JAFM: Journal of Accounting and Finance Management
E-ISSN: 2721-3013
P-ISSN: 2721-3005
https://dinastires.org/JAFM dinasti.info@gmail.com +62 811 7404 455
DOI: https://doi.org/10.38035/jafm.v6i4

Investor Behavior in Cryptocurrency Market in Indonesia: The Role of Trust, Regulation, Digital Access and Risk Perception Through Psycological Empowerment

Angga Putra Jayani[1], Fajri Adrianto[2], Masyhuri Hamidi[3]
[1]Universitas Andalas, Magister Manajemen, Padang, Indonesia, 2320522076_angga@student.unand.ac.id
[2]Universitas Andalas, Magister Manajemen, Padang, Indonesia, fajriadrianto@eb.unand.ac.id
[3]Universitas Andalas, Magister Manajemen, Padang, Indonesia, masyhurihamidi@eb.unand.ac.id

Corresponding Author: 2320522076_angga@student.unand.ac.id[1]

Abstract: This study examines the determinants of investor behavior in Indonesia's cryptocurrency market, focusing on trust, regulation, digital access, and risk perception, with psychological empowerment as a mediating variable. Motivated by the rapid growth of crypto adoption in Indonesia alongside issues of volatility, regulatory uncertainty, and varying levels of digital literacy, the research aims to identify how these factors influence investment decisions. A quantitative explanatory design was applied, using a structured online questionnaire distributed to 150 active Indonesian cryptocurrency investors selected through stratified random and snowball sampling. Data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) to assess measurement validity, structural relationships, and mediation effects. The results show that trust, regulation, and digital access positively and significantly influence investor behavior, while risk perception has a positive but significant impact. Psychological empowerment was found to partially mediate the relationship between all independent variables and investor behavior, indicating that confidence, autonomy, and self-efficacy enhance the translation of external conditions into active investment. These findings highlight the importance of strengthening regulatory clarity, enhancing platform security, expanding digital access, and fostering investor empowerment to promote responsible and sustainable cryptocurrency participation in Indonesia.

Keywords: Cryptocurrency Investment, Investor Behavior, Psychological Empowerment

INTRODUCTION

The rapid evolution of *cryptocurrency* has reshaped the global investment landscape, providing investors with an alternative asset class characterized by decentralization, technological innovation, and high return potential (Bouri et al., 2019). Since the launch of *Bitcoin* in 2009, the cryptocurrency market has expanded to thousands of digital assets such as Ethereum, Binance Coin, and Solana, with a market capitalization peaking above USD 3 trillion (CoinMarketCap, 2024). In Indonesia, the market has shown significant growth,

recording 21.27 million users and transaction values reaching IDR 426.69 trillion by September 2024 (Bappebti, 2024). Despite this expansion, the cryptocurrency market remains volatile, with investor decisions heavily influenced by technological trust, regulatory clarity, access to digital infrastructure, and individual perceptions of risk.

Investor behavior in such a dynamic environment is shaped by both external and internal factors. Externally, *trust* in blockchain technology, trading platforms, and market integrity plays a central role in reducing uncertainty and encouraging investment (Gefen et al., 2003). Regulatory frameworks also affect investor confidence; clear and well-enforced policies can foster market legitimacy, while regulatory ambiguity may deter participation (Aysan et al., 2021). The rapid development of digital infrastructure has increased *digital access*, enabling more investors to participate in cryptocurrency markets through mobile apps and online platforms (Venkatesh et al., 2003). Conversely, *risk perception*, defined as subjective judgments about potential losses, can either discourage or motivate investment depending on the individual's risk tolerance (Liu et al., 2021).

Internally, these external drivers interact with *psychological empowerment*, a multidimensional construct encompassing meaning, competence, self-determination, and impact in decision-making (Spreitzer, 1995). The *Theory of Planned Behavior* (Ajzen, 1991) provides a theoretical foundation, asserting that perceived behavioral control closely related to empowerment directly influences intention and action. In the context of cryptocurrency, empowered investors are more likely to navigate uncertainty, make independent decisions, and engage actively in the market.

