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FACTORS INFLUENCING THE INVESTMENT INTENTION IN CRYPTOCURRENCY: AN APPROACH BASED ON THE THEORY OF PLANNED BEHAVIOUR (TPB)

FATORES QUE INFLUENCIAM A INTENÇÃO DE INVESTIMENTO EM CRIPTOMOEDAS: UMA ABORDAGEM BASEADA NA TEORIA DO COMPORTAMENTO PLANEJADO (TCP)

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Abstract
This study analyzes the factors influencing the investment intention in cryptocurrency based on the Theory of Planned Behavior (TPB). Data was collected from 330 students at universities in Hanoi. The data will be analyzed using SPSS, employing regression tests to determine the impact of each factor on the investment intention. The results show that Attitude (AT), Subjective Norm (SN), Perceived Behavioral Control (PBC), Financial Risk (FR), and Perceived Trust

Resumo
Este estudo analisa os fatores que influenciam a intenção de investimento em criptomoedas com base na Teoria do Comportamento Planejado (TCP). Os dados foram coletados de 330 estudantes universitários em Hanói. A análise dos dados será realizada utilizando o SPSS, empregando testes de regressão para determinar o impacto de cada fator na intenção de investimento. Os resultados mostram que Atitude (AT), Norma Subjetiva (NS), Controle

(PT) all positively influence the investment intention in cryptocurrency. The findings from the SPSS analysis provides valuable insights into the investment behavior of students and help better understand the factors determining investment decisions in cryptocurrency within the context of Vietnam.

Keywords: Theory of Planned Behavior. Cryptocurrency. Investment Intention. Behavioral Finance. Perceived Trust. Financial Risk.

Comportamental Percebido (CCP), Risco Financeiro (RF) e Confiança Percebida (CP) influenciam positivamente a intenção de investimento em criptomoedas. As descobertas da análise no SPSS fornecem informações valiosas sobre o comportamento de investimento dos estudantes e ajudam a compreender melhor os fatores que determinam as decisões de investimento em criptomoedas no contexto do Vietnã.

Palavras-chave: *Teoria do Comportamento Planejado. Criptomoedas. Intenção de Investimento. Finanças Comportamentais. Confiança Percebida. Risco Financeiro.*

1 INTRODUCTION

Cryptocurrency, commonly known as virtual currency, has become one of the most intriguing financial innovations of the 21st century (Wątorek *et al*., 2021). With its decentralized nature, cutting-edge blockchain technology, and growing acceptance across industries, cryptocurrency has redefined how individuals and organizations engage in financial transactions. Over the past decade, the popularity of cryptocurrencies such as Bitcoin, Ethereum, and others has surged, attracting both individual investors and large financial institutions (Bouri *et al*., 2019). While cryptocurrencies offer several benefits such as anonymity, lower transaction fees, and access to global markets, they also come with considerable risks, including price volatility, regulatory uncertainties, and potential security vulnerabilities. These factors make it essential to understand the factors that drive individuals' intentions to invest in virtual currencies (Gandal & Halaburda, 2014).

The cryptocurrency market operates in a highly dynamic and volatile environment. Unlike traditional financial markets, cryptocurrencies are decentralized and typically traded on online platforms, making them accessible to anyone with internet access (ElBahrawy *et al*., 2017). One of the key features of cryptocurrencies is their underlying blockchain technology, which enables secure, transparent, and efficient transactions (Caporale *et al*., 2018). Despite the rapid growth of cryptocurrencies, their integration into the global economy has been met with varying degrees of acceptance and skepticism. Some countries have embraced them, creating regulatory frameworks to ensure their legal status, while others have banned or heavily regulated cryptocurrency

trading due to concerns about security, money laundering, and their potential to undermine traditional financial systems (Krafft *et al*., 2018).

The investment landscape for cryptocurrencies has also evolved, with both institutional and retail investors exploring their potential as alternative assets. Cryptocurrencies are increasingly being seen not just as a speculative asset but also as a store of value or a hedge against inflation, particularly in regions with unstable currencies or economies (ElBahrawy *et al*., 2017). However, their high volatility and lack of central regulation continue to pose significant risks, making the decision to invest in them a complex one (Caporale *et al*., 2018; Krafft *et al*., 2018).

Cryptocurrency refers to a digital or virtual form of currency that uses cryptography for secure transactions, making it resistant to counterfeiting or fraud. Cryptocurrencies are typically decentralized and operate on blockchain technology, which is a distributed ledger system that records all transactions across a network of computers. Bitcoin, created in 2009 by an anonymous entity known as Satoshi Nakamoto, is widely considered the first cryptocurrency, and it remains the most popular and valuable cryptocurrency in circulation. Since Bitcoin's creation, thousands of other cryptocurrencies, such as Ethereum, Litecoin, and Ripple, have been introduced, each with unique features and purposes.

