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Determinants of Cryptocurrency Investment Decisions among Generation Z: The Roles of Financial Technology, Fear of Missing Out, and Financial Literacy

Muhammad Anwar Kurniawan [1*], Rina Susanti [2]

[1, 2] Slamet Riyadi University, Indonesia

* muhanwarkurniawan@gmail.com

Abstract

This study is urgent because understanding the factors influencing Generation Z's cryptocurrency investment decisions is essential for promoting informed and responsible digital investment behavior. The growing popularity of cryptocurrency as a digital investment instrument among Generation Z highlights the need to understand the factors that shape their investment decisions, particularly in an environment characterized by rapid financial technology development, psychological pressures associated with fear of missing out, and varying levels of financial literacy. This study aims to examine the effects of financial technology, fear of missing out, and financial literacy on cryptocurrency investment decisions among Generation Z in Surakarta. A quantitative research approach with a survey design was employed. The population comprised Generation Z individuals in Surakarta who had invested in cryptocurrency, with the total population size unknown. Using purposive sampling, 100 respondents were selected based on predetermined criteria. Data were collected through questionnaires using a five-point Likert scale and analyzed using instrument validity and reliability tests, classical assumption tests, multiple linear regression analysis, t-tests, F-test, and the coefficient of determination (R^2). The results indicate that financial technology has a positive and significant effect on cryptocurrency investment decisions among Generation Z in Surakarta. Fear of missing out also has a positive and significant effect on cryptocurrency investment decisions. Furthermore, financial literacy has a positive and significant effect on cryptocurrency investment decisions. Simultaneously, financial technology, fear of missing out, and financial literacy significantly affect cryptocurrency investment decisions, as indicated by an F-statistic of 177.027 with a significance level of 0.000. The Adjusted R^2 value of 0.842 indicates that 84.2% of the variance in cryptocurrency investment decisions is explained by the three independent variables, while the remaining 15.8% is explained by other factors outside the research model, such as risk tolerance and herding behavior. These findings underscore the importance of technological, psychological, and financial knowledge factors in understanding cryptocurrency investment decisions among Generation Z.

Keywords: *Fear of Missing Out, Financial Literacy, Cryptocurrency Investment Decision, Generation Z*

Introduction

Digital financialization has transformed the architecture of contemporary financial markets by embedding technology in payment, information, trading, and investment activities. This transformation reduces procedural barriers, accelerates access to financial information, and allows individuals to participate in markets through mobile and platform-based services. For younger investors, the implications are particularly important because digital financial services increasingly combine information, transaction facilities, and investment opportunities within

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the same technological environment. The expansion of cryptocurrency illustrates this transformation most clearly. Cryptocurrency is a digital asset supported by blockchain technology and traded through continuously operating digital platforms, while its market is characterized by rapid price movements, high volatility, and strong sensitivity to information and investor sentiment (Wijaya & Hamid, 2026). A comprehensive review of cryptocurrency trading shows that the market has developed into a complex financial environment in which price dynamics, trading behavior, market information, and technological mechanisms interact closely (Fang et al., 2022).

Research on Generation Z further indicates that digital assets have become increasingly familiar to younger users, although familiarity, knowledge, perceived usefulness, and willingness to invest do not necessarily develop at the same pace. Generation Z may therefore be highly exposed to digital assets while remaining heterogeneous in its understanding of their risks and investment mechanisms (Król & Zdonek, 2023). The psychological dimension adds another layer of complexity. Cryptocurrency investment is conducted in an information-rich environment in which social media, market narratives, peer behavior, and rapid price changes can create pressure to act before perceived opportunities disappear. Experimental evidence demonstrates that fear-of-missing-out appeals can influence risky cryptocurrency investment decisions and can encourage repeated investment behavior even after previous losses, showing that investment choices may be affected by emotional mechanisms rather than by analytical assessment alone (Friederich et al., 2024). At the same time, financial literacy is essential because investors need sufficient knowledge to evaluate risk, return, diversification, and the characteristics of financial products before committing funds. Contemporary financial-literacy research emphasizes that financial knowledge is an important capability for making informed financial choices and reducing vulnerability to poor financial decisions (Lusardi & Mitchell, 2023).

The study's 2021-2025 global cryptocurrency market-cap graph further illustrates this problem: market capitalization fluctuated sharply and remained unstable, although the medium- to long-term pattern generally increased. The rapid market response to sentiment and trading activity is also reflected in the prominent use of stablecoins such as USDT, which supports transaction efficiency and value stability within the digital-asset ecosystem. Thus, the central problem is not simply the increasing accessibility of cryptocurrency investment, but the possibility that easier technological access and intensive information exposure may coexist with psychological pressure and uneven financial knowledge. This problem is particularly relevant when cryptocurrency investment decisions are examined among Generation Z, whose digital engagement may facilitate participation while simultaneously increasing exposure to behavioral and informational influences.

The Indonesian context reinforces the importance of examining these mechanisms. Cryptocurrency has developed from a relatively new digital asset into an increasingly visible component of Indonesia's financial ecosystem, while regulatory responsibility has shifted from the Commodity Futures Trading Supervisory Agency (Bappebti) to the Financial Services Authority (OJK). OJK reported that the number of crypto-asset consumers reached 20.19 million by December 2025, while the total value of crypto-asset transactions during 2025 reached IDR 482.23 trillion, indicating the scale of participation in the national digital-asset market. The upward pattern shown in Figure 2 across 2021–2025 is also evident, although annual growth was not uniform. Under Indonesia's regulatory framework, crypto assets were previously supervised as commodities by Bappebti and are now under OJK supervision, giving the market a more structured legal and supervisory environment. This expansion suggests

that cryptocurrency is increasingly considered an alternative investment instrument, but the rapid growth of participation does not by itself indicate that investors possess adequate decision-making capabilities.