This study aims to analyze the effects of trust, regulation, digital access, and risk perception on investor behavior in Indonesia's cryptocurrency market, while examining the mediating role of psychological empowerment. Operationally, investor behavior refers to the decision to invest, frequency of transactions, diversification of assets, and engagement with crypto-related communities (Bouri et al., 2019). Based on the problem approach, the research conceptual framework is as follows:

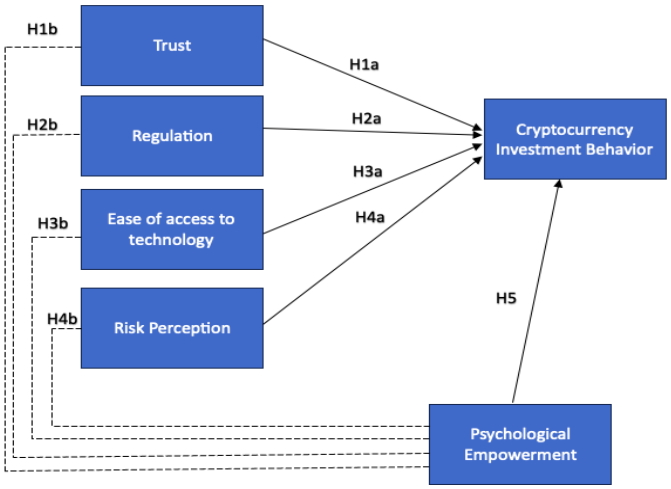

Figure 1. Conceptual Famework

METHOD

This study employed a quantitative research design with an explanatory approach to examine the influence of trust, regulation, digital access, and risk perception on investor behavior in the Indonesian cryptocurrency market, with psychological empowerment as a mediating variable. The quantitative method was chosen to enable systematic collection and statistical analysis of numerical data, allowing for the testing of hypotheses and identification of relationships among variables.

The population of this research consisted of individual retail investors in Indonesia who had engaged in cryptocurrency investment within the past year. The study excluded institutional investors, cryptocurrency miners, and blockchain developers to maintain a focus on active retail market participants. A stratified random sampling method was used to ensure representation across different demographic characteristics, including age, gender, income, education, and geographic location. The sample size was determined using power analysis, resulting in a minimum of 150 respondents, which was achieved during the data collection process.

Data were gathered between 21 and 31 July 2025 through an online survey distributed via social media platforms such as WhatsApp, Instagram, and Telegram. The instrument used was a structured questionnaire developed from validated scales in prior studies, covering all research variables: trust (Gefen et al., 2003), regulation (Aysan et al., 2021), digital access (Venkatesh et al., 2003), risk perception (Liu et al., 2021), psychological empowerment (Spreitzer, 1995), and investor behavior (Bouri et al., 2019). Each construct was measured using four indicators rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire also included demographic questions to profile the respondents.

The data collection procedure involved both direct distribution to known cryptocurrency investors and the use of a snowball sampling technique, where respondents were encouraged to share the survey link with their networks. This approach facilitated wider coverage and improved the diversity of the sample.

Data analysis was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) technique through SmartPLS software. This method was selected for its ability to handle complex models with multiple independent, dependent, and mediating variables, and to accommodate data that may not be normally distributed. The analysis followed three main stages: evaluation of the measurement model (outer model) to assess validity and reliability; evaluation of the structural model (inner model) to test hypotheses through path coefficients, t-statistics, and p-values; and mediation analysis to assess the role of psychological empowerment. Composite reliability and Cronbach's alpha values above 0.70 were used to confirm internal consistency, while Average Variance Extracted (AVE) values above 0.50 indicated convergent validity. Discriminant validity was verified using the Fornell–Larcker criterion.

Ethical considerations were observed by ensuring respondent anonymity and voluntary participation. All participants provided informed consent before completing the survey.

