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Financial technology, social media influencers, and experience of cryptocurrency investment decisions: Financial literacy's role

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Abstract: *This study evaluates the impact of financial technology usage, social media influencer presence, and investment experience on cryptocurrency investment decisions, considering financial literacy as a moderating factor. Financial technology refers to using technology in financial systems to create new service products, technologies, and business models. Social media influencers have gained fame and exert significant influence over their followers on social media platforms. Meanwhile, investment experience encompasses the duration of an investor's experience in trading transactions. Data for the study were obtained through a Google Form questionnaire distributed via social media to cryptocurrency investors aged 20 to 30 in the Jabodetabek area. Convenience sampling technique was employed to obtain a sample of 192 respondents. Data analysis was conducted using the SEM-PLS method with SmartPLS software. The results indicate that using financial technology and social media influencers positively influences cryptocurrency investment decisions, while investment experience does not significantly impact. However, financial literacy does not strengthen the influence of financial technology usage, social media influencers, and investment experience on cryptocurrency investment decisions. The research findings indicate that enhancing financial literacy among young investors should be prioritized. This can be achieved through formal education programs and financial literacy campaigns. Practitioners in the financial industry also need to provide financial education to their clients and offer educational content on cryptocurrency. These measures can help mitigate uncontrolled investment risks and promote informed investment decisions, thereby contributing to the stability of the financial market and the financial protection of the wider community.*

Keywords: *cryptocurrency; financial literacy; financial technology; investment decisions; investment experience; social media influencers*

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Teknologi keuangan, *influencer* media sosial, dan pengalaman keputusan investasi *cryptocurrency:* Peran literasi keuangan

Abstrak: *Penelitian ini bertujuan untuk mengevaluasi dampak penggunaan financial technology, influencer media sosial, dan pengalaman investasi terhadap keputusan berinvestasi dalam cryptocurrency, dengan mempertimbangkan literasi keuangan sebagai faktor pemoderasi. Financial technology merujuk pada pemanfaatan teknologi dalam sistem keuangan untuk menciptakan produk layanan, teknologi, dan model bisnis baru. Influencer media sosial didefinisikan sebagai individu yang telah memperoleh ketenaran dan memiliki pengaruh signifikan terhadap kelompok pengikutnya di platform media sosial. Sedangkan, pengalaman investasi mencakup lamanya durasi pengalaman dalam melakukan transaksi trading oleh seorang investor. Data penelitian diperoleh melalui kuesioner berformat Google Form yang disebar melalui media sosial kepada investor cryptocurrency berusia 20 hingga 30 tahun di wilayah Jabodetabek. Teknik convenience sampling digunakan untuk memperoleh sampel sebanyak 192 orang responden. Analisis data menggunakan metode SEM-PLS dengan perangkat lunak SmartPLS. Hasil penelitian menunjukkan bahwa penggunaan financial technology dan influencer media sosial berdampak positif terhadap keputusan investasi cryptocurrency, sedangkan pengalaman investasi tidak memberikan dampak yang signifikan. Namun, literasi keuangan tidak memperkuat pengaruh penggunaan financial technology, influencer media sosial, dan pengalaman investasi terhadap keputusan investasi cryptocurrency. Temuan penelitian menunjukkan bahwa meningkatkan literasi keuangan di kalangan investor muda perlu menjadi prioritas. Hal ini dapat dilakukan melalui program pendidikan formal dan kampanye literasi keuangan. Praktisi di industri finansial juga perlu memberikan edukasi finansial kepada klien mereka dan menyediakan konten edukatif tentang cryptocurrency. Langkah-langkah ini dapat membantu mengurangi risiko investasi yang tidak terkendali dan meningkatkan keputusan investasi yang bijak, serta berkontribusi pada stabilitas pasar finansial dan perlindungan keuangan masyarakat luas.*

Kata kunci: *cryptocurrency; influencer media sosial; keputusan investasi; literasi keuangan; pengalaman investasi; teknologi keuangan*

INTRODUCTION

The current technological advancements have spurred innovations in the financial sector, leading to the emergence of Financial Technology (FinTech). The inception of FinTech traces back to 1866 with the introduction of money transfer systems like Fedwire, and notably gained momentum in 2008, marking "a new era of Fintech" (Alt et al., 2018), driven by technological evolution such as mobile devices, wireless networks, and web technologies, resulting in significant transformations, particularly in banking. FinTech integrates various fields, including finance, advisory, payments, and compliance (Leong & Sung, 2018), and its development in the financial realm encompasses areas such as government funds, payments, venture capital, franchising, and investment. It has been a game-changer in financial markets, spawning new business models (Lee & Shin, 2018), including the emergence of cryptocurrencies as an investment instrument.

Cryptocurrencies began with the introduction of Bitcoin to the world in 2009. Bitcoin was created as an alternative form of payment, aiming to enhance the efficiency of conventional payments by transitioning them into the digital realm. Subsequently, other cryptocurrencies emerged, resembling Bitcoin, driven by the rapid and widespread development of Bitcoin. These include litecoin, namecoin, ethereum, dogecoin, and other cryptocurrencies. Moreover, cryptocurrencies are known as decentralized digital currencies, operated without regulation from any specific country. This characteristic gives cryptocurrencies distinctive appeal and makes them favorites among digital currency users (Madey, 2017). Cryptocurrencies have an advantage over conventional currencies, which can be sent anywhere via the internet without intermediaries. Cryptocurrencies have no transaction limits, allowing individuals to send any amount to others. Cryptocurrency transactions also occur unconditionally. Cryptocurrencies can be stored in a digital wallet similar to electronic banking, each with a unique address for every user. Users can access their digital wallets using a username and password. To send cryptocurrencies over the internet, one must correctly input the unique address of

their digital wallet to facilitate cryptocurrency transfer (Pernice & Scott, 2021). However, due to the lack of regulatory oversight, they also pose risks with irreversible transactions (Liu et al., 2021).