Indonesian empirical studies provide several relevant explanations. Financial technology has been shown to contribute positively and significantly to Generation Z investment decisions, indicating that technology-based financial access can facilitate participation in investment activities (Saptyana, 2024). Similarly, research on Generation Z in Banda Aceh reports that financial technology and financial literacy positively and significantly influence investment decisions, highlighting the combined importance of digital access and financial capability (Meutia et al., 2026). Evidence from Generation Z in Denpasar also identifies financial technology and financial literacy as relevant determinants of investment decisions, with financial knowledge positioned within the relationship between these factors and investment decisions (Netriani et al., 2026). More specifically, cryptocurrency-focused evidence from Indonesia shows that financial technology usage positively influences cryptocurrency investment decisions among young investors, while financial literacy does not necessarily strengthen the technology–decision relationship (Rijanto & Utami, 2024).

Digital financial literacy also has a positive relationship with investment behavior among Indonesian millennials, suggesting that the ability to understand and use digital financial services is relevant to participation in technology-mediated financial activities (Rahayu et al., 2022). Qualitative evidence concerning cryptocurrency further indicates that digital financial literacy is important because investors require adequate technological and financial understanding before selecting cryptocurrency as part of an investment portfolio (Fadli, 2024). Evidence from Generation Z in Greater Jakarta likewise shows that digital financial literacy has a positive and significant effect on investment decisions, reinforcing the role of digital financial capability in evaluating and using investment services (Harianto & Suciati, 2026). Research on Generation Z cryptocurrency investors also demonstrates that digital literacy and investment motivation can positively influence cryptocurrency investment decisions, confirming that cognitive and motivational factors operate within the digital investment environment (Setyaningrum & Wiyatur, 2025). Across Generation Z investment settings, however, the significance of individual predictors varies by context and investment product. These findings collectively indicate that technological accessibility and financial capability are important, but they do not fully explain why young investors make particular cryptocurrency investment decisions.

Despite these findings, the existing literature leaves several important gaps. First, studies of financial technology and investment decisions among Generation Z generally examine conventional capital-market instruments rather than cryptocurrency, even though cryptocurrency differs substantially in volatility, market structure, trading continuity, and information intensity. Evidence from Generation Z in South Sumatra shows that digital financial literacy and financial technology are relevant to investment decision-making, but the study focuses on users of FinTech-based investment platforms rather than specifically on cryptocurrency investors (Candera et al., 2026). Research on Generation Z mutual-fund investors in West Java similarly finds that financial technology and financial literacy are relevant to investment decisions, yet the object remains a conventional investment product rather than a highly volatile digital asset (Palesta & Paramita, 2024). Second, the evidence concerning financial literacy is not consistent across investment contexts.

Research on millennials' stock investment decisions indicates that financial literacy, financial self-efficacy, financial technology literacy, and risk perception should be considered jointly, demonstrating that financial capability may operate differently according to investor characteristics and market settings (Sunarko & Sutrisno, 2025). Likewise, research in Indonesia identifies digital financial literacy and investment intention as important mechanisms in explaining investment decision-making, suggesting that the pathway from knowledge to actual decisions may not be direct (Maulana et al., 2025). Third, cryptocurrency-specific studies have increasingly incorporated behavioral factors, but they often emphasize herding, risk perception, overconfidence, knowledge, social influence, or investment experience rather than examining financial technology, FOMO, and financial literacy simultaneously. For example, a phenomenological study of Indonesian cryptocurrency investors examines investment decisions through the lens of mental accounting, illustrating the importance of behavioral interpretation but not integrating financial technology, FOMO, and financial literacy within one explanatory model (Ginting et al., 2023). Fourth, recent evidence on Generation Z cryptocurrency investors demonstrates that FOMO can influence investment decisions and that financial literacy can interact with behavioral influences (Indikasari & Wibowo, 2026).

The literature remains fragmented across different combinations of variables, geographical settings, and analytical roles. Evidence from Pontianak, for instance, shows that FOMO affects cryptocurrency investment decisions and that financial literacy moderates some behavioral relationships, but not the relationship between FOMO and investment decisions (Tanjung et al., 2026). This indicates that financial literacy cannot simply be assumed to have a uniform function across digital investment contexts. Consequently, an important empirical gap remains in understanding whether financial technology, FOMO, and financial literacy each exert a direct influence on cryptocurrency investment decisions when examined together within the same model.

The gap is particularly evident at the city level, because existing Indonesian studies have concentrated on national samples, Jabodetabek, Banda Aceh, Denpasar, West Java, South Sumatra, Pontianak, and other locations, while the specific investment behavior of Generation Z in Surakarta remains insufficiently documented. Addressing this gap can provide more context-sensitive evidence on how technological accessibility, psychological pressure, and financial capability jointly shape cryptocurrency investment decisions. The Surakarta context makes this gap particularly meaningful because the city has experienced increasing exposure to digital-finance education and blockchain-related activities. Web3 University Tour 2025 in Solo introduced Web3, blockchain, and crypto assets to university students, while Degree Crypto Token established its first Business Center at Solo Technopark as an educational and learning center for cryptocurrency and blockchain technology. These developments indicate an environment that is increasingly conducive to digital-asset awareness, but exposure to technology and information does not guarantee uniform investment judgment. This is especially relevant for Generation Z, who constitute the largest internet-user generation in Indonesia, with a reported proportion of 34.4 percent, and who routinely use the internet, mobile devices, and digital platforms for communication, information search, and financial activities.

