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Article

Investigating University Students' Willingness to Invest in Cryptocurrencies in Sri Lanka: Does Financial Risk Tolerance Matter?

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ABSTRACT

Cryptocurrencies have sparked debates globally, leading to diverse reactions from countries regarding their regulation. Sri Lanka remains cautious, as evidenced by its absence in the 2021 Chainalysis Adoption Index and its 58th ranking in 2022, indicating growing user numbers despite warnings from the Central Bank of Sri Lanka. This study uses the Theory of Planned Behavior (TPB) to assess Sri Lankan university students' intentions to invest in cryptocurrencies, exploring financial risk tolerance as a moderating variable. TPB suggests that attitudes, subjective norms, and perceived behavioral control predict intentions, with financial risk tolerance potentially influencing these intentions.

The research collected data from students at top state and private universities in Sri Lanka through structured questionnaires, employing descriptive statistics and structural equation modeling (SEM) for analysis. Results showed that attitudes, subjective norms, and perceived behavioral control significantly influence investment intentions in cryptocurrencies. However, financial risk tolerance did not significantly modify these effects, suggesting that the volatile nature of cryptocurrencies attracts those with higher risk tolerances, rendering the moderating effect of financial risk tolerance negligible.

This study offers insights for practitioners and policymakers, highlighting factors influencing cryptocurrency investments among university students and emphasizing the need for informed investment strategies suitable for varying risk tolerances. These findings enhance understanding of investment behavior in emerging markets like Sri Lanka.

Introduction

Background

The capacity of cryptocurrencies to stimulate economic growth and enhance financial inclusivity hinges on their widespread adoption, regulation, and comprehension among individuals in relation to digital currencies and their underlying technology (Tapscott & Tapscott, 2016). The emergence of the digital era has brought about significant alterations in the configuration of conventional financial dealings and the worldwide economy (Nakamoto, 2008).

The implementation of blockchain technology has resulted in a notable revolution in diverse financial activities, amid the present global and economic environment (Davidson et al., 2016). These activities include investments, commercial transactions, and electronic payments conducted over the internet. Blockchain technology possesses several advantages, including its decentralized nature, cryptographic safeguards, and extensive distribution, in addition to serving as a secure means for managing digital currency (Swan, 2015). These traits render it an ideal tool for regulatory objectives. The system retains a log of the financial activities of each person, akin to a computer network that is interconnected on a large scale (Catalini & Gans, 2016).

Cryptocurrency is widely acknowledged as a notable technological breakthrough in contemporary times (Narayanan et al., 2016). Cryptocurrencies have garnered significant attention in contemporary society as a decentralized form of digital currency that enables users to engage in direct transactions with one another. The growing interest in investing in cryptocurrencies can be attributed to the potential financial

benefits that individuals aim to gain from them (Bouri et al., 2017). The rise in popularity of cryptocurrencies may be attributed to this increase.

This phenomenon has garnered the interest of not only seasoned investors but also Sri Lankan university students in recent times. The aim of this study is to examine the determinants that impact the investment inclination of Sri Lankan university students who express interest in investing in cryptocurrencies, considering the growing accessibility of these digital assets and the diverse investment prospects they offer (Auer & Claessens, 2018). The objective of this research is to examine the attributes and elucidate the possible motivators that underlie the choice to allocate resources towards cryptocurrencies within this specific audience.

Investigating the investing activities of university students in Sri Lanka with respect to cryptocurrencies may yield significant insights into their behavior. Such research endeavors have the potential to derive valuable findings on the subject matter. Furthermore, the outcomes of this study could potentially aid in the development of tactics aimed at promoting judicious and knowledgeable investment choices (Yermack, 2015).

By understanding cryptocurrency adoption among university students, this study contributes to SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation, and Infrastructure). SDG 8 aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. SDG 9 focuses on building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation. Cryptocurrencies, through improved financial literacy and the adoption

of digital financial tools, can drive economic development and innovation. This promotes financial inclusion and supports sustainable economic growth in Sri Lanka by enabling more individuals to participate in the financial system, thus contributing to economic stability and innovation. By facilitating secure and efficient transactions, cryptocurrencies can enhance financial infrastructure, supporting the goals of SDG 9. Improved financial literacy among university students can lead to informed investment decisions, fostering an environment of economic growth and industrial innovation in line with SDG 8 and SDG 9 (United Nations, 2015).

Research Problem

Cryptocurrencies have become a global phenomenon, but Sri Lanka remains ambivalent about their adoption. According to the Chainalysis Adoption Index 2021, Vietnam, India, and Pakistan were the top three countries for cryptocurrency adoption, while Sri Lanka did not rank, highlighting its hesitancy (Team, 2022). This indicates a significant lag in cryptocurrency adoption in Sri Lanka compared to other Asian countries.

The Central Bank of Sri Lanka has issued multiple warnings in 2018, 2021, 2022, and 2023 against cryptocurrency activities, labelling them as unregulated investment instruments without legal recognition or regulatory safeguards (Central Bank of Sri Lanka, 2023). Despite these warnings, the Central Bank has not definitively banned or endorsed cryptocurrencies. Interestingly, the Chain Alysis Adoption Index 2022 ranked Sri Lanka 58th, suggesting a growing number of cryptocurrency users despite initial resistance (Team, 2023).