Cryptocurrency has become a highly risky investment yet has yielded significant profits in recent years. Since 2019, Bitcoin has been legally recognized by the Futures Exchange Supervisory Board, and cryptocurrency trading on futures exchanges has been permitted by the Ministry of Trade in Futures Commodities (BAPPEBTI). There are 229 cryptocurrencies recognized as legal in Indonesia, including Bitcoin. This recognition is outlined in Regulation No. 7 of the Futures Exchange Supervisory Board regarding the list of cryptocurrencies that can be traded, effective from December 17, 2020. With the issuance of this regulation, cryptocurrency trading in Indonesia can provide legal certainty and protection for individuals engaging in transactions (Hasani et al., 2022).

The development of cryptocurrencies has led to the creation of cryptocurrencies as an investment instrument. Cryptocurrencies are often favored as investments due to their fluctuating value, similar to stocks. Investing in cryptocurrencies is gaining popularity among the younger generation, with many considering cryptocurrencies as one of their investment instruments in hopes of achieving significant returns. A survey by We Are Social revealed that the highest percentage of young investors are investing in cryptocurrency. Cryptocurrency investors are predominantly young and belong to the millennial and Generation Z cohorts (We Are Social, 2022).

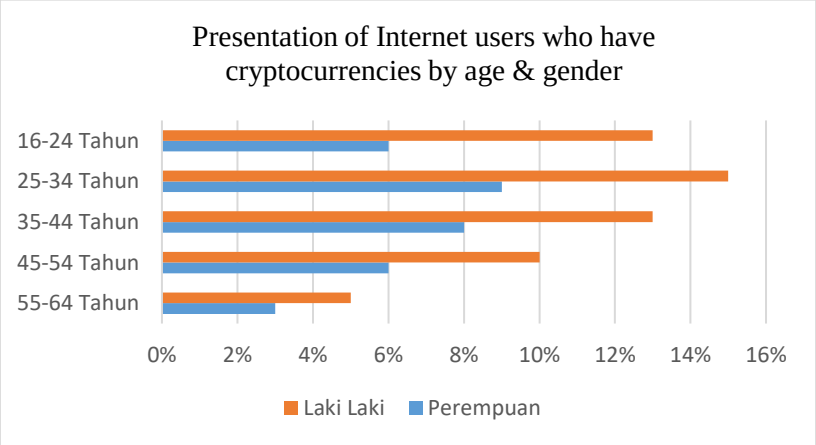

Figure 1. Internet users Crypto currency owners
Source: Literature review (2022)

The surge in cryptocurrency investments among Generation Z and Millennials has led to influencer endorsements on social media platforms, leveraging their popularity to promote cryptocurrency investments (Ismail et al., 2018). With their enormous following and significant influence, social media influencers play a pivotal role in shaping public decisions, especially among younger demographics who perceive influencer actions as trendy and desirable, thus influencing their investment decisions (Chairunnisa & Dalimunthe, 2021). However, many investors rely solely on social media influence and must consider other factors, such as financial literacy. Financial literacy, encompassing knowledge, skills, and beliefs affecting financial decision-making and effective financial management for improved well-being (Stolper & Walter, 2017), remains low in Indonesia, with the financial literacy index reaching only 49.68% in 2022, according to a survey by OJK (Otoritas Jasa Keuangan, 2022). This indicates a need for more understanding and awareness of financial literacy among most Indonesian investors.

According to Zhao & Zhang (2021), their research indicates that financial literacy is not a determining factor for cryptocurrency investors to invest in crypto instruments; investment experience plays a more significant role. Luo et al. (2021) found that investors prefer alternative investments over cryptocurrency due to its ambiguous nature. The use of Financial Technology, as indicated by Lee & Shin (2018), mainly through Robo-advisors, instills confidence in investors. Additionally, Jonathan & Sumani (2021) suggest that Financial Technology positively impacts investment decisions among millennials. However, conflicting research exists. Fujiki (2021) argues that investment experience and

financial literacy do not influence cryptocurrency investment decisions, while Kusumahadi & Utami (2022) found that Financial Technology does not affect investor decisions.

Fintech is characterized as a "disruptive," "revolutionary," and "digital weapon" innovation that aims to "overturn" barriers and traditional financial institutions (World Economic Forum, 2017). Fintech refers to applying technology in the financial sector to develop innovations such as products, services, technologies, and business models. Additionally, Fintech has the potential to influence monetary and financial system stability and increase efficiency, smoothness, security, and constraints in the payment system (Bank Indonesia, 2017). Fintech offers significant advantages to society by enhancing efficiency and effectiveness in various aspects. Firstly, it enables cheaper lending and better product provision. Secondly, Fintech firms can reduce labor costs and office space, leading to increased comfort, as consumers have reported. Thirdly, it enhances borrower screening through alternative information sources and significant data approaches. This, in turn, facilitates more accessible investments for investors, who can directly invest through applications without intermediary brokers (Buchak et al., 2018).

Additionally, Fintech is adaptable to changing consumer needs, providing affordable financial services without geographical constraints and with more accessible regulations, offering relatively lower risk exposure than traditional services. The types of Fintech include loan technology, payment systems, personal finance management, money transfer, blockchain/cryptocurrency, institutional technology, insurance technology, and equity crowdfunding. Fintech applications typically feature user-friendly interfaces, personalized experiences, responsive customer service, informative notifications, and robust security measures to prevent data breaches and cyber threats (Sangwan et al., 2020).

Social media is an online platform that enables individuals to present themselves for interaction, collaboration, sharing, and communication with other users. It also shapes virtual social bonds, reflecting societal values and issues. According to Phillip Kotler and Kevin Keller, social media allows consumers to share various types of information, including text, images, videos, and audio, among themselves and companies (Kotler & Keller, 2012). An influencer, often referred to as a celebrity or public figure, can sway more people to behave or decide in a certain way. On the other hand, a Social Media Influencer (SMI) is an ordinary person who has gained fame and influence over their followers on social media (Marwick, 2015).