High digital intensity may facilitate access to FinTech services and cryptocurrency markets while also increasing exposure to investment narratives, peer behavior, and FOMO. At the same time, the national increase in crypto participation, reflected in the study's 2021–2025 investor trend, needs to be considered alongside the high-risk nature of cryptocurrency and OJK's warning that consumers and prospective consumers should understand the risks of

digital financial assets before transacting. Investment decision-making can be understood as the process of allocating funds by considering expected return and risk, while the Theory of Planned Behavior emphasizes attitudes, subjective norms, and perceived behavioral control. The research therefore asks three questions: does financial technology positively and significantly affect cryptocurrency investment decisions among Generation Z in Surakarta; does fear of missing out positively and significantly affect those decisions; and does financial literacy positively and significantly affect those decisions? Accordingly, this study aims to analyze the positive and significant effects of financial technology, fear of missing out, and financial literacy on cryptocurrency investment decisions among Generation Z in Surakarta.

The study's novelty lies in integrating these three dimensions within a single explanatory model and applying the model to Generation Z cryptocurrency investors in Surakarta, a localized setting that has received comparatively limited empirical attention. The proposed framework connects technological accessibility, psychological pressure, and financial capability rather than examining these dimensions separately. This integrated perspective is important because FinTech can reduce access barriers and accelerate transactions, FOMO can encourage action in response to rapidly changing market trends, and financial literacy can support more deliberate evaluation of risk and return. The study is therefore expected to contribute empirical evidence for understanding cryptocurrency investment decisions in an Indonesian urban context and to provide practical implications for Generation Z in Surakarta. For investors, the findings can support more rational and informed decision-making and help align cryptocurrency participation with future financial goals. For future researchers, the results can provide an empirical reference for extending financial-behavior research by examining additional psychological, technological, or contextual variables in cryptocurrency investment.

Method

This study employed a quantitative research design to examine the effects of financial technology, fear of missing out (FOMO), and financial literacy on cryptocurrency investment decisions among Generation Z. The study used a deductive approach, in which data were collected through a structured questionnaire and analyzed statistically to examine the proposed relationships among the variables. Financial technology, fear of missing out, and financial literacy were specified as the independent variables, while cryptocurrency investment decision was the dependent variable. The research was conducted among Generation Z respondents domiciled in Surakarta City, Indonesia, who had experience investing in cryptocurrency. The study did not restrict respondents to a particular cryptocurrency investment platform. The research period was not specified in the draft and therefore needs to be completed with the actual period of data collection before publication.

The population comprised Generation Z in Surakarta City who were currently or previously involved in cryptocurrency investment. The exact size of this population was unknown because no reliable data were available regarding the total number of Generation Z cryptocurrency investors in Surakarta. Because the population size was unknown, the minimum sample size was determined using the Leedy approach, assuming a population proportion of 0.5, a 10% sampling error, and a 95% confidence level with a standard normal value of 1.96. The calculation resulted in a minimum sample requirement of 96.04 respondents; therefore, the study used 100 respondents.

Sampling Technique and Sampling Criteria

The respondents were selected using purposive sampling, a non-probability sampling technique in which participants are selected based on predetermined criteria relevant to the research objectives. The sampling criteria were that respondents were Generation Z aged 17–29 years, domiciled in Surakarta City, and currently or previously engaged in cryptocurrency investment. Respondents were also required to have conducted cryptocurrency investment activities, such as purchasing or selling crypto assets, so that they had direct experience in making cryptocurrency investment decisions. In addition, respondents were required to have conducted cryptocurrency investment activities within the previous six months to ensure that their responses reflected relatively recent experience with cryptocurrency investment activities.

Data Collection Techniques

The primary data were collected through a structured questionnaire distributed online using Google Forms. The questionnaire was administered to respondents who met the predetermined sampling criteria and contained statements measuring financial technology, fear of missing out, financial literacy, and cryptocurrency investment decisions. A literature study was also conducted as a supporting data collection technique by reviewing relevant books and previous research articles to support the development of the research variables and measurement indicators. The quantitative analysis was based on the primary questionnaire data. The research instrument was a structured questionnaire using a five-point Likert scale. Respondents were asked to indicate their level of agreement with each statement, ranging from 1 (strongly disagree) to 5 (strongly agree), with the response categories of strongly disagree, disagree, neutral, agree, and strongly agree. Before the data were analyzed, the questionnaire instrument was assessed for validity and reliability. Item validity was examined using Pearson correlation, with an item considered valid when the p-value was below 0.05. Reliability was assessed using Cronbach's alpha, with a coefficient of 0.60 or higher considered acceptable. These tests were conducted to ensure that the questionnaire items adequately measured the intended research constructs and demonstrated internal consistency.

Data Analysis Techniques

The collected data were analyzed using descriptive and inferential statistical techniques. Descriptive analysis was used to summarize respondent characteristics and questionnaire responses. Respondent characteristics included age, domicile, gender, and frequency of investment transactions. Descriptive statistics for questionnaire responses were presented using mean scores, which were interpreted according to five categories: 1.00–1.80 (very low), 1.81–2.60 (low), 2.61–3.40 (moderate), 3.41–4.20 (high), and 4.21–5.00 (very high). Before multiple linear regression analysis, the data were subjected to classical assumption testing. Normality was assessed using graphical analysis and the One-Sample Kolmogorov–Smirnov test, with a p-value of 0.05 or higher indicating normally distributed residuals. Multicollinearity was assessed using tolerance and variance inflation factor (VIF) values; tolerance values above 0.10 and VIF values below 10 indicated the absence of multicollinearity. Autocorrelation was assessed using the Runs Test, with a p-value of 0.05 or higher indicating no autocorrelation. Heteroskedasticity was examined using the Glejser test, with a p-value of 0.05 or higher indicating no heteroskedasticity.

