. https://doi.org/10.1108/JMLC-11-2021-0126

Pandey, R., & Jessica, V. M. (2019). Sub-optimal behavioural biases and decision theory in real estate: The role of investment satisfaction and evolutionary psychology. *International Journal of Housing Markets and Analysis*, *12*(2), 330–348. https://doi.org/10.1108/IJHMA-10-2018-0075

Pangestu, A., & Batara Daniel Bagana. (2022). Faktor-Faktor Yang Mempengaruhi Minat Investasi Generasi Milenial di Kota Semarang. *E-Bisnis : Jurnal Ilmiah Ekonomi Dan Bisnis*, *15*(2), 212–220. https://doi.org/10.51903/e-bisnis.v15i2.671

Park, K. B., & Park, M. J. (2017). Does the interactive quality of premium asset management service promote customers' referral intentions? The moderating effect of customer's asset size. *International Journal of Bank Marketing*, *35*(4), 596–615. https://doi.org/10.1108/IJBM-05-2016-0062

Parn, E. A., & Edwards, D. (2019). Cyber threats confronting the digital built environment: Common data environment vulnerabilities and block chain deterrence. *Engineering, Construction and Architectural Management*, *26*(2), 245–266. https://doi.org/10.1108/ECAM-03-2018-0101

Rasheed, R., & Siddiqui, S. H. (2019). Attitude for inclusive finance: influence of owner-managers' and firms' characteristics on SMEs financial decision making. *Journal of Economic and Administrative Sciences*, *35*(3), 158–171. https://doi.org/10.1108/jeas-05-2018-0057

Raut, R. K., Kumar, R., & Das, N. (2020). Individual investors' intention towards SRI in India: an implementation of the theory of reasoned action. *Social Responsibility Journal*, *17*(7), 877–896. https://doi.org/10.1108/SRJ-02-2018-0052

Safa, N. S., Sookhak, M., Von Solms, R., Furnell, S., Ghani, N. A., & Herawan, T. (2015). Information security conscious care behaviour formation in organizations. *Computers and Security*, *53*, 65–78. https://doi.org/10.1016/j.cose.2015.05.012

Shaikh, I. M., Qureshi, M. A., Noordin, K., Shaikh, J. M., Khan, A., & Shahbaz, M. S. (2020). Acceptance of Islamic financial technology (FinTech) banking services by Malaysian users: an extension of technology acceptance model. *Foresight*, *22*(3), 367–383. https://doi.org/10.1108/FS-12-2019-0105

Singh, N., Srivastava, S., & Sinha, N. (2017). Consumer preference and satisfaction of M-wallets: a study on North Indian consumers. *International Journal of Bank Marketing*, *35*(6), 944–965. https://doi.org/10.1108/IJBM-06-2016-0086

Sinlapates, P., & Chancharat, S. (2023). Persistence and volatility spillovers of Bitcoin to other leading cryptocurrencies: a BEKK-GARCH analysis. *Foresight*, *June*. https://doi.org/10.1108/FS-09-2022-0100

Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing*, *35*(5), 818–841. https://doi.org/10.1108/IJBM-01-2016-0012

Widjaja, S. S., Ir, P., & Sembel, H. M. R. (2020). *the Effect of Investor Personality Traits on Investment Intention of Indonesia Digital Startup With Mediating Role of Financial Self-Efficacy*. *22*(1), 74–82.

Widyastuti, U., Febrian, E., Sutisna, S., & Fitrijanti, T. (2021). Market discipline in the behavioral finance perspective: a case of Sharia mutual funds in Indonesia. *Journal of Islamic Accounting and Business Research*, *13*(1), 114–140. https://doi.org/10.1108/JIABR-06-2020-0194

Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, *35*(5), 805–817. https://doi.org/10.1108/IJBM-01-2016-0009

Yadav, R., & Pathak, G. S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, *96*, 122–128. https://doi.org/10.1016/j.appet.2015.09.017

Yeoh, P. (2017). Regulatory issues in blockchain technology. *Journal of Financial Regulation and Compliance*, *25*(2), 196–208. https://doi.org/10.1108/JFRC-08-2016-0068

Yuliansyah, Y., Rammal, H. G., & Rose, E. (2016). Business strategy and performance in Indonesia's service sector. *Journal of Asia Business Studies*, *10*(2), 164–182. https://doi.org/10.1108/JABS-07-2015-0094