Since the phenomenon of Social Media Influencers (SMIs) has evolved organically alongside the development of social media, various researchers have defined them as not necessarily celebrities but ordinary individuals who have become famous (Senft, 2013). Influencers maintain strong relationships with their audience, who are their followers; influencers can significantly shape the behavior of their followers through communication via their social media channels. In an Influence Theory framework, it is assumed that society, as a group, can be guided by several individuals who can disseminate information, and their presence is influential, making them influencers. Organizations utilize influencers as relevant intermediaries because influencers have significant access to their audiences. This includes stakeholders who need help to reach. Influencers easily reach young consumers, adults, and specific groups in digital content. Influencers on social media play a crucial role as informants and communication facilitators, seen as role models by their followers. They also significantly impact social media audiences because they have the loudest voice and the most impressions, especially on the millennial generation, who tend to follow and like influencers. Examples of individuals falling into the influencer category in the cryptocurrency field are Steven Suhadi, Eileen Kamtawijoyo, Ellen May, Tessar Napitupulu, and many others.

Investment experience can be identified as the duration of an investor's trading transactions (Khanam, 2017). Personal investment experience significantly influences an individual's investment behavior, whereby more excellent experience leads to better investment decisions. This aligns with research conducted by (Awais et al., 2016), which yielded several significant positive outcomes regarding the impact of investment experience on investment decisions. With increasing age and investment experience, cryptocurrency investors tend to become more cautious. Conversely, investors with less investment experience and younger age exhibit higher risk values in their cryptocurrency investments (Fujiki, 2021).

Investment decisions involve selecting alternatives among various investment options (Subash, 2012). Investors face a trade-off between return expectations and risk when making investment decisions. The most significant risk in investment activities is the loss of the entire value of the investment or asset purchased. Each asset level has several characteristics, attributes, and relationships between risk and return levels. Asset allocation strategies will depend on investment goals, investment constraints, and the investor's risk attitude. Therefore, effective investment decisions can be made by selecting instruments that align with the expected benefits. To make investment decisions, prospective investors require information regarding available investment options to choose the most optimal investment. Investors take several steps in the investment process, including setting investment goals, managing portfolio performance, evaluating portfolio performance, conducting analysis, and portfolio construction. Thus, allocating funds to investment instruments that will generate profit and other related processes are essential factors in forming investment decisions (Nugraheni et al., 2021).

Effective financial management and adequate financial literacy are crucial for improving living standards (Awais et al., 2016). Financial literacy involves understanding financial concepts, applying knowledge to make informed decisions, and managing personal finances confidently (Lusardi & Mitchell, 2017). National Financial Literacy Strategy Indonesia emphasizes planned planning, achievement orientation, sustainability, and collaboration (Otoritas Jasa Keuangan, 2021). Financial literacy encompasses awareness, knowledge, skills, attitudes, and behaviors necessary for sound financial decision-making and achieving individual financial well-being (Huston, 2010). It is divided into four conceptual dimensions: behavior, skills, knowledge, and attitude (Bongomin et al., 2016).

Financial literacy is important in regulating the relationship between Fintech, social media influencers, and investment experiences in one's investment decisions. Research by Junianto et al. (2020) showed that financial literacy moderates the relationship between the use of fintech and investment decisions, meaning that a person's level of financial understanding can affect the extent to which financial technology affects their investment decisions. On the other hand, the ability of a social media influencer to communicate information about investments can also affect investor financial understanding. Research findings by Ulmi et al. (2022) confirm that financial literacy plays a moderating role in the relationship between social media influencers and investment decisions. That is, the level of financial understanding of investors can influence the extent to which information delivered by social media influencers affects their investment decisions. Financial literacy reflects an individual's level of understanding of personal financial information. It plays a significant role in moderating the influence of fintech, social media influencers, and investment experiences on one's investment decisions. This aligns with research by Zhao & Zhang (2021), which shows that investment experience and financial literacy influence investors' decisions. Thus, a high level of financial literature can help investors understand the information supporting more intelligent and effective investment decision-making.

METHOD

Data was collected by disseminating a structured Google Form questionnaire to respondents via social media channels. The selected participants were cryptocurrency investors between 20 and 30 years old, residing in the Jabodetabek area of Indonesia and utilizing legally registered fintech platforms overseen by regulatory bodies. The researcher employed the convenience sampling technique for participant selection. Subsequently, validity and reliability tests were conducted. This study utilized the Partial Least Squares Structural Equation Modeling (PLS-SEM) method because it handles multiple independent variables and processes non-normally distributed data. Moreover, PLS-SEM can estimate highly complex models involving numerous constructs and indicators. Data analysis was performed using the SmartPLS 3 application.

The independent variables in this study were Fintech usage, social media influencers, and investment experience. The dependent variable was investment decision. Financial literacy served as the moderation variable. Indicators for the Fintech usage variable were modified from Sangwan et al. (2020) research and included ease of user interface, security and convenience, ease of use, and speed.

Indicators for the social media influencers variable were modified from Chairunnisa & Dalimunthe (2021) and Ulmi et al. (2022) research. They included cryptocurrency investment due to influencer endorsements, influencer cryptocurrency portfolios, influencer credibility, influencer portfolio returns, and trust. Investment experience variable indicators were developed based on Fachrudin & Fachrudin (2016) research, including investment duration and investment experience scale. Investment decision variable indicators were modified from Nugraheni et al. (2021) research and included investment activities, studying investment instruments prior to investing, observing price movements, comparing investment instruments, and risk and return considerations. Financial literacy variable indicators were developed from OECD (2018) and Utami & Sitanggang (2021) research, including skills, behavior, knowledge, and attitude.

RESULTS AND DISCUSSION

Results

Respondent characteristics

The population in this study consists of all residents domiciled in the Jabodetabek area, and the sample used comprises residents of Jabodetabek aged between 20 and 30 years old who are cryptocurrency investors. The data obtained for this research amounted to 192 respondents. The data were collected through a Google Form questionnaire distributed via social media platforms.