Multiple linear regression analysis was then employed to examine the partial and simultaneous effects of financial technology, fear of missing out, and financial literacy on cryptocurrency investment decisions among Generation Z in Surakarta. This analysis was conducted to estimate the direction and magnitude of the relationships between the independent and dependent variables and to determine the extent to which each predictor contributes to investment decision-making. The regression model was specified as:

$$(Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e),$$

Where (Y) represents cryptocurrency investment decision, (X_1) financial technology, (X_2) fear of missing out, (X_3) financial literacy, (a) the constant, (b_1), (b_2), and (b_3) the regression coefficients, and (e) the error term.

The significance of the individual effects of the independent variables was assessed using the t-test at a 5% significance level. An independent variable was considered to have a statistically significant effect when its p-value was below 0.05. The overall significance of the regression model was assessed using the F-test at a 5% significance level; a p-value below 0.05 indicated that the regression model was statistically significant. Finally, the coefficient of determination was assessed using the adjusted R^2 to determine the proportion of variation in cryptocurrency investment decisions explained by the independent variables included in the regression model.

Results

Respondent Profile

The study involved 100 Generation Z respondents in Surakarta City who were currently or previously engaged in cryptocurrency investment. The respondents were distributed across five districts of Surakarta City and varied in terms of gender, age, and educational background. The respondent characteristics are presented in Table 1.

***Table 1**. Respondent Characteristics*

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	65	65.0
	Female	35	35.0
Total		100	100.0
Age	< 20 years	8	8.0
	21–23 years	69	69.0
	24–26 years	19	19.0
	27–29 years	4	4.0
Total		100	100.0
Education	Senior High School/Vocational School	62	62.0
	D3/D4	10	10.0
	Bachelor's degree (S1)	28	28.0
Total		100	100.0
Domicile	Banjarsari	30	30.0
	Jebres	16	16.0
	Laweyan	20	20.0
	Pasar Kliwon	22	22.0
	Serengan	12	12.0
Total		100	100.0

The respondent distribution shows that 65 respondents (65.0%) were male and 35 (35.0%) were female. The largest age group was 21–23 years, comprising 69 respondents

(69.0%), followed by 24–26 years with 19 respondents (19.0%). In terms of education, 62 respondents (62.0%) had completed senior high school/vocational school. By domicile, Banjarsari had the largest representation with 30 respondents (30.0%), followed by Pasar Kliwon with 22 (22.0%).

Instrument Validity and Reliability

The validity of the questionnaire items was assessed using Pearson correlation with a significance criterion of 0.05. The original draft reports significance values rather than r-count and r-table values. Therefore, only the available significance values and validity decisions are presented below.

Table 2. *Validity Test Results*

Variable	Item	p-value	α	Decision
Financial technology (X1)	X1.1	0.000	0.05	Valid
	X1.2	0.000	0.05	Valid
	X1.3	0.000	0.05	Valid
	X1.4	0.000	0.05	Valid
Fear of missing out (X2)	X2.1	0.001	0.05	Valid
	X2.2	0.000	0.05	Valid
	X2.3	0.000	0.05	Valid
	X2.4	0.000	0.05	Valid
	X2.5	0.000	0.05	Valid
	X2.6	0.000	0.05	Valid
Financial literacy (X3)	X3.1	0.000	0.05	Valid
	X3.2	0.000	0.05	Valid
	X3.3	0.011	0.05	Valid
	X3.4	0.000	0.05	Valid
	X3.5	0.000	0.05	Valid
Cryptocurrency investment decision (Y)	Y.1	0.000	0.05	Valid
	Y.2	0.000	0.05	Valid
	Y.3	0.000	0.05	Valid
	Y.4	0.000	0.05	Valid
	Y.5	0.000	0.05	Valid
	Y.6	0.000	0.05	Valid
	Y.7	0.000	0.05	Valid

All 22 questionnaire items had p-values below 0.05. For financial technology, all four items had a p-value of 0.000. For fear of missing out, the six items had p-values ranging from 0.000 to 0.001. The five financial literacy items had p-values ranging from 0.000 to 0.011, while all seven cryptocurrency investment decision items had a p-value of 0.000. Accordingly, all questionnaire items were classified as valid.

Table 3. *Reliability Test Results*

Variable	Cronbach's Alpha	Number of Items	Decision
Financial technology (X1)	0.738	4	Reliable
Fear of missing out (X2)	0.701	6	Reliable
Financial literacy (X3)	0.674	5	Reliable
Cryptocurrency investment decision (Y)	0.732	7	Reliable

The reliability analysis produced Cronbach's alpha coefficients of 0.738 for financial technology, 0.701 for fear of missing out, 0.674 for financial literacy, and 0.732 for cryptocurrency investment decision. All coefficients exceeded the 0.60 criterion. Thus, the four research variables demonstrated acceptable internal consistency, with financial technology recording the highest Cronbach's alpha coefficient and financial literacy the lowest among the four variables.

Classical Assumption Tests

The regression model was assessed using normality, multicollinearity, autocorrelation, and heteroskedasticity tests to ensure that the underlying assumptions of multiple linear regression were adequately satisfied. These diagnostic procedures were conducted to confirm the reliability and validity of the regression estimates before hypothesis testing. The main results of these tests are summarized in Table 4.