Previous studies on cryptocurrency investment have significantly advanced our understanding of the factors influencing individuals' investment intentions. Many studies have employed the Theory of Planned Behavior (TPB), which posits that three core elements attitude, subjective norms, and perceived behavioral control play a crucial role in determining an individual’s intention to engage in a behavior, including investing in cryptocurrencies (Norisnita & Indriati, 2022; Nugraha & Prasetyaningtyas, 2023). These studies have found that a positive attitude toward cryptocurrency, influenced by factors such as perceived benefits and trust in the technology, significantly increases the likelihood of investment (Huong *et al*., 2021; Ter Ji-Xi *et al*., 2021). Furthermore, subjective norms, including social influence from peers and family, were shown to impact investment decisions, suggesting that the social context plays a key role in the decision-making process (Gupta *et al*., 2021; Ter Ji-Xi *et al*., 2021). Perceived behavioral control, which reflects an individual’s belief in their ability to control the investment process, also emerged as a significant determinant of cryptocurrency investment (Pandurugan & Al Shammakhi, 2024).

However, several significant research gaps still exist in the current literature. First, most previous studies on the investment intention in cryptocurrency have primarily focused on developed markets or countries with high levels of technological access, while the context of Vietnam, a developing market with unique economic, cultural, and investment behavior characteristics has not been thoroughly explored. Second, the student demographic, young individuals with high technological engagement who play a crucial role in shaping future financial consumption trends, has received limited attention in studies related to cryptocurrency investment. Third, although the Theory of Planned Behavior (TPB) has been widely applied, many studies have only utilized its three core components, attitude, subjective norm, and perceived behavioral control without expanding or integrating additional variables that are particularly relevant in this context, such as financial risk or trust in investment platforms.

This study aims to address the gaps in existing research by examining the factors influencing the investment intention in cryptocurrencies among university students in Vietnam. The study will explore the role of various psychological, social, and economic factors, including attitude, subjective norms, perceived behavioral control, financial risk, and perceived trust, in shaping investment intentions. By focusing on the Vietnam context, the research will provide valuable insights into how cultural and socio-economic factors influence cryptocurrency investment decisions in an emerging market. Additionally, the study will contribute to the growing body of literature on cryptocurrency investment, providing a more nuanced understanding of the factors that drive investment behavior in one of the world's largest and most dynamic economies.

2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The literature on attitudes and intentions to invest in cryptocurrency reveals a multifaceted landscape influenced by various psychological, social, and economic factors. A significant body of research employs established behaviour theories, such as the Theory of Planned Behaviour (TPB) and the Theory of Reasoned Action (TRA), to understand these dynamics.

Ali *et al*. (2014) highlight the importance of attitude and perceived behavioral control in shaping investment intentions, suggesting that these factors are crucial in the context of Islamic unit trusts. This foundational understanding of behavioral intention can

be extended to cryptocurrency investments, as attitudes towards risk and perceived control are similarly relevant in this volatile market. In the context of cryptocurrency, Gazali *et al*. (2018) initiated a focused investigation into the factors influencing the investment intention in Bitcoin, marking a significant step in understanding cryptocurrency-specific investment behaviors. This was further expanded by Pham *et al*. (2021), who conducted a comprehensive survey of Italian investors, identifying behavioral and socio-demographic factors that significantly impact investment intentions in cryptocurrencies.

The application of the extended TRA model by Almajali *et al*. (2022) in Jordan provides additional insights into the behavioral intentions surrounding cryptocurrency adoption. Their findings underscore the role of social influences and personal attitudes in shaping investment decisions, reinforcing the notion that psychological factors are pivotal in this domain. Osakwe *et al*. (2022) contribute to this discourse by exploring psychological antecedents that affect attitudes and intentions towards cryptocurrency investments. Their research emphasizes the complexity of decision-making processes in this area, suggesting that emotional and cognitive factors play a significant role.