Based on Table 1 below, the majority of respondents in this study are male, accounting for 57.29% or 110 respondents. Meanwhile, a small portion of respondents are female, comprising 42.71% or 82 respondents. From these data, it can be assumed that most cryptocurrency investors are male.

The majority of respondents in this study are 21 years old, accounting for 28.65% or 55 respondents, followed by the second largest group aged 20 years old, comprising 23.44% or 45 respondents, and the third largest group aged 22 years old, comprising 12.50% or 24 respondents. Conversely, a smaller portion of respondents fall within the age range of 23 to 30 years old, with 9 respondents aged 23 years old (4.69%), 14 respondents aged 24 years old (7.29%), 18 respondents aged 25 years old (8.85%), 10 respondents aged 26 years old (4.17%), 10 respondents aged 27 years old (5.21%), 2 respondents aged 28 years old (1.04%), 4 respondents aged 29 years old (2.08%), and 4 respondents aged 30 years old (2.08%). Hence, most cryptocurrency investors are between 20 and 23 years old.

Respondents in this study reside in Jakarta and the Jabodetabek area, with 56.25% or 108 respondents residing in Jakarta and 43.75% or 84 respondents residing in the Jabodetabek area. Therefore, it can be assumed that most cryptocurrency investors are domiciled in Jakarta. Most respondents have completed their highest education level as Senior High School (SMA), comprising 62.50% or 120 respondents. This is followed by respondents with a Bachelor's degree (S1), accounting for 34.90% or 67 respondents, and lastly, respondents with a Master's degree (S2), comprising 2.60% or 5 respondents. Most respondents are students, accounting for 65.10% or 125 respondents. This is followed by respondents who are entrepreneurs, comprising 16.67% or 32 respondents; private employees, comprising 10.94% or 21 respondents; public employees, comprising 4.69% or 9 respondents; and unemployed individuals, comprising 2.60% or 5 respondents.

Most respondents in this study use TokoCrypto as their cryptocurrency investment platform, accounting for 32.29% or 62 respondents. Rekeningku follows this with 20.83% or 40 respondents, Indodax with 16.67% or 32 respondents, Koinku with 10.94% or 21 respondents, Pintu with 5.21% or 10 respondents, Luna with 3.65% or 7 respondents, Pluto with 3.13% or 6 respondents, Triv with 3.13% or 6 respondents, Binance with 2.08% or 4 respondents, and Zipmex with 2.08% or 4 respondents. The majority of respondents in this study have a monthly income ranging from 1 to 3 million IDR, comprising 29.69% or 57 respondents. This is followed by respondents with a monthly income ranging from 3 to 6 million IDR, accounting for 26.04% or 50 respondents, respondents with a monthly income less than 1 million IDR, comprising 19.27% or 48 respondents, and lastly, respondents with a monthly income greater than 6 million IDR, totaling 37 respondents.

Table 1. Respondent characteristics

Characteristic	Percentage
Gender	
Male	57.29%
Female	42.71%
Age	
20	23.44%
21	28.65%
22	12.50%
23	4.69%
24	7.29%
25	8.85%
26	4.17%
27	5.21%
28	1.04%
29	2.08%
30	2.08%
Domicile	
Bogor, Depok, Tangerang, Bekasi	43.75%
Jakarta	56.25%
Education	
SMA	62.50%
S1	34.90%
S2	2.60%
Occupation	
Student	65.10%
Private employees	16.67%
Public employees	10.94%
Businessman	4.69%
Unemployed	2.60%
Cryptocurrency investment platforms	
TokoCrypto	32.29%
Indodax	16.67%
Rekeningku	20.83%
Koinku	10.94%
Pintu	5.21%
Luna	3.65%
Pluto	3.13%
Binance	2.08%
Triv	3.13%
Zipmex	2.08%
Income	
< 1 million	25.00%
1-3 million	29.69%
3-6 million	26.04%
> 6 million	19.27%

Source: Data analysis (2024)

Descriptive analysis

Descriptive analysis is carried out by giving an overview of the characteristics of each variable in the study. Based on the calculations of descriptive analysis carried out on IBM SPSS Statistics 29 software, the mean score is obtained from each variable indicator of financial technology usage, social media influencer, investment experience, investing decisions, and financial literacy as follows:

Table 2. Descriptive analysis

Variable	Code	Mean score	Interval	Description
Fintech usage	PK1	4.02	3.43 - 4.23	High
	PK2	4.08	3.43 - 4.23	High
	PK3	4.11	3.43 - 4.23	High
	PK4	4.08	3.43 - 4.23	High
	PK5	4.12	3.43 - 4.23	High
	Overall mean score	4.08	3.43 - 4.23	High
Social media influencer	SM1	3.66	3.43 - 4.23	High
	SM2	3.65	3.43 - 4.23	High
	SM3	3.70	3.43 - 4.23	High
	SM4	3.79	3.43 - 4.23	High
	SM5	3.76	3.43 - 4.23	High
	SM6	3.73	3.43 - 4.23	High
	Overall mean score	3.72	3.43 - 4.23	High
Investment experience	IE1	2.51	1.81 - 2.61	Low
	Overall mean score	2.51	1.81 - 2.61	Low
Investment decision	KI1	3.82	3.43 - 4.23	High
	KI2	4.05	3.43 - 4.23	High
	KI3	4.10	3.43 - 4.23	High
	KI6	4.07	3.43 - 4.23	High
	Overall mean score	4.01	3.43 - 4.23	High
Financial literacy	FL1	4.27	4.24 - 5.04	Very high
	FL2	4.33	4.24 - 5.04	Very high
	FL3	4.23	3.43 - 4.23	High
	FL4	4.20	3.43 - 4.23	High
	FL5	4.13	3.43 - 4.23	High
	FL6	4.24	4.24 - 5.04	Very high
	Overall mean score	4.23	3.43 - 4.23	High

Source: Data analysis (2024)

The mean score of the highest indicator variable for fintech usage is code PK5, indicating that respondents perceive using Fintech as a means of payment to make transactions faster. Thus, the use of Fintech as a payment tool accelerates payment transactions. Meanwhile, the lowest mean score of the fintech usage indicator variable is PK1, signifying that respondents only sometimes use Fintech for their investments. The Fintech usage variable has an overall mean score of 4.08, indicating that respondents rate their personal use of Fintech highly.