RESULTS AND DISCUSSION

Table 1. Validity Testing

Variable	Question Item	Loading Factor	AVE
Trust	**T1**	0,602	0,513
	T2	0,71	
	T3	0,77	
	T4	0,77	
Regulation	**R1**	0,767	0,642
	R2	0,768	
	R3	0,802	
	R4	0,822	
Digital Acceptance	**DA1**	0,799	0,623
	DA2	0,708	
	DA3	0,725	
	DA4	0,91	
Risk Perception	**RP1**	0,754	0,67

	RP2	0,823	
	RP3	0,864	
	RP4	0,829	
Psycologhical Empowerment	**PE1**	0,762	0,609
	PE2	0,852	
	PE3	0,788	
	PE4	0,711	
Investor Behavior	**IB1**	0,927	0,664
	IB2	0,728	
	IB3	0,903	
	IB4	0,672	

Source: Primary data processed by SmartPLS (2025)

Convergent validity testing considers factor loading values mostly exceeding 0.70, AVE values above 0.50, and cumulative values above 0.50 (Ghozali, 2012). The validity test results demonstrate that all outer loading factors are above 0.7 and AVE values for all variables are above 0.5, confirming the validity of all variables in this study.

Table 2. Reliability Testing

	Cronbach's Alpha	Composite Reliability	Result
Trust	0,722	0,807	Reliable
Regulation	0,806	0,869	Reliable
Digital Acceptance	0,794	0,867	Reliable
Risk Perception	0,836	0,89	Reliable
Pshycological Empowerment	0,787	0,861	Reliable
Investor Behavior	0,826	0,886	Reliable

Source: Primary data processed by SmartPLS (2025)

The reliability test criteria use Cronbach's Alpha values greater than 0.7. Internal consistency reliability is assessed using composite reliability. Based on the table above, all variables exceed the threshold of 0.7, indicating that all variables are reliable.

Table 3. Structural Model Testing

	R Square	R Square Adjusted
Pshycological Empowerment	0,46	0,445
Investor Behavior	0,44	0,436

Source: Primary data processed by SmartPLS (2025)

The coefficient of determination test results reveal that Trust, Regulation, Digital Acceptance, Risk Perception influence Pshycological Empowermentby 46% and Investor Behavior 44%.

Table 4. Hyphotesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Trust -> Investor Behavior	0,273	0,291	0,104	2,62	0,009
Regulation -> Investor Behavior	0,364	0,355	0,122	2,987	0,003
Digital Acceptance -> Investor Behavior	0,138	0,151	0,068	2,018	0,044
Risk Perception -> Investor Behavior	0,083	0,086	0,082	1,012	0,312
Pshycological Empowerment -> Investor Behavior	0,663	0,674	0,062	10,783	0,000

Source: Primary data processed by SmartPLS (2025)

Table 5. Mediation Effect Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Trust -> Pshycological Empowerment -> Investor Behavior	0,042	0,06	0,05	0,851	0,198
Regulation -> Pshycological Empowerment -> Investor Behavior	0,311	0,317	0,062	5,027	0,000
Digital Acceptance -> Pshycological Empowerment -> Investor Behavior	0,118	0,124	0,047	2,49	0,007
Risk Perception -> Pshycological Empowerment -> Investor Behavior	0,146	0,138	0,046	3,183	0,001

Source: Primary data processed by SmartPLS (2025)