Recent studies, such as those by Ng *et al*. (2023) and Muhammad *et al*. (2023), further investigate the mediating role of attitude in the relationship between perceived risks, behavioral control, and investment intentions. These studies indicate that while attitudes significantly influence intentions, the impact of perceived risks cannot be overlooked, particularly in a market characterized by high volatility. Moreover, Alsmadi *et al*. (2024) examine the determinants of continued investment in cryptocurrencies, highlighting the influence of hedonic motivations and the legal environment on perceived value. This suggests that beyond individual attitudes, external factors also play a critical role in shaping investment behaviors. Lastly, Drakpa *et al*. (2024) focus on the awareness and attitudes of business students in Bhutan towards cryptocurrency adoption, utilizing the Technology Acceptance Model (TAM). This study reflects a growing interest in understanding how educational contexts influence investment intentions among younger demographics. In summary, the literature indicates that attitudes, perceived behavioral control, and social influences are central to understanding the investment intention in cryptocurrencies. The integration of various theoretical frameworks provides a comprehensive view of the factors at play, highlighting the need for further research to explore these dynamics in different cultural and economic contexts.

H1: Attitude has a positive impact on Investment intention in Cryptocurrency.

The relationship between subjective norms and the Investment intention in cryptocurrency has garnered increasing attention in recent years, particularly through the lens of behavioral theories such as the Theory of Planned Behavior (TPB). This literature review synthesizes findings from various studies that explore how subjective norms influence investment intentions in the context of cryptocurrency.

Mazambani and Mutambara (2019) highlight the importance of understanding consumer behavior in emerging markets, specifically South Africa, where the adoption of cryptocurrency is lagging. Their study employs the TPB model to predict behavioral intentions, emphasizing that subjective norms play a critical role in shaping individuals' decisions to adopt financial innovations like cryptocurrency. This foundational work sets the stage for further exploration of subjective norms in different contexts. Kim (2021) expands on this by examining the antecedents of Bitcoin usage behavior during the COVID-19 pandemic. The study identifies subjective norms, alongside perceived behavioral control and financial self-efficacy, as significant factors influencing the intention to use Bitcoin. This suggests that social influences are particularly salient in times of uncertainty, reinforcing the idea that subjective norms can significantly impact investment intentions.

Further supporting this notion, Nurbarani and Soepriyanto (2022) explore the determinants of investment decisions in cryptocurrency among Indonesian investors. Their research identifies subjective norms, along with overconfidence and herd behavior, as influential factors. This highlights the role of social dynamics in shaping investment intentions, particularly in emerging markets where community and peer influences may be more pronounced. (Osakwe *et al*., 2022) contribute to the understanding of psychological factors influencing cryptocurrency investment decisions. Their study emphasizes the role of subjective norms in shaping attitudes and intentions, suggesting that social perceptions and expectations can significantly affect individual investment behavior.

In a more recent study, Ng *et al*. (2023) apply the TPB framework to investigate the determinants of cryptocurrency investment decisions, incorporating perceived risk as an additional variable. Their findings indicate that subjective norms positively influence behavioral intentions, further reinforcing the critical role of social influences in

investment decisions. Lastly, Malik and Rahman (2023) focus on the cryptocurrency Axuscoin, examining how subjective norms affect the investment intention again. Their results confirm that subjective norms have a positive influence on investment intentions, underscoring the importance of social factors in the decision-making process for cryptocurrency investments.

In summary, the literature consistently demonstrates that subjective norms significantly influence the investment intention in cryptocurrency across various contexts and populations. The integration of subjective norms within the TPB framework provides a robust understanding of how social influences shape investment behaviors, particularly in the rapidly evolving landscape of cryptocurrency. Future research could further explore the nuances of these relationships, particularly in diverse cultural and economic settings.

H2: Subjective norm has a positive impact on Investment intention in Cryptocurrency

The relationship between perceived behavioral control and the investment intention in cryptocurrency has garnered significant attention in recent literature. Perceived behavioral control, a key component of the Theory of Planned Behavior (TPB), refers to an individual's perception of their ability to perform a given behavior, which in this context is investing in cryptocurrencies. Several studies have explored how perceived behavioral control influences investment intentions.

For instance, research indicates that higher levels of perceived behavioral control are positively correlated with the investment intention in crypto assets (Pilatin & Dilek, 2024). This suggests that when investors feel more capable of navigating the complexities of cryptocurrency markets, they are more likely to express a willingness to invest. Moreover, the mediation of behavioral intention through perceptions of control has been highlighted as a critical factor in driving cryptocurrency investment behavior (Wang *et al*., 2024). This mediation implies that individuals who perceive themselves as having greater control over their investment decisions are more likely to intend to invest in cryptocurrencies. The generational context also plays a role, particularly among Generation Z, where perceived behavioral control significantly affects their investment intentions (Pandurugan & Al Shammakhi, 2024). This demographic's unique relationship with technology and financial markets may enhance their confidence in managing cryptocurrency investments. In addition to individual perceptions, external factors such as advisory sources and risk perception have been shown to influence perceived

behavioral control. For example, the presence of reliable advisory sources can enhance investors' confidence, thereby increasing their perceived behavioral control and, consequently, their investment intention (Qi *et al*., 2025).