The highest mean score of the social media influencer indicator variable is code SM4, indicating that respondents review the credibility of influencers before following their portfolios. Hence, most respondents review the credibility of influencers before following their portfolios. On the other hand, the lowest mean score of the social media influencer indicator variable is code SM2, stating that respondents follow influencer portfolios less frequently. This suggests that respondents do not actively

follow influencer portfolios. The social media influencer variable has an overall mean score of 3.72, indicating that respondents perceive social media influencers to have a significant impact.

The mean score of the investment experience indicator variable with code IE1 is 2.51. Since this overall mean score falls within the low category, it is converted back to an interval. The interval is determined to be 3-6 months, suggesting that, on average, respondents have investment experience ranging from 3-6 months.

The highest mean score of the investment decision indicator variable is code KI3, indicating that respondents observe cryptocurrency price movements before investing in cryptocurrency. This implies that respondents observe cryptocurrency movements before making investments. Conversely, the lowest mean score for the investment decision indicator variable is code KI1, stating that respondents do not prioritize cryptocurrency as their primary investment. Overall, the investment decision variable has an overall mean score of 4.01, indicating a high level of investment decision-making among respondents.

The highest mean score of the financial literacy indicator variable is code FL2, indicating the importance of setting financial targets. Therefore, most respondents find it necessary to set financial targets. On the other hand, the lowest mean score in the financial literacy variable is code FL5, stating that respondents only sometimes adhere to their expenditure plans. This suggests that respondents still need to follow their expenditure plans consistently. The financial literacy variable has an overall mean score of 4.23, indicating a high level of financial literacy among respondents.

Convergent validity test

The analysis adhered to validity criteria, where loading factor values > 0.7 indicate validity. If the loading factor values for questionnaire items exceed this threshold, they are considered valid. Conversely, the questionnaire items are deemed invalid if the loading factor values are < 0.7. Based on the validity test, two indicators of variables are invalid, namely items KI4 and KI5. Thus, only 4 of 6 investment decision indicators are valid and can be utilized.

Table 3. Indicator items after convergent validity test

Variable	Indicator	Loading factor	AVE	Explanation
Fintech usage	PK1	0.862	0.833	Valid
	PK2	0.925		Valid
	PK3	0.910		Valid
	PK4	0.913		Valid
	PK5	0.951		Valid
Social media influencers	SM1	0.895	0.816	Valid
	SM2	0.911		Valid
	SM3	0.920		Valid
	SM4	0.862		Valid
	SM5	0.893		Valid
	SM6	0.935		Valid
Investment experience	IE1	1.000	1.000	Valid
Investment decision	KI1	0.779	0.761	Valid
	KI2	0.944		Valid
	KI3	0.938		Valid
	KI6	0.816		Valid
Financial literacy	FL1	0.842	0.758	Valid
	FL2	0.893		Valid
	FL3	0.879		Valid
	FL4	0.923		Valid
	FL5	0.870		Valid
	FL6	0.813		Valid

Source: Data analysis (2024)

Reliability test

The following are the results of the reliability test conducted by the researcher using Cronbach's Alpha test with SmartPLS 3.0 software. All variables in this study, namely Fintech usage, social media influencers, investment experience, investment decisions, and financial literacy, are reliable as they have Cronbach's Alpha values > 0.70. Therefore, the data from the indicator variables are considered consistent over time when retested.

Table 4. Reliability test results

Variable	Cronbach's Alpha	Composite reliability	Reliability test results
Fintech usage	0.950	0.961	Reliable
Social media influencers	0.956	0.964	Reliable
Investment experience	1.000	1.000	Reliable
Investment decision	0.893	0.927	Reliable
Financial literacy	0.936	0.949	Reliable

Source: Data analysis (2024)

Results of coefficient of determination (R^2) test

The coefficient of determination (R-square) test is conducted to measure the ability of a model to explain the dependent variable. In the study by Hair et al. (2014), it is stated that there are three categories in the criteria for R values, namely 0.75 (substantial), 0.50 (moderate), and 0.25 (weak). Table 4 below shows the calculated R^2 values obtained for this research.

Table 5. R^2 value of dependent variable

Model	R-square	R-square adjusted
Investment decision	0.567	0.558

Source: Data analysis (2024)

Based on the results calculated in the table above, the model of the influence of Fintech usage, social media influencers, and investment experience on investment decisions yields a value of 0.567. Thus, investment decisions can be explained by the variables of Fintech usage, social media influencers, and investment experience to the extent of 56.7%. In comparison, other variables outside the scope of this study explain the remaining 43.3%.

Results of Q-square test (Q^2)

Q-square measures the predictive relevance of the inner model. The smaller the difference between predicted values and actual values, the larger the Q-square and the accuracy of predictions in the model. Q-square ranges from 0 to 1, where values closer to 1 indicate better predictive relevance in the inner model. A Q-square value > 0 indicates that the model has predictive relevance. Q-square measurement in this study was conducted using the Calculate blindfolding function in the SmartPLS application. The following are the Q-square values.

Table 6. Q^2 value

	SSO	SSE	Q^2 (=1-SSE/SSO)
Financial literacy	1152	1152	
Investment experience	192	192	
Investment decision	768	477.455	0.378
Fintech usage	960	960	
Social media influencer	1152	1152	

Source: Data analysis (2024)

Based on the test results, the obtained Q-square value is 0.378 > 0, indicating that the predictive relevance of the model is good.

Results of effect size (F-square) test

Effect size (F-square) measurement aims to determine the significance of each path model's influence. F-square is also used to assess the relative intensity of each variable relationship. The magnitude of effect size is divided into three categories: 0.02 (small), 0.15 (medium), and 0.35 (large). The path relationships between Fintech usage, social media influencers, investment experience, and investment decisions have effect size values of 0.251, 0.411, and 0.002, respectively.