Findings

1) H1a: Trust positively influence and significant on Investment Behavior in the Cryptocurrency market in Indonesia (Accepted).
2) H1b: Trust positive influence and not significant on investment Behavior and mediated by psychological empowerment in the cryptocurrency market in Indonesia (Not Accepted).
3) H2a: Regulation positively influence and significant on Investment Behavior in the Cryptocurrency market in Indonesia (Accepted).
4) H2b: Regulation positive influence and significant on investment Behavior and mediated by psychological empowerment in the cryptocurrency market in Indonesia (Accepted).
5) H3a: Digital Access positively influence and significant on Investment Behavior in the Cryptocurrency market in Indonesia (Accepted).
6) H3b: Digital Access positive influence and significant on investment Behavior and mediated by psychological empowerment in the cryptocurrency market in Indonesia (Accepted).
7) H4a: Perceive risk postively influence and not significant on Investment Behavior in the Cryptocurrency market in Indonesia (Not Accepted).
8) H4b: Perceive risk positively influence and significant on investment Behavior and mediated by psychological empowerment in the cryptocurrency market in Indonesia (Not Accepted).
9) H5: Psychological Empowerment mediate the relationship between Trust, Regulation, Digital Access, and Perceive Risk with Investment Behavior on the cryptocurrency (Accepted).

CONCLUSION

This study set out to explore the behavioral dynamics of cryptocurrency investors in Indonesia by analyzing the influence of four external factors trust, regulation, digital access, and risk perception while also investigating the mediating role of psychological empowerment. Based on empirical data collected from 150 active crypto investors, the study revealed that trust, regulation, and digital access significantly and positively influence investor behavior. Investors who perceive cryptocurrency platforms as secure, regulations as protective, and digital infrastructure as accessible are more likely to participate actively in crypto markets. This indicates that external environmental conditions play a foundational role in facilitating or hindering investment decisions.

Risk perception, on the other hand, exhibited a positive and not significant influence on investor behavior. This means that although some investors perceive cryptocurrency as risky, such perceptions do not necessarily deter them from participating possibly due to speculative motivations or high return expectations. However, the presence of psychological empowerment

defined as the investor's sense of competence, autonomy, and self-determination was found to significantly mediate the relationship between these external factors and investment behavior. Empowered investors demonstrated greater resilience toward market risks and uncertainty, showing a higher likelihood of engaging in investment activities despite recognizing the inherent risks. In essence, while external conditions create the environment for investment, internal empowerment determines whether and how investors act within that environment.

Overall, the study concludes that investor behavior in Indonesia's cryptocurrency market is a function of both environmental enablers and internal psychological readiness. Trust in platforms, clarity in regulation, ease of digital access, and subjective risk perceptions all matter, but their effects are amplified or dampened depending on the investor's psychological empowerment. The findings underscore the complexity of investment decision-making and support the use of integrated theoretical models such as Behavioral Finance and the Theory of Planned Behavior in explaining such behavior.

REFERENCES

Adrianto, F. (2021). The prospect of Indonesian government retail Sukuk: From the perspective of Sharia financial knowledge, education, and behavior. *DLSU Business and Economics Review*, *30*(2), 50-60.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.

Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & health*, *26*(9), 1113-1127.

Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International journal of information management*, *37*(3), 99-110.

Alekseenko, A. P. (2023). Model framework for consumer protection and crypto-exchanges regulation. *Journal of Risk and Financial Management*, *16*(7), 305.

Alzyoud, S., Alshurafat, H., & Khatatbeh, I. N. (2025). Understanding cryptocurrency investment behaviour in Jordan: an examination of motivational drivers through the lens of the UTAUT2 model. *Studies in Economics and Finance*, *42*(1), 154-172.

Ariwangsa, I. O., Putra, K. W. S., & Laksmi, K. W. (2025). Empowering Investment Decisions Through Financial Literacy and Government Regulations on MSMES, *15*(01), 47-61.

Asosiasi Penyelenggara Jasa Internet Indonesia. (2022). *Profil Internet Indonesia 2022*. https://online.fliphtml5.com/rmpye/ztxb/

Aysan, A. F., & Kayani, F. N. (2022). China's transition to a digital currency does it threaten dollarization?. *Asia and the Global Economy*, *2*(1), 100023.

Aysan, A. F., Khan, A. I., Topuz, H., & Tunalı, A. S. (2021). Survival of the fittest: A natural experiment frım crypto exchanges.