Table 4. *Classical Assumption Test Results*

Test	Variable/Statistic	Result	Decision
Normality	N	100	—
	Mean residual	0.0000000	—
	Std. Deviation	1.36887878	—
	Test Statistic	0.045	—
	Asymp. Sig. (2-tailed)	0.200	Normal
Multicollinearity	Financial technology – Tolerance	0.352	No multicollinearity
	Financial technology – VIF	2.839	No multicollinearity
	Fear of missing out – Tolerance	0.350	No multicollinearity
	Fear of missing out – VIF	2.857	No multicollinearity
	Financial literacy – Tolerance	0.248	No multicollinearity
	Financial literacy – VIF	4.028	No multicollinearity
Autocorrelation	Number of runs	47	—
	Z	-0.804	—
	Asymp. Sig. (2-tailed)	0.421	No autocorrelation
Heteroskedasticity	Financial technology – Sig.	0.291	No heteroskedasticity
	Fear of missing out – Sig.	0.065	No heteroskedasticity
	Financial literacy – Sig.	0.620	No heteroskedasticity

The Kolmogorov Smirnov test produced an Asymp. Sig. value of 0.200, indicating normally distributed residuals. Tolerance values ranged from 0.248 to 0.352 and VIF values from 2.839 to 4.028, indicating no multicollinearity. The Runs Test yielded a significance value of 0.421, indicating no autocorrelation. The Glejser test produced significance values of 0.291, 0.065, and 0.620 for the three independent variables, indicating no heteroskedasticity.

Descriptive Statistics of Research Variables

The descriptive analysis presents the mean scores of respondents' responses for each questionnaire item to provide an overview of the observed characteristics of the research variables. The analysis covers financial technology, fear of missing out, financial literacy, and cryptocurrency investment decisions. These descriptive results illustrate respondents' general perceptions and tendencies toward each variable and provide an initial basis for interpreting the subsequent statistical findings.

Table 5. *Descriptive Statistics of Financial Technology (X1)*

No.	Statement	Mean
1	Fintech use saves time in searching for information and analyzing cryptocurrency investment opportunities.	4.13
2	Fintech facilitates cryptocurrency investment transactions.	4.17
3	Fintech helps in making more appropriate cryptocurrency investment decisions.	4.11
4	Features available on fintech platforms help achieve cryptocurrency investment objectives.	4.14
	Overall Mean	4.14

The mean score for financial technology was 4.14. Among the four items, the highest mean was 4.17 for the statement concerning the facilitation of cryptocurrency investment transactions. The lowest mean was 4.11 for the statement concerning assistance in making cryptocurrency investment decisions. The other two items recorded mean scores of 4.13 and

4.14, respectively. Based on the stated classification, the overall mean of 4.14 falls within the high category.

Table 6. *Descriptive Statistics of Fear of Missing Out (X2)*

No.	Statement	Mean
1	Frequently monitor social media or digital platforms to follow cryptocurrency investment developments discussed by others.	4.23
2	Feel encouraged to immediately buy popular cryptocurrency to avoid missing investment trends.	3.95
3	Feel anxious when seeing others gain profits from cryptocurrency that I do not own.	4.06
4	Compare my cryptocurrency investment decisions with those of others.	4.13
5	Make spontaneous cryptocurrency purchases because of fear of losing an investment opportunity.	4.11
6	Information from influencers or advertisements encourages immediate cryptocurrency investment decisions.	4.07
	Overall Mean	4.09

The mean score for fear of missing out was 4.09. The highest item mean was 4.23, relating to monitoring social media or digital platforms for cryptocurrency investment developments. The lowest was 3.95, relating to the immediate purchase of popular cryptocurrency to avoid missing investment trends. The remaining items recorded means of 4.06, 4.13, 4.11, and 4.07. The overall mean of 4.09 falls within the high category.

Table 7. *Descriptive Statistics of Financial Literacy (X3)*

No.	Statement	Mean
1	Understand the risks involved in cryptocurrency investment.	4.25
2	Understand how cryptocurrency investment works before investing.	4.12
3	Understand that cryptocurrency investment returns can be obtained from price increases (capital gains).	4.18
4	Understand the importance of using funds that are appropriate to financial capacity when investing.	4.21
5	Understand how to avoid fraud risks in cryptocurrency investment.	4.09
	Overall Mean	4.17

The overall mean score for financial literacy was 4.17. The highest mean was 4.25 for understanding the risks involved in cryptocurrency investment. The lowest mean was 4.09 for understanding how to avoid fraud risks in cryptocurrency investment. The other items recorded mean scores of 4.12, 4.18, and 4.21. The overall mean of 4.17 falls within the high category according to the response classification used in the study.

Table 8. *Descriptive Statistics of Cryptocurrency Investment Decision (Y)*

No.	Statement	Mean
1	Consider investment risk before deciding to invest in cryptocurrency.	4.30
2	Consider potential returns before investing in cryptocurrency.	4.21
3	Use obtained information as a basis for making cryptocurrency investment decisions.	4.17
4	Compare several sources of information before determining a cryptocurrency investment decision.	4.15
5	Feel confident about the cryptocurrency investment decision made.	4.05
6	Do not hesitate about the cryptocurrency investment decision that has been determined.	4.18
7	Make cryptocurrency investments based on decisions that have been considered.	4.26
	Overall Mean	4.19

The overall mean score for cryptocurrency investment decision was 4.19. The highest mean was 4.30 for considering investment risk before investing, followed by 4.26 for carrying out investments based on considered decisions. The lowest mean was 4.05 for confidence in the investment decision. The remaining items recorded means of 4.21, 4.17, 4.15, and 4.18. The overall mean of 4.19 falls within the high category.