Table 7. Effect size test results (F^2)

	Investment decision
Investment experience	0.002
Fintech usage	0.251
Social media influencer	0.411

Source: Data analysis (2024)

Measurement of goodness of fit

The final evaluation of the inner model in this study involves calculating the value of goodness of fit (GoF). Three types of goodness of fit values exist small GoF = 0.1, medium GoF = 0.25, and large GoF = 0.38. The GoF value in PLS-SEM must be manually determined using the following formula:

$$GoF = \sqrt{AVE \times R^2}$$

$$GoF = \sqrt{0.672 \times 0.567}$$

$$GoF = 0.617$$

From the calculated results, the obtained value of goodness of fit (GoF) is 0.617. This indicates that the research model has a large goodness of fit value. With a large goodness of fit value, it can be concluded that hypothesis testing can be conducted because the tests of R^2, Q^2, and GoF performed have a robust predictive efficiency for the measurement model.

Results of hypothesis testing with path coefficients

Hypothesis testing is conducted using bootstrapping, deciding hypothesis acceptance based on the p-value and t-table values. Testing based on path coefficients involves examining the magnitude of positive original sample estimate coefficient values, indicating a positive relationship or influence between one variable and another. The criteria for accepting or rejecting hypotheses are as follows:

- Ho is rejected if the t-value ≥ 1.96 and the p-value ≤ 0.05 at a significance level of 5% (α 5%).
- Ho is accepted if the t-value < 1.96 and the p-value > 0.05 at a significance level of 5% (α 5%).

The testing results of the model with t-values in this study are conducted in two stages: testing the structural model's direct influence and the indirect influence (moderation) of the structural model. Below are the results of the direct and moderation effects testing of the structural model:

Table 8. T-value output results (direct influence)

	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P values
IE → KI	0.020	0.016	0.062	0.324	0.746
PK → KI	0.238	0.246	0.085	2.811	0.005
SM → KI	0.418	0.417	0.078	5.344	0.000

Source: Data analysis (2024)

Table 9. P-value output results (moderation)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Statistics (|O/STDEV|)	P values
IE*FL → KI	0.041	0.032	0.070	0.586	0.558
PK*FL → KI	0.070	0.068	0.069	1.013	0.311
SM*FL → KI	-0.106	-0.113	0.096	1.099	0.272

Source: Data analysis (2024)

Information:
PK: Fintech usage
SM: Social media influencer
IE: Investment experience
KI: Investment decision
FL: Financial literacy

Discussion

Based on the research findings, there is a positive influence between the use of Fintech and the decision to invest in cryptocurrency. This study supports previous research findings by Jonathan & Sumani (2021), which indicated that using Fintech plays a role in influencing investment decisions by facilitating financial activities, especially in Fintech investments. The variable of Fintech usage in this study explains the utilization of technology in financial service systems, resulting in new technological service products and business models. The measurement of Fintech usage in this study is based on utilizing technology in financial service systems. The research results indicate that respondents have a high level of Fintech usage, with an overall mean score for the Fintech usage variable being high. One of the most agreed-upon factors of Fintech usage among the respondents is its use as a payment method, making the payment process faster. This indicates that respondents have a high level of Fintech usage in the context of investment and financial fields.

The social media influencer variable has a positive effect on cryptocurrency investment decisions. This result is consistent with previous research conducted by Ulmi et al. (2022), which stated that social media influencers influence the investment decisions of students. In this study, social media influencers are described based on statements from Marwick (2015), defining them as individuals who have become famous and have influence over their followers on social media. Social media influencers in this study are measured based on credibility, attractiveness, expertise, trustworthiness, and suitability. The overall mean score result for the social media influencer variable in this study indicates a high value, signifying that respondents have a high level of awareness regarding social media influencers. The results of this study are also consistent with the theory proposed by Ulmi et al. (2022), stating that social media influencers have a positive and significant influence on investors. By providing information about an influencer's personal portfolio investment, investors become interested in investing in the same portfolio as the social media influencer. Thus, a social media influencer influences an individual's cryptocurrency investment decision.

The investment experience variable, measured based on the investment duration, does not positively influence cryptocurrency investment decisions. This study also shows that although investment experience is generally measured by the duration of investment experience, in the case of cryptocurrency, the duration of an investor's investment experience does not affect their investment decisions. These research results are inconsistent with previous studies Awais et al. (2016), which stated that investment experience positively influences investment decisions. Research conducted by Khanam (2017) also explains that investment experience can be interpreted as the duration of an investor's trading transaction experience. In this study, it is measured based on the duration of the investment. However, the research results also indicate that the overall mean score for the investment experience variable is low, suggesting that respondents' experiences in this study have a short duration. The theory proposed by Zhao & Zhang (2021) previously stated that investment experience positively influences cryptocurrency investments. However, this study indicates that the duration of investment experience does not change investment decisions related to cryptocurrency. Therefore, regardless of

the size and duration of an investor's investment experience, the duration of the experience will not change their decision to invest in cryptocurrency.

Cryptocurrency markets exhibit unique characteristics compared to traditional financial markets. Cryptocurrencies are highly volatile and subject to rapid price fluctuations, often driven by speculative trading and sentiment. As such, traditional investment experience may not adequately prepare investors for the dynamics of cryptocurrency markets. The lack of regulation and transparency in cryptocurrency markets further complicates decision-making, as investors may face increased uncertainty and risk. Empirical evidence from the study suggests that investors with varying investment experiences demonstrate similar decision-making patterns regarding cryptocurrency investments. This could be because factors other than investment experience, such as market sentiment, media influence, and technological developments, exert a more significant influence on cryptocurrency investment decisions. For example, investors may be influenced by social media trends, news articles, or celebrity endorsements when making decisions about cryptocurrency investments, regardless of their investment experience. Hence, this study concludes that investment experience does not positively influence cryptocurrency investment decisions, although previous theories suggest a more significant influence.