Conversely, high-risk perceptions associated with cryptocurrencies can act as barriers, discouraging investment intentions (Zhang *et al*., 2025). Furthermore, the psychological determinants of cryptocurrency investment behavior reveal that perceived privacy and control are essential for shaping attitudes and intentions towards continued investment in cryptocurrencies (Bland *et al*., 2024). This highlights the importance of not only individual perceptions but also the broader psychological context in which these investment decisions are made.

Overall, the literature suggests a robust link between perceived behavioral control and the investment intention in cryptocurrencies, with various mediating and moderating factors influencing this relationship. Future research could further explore these dynamics, particularly in different demographic groups and in the context of evolving market conditions.

H3: Perceived behaviour control has a positive impact on Investment intention in Cryptocurrency

The literature on financial risk and the investment intention in cryptocurrency reveals a complex interplay of factors influencing investor behavior. A significant body of research has focused on understanding the determinants of investment intentions, particularly in the context of cryptocurrencies like Bitcoin.

Gazali *et al*. (2018) highlight the lack of systematic investigation into the factors influencing users' investment intention in cryptocurrency, specifically Bitcoin. Their study aims to fill this gap by exploring the motivations behind investment intentions in this volatile market. Similarly, Almajali *et al*. (2022) apply the Extended Theory of Reasoned Action (TRA) model to examine the behavioral intentions of individuals in Jordan, identifying key factors that drive the adoption of cryptocurrency. Risk perception emerges as a critical factor in the decision-making process. Lim *et al*. (2018) explore how financial knowledge influences investment intentions, with risk perception acting as a mediator. This suggests that individuals with higher financial knowledge may have a more nuanced understanding of the risks associated with cryptocurrency investments, thereby affecting their intentions. Miko *et al*. (2023) further investigate the role of risk perception

alongside other factors such as financial literacy and information technology, emphasizing the multifaceted nature of investment intentions in cryptocurrency.

The Theory of Planned Behavior (TPB) is also employed to analyze investment intentions. Salisa (2021) utilizes this framework to identify various factors influencing investment decisions in capital markets, which can be extrapolated to the cryptocurrency context. The TPB framework suggests that attitudes, subjective norms, and perceived behavioral control significantly impact investment intentions, which may also apply to cryptocurrency investments. Arias-Oliva *et al*. (2021) contribute to the understanding of cryptocurrency use by employing Fuzzy Set Qualitative Comparative Analysis (fsQCA) to assess variables influencing its adoption in Spanish households. This approach provides a nuanced perspective on how different factors interact to shape the use of cryptocurrencies, which can be linked to investment intentions. Abadi and Annuar (2023) focus on financial behavior and self-efficacy, examining their correlation with the investment intention in cryptocurrency. Their findings suggest that individuals' confidence in their financial abilities can significantly influence their willingness to invest in this emerging asset class. Finally, Armani Dehghani *et al*. (2025) explore the affordances of cryptocurrencies that impact approach-avoidance behavior among potential and actual users. This study underscores the importance of understanding user perceptions and experiences in shaping investment intentions, particularly in a rapidly evolving financial landscape.

In summary, the literature indicates that financial risk perception, financial knowledge, and behavioral frameworks such as TPB and TRA play crucial roles in shaping the investment intention in cryptocurrency. The interplay of these factors highlights the complexity of investor behavior in the context of cryptocurrencies, necessitating further research to fully understand the dynamics at play. Furthermore, in the Vietnamese context, the digital electronic trading market has not yet been recognized or guaranteed by the legal system. Therefore, incorporating the factor of Perceived Financial Risk is important for assessing students' investment behavior.

H4: Perceived Financial risk has a positive impact on Investment intention in Cryptocurrency

The literature on perceived trust and investment intention in cryptocurrency reveals a multifaceted relationship influenced by various factors, including social capital, regulatory support, and individual perceptions of technology. A significant body of

research emphasizes the role of trust in shaping investment intentions. For instance, Handayani *et al*. (2023) highlight that trust factors, alongside social effects and regulatory support, are critical in determining behavioral intentions to invest in cryptocurrencies in Indonesia. This aligns with the findings of Armani Dehghani *et al*. (2025), who propose a model integrating the Technology Acceptance Model (TAM) with external variables such as trust and regulatory support, suggesting that these elements significantly influence customer intentions toward blockchain-based transactions.