Bland, E., Changchit, C., Cutshall, R., & Pham, L. (2024). Behavioral and Psychological Determinants of Cryptocurrency Investment: Expanding UTAUT with Perceived Enjoyment and Risk Factors. *Journal of Risk and Financial Management*, *17*(10), 447.

Bodie Z, A Kane, AJ Marcus, & R Jain. Investment. Mcgraw-Hill Education.

Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. john wiley & sons.

Bouri, E., Molnár, P., Azzi, G., Roubaud, D., & Hagfors, L. I. (2017). On the hedge and safe haven properties of Bitcoin: Is it really more than a diversifier?. *Finance Research Letters*, *20*, 192-198.. https://doi.org/10.1016/j.frl.2016.09.025

Chauhan, R., & Patel, N. (2024). Unraveling investor behavior: Exploring the influence of behavioral finance on investment decision-making. *Journal of Economics, Assets, and Evaluation*, *1*(4), 1-13.

Choi, Y., Han, S., & Lee, C. (2024). *Exploring drivers of fintech adoption among elderly consumers*. Technology in Society, 78, 102669. https://doi.org/10.1016/j.techsoc.2024.102669

CoinMarketCap. (2024). *Cryptocurrency prices, charts and market capitalizations*. https://coinmarketcap.com

CompaniesMarketCap. (2025). *Assets by market cap*. https://companiesmarketcap.com/assets-by-market-cap/

Corbet, S., Lucey, B., Urquhart, A., & Yarovaya, L. (2019). Cryptocurrencies as a financial asset: A systematic analysis. *International Review of Financial Analysis*, *62*, 182-199.

Fang, F., Ventre, C., Basios, M., Kanthan, L., Martinez-Rego, D., Wu, F., & Li, L. (2022). Cryptocurrency trading: a comprehensive survey. *Financial Innovation*, *8*(1), 13.

Farrell, L., Fry, T. R., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of economic psychology*, *54*, 85-99.

Fourqoniah, F., Bharata, W., & Mahriani, M. W. (2024). The role of psychological aspects to measure Indonesian cryptocurrency investor behavior. *Jurnal Ekonomi dan Bisnis*, *27*(2), 81-102.

Gandal, N., Hamrick, J. T., Moore, T., & Oberman, T. (2018). Price manipulation in the Bitcoin ecosystem. *Journal of Monetary Economics*, *95*, 86-96.

Gefen D, E. Karahanna, & D. W. Straub. (2003). Trust and tam in online shopping: An integrated model1. *MIS Quarterly*, *27*(1), 51-90.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly, 27*(1), 51–90. https://doi.org/10.2307/30036519

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3), 100027.

Hasan, A., Alam, S., Habib, S., & Khan, A. M. (2024). Analysis of factors affecting investors' decision towards cryptocurrency investments in Saudia Arabia: A moderating role of fear of missing out (FOMO) on decision-making. *Journal of Infrastructure, Policy and Development*, *8*(9), 6419.

Hassan, S., Mai, N. H., Amin, M. B., Hassan, M., & Oláh, J. (2025). Decentralized Fintech Platforms Adoption Intention in Cyber Risk Environment among0 GenZ: A Dual-Method Approach Using PLS-SEM and Necessary Condition Analysis. *Computers in Human Behavior Reports*, 100687.

Heryana, A. (2020). *Hipotesis penelitian*. ResearchGate.

Jalan, A., Matkovskyy, R., Urquhart, A., & Yarovaya, L. (2023). The role of interpersonal trust in cryptocurrency adoption. *Journal of International Financial Markets, Institutions and Money*, *83*, 101715.