Based on the results of this research, financial literacy cannot moderate the relationship between the use of financial technology, social media influencers, and investment experience in cryptocurrency investment decisions. While financial literacy encompasses knowledge of financial management, investment principles, and financial instruments, it does not inherently promote or discourage cryptocurrency investments. Investing in cryptocurrency is influenced by factors beyond financial literacy, such as market trends, technological advancements, and individual risk appetite. Moreover, the ease and convenience offered by financial technology platforms, such as Fintech applications, may outweigh the significance of financial literacy in cryptocurrency investment decisions. Investors may prioritize the user-friendly interface and accessibility of Fintech platforms over their level of financial literacy when making investment decisions in cryptocurrency markets. This finding is also consistent with research conducted by Zhao & Zhang (2021), which indicates that financial literacy does not have a positive role in cryptocurrency investment decisions.

The influence of social media influencers on cryptocurrency investment decisions may stem more from factors such as trust, credibility, and perceived suitability rather than the investor's level of financial literacy. Investors may rely on social media influencers for market insights and investment recommendations, regardless of their financial literacy level. Additionally, the low adherence to financial expenditure plans, as indicated by the average score of this financial literacy indicator, suggests that investors may prioritize following social media influencers' portfolios over strategic financial planning. This implies that trust in social media influencers may override the influence of financial literacy on investment decisions, particularly in cryptocurrency investments. In conclusion, the lack of moderation by financial literacy on the relationship between Fintech usage, social media influencer impact, and investment experience with cryptocurrency investment decisions can be attributed to the multifaceted nature of investment decision-making, where factors such as technological convenience, social influence, and individual preferences play significant roles alongside financial literacy.

CONCLUSION

In conclusion, this research provides valuable insights into the impact of Fintech usage, social media influencers, investment experience, and financial literacy on cryptocurrency investment decisions. The study confirms that Fintech usage significantly influences cryptocurrency investment decisions, emphasizing its role in facilitating financial activities, particularly in Fintech investments. Additionally, it highlights the crucial role of social media influencers in shaping these decisions, leveraging their credibility, attractiveness, and expertise to attract investors to their portfolios. Surprisingly, contrary to expectations, investment experience, measured by investment duration, does not positively affect cryptocurrency investment decisions. Despite previous theories suggesting its

importance, this study indicates that the duration of investment experience does not impact these decisions significantly. Moreover, the study finds that financial literacy does not moderate the relationship between Fintech usage and cryptocurrency investment decisions. Despite anticipating a reinforcing effect from higher financial literacy levels, the study reveals that other factors, such as the convenience and ease offered by financial technology, play a more substantial role in influencing these decisions. These findings underscore the complexity of factors influencing cryptocurrency investment decisions and call for further research to comprehensively understand the intricate relationships among technology, social influence, investment experience, financial literacy, and investment decisions in the cryptocurrency market.

Prospective cryptocurrency investors should improve their financial literacy and broaden their investment experience before entering the cryptocurrency market. This will empower them to make informed and cautious investment decisions. It is also essential for them to carefully evaluate the specific cryptocurrency they plan to invest in, considering factors such as its stability, growth potential, and underlying technology. Future researchers are encouraged to address the limitations of this study by exploring additional variables, such as financial awareness and financial skills, which should have been more extensively examined here. Moreover, expanding the population and sample size could provide a more comprehensive understanding of the subject matter. Additionally, providing a range or interval for the investment experience variable can enhance the robustness and significance of future research endeavors.

REFERENCES

Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. In *Electronic markets* (Vol. 28, pp. 235–243). Springer. https://doi.org/10.1007/s12525-018-0310-9

Awais, M., Laber, M. F., Rasheed, N., & Khursheed, A. (2016). International Journal of Economics and Financial Issues Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions: Empirical Evidence from Pakistan. *International Journal of Economics and Financial Issues*, *6*(1), 73-79. https://doi.org/ 10.1080/09645290110086126

Bank Indonesia. (2017). *Peraturan Bank Indonesia Nomor 19/PBI/2017 tentang Penyelenggaraan Teknologi Finansial*. https://www.bi.go.id/id/publikasi/peraturan/Pages/pbi_191217.aspx

Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2018). Fintech, regulatory arbitrage, and the rise of shadow banks. *Journal of Financial Economics*, *130*(3), 453-483. https://doi.org/10.1016/j.jfineco.2018.03.011

Chairunnisa, A., & Dalimunthe, Z. (2021). Indonesian stock's influencer phenomenon: Did financial literacy on millennial age reduce herding behavior? *Jurnal Akuntansi Dan Keuangan*, *23*(2), 62-68. https://doi.org/10.9744/jak.23.2.62-68

Fachrudin, K. R., & Fachrudin, K. A. (2016). The influence of education and experience toward investment decision with moderated by financial literacy. *Polish Journal of Management Studies*, *14*. 10.17512/pjms.2016.14.2.05

Fujiki, H. (2021). Crypto asset ownership, financial literacy, and investment experience. *Applied Economics*, *53*(39), 4560-4581. https://doi.org/10.1080/00036846.2021.1904125

Hasani, M. N., Ramadhan, M., Mariyani, K., Setiawan, R., & Sucidha, I. (2022). Analisis cryptocurrency sebagai alat alternatif dalam berinvestasi di indonesia pada mata uang digital bitcoin. *Jurnal Ilmiah Ekonomi Bisnis*, *8*(2), 329-344. https://doi.org/10.35972/jieb.v8i2.762

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, *44*(2), 296-316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Ismail, S., Nair, R. K., Sham, R., & Wahab, S. N. (2018). Impacts of online social media on investment decision in Malaysia. *Indian Journal of Public Health Research & Development*, *9*(11). https://doi.org/ 10.5958/0976-5506.2018.01627.3

Jonathan, R., & Sumani, S. (2021). Millennial investment decision analysis. *Business and Entrepreneurial Review*, *21*(2), 279-296. http://dx.doi.org/10.25105/ber.v21i2.10409