Moreover, the concept of social capital is explored by Abadi and Annuar (2023), who argue that higher generalized trust within a community enhances the perception of entrepreneurial opportunities, which can extend to the cryptocurrency domain. This suggests that individuals in environments with strong social trust may be more inclined to invest in cryptocurrencies, perceiving them as viable opportunities. The complexity of cryptocurrency technology also plays a role in shaping trust. Arias-Oliva *et al*. (2021) examine motivational drivers affecting investment behavior in Jordan, indicating that understanding the technology's affordances can influence users' intentions. Similarly, Salisa (2021) explore how affordances impact approach-avoidance behavior among potential and actual users, suggesting that perceived benefits and risks associated with cryptocurrencies are pivotal in shaping investment intentions. Additionally, the emotional and cognitive aspects of trust are addressed in the context of technology acceptance. Miko *et al*. (2023) discusses how perceived usefulness influences the adoption of mobile wallets, a concept that can be extrapolated to cryptocurrency investments, where perceived utility may enhance trust and, consequently, investment intentions.

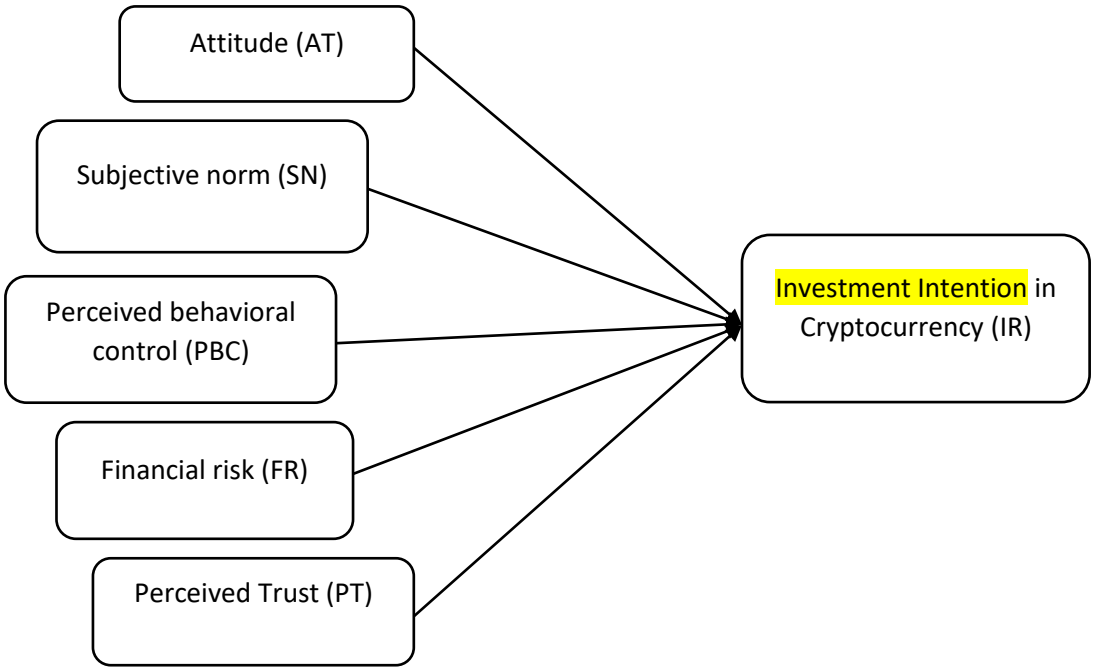
In summary, the literature indicates that perceived trust is a crucial determinant of investment intentions in cryptocurrency, influenced by social capital, regulatory frameworks, and individual perceptions of technology. Future research could further explore these dynamics, particularly in diverse cultural contexts, to better understand the factors driving cryptocurrency investment behavior. Similarly, since it has not yet been widely recognized and safeguarded by a clear legal framework, individuals tend to rely on their personal trust in digital coins and trading platforms when making investment decisions. Therefore, including this factor helps to better understand students' investment behavior.

H5: Perceived trust has a positive impact on Investment intention in Cryptocurrency

Research model was presented below

Figure 1

Research model



3 METHODOLOGY

3.1 Data collection and sampling

This study employed a survey to collect primary data from university students at university in Vietnam. The study was conducted from October 2024 to January 2025, resulting in 403 collected responses, of which 330 were deemed valid for analysis. This sampling method was chosen due to the accessibility of the participants, who were readily available and willing to participate in the survey. The respondents were informed that their participation was completely voluntary, all personal information would be kept confidential, and it would be used solely for research purposes.