Multiple Linear Regression and Hypothesis Testing

Multiple linear regression was used to examine the effects of financial technology, fear of missing out, and financial literacy on cryptocurrency investment decisions. The regression coefficients and individual significance tests are presented in Table 9.

***Table 9**. Multiple Linear Regression Results*

Model	B	Std. Error	Beta	t	Sig.
Constant	2.373	1.197	—	1.982	0.050
Financial technology (X1)	0.476	0.113	0.284	4.227	0.000
Fear of missing out (X2)	0.275	0.074	0.250	3.703	0.000
Financial literacy (X3)	0.590	0.103	0.460	5.737	0.000
Dependent variable: Cryptocurrency investment decision (Y)					

The estimated regression equation was $(Y = 2.373 + 0.476X_1 + 0.275X_2 + 0.590X_3 + e)$. The coefficient for financial technology was 0.476, with a standardized beta of 0.284, t-value of 4.227, and significance of 0.000. Fear of missing out had a coefficient of 0.275, beta of 0.250, t-value of 3.703, and significance of 0.000. Financial literacy had a coefficient of 0.590, beta of 0.460, t-value of 5.737, and significance of 0.000.

The t-test results show that financial technology had a significant positive effect on cryptocurrency investment decisions because its significance value was 0.000 < 0.05. Therefore, H1 was supported. Fear of missing out also had a significant positive effect, with a significance value of 0.000 < 0.05; consequently, H2 was supported. Financial literacy had a significant positive effect on cryptocurrency investment decisions, with a significance value of 0.000 < 0.05, supporting H3.

***Table 10**. F-Test Results*

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1026.251	3	342.084	177.027	0.000
Residual	185.509	96	1.932	—	—
Total	1211.760	99	—	—	—
Dependent variable: Cryptocurrency investment decision (Y)					
Predictors: Financial technology, fear of missing out, and financial literacy					

The ANOVA results show that the regression model produced an F-value of 177.027 with a significance value of 0.000. Because the significance value was below 0.05, the null hypothesis was rejected. The regression model was therefore statistically significant for examining the joint effects of financial technology, fear of missing out, and financial literacy on cryptocurrency investment decisions. The regression, residual, and total sums of squares were 1026.251, 185.509, and 1211.760, respectively.

***Table 11.** Coefficient of Determination*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.920	0.847	0.842	1.39010
Predictors: Financial technology, fear of missing out, and financial literacy.				
Dependent variable: Cryptocurrency investment decision (Y).				

The model produced an R value of 0.920, an R Square of 0.847, and an Adjusted R Square of 0.842, with a Std. Error of the Estimate of 1.39010. Based on the Adjusted R Square, 84.2% of the variation in cryptocurrency investment decisions was accounted for by financial technology, fear of missing out, and financial literacy. The remaining 15.8% was attributed to factors outside the variables included in the model.

Discussion

The Effect of Financial Technology on Cryptocurrency Investment Decisions

The t-test results show that financial technology has a positive and significant effect on cryptocurrency investment decisions among Generation Z in Surakarta, as indicated by a positive regression coefficient (B) of 0.476 and a significance value of 0.000 (< 0.05). Therefore, H1 is supported, indicating that higher utilization of financial technology is associated with stronger cryptocurrency investment decisions. This finding suggests that financial technology facilitates individuals' engagement in cryptocurrency investment by providing greater accessibility and convenience in carrying out investment-related activities. Digital financial platforms can simplify access to cryptocurrency investment services and enable users to conduct investment transactions more efficiently. This result is consistent with previous research showing that financial technology usage has a positive effect on cryptocurrency investment decisions among young cryptocurrency investors (Rijanto & Utami, 2024).

The finding can be explained through the Theory of Planned Behavior (TPB), particularly the concept of perceived behavioral control. Financial technology can strengthen perceived behavioral control because technological facilities make investment activities easier to access and execute. When individuals perceive that financial technology enables them to monitor markets, access investment services, and conduct transactions efficiently, they may develop greater confidence in their ability to engage in cryptocurrency investment. Thus, the positive effect identified in this study indicates that technological convenience can function as an enabling condition that strengthens individuals' capacity to make cryptocurrency investment decisions. This interpretation is consistent with empirical evidence that financial technology usage positively influences cryptocurrency investment decisions (Rijanto & Utami, 2024).

The practical implication is that financial technology providers should not focus solely on transaction convenience but should also strengthen features that support informed investment decisions. Based on the descriptive results, the convenience of conducting transactions should be maintained because it received the highest assessment among the financial technology indicators. In addition, fintech platforms could provide clearer market information, risk-analysis features, investment education, easy-to-understand price charts, and data-based analytical tools. These features could strengthen the role of financial technology from merely facilitating transactions to supporting more informed and systematic cryptocurrency investment decisions.

The Effect of Fear of Missing Out on Cryptocurrency Investment Decisions

The t-test results indicate that fear of missing out (FoMO) has a positive and significant effect on cryptocurrency investment decisions among Generation Z in Surakarta, with a positive regression coefficient (B) of 0.275 and a significance value of 0.000 (< 0.05). Therefore, H2 is supported. This finding indicates that individuals with stronger feelings of FoMO tend to demonstrate stronger cryptocurrency investment decisions. In the context of cryptocurrency, the perception that other people are obtaining attractive investment opportunities may create an emotional motivation to participate in the market in order to avoid missing potentially profitable opportunities. This result is consistent with experimental evidence showing that externally evoked FoMO influences consumers' cryptocurrency investment decisions and can encourage repeated investment decisions even after previous investment losses (Friederich et al., 2024).