Kementerian Perdagangan Republik Indonesia. (2024, October 28). *Bappebti: Jumlah pelanggan aset kripto di Indonesia tembus 21,27 juta*. https://www.kemendag.go.id/berita/pojok-media/bappebti-jumlah-pelanggan-aset-kripto-di-indonesia-tembus-2127-juta

Khusnul, K., & Prihatin, J. (2020, June). An Analysis of the utilization of Gamal Plant (Gliricidia sepium) as a shade for coffee plants. In *Journal of Physics: Conference Series* (Vol. 1563, No. 1, p. 012014). IOP Publishing.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and social psychology Bulletin*, *18*(1), 3-9.

Martin, B. A., Chrysochou, P., Strong, C., Wang, D., & Yao, J. (2022). Dark personalities and Bitcoin®: The influence of the Dark Tetrad on cryptocurrency attitude and buying intention. *Personality and Individual Differences*, *188*, 111453.

Murugappan, M., Nair, R., & Krishnan, S. (2023). Global market perceptions of cryptocurrency and the use of cryptocurrency by consumers: A pilot study. *Journal of Theoretical and Applied Electronic Commerce Research*, *18*(4), 1955-1970.

Nakamoto, S. (2009). Bitcoin: A peer-to-peer electronic cash system Bitcoin: A Peer-to-Peer Electronic Cash System. *Bitcoin. org. Disponible en https://bitcoin. org/en/bitcoin-paper*.

Pham, Q. T., Phan, H. H., Cristofaro, M., Misra, S., & Giardino, P. L. (2021). Examining the intention to invest in cryptocurrencies: An extended application of the theory of planned behavior on Italian independent investors. *International Journal of Applied Behavioral Economics (IJABE)*, *10*(3), 59-79.

Pilatin, A., & Dilek, Ö. (2024). Investor intention, investor behavior and crypto assets in the framework of decomposed theory of planned behavior. *Current Psychology*, *43*(2), 1309-1324.

Rehman, M. H. ur, Salah, K., Damiani, E., & Svetinovic, D. (2019). Trust in blockchain cryptocurrency ecosystem. *IEEE Transactions on Engineering Management*, *67*(4), 1196-1212

Rezeki, R. N. S., & Ariefianto, M. D. (2023). *Examining the role of attitude in mediating the influence of social media influencers, risk, fear of missing out, and herd behavior on interest to invest in stocks*. *Journal of System and Management Sciences, 13*(3), 219–232. https://doi.org/10.33168/JSMS.2023.0315

Satomero A.M. & Babbel D.F. Financial market, instruments & institutions (second edition). Mcgraw-Hill/Irwin.

Sourirajan, S., & Perumandla, S. (2022). Do emotions, desires and habits influence mutual fund investing? A study using the model of goal-directed behavior. *International Journal of Bank Marketing*, *40*(7), 1452-1476.

Srivastava, S. K., Deepika Chandra, V., Jangirala, S., & Yadav, J. K. (2024). The Genesis of the crypto-economy: Application of the institutional theory. *Vikalpa*, *49*(3), 244-256.

Sugiono, S. (2004). Konsep, identifikasi, alat analisis dan masalah penggunaan variabel moderator. *Jurnal Studi Manajemen Organisasi*, *1*(2), 61-70.

Thaler, R. H. (1999). The end of behavioral finance. *Financial Analysts Journal*, *55*(6), 12-17.

Thangavelu Poonkulali. (2023). How Inflation Impacts Your Savings . *Https://Www.Investopedia.Com/Articles/Investing/090715/How-Inflation- Affects-Your-Cash-Savings.Asp*.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

Wang, Y. S., Duong, N. T., Ying, C. H., & Chang, Y. C. (2024). What Drives People's Cryptocurrency Investment Behavior. *Journal of Computer Information Systems*, 1-18.

Zetzsche, D. A., Arner, D. W., & Buckley, R. P. (2020). Decentralized finance. *Journal of Financial Regulation*, *6*(2), 172-203.

Zetzsche, D. A., Buckley, R. P., Barberis, J. N., & Arner, D. W. (2017). Regulating a revolution: from regulatory sandboxes to smart regulation. *Fordham J. Corp. & Fin. L.*, *23*, 31.