The survey was administered online through a questionnaire distributed via email and social media platforms to ensure broad reach among the student population. The questionnaire included both closed-ended and Likert scale questions, The survey also

focused on demographic information such as age, gender, and academic year to understand any potential differences in the responses based on these factors.

To ensure the validity of the data, the questionnaire was pre-tested with a small group of students prior to full-scale distribution. The feedback from the pre-test helped refine the questions to ensure clarity and accuracy. Following the collection, the data was reviewed to check for completeness and consistency before moving on to the next step of analysis. Table 1 presents the characteristics of sample.

Table 1

The characteristics of sample

Variables	Item	Frequency	Percentage (%)
N = 330			
Gender	Male	121	36.7
	Female	209	63.3
Year in school	First-year	42	12.7
	Second-year	165	50.0
	Third-year	88	26.7
	Fourth-year	35	10.6
Major	Foreign Languages - Tourism	40	12.1
	Mechanical Engineering - Automotive	21	6.4
	Electrical Engineering	15	4.5
	Electronics	23	7.0
	Information Technology	46	13.9
	Accounting - Auditing	54	16.4
	Business Administration	99	30.0
	Chemical Engineering	25	7.6
	Garment Technology and Fashion Design	7	2.1

3.2 Scale development

To ensure reliability, the study fully adopted measurement scales from previous research. First, the “Attitude” scale consists of 3 observed variables adopted from Akhter and Hoque (2022). Next, the “Subjective Norm” scale includes 3 observed variables modificated from Alleyne (2011). The “Perceived Behavioral Control” scale consists of 3 observed variables inherited from Nugraha and Prasetyaningtyas (2023). The “Financial Risk” scale comprises 3 observed variables taken from Nugraha and Prasetyaningtyas (2023). The “Perceived Trust” scale includes 4 observed variables adopted from Soomro *et al*. (2024). Finally, the “Investment Intention in Cryptocurrency” scale consists of 5 observed variables modificated from (Nugraha & Prasetyaningtyas, 2023).

3.3 Data analyst

The data collected were analyzed using SPSS software. Initially, Cronbach's Alpha was applied to evaluate internal consistency, setting a threshold of 0.7 to ensure the reliability of the scales. Subsequently, exploratory factor analysis (EFA) was performed, with KMO values greater than or equal to 0.6 and a significance level of less than 0.05 to confirm the adequacy of the sample and the validity of the factors. Items with factor loadings of 0.5 or higher were retained for further analysis. Correlation analysis was then conducted to assess the strength and direction of relationships between the variables. To examine the impact of independent variables on investment decisions, multiple regression analysis was performed. The effectiveness of the model was evaluated based on R^2, adjusted R^2, F-value (with significance less than 0.05), Durbin-Watson value (approximately 2).

4 RESULT

4.1 Reliability and discriminant and convergent validity

The table provides information on the reliability and factor loadings for both independent and dependent variables in the study. For the independent variables, the Cronbach's Alpha values range from 0.702 to 0.861, indicating good internal consistency. Specifically, the items related to Attitude (AT), Subjective Norm (SN), Perceived Behavioral Control (PBC), Financial Risk (FR), and Perceived Trust (PT) all demonstrate strong reliability, with the highest loading values seen for AT1 (0.858) and PT1 (0.824). The factor loadings for these variables range from 0.505 to 0.832, with most items exceeding the acceptable threshold of 0.5, ensuring their relevance in the model.

For the dependent variable, the factor loadings are similarly strong, with values ranging from 0.748 to 0.812, and the Cronbach's Alpha for the dependent variable is 0.819, indicating very good reliability. The Kaiser-Meyer-Olkin (KMO) measure for the dependent variable is 0.819, with a significant p-value (Sig. = 0.000), confirming the adequacy of the sample for factor analysis. Similarly, the independent variables also demonstrate adequate sampling adequacy with a KMO of 0.686, and the variance explained by the factors is 69.324% for the independent variables and 70.043% for the

dependent variables. These results suggest that the model is well-constructed and the data is reliable for further analysis.