Junianto, Y., Kohardinata, C., & Silaswara, D. (2020). Financial literacy effect and Fintech in investment decision making. *Primanomics: Jurnal Ekonomi & Bisnis*, *18*(3), 150-168. https://doi.org/10.31253/pe.v18i3.472

Khanam, Z. (2017). The impact of demographic factors on the decisions of investors during dividend declaration: A study on dhaka stock exchange, bangladesh. *IOSR Journal of Business and Management (IOSR-JBM)*, *19*(8), 1-7. https://doi.org/10.9790/487X-1908040107

Kotler, P., & Keller, K. L. (2012). *Marketing management*. Pearson

Kusumahadi, T. A., & Utami, N. (2022). Teknologi finansial, literasi keuangan, dan keputusan investasi produk reksa dana di Indonesia. *Jurnal Manajemen Maranatha*, *21*(2), 177-186. https://doi.org/10.28932/jmm.v21i2.4631

Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, *61*(1), 35-46. https://doi.org/10.1016/j.bushor.2017.09.003

Leong, K., & Sung, A. (2018). Fintech (financial technology): What is it and how to use technologies to create business value in Fintech way? *International Journal of Innovation, Management and Technology*, *9*(2), 74-78. https://doi.org/10.18178/ijimt.2018.9.2.791

Liu, X. F., Jiang, X.-J., Liu, S.-H., & Tse, C. K. (2021). Knowledge discovery in cryptocurrency transactions: A survey. *Ieee Access*, *9*, 37229-37254. https://doi.org/10.1109/ACCESS.2021.3062652

Luo, D., Mishra, T., Yarovaya, L., & Zhang, Z. (2021). Investing during a Fintech revolution: Ambiguity and return risk in cryptocurrencies. *Journal of International Financial Markets, Institutions and Money*, *73*, 101362. https://doi.org/10.1016/j.intfin.2021.101362

Lusardi, A., & Mitchell, O. S. (2017). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. *Quarterly Journal of Finance*, *7*(03), 1750008. https://doi.org/10.1142/S2010139217500082

Madey, R. S. (2017). *A study of the history of cryptocurrency and associated risks and threats*. Utica College

Marwick, A. E. (2015). Instafame: Luxury selfies in the attention economy. *Public Culture*, *27*(1), 137-160. https://doi.org/10.1215/08992363-2798379

Nugraheni, N. N. A., Kellen, P. B., & de Rozari, P. E. (2021). The effect of financial behavior, financial literacy, and macroeconomics on stock investment decision-making in East Nusa Tenggara. *Annals of Management and Organization Research*, *3*(1), 1-20. https://doi.org/10.35912/amor.v3i1.1183

OECD. (2018). *OECD/INFE toolkit for measuring financial literacy and financial inclusion*. https://www.oecd.org/financial/education/2018-INFE-FinLit-Measurement-Toolkit.pdf

Okello Candiya Bongomin, G., Ntayi, J. M., Munene, J. C., & Nkote Nabeta, I. (2016). Social capital: Mediator of financial literacy and financial inclusion in rural Uganda. *Review of International Business and Strategy*, *26*(2), 291-312. https://doi.org/10.1108/RIBS-06-2014-0072

Otoritas Jasa Keuangan. (2021). *Strategi Nasional Literasi Keuangan Indonesia (SNLKI) 2021-2025*. https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/Strategi-Nasional-Literasi-Keuangan-Indonesia-2021-2025/Strategi Nasional Literasi Keuangan Indonesia 2021-2025.pdf

Otoritas Jasa Keuangan. (2022). *Survei Nasional Literasi dan Inklusi Keuangan 2022*. https://Sikapiuangmu.Ojk.Go.Id/FrontEnd/CMS/InfoGraphics/16

Pernice, I. G. A., & Scott, B. (2021). Cryptocurrency. *Internet Policy Review, Glossary of Decentralised Technosocial Systems*, *10*(2). https://doi.org/10.14763/2021.2.1561

Sangwan, V., Prakash, P., & Singh, S. (2020). Financial technology: A review of extant literature. *Studies in Economics and Finance*, *37*(1), 71-88. https://doi.org/10.1108/SEF-07-2019-0270

Senft, T. M. (2013). Microcelebrity and the branded self. *A Companion to New Media Dynamics*, 346-354. https://doi.org/10.1002/9781118321607

Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economics*, *87*, 581-643. https://doi.org/10.1007/s11573-017-0853-9

Subash, R. (2012). Role of behavioral finance in portfolio investment decisions: Evidence from India. *Charles University in Prague Faculty of Social Sciences Institute of Economic Studies*. https://www.semanticscholar.org/paper/Role-of-Behavioral-Finance-in-Portfolio-Investment-Subash/a25b064af188dedd6d4a1d2b38a5f4c403e698fb

Ulmi, A. T., Pahlevi, C., & Sobarsyah, M. (2022). The influence of social media influencer on students' interest in investing in the capital market. *Hasanuddin Journal of Business Strategy*, *4*(1), 25-31. https://doi.org/10.26487/hjbs.v4i

Utami, N., & Sitanggang, M. L. (2021). The analysis of financial literacy and its impact on investment decisions: A study on generation Z in Jakarta. *Inovbiz: Jurnal Inovasi Bisnis*, *9*(1), 33-40. https://doi.org/10.35314/inovbiz.v9i1.1840

We Are Social. (2022). *Ownership of cryptocurrency*. https://wearesocial.com/uk/blog/2022/01/digital-2022-another-year-of-bumper-growth-2/

World Economic Forum. (2017). *Beyond Fintech: A pragmatic assessment of disruptive potential in financial services*. https://www3.weforum.org/docs/Beyond_Fintech_-_A_Pragmatic_Assessment_of_Disruptive_Potential_in_Financial_Services.pdf

Zhao, H., & Zhang, L. (2021). Financial literacy or investment experience: Which is more influential in cryptocurrency investment? *International Journal of Bank Marketing*, *39*(7), 1208-1226. https://doi.org/10.1108/IJBM-11-2020-0552