The finding can be interpreted through the Theory of Planned Behavior, particularly the subjective-norm component, although FoMO itself should not be regarded as identical to subjective norms. Exposure to cryptocurrency investment activities, market trends, and information shared through digital media may create perceptions that cryptocurrency participation is widespread among peers and other investors. Such social exposure can intensify the feeling that remaining outside the market may result in missing an attractive opportunity. Consequently, individuals experiencing stronger FoMO may be more inclined to make cryptocurrency investment decisions. This interpretation is supported by evidence that FOMO appeals can influence cryptocurrency investment decisions through affective processes and can increase risky investment behavior (Friederich et al., 2024).

The practical implication is that FoMO should be managed by directing individuals' tendency to monitor investment information toward more rational information processing. The relatively high tendency of respondents to monitor digital investment information can be beneficial when the information is used to increase knowledge and evaluate investment alternatives. However, emotional pressure to follow investment trends should be controlled because it may encourage premature decisions without adequate risk assessment. Investment education should therefore encourage Generation Z investors to evaluate cryptocurrency volatility, potential losses, investment objectives, and risk tolerance rather than relying primarily on asset popularity, other investors' returns, or influencer recommendations. In this way, the information-seeking aspect associated with FoMO can be transformed into a more constructive investment behavior.

The Effect of Financial Literacy on Cryptocurrency Investment Decisions

The t-test results demonstrate that financial literacy has a positive and significant effect on cryptocurrency investment decisions among Generation Z in Surakarta, as indicated by a positive regression coefficient (B) of 0.590 and a significance value of 0.000 (< 0.05). Therefore, H3 is supported. The finding indicates that higher financial literacy is associated with stronger cryptocurrency investment decisions. Among the three independent variables examined in this study, financial literacy has the largest regression coefficient, suggesting that it has the strongest positive relationship with cryptocurrency investment decisions within the estimated regression model. This result indicates that financial knowledge may provide individuals with a stronger basis for evaluating cryptocurrency investment opportunities and their associated risks. Previous research found that financial literacy was positively associated with cryptocurrency investment behavior among individual investors, although investment experience was found to be a stronger predictor (Zhao & Zhang, 2021).

The finding can be explained through the Theory of Planned Behavior, particularly perceived behavioral control. Financial literacy provides individuals with knowledge and cognitive resources that can strengthen their perceived ability to evaluate financial alternatives and manage investment decisions. In cryptocurrency investment, this capability is particularly important because cryptocurrency is characterized by substantial volatility and uncertainty. Individuals with greater financial literacy may be better able to assess potential returns and losses, recognize investment risks, and determine whether an investment is consistent with their financial objectives and risk tolerance. Accordingly, the positive relationship found in this study suggests that financial literacy can strengthen the perceived control necessary to make more informed cryptocurrency investment decisions. This interpretation is consistent with evidence that financial literacy is positively associated with cryptocurrency investment behavior (Zhao & Zhang, 2021).

The practical implication is that financial literacy programs for Generation Z should address not only general financial concepts but also risks specific to cryptocurrency investment. The respondents' understanding of investment risk should be maintained because cryptocurrency involves substantial price volatility and the possibility of significant losses. At the same time, greater attention should be given to fraud prevention. Educational programs should improve investors' ability to identify potentially illegal investment platforms, verify the legality and credibility of service providers, recognize unrealistic return promises, and distinguish credible investment information from misleading information. Consequently, financial literacy should extend beyond understanding investment returns and risks to include the ability to protect investors from fraudulent cryptocurrency investment practices.

Conclusion

This study concludes that financial technology, fear of missing out, and financial literacy each have a positive and significant effect on cryptocurrency investment decisions among Generation Z in Surakarta. These findings indicate that technological accessibility, psychological responses to potentially missed opportunities, and financial knowledge are all relevant factors in explaining cryptocurrency investment decisions within the specific population examined. The findings contribute to the literature by providing empirical evidence that technological, psychological, and knowledge-related factors can simultaneously be considered in understanding cryptocurrency investment decisions among Generation Z in an urban Indonesian context.

Several limitations should be acknowledged. First, the study examined only three independent variables, leaving the possibility that other factors may also influence cryptocurrency investment decisions. Second, the sample was limited to 100 respondents, determined using the Leedy formula, which may restrict the extent to which the findings represent the broader Generation Z population. Third, the study focused exclusively on Generation Z in Surakarta, limiting the generalizability of the findings to other geographical areas and age groups. Fourth, data were collected through self-administered questionnaires, meaning that responses were subjective and dependent on respondents' individual perceptions at the time of data collection. For Generation Z in Surakarta, participation in cryptocurrency investment education through fintech platforms or investment communities may help strengthen understanding of financial technology, manage fear of missing out, and improve financial literacy before making investment decisions. Future researchers are encouraged to extend the model by examining additional factors, such as risk tolerance, herding behavior, and pocket money, and to involve larger samples and broader geographical areas or different population groups. Future studies may also consider alternative data-collection approaches to complement questionnaire responses and provide a more comprehensive understanding of cryptocurrency investment decisions.