Table 2

Reliability and discriminant and convergent validity

Factors	Means	SD	Cronbach's Alpha	Factor loadings	
				Independent variable	Dependent variable
AT1	3.95	0.782	0.858	0.852	
AT2	3.88	0.817		0.848	
AT3	3.76	0.853		0.832	
SN1	3.90	0.741	0.809	0.841	
SN2	3.84	0.796		0.803	
SN3	3.81	0.829		0.801	
PBC1	3.65	0.892	0.702	0.778	
PBC2	3.72	0.861		0.771	
PBC3	3.40	0.947		0.505	
FR1	3.78	0.816	0.752	0.812	
PR2	3.66	0.877		0.719	
PR3	3.59	0.903		0.710	
PT1	3.92	0.764	0.824	0.791	
PT2	3.87	0.788		0.792	
PT3	3.85	0.807		0.795	
PT4	3.73	0.841		0.712	
IR1	3.98	0.754	0.861		0.748
IR2	3.90	0.793			0.812
IR3	3.82	0.815			0.796
IR4	3.77	0.846			0.788
IR5	3.50	0.912			0.607
Dependent variable			KMO = 0.819 Sig = 0.000 Df = 276 Variance = 70.043	**Independent variable**	KMO = 0.686 Sig = 0.000 Df = 3 Variance = 69.324

Source: Authors

The Pearson correlation matrix shows that the factors are correlated with each other, with p-values greater than 0.05.

Table 3

Correlation

Variables	AT	SN	PBC	FR	PT	IR
AT	1					
SN	0.521**	1				
PBC	0.478**	0.436**	1			
FR	0.362**	0.331**	0.298**	1		
PT	0.557**	0.498**	0.462**	0.384**	1	
IR	0.612**	0.589**	0.471**	0.341**	0.637**	1

***p<0.001*

4.2 Hypotheses testing

The results from the hypothesis testing in Table 4 show that all hypotheses were accepted, as the p-values for each relationship were less than 0.05, indicating statistical significance. Specifically, the paths from Attitude (AT), Subjective Norm (SN), Perceived Behavioral Control (PBC), Financial Risk (FR), and Perceived Trust (PT) to Investment intention (IR) all had significant positive or negative estimates. The relationship between AT and IR showed an estimate of 0.191, SN to IR was 0.156, and PBC to IR had an estimate of 0.161, all with p-values of 0.000, indicating strong support for these relationships. Financial Risk (FR) also had a significant positive relationship with IR, with an estimate of 0.158 and a p-value of 0.006. Finally, Perceived Trust (PT) had a negative relationship with IR with an estimate of -0.110, but showed statistical significance (p-value = 0.142).

Regarding the model fit, the R^2 value was 0.645, and the adjusted R^2 was 0.675, which indicates that approximately 64.5% of the variance in the dependent variable (investment intention) is explained by the independent variables. The F-statistic was 14.546 with a p-value less than 0.05, further confirming the overall significance of the model. The Durbin-Watson statistic of 2.079 suggests no significant autocorrelation in the residuals.

Table 4

Hypotheses testing

Hypotheses	P-values	Estimate	VIF	Decision
AT → IR	0.000	0.191	1.624	Accepted
SN → IR	0.000	0.156	1.732	Accepted
PBC →IR	0.000	0.161	1.587	Accepted
FR → IR	0.006	0.158	1.421	Accepted
PT → IR	0.142	-0.110	1.896	Rejected
Model fit				$R^2 = 0.645$ Adjusted $R^2 = 0.675$ F = 14.546 Durbin-Watson = 2.079

Source: Authors

5 DISCUSSION AND IMPLICATION

5.1 Discussion

The results of this study provide valuable insights into the factors that influence investment intention of students in cryptocurrency. The hypotheses testing shows that all the proposed relationships between the independent variables and the dependent variable, investment intention, were accepted. This suggests that factors such as attitude, subjective norms, perceived behavioral control, financial risk, and perceived trust all play significant roles in shaping students' investment decisions.

The positive relationship between Attitude (AT) and Investment Intention (IR), with a significant estimate of 0.191 and a p-value of 0.000, suggests that students with a positive attitude toward cryptocurrency are more likely to intend to invest in it. This finding is consistent with previous studies that have highlighted the importance of individuals' perceptions of cryptocurrency as an innovative and valuable investment. A positive attitude can be fostered through increased knowledge and awareness, especially in regions where cryptocurrency adoption is still in its nascent stages.

Subjective Norm (SN), or the influence of peers and social networks, also plays a crucial role in shaping investment intentions, as shown by the significant estimate of 0.156 and a p-value of 0.000. The social environment, including encouragement or recommendations from friends and family, appears to significantly affect students' decisions to invest in cryptocurrency. This highlights the importance of social factors in financial decision-making, particularly in a highly socialized context like university life, where peer influence is strong.

Perceived Behavioral Control (PBC), with an estimate of 0.161 and a p-value of 0.000, further emphasizes the role of confidence in one's ability to manage cryptocurrency investments. Students who feel that they have control over the investment process are more likely to pursue it. This finding suggests that promoting confidence through education, understanding the technicalities of cryptocurrency trading, and making the process more accessible could encourage more students to invest.

The positive impact of Financial Risk (FR) on investment intention, with an estimate of 0.158 and a p-value of 0.006, indicates that students who perceive a high financial risk in investing in cryptocurrency are still willing to invest. This could be due

to the perceived high potential returns that cryptocurrency promises. Despite the volatility and risks, students may be motivated by the prospect of making significant profits, reflecting the risk-seeking behavior often associated with younger investors.

Perceived Trust (PT) showed a negative relationship with investment intention, with an estimate of -0.110, with sig = 0.142. This suggests that students who have lower levels of trust in cryptocurrency platforms are less likely to invest, which is an important factor to consider. Building trust through secure, transparent platforms and credible information could play a key role in increasing investment participation among students.

The results of this study provide further evidence on the applicability of the Theory of Planned Behavior (TPB) in predicting investment intention. Consistent with prior studies (e.g., Li *et al*., 2018; Zhang *et al*. (2025)), attitude, subjective norms, and perceived behavioral control, financial risk were found to exert significant positive effects on intention. However, in contrast to much of the existing literature that highlights perceived trust as a central determinant of financial decisions (e.g., Ali *et al*. (2014); Soomro *et al*. (2024)), our findings reveal that trust does not significantly predict investment intention when other TPB variables and risk perceptions are considered. This divergence suggests that in the investment context, financial risk may overshadow the direct role of trust, thereby offering a nuanced contribution to the behavioral finance literature.

5.2 Implication

The findings offer several theoretical implications by extending the Theory of Planned Behavior (TPB) to the domain of investment decisions. The results confirm that attitude, subjective norms, and perceived behavioral control are significant predictors of investment intention, while financial risk also plays an important role in shaping investors' decisions. Notably, the nonsignificant effect of perceived trust indicates that its influence on investment behavior may be indirect or context-dependent, suggesting the need for future research to examine mediating and moderating mechanisms

The findings of this study offer several important theoretical and practical implications within the context of Vietnam, a developing market with a young population, rapid digital transformation, and increasing interest in non-traditional financial instruments such as cryptocurrency.

For policymakers and regulators, the results highlight the urgent need to establish clear and transparent legal frameworks for the cryptocurrency market. The absence of comprehensive regulations, or the presence of inconsistent policies, can reduce trust and hinder investment intentions—particularly among university students who often lack investment experience and are highly influenced by psychological and social factors. Therefore, promoting financial literacy and providing official communication on both the risks and opportunities of cryptocurrency investment is essential to support responsible decision-making among young investors.

For cryptocurrency platforms and businesses, the study shows that a positive attitude, social influence, and perceived behavioral control are key drivers of investment intention. As such, these platforms should design educational marketing campaigns tailored to the language and preferences of young people. Leveraging social media, influencers, and partnerships with universities could help reach students effectively. In addition, platforms should prioritize user-friendly interfaces, transparent investment information, and enhanced security features to build greater trust within the student community.

For universities and educational institutions, the results suggest that students' knowledge and sense of control significantly affect their investment intentions. Therefore, incorporating topics such as personal finance, blockchain technology, and financial risk management into academic curricula will better equip students to make informed investment decisions. Furthermore, extracurricular activities, seminars, or investment simulation competitions can provide hands-on experience and practical skills in the field of digital finance.

6 CONCLUSION

This study aimed to explore the factors influencing university students' investment intention in cryptocurrency, using the Theory of Planned Behavior (TPB) as the theoretical framework. The findings provide valuable insights into the key drivers of investment intention, with attitude, subjective norms, perceived behavioral control, financial risk, and perceived trust all playing significant roles. The results suggest that fostering a positive attitude toward cryptocurrency, leveraging social influence, and improving students' perceived control over their investment decisions can effectively

increase the likelihood of investment in this market.The study highlights the importance of trust in cryptocurrency platforms, indicating that building secure and transparent environments is crucial for attracting young investors. Additionally, the perceived financial risk did not deter students from investing; instead, the potential for high returns encouraged investment, emphasizing the importance of clear communication about both the risks and rewards associated with cryptocurrency investments.

Although we have explained the rationale for selecting students as the target respondents, this sampling approach may reduce the generalizability of the model. We suggest that future studies in Vietnam should expand the sampling population to enhance the level of generalizability. In addition, due to resource constraints, we employed a convenient sampling method. Future studies may adopt a more random sampling approach to ensure the representativeness of the research.

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All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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