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References

Candera, M., Safitri, E., Saputra, R. Z. M. F., & Kasuwara, C. (2026). Knowledge to action: How digital financial literacy shapes investment decisions of Generation Z through FinTech. *Jurnal Reviu Akuntansi dan Keuangan, 16*(2). https://doi.org/10.22219/jrak.v16i2.42776

Fadli, J. A. (2024). The importance of digital financial literacy in cryptocurrency investment: A qualitative study. *Jurnal Informatika Ekonomi Bisnis, 6*(4), 719–722. https://doi.org/10.37034/infeb.v6i4.941

Fang, F., Ventre, C., Basios, M., Kanthan, L., Martinez-Rego, D., Wu, F., & Li, L. (2022). Cryptocurrency trading: A comprehensive survey. *Financial Innovation, 8*, 13. https://doi.org/10.1186/s40854-021-00321-6

Friederich, F., Meyer, J.-H., Matute, J., & Palau-Saumell, R. (2024). Crypto-mania: How fear-of-missing-out drives consumers' (risky) investment decisions. *Psychology & Marketing, 41*(1), 102–117. https://doi.org/10.1002/mar.21906

Ginting, R., Crystopher, D., & Yunita, K. (2023). Revealing the meaning of Indonesian cryptocurrency investment decisions based on mental accounting: A phenomenological study. *Jati: Jurnal Akuntansi Terapan Indonesia, 6*(1), 45–57. https://doi.org/10.18196/jati.v6i1.18042

Harianto, G. R., & Suciati, R. (2026). The influence of financial inclusion, digital financial literacy, and risk perception on investment decisions in Generation Z. *Dinasti International Journal of Economics, Finance & Accounting, 7*(2), 1067–1076. https://doi.org/10.38035/dijefa.v7i2.6772

Indikasari, P., & Wibowo, E. (2026). The influence of income and social media on investment decisions with digital financial literacy as a moderating variable among Generation Z in Wonogiri Regency. *Journal Social Society, 6*(4), 2818–2828. https://doi.org/10.54065/jss.6.4.2026.1634

Król, K., & Zdonek, D. (2023). Digital assets in the eyes of Generation Z: Perceptions, outlooks, concerns. *Journal of Risk and Financial Management, 16*(1), 22. https://doi.org/10.3390/jrfm16010022

Lusardi, A., & Mitchell, O. S. (2023). The importance of financial literacy: Opening a new field. *Journal of Economic Perspectives, 37*(4), 137–154. https://doi.org/10.1257/jep.37.4.137

Maulana, H., Ulya, A. Z. S., Syahruddin, S., Abadi, M. K. R., Hastuti, E. W., & Harahap, S. A. R. (2025). Factors affecting investment decision in Indonesia: Mediating role of intention to invest. *Jurnal Ekonomi & Keuangan Islam, 11*(2), 241–257. https://doi.org/10.20885/jeki.vol11.iss2.art6

Meutia, R., Rochied, A., & Azra, U. (2026). Determinants of investment decisions among Generation Z: The role of financial literacy, financial inclusion and FinTech. *Jurnal Manajemen dan Profesional, 7*(2), 279–294. https://doi.org/10.32815/jpro.v7i2.3070

Netriani, N. N. R., Tahu, G. P., & Wijana, I. M. D. (2026). The influence of financial technology and financial literacy on investment decisions through financial knowledge in Gen Z in Denpasar City. *International Journal of Economics and Management Sciences, 3*(2). https://doi.org/10.61132/ijems.v3i2.1243

Palesta, P. K., & Paramita, V. S. (2024). The influence of financial technology, financial literacy, and risk perception on mutual fund investment decisions in Generation Z in Jawa Barat. *International Journal of Science, Technology & Management, 5*(1), 135–145. https://doi.org/10.46729/ijstm.v5i1.1038

Rahayu, R., Ali, S., Aulia, A., & Hidayah, R. (2022). The current digital financial literacy and financial behavior in Indonesian millennial generation. *Journal of Accounting and Investment, 23*(1), 78–94. https://doi.org/10.18196/jai.v23i1.13205

Rijanto, B. P., & Utami, N. (2024). Financial technology, social media influencers, and experience of cryptocurrency investment decisions: Financial literacy's role. *Jurnal Manajemen Maranatha, 23*(2), 201–216. https://doi.org/10.28932/jmm.v23i2.8717

Saptyana, R. F. (2024). The influence of lifestyle, financial technology, financial literacy, and financial behavior on Generation Z investment decisions. *Tax Accounting Applied Journal, 2*(2), 12–25. https://doi.org/10.14710/taaij.2023.22074

Setyaningrum, R. P., & Wiyatur. (2025). The decision making of cryptocurrency investment in digital literacy and motivation among Generation Z through investment interest in Indonesia. *Jurnal Manajemen Bisnis, 12*(1). https://doi.org/10.33096/jmb.v12i1.984

Sunarko, C., & Sutrisno. (2025). The effect of financial literacy, financial self-efficacy, financial technology literacy, and risk perception on stock investment decisions: Millennials preferences. *Asian Management and Business Review, 5*(1), 19–34. https://doi.org/10.20885/AMBR.vol5.iss1.art2

Tanjung, R. H., Mustaruddin, Ristyawan, M. R., Giriati, & Mustika, U. N. (2026). How financial literacy moderate the herding behavior, social media, and FOMO to investment decision crypto in Gen Z. *JEMSI (Jurnal Ekonomi, Manajemen, dan Akuntansi), 12*(4), 3655–3665. https://doi.org/10.35870/jemsi.v12i4.6749

Wijaya, R. A., & Hamid, M. (2026). The influence of blockchain technology and human resource competence on the quality of financial reports at the UPT Metal Division of the Department of Industry, Cooperatives, Small and Medium Enterprises of Yogyakarta City. *Journal Social Society, 6*(2), 971–983. https://doi.org/10.54065/jss.6.2.2026.1186

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