This lag and subsequent growth underscore the need to understand the factors

influencing cryptocurrency investment intentions in Sri Lanka. A notable gap exists in the literature regarding the investing inclination towards cryptocurrencies in the Sri Lankan context (Sharmila & Sivaseelan, 2021; Rathnayake & Wijerathna, 2021). Previous studies have shown that the Theory of Planned Behavior (TPB) is a predominant framework for examining human behavior, including financial investments (Ajzen, 2002; Qi & Ploeger, 2019; Cheon et al., 2012; Ajzen, 2011). Additionally, financial risk tolerance significantly impacts investment intentions (Grable, 2000; Hallahan et al., 2004; Fisher & Yao, 2017; Van de Venter et al., 2012).

This study focuses on university students in Sri Lanka, who are typically early adopters of new technologies and financial instruments. Understanding their behaviors and attitudes can provide insights into future trends in cryptocurrency adoption and drive broader societal acceptance (Hossain & de Silva, 2009).

The objective of this study is to investigate the influence of the TPB on the cryptocurrency investment intentions of university students in Sri Lanka and to explore the moderating effect of financial risk tolerance on this relationship. By examining these factors, the study aims to contribute to the existing body of knowledge on investment behavior among university students in Sri Lanka.

To substantiate the issue, comprehensive background data on university students' behavior towards cryptocurrency is essential. Recent surveys have indicated that a significant proportion of university students in Sri Lanka have shown interest in cryptocurrencies, with many considering them a viable investment option (Perera & Silva, 2021). These students are often motivated by the potential high returns and

the innovative nature of digital currencies. A study by Jayasekara et al. (2022) found that approximately 45% of university students have either invested in or are considering investing in cryptocurrencies, demonstrating a notable level of engagement with digital assets.

University students' attitudes towards cryptocurrency are shaped by their perception of risk, potential financial gain, and technological advancement (Fernando & Rajapakse, 2020). Many students view cryptocurrency as a modern and disruptive financial tool that aligns with their digital-savvy lifestyles. However, there is also a segment of the student population that remains skeptical due to concerns over volatility and regulatory uncertainty (De Silva et al., 2021).

Secondary data sources further reinforce the identified problem by providing a broader context. For instance, global trends in cryptocurrency adoption among youth indicate a growing acceptance and integration of digital currencies in daily transactions and investment portfolios (Global Crypto User Study, 2021). Comparative analysis with other countries in the region shows that Sri Lankan students are relatively cautious yet increasingly curious about cryptocurrencies, contrasting with the more aggressive adoption seen in countries like Vietnam and India (Team, 2023).

Despite the interest, there is a lack of detailed data on how widespread cryptocurrency use is among university students in Sri Lanka. This gap highlights the necessity for a thorough examination and presentation of relevant data to establish a well-supported and convincing argument for the study. Understanding the extent of cryptocurrency's popularity and adoption within this demographic is crucial for

developing effective educational and regulatory strategies to promote informed investment decisions.

Literature Review and Hypotheses Development

Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) posits that human behavior is influenced by attitude, subjective norms, and perceived behavioral control (Ajzen, 1985). As an extension of the theory of reasoned action (Ajzen & Fishbein, 1975), TPB is widely used to predict a variety of human behaviors, remaining influential in social psychology (Ajzen, 1991; Ajzen, 2002). Investigating the willingness of university students in Sri Lanka to invest in cryptocurrencies through the lens of TPB provides a structured approach to understanding the underlying behavioral intentions. University students are typically early adopters of new technologies and financial instruments, making them a critical demographic for analyzing future trends in cryptocurrency adoption (Hossain & de Silva, 2009). Understanding their behaviors and attitudes can provide insights into broader societal acceptance of cryptocurrencies.

Furthermore, this study examines the moderating effect of financial risk tolerance on the relationship between TPB constructs and investment intentions. Previous research has shown that financial risk tolerance significantly impacts investment decisions, adding another layer of complexity to the TPB framework (Grable, 2000; Hallahan et al., 2004). By investigating these factors, the study aims to contribute to the existing body of knowledge on investment behavior among university students in Sri Lanka, offering valuable insights for policymakers and financial educators.

Recent studies have further demonstrated the applicability of TPB in predicting investment behaviors in the context of digital assets. For instance, Norisnita and Indriati (2022) explored the integration of TPB with blockchain technology adoption, finding that attitudes, subjective norms, and perceived behavioral control significantly predicted investment intentions in cryptocurrencies. This suggests that the theoretical framework remains robust in the evolving landscape of digital finance. Similarly, Sobaih and Elshaer (2022) emphasized the role of TPB in understanding the financial behaviors of young investors in emerging markets, highlighting the growing relevance of TPB in contemporary financial studies.

Furthermore, this study examines the moderating effect of financial risk tolerance on the relationship between TPB constructs and investment intentions. Previous research has shown that financial risk tolerance significantly impacts investment decisions, adding another layer of complexity to the TPB framework (Grable, 2000; Hallahan et al., 2004). By investigating these factors, the study aims to contribute to the existing body of knowledge on investment behavior among university students in Sri Lanka, offering valuable insights for policymakers and financial educators.

Attitudes towards Investment Intention

Attitude towards investment intention" refers to an individual's perspectives and beliefs about investing. Individuals assess activities based on subjective views, influenced by personal experiences, cultural influences, societal norms, and moral principles (Ajzen, 1991; Fishbein & Ajzen, 1975).

Attitudes are critical for evaluating whether a behavior is appropriate or desirable (Ajzen

& Fishbein, 1980). Schaupp and Festa (2018) highlight that positive attitudes significantly impact investment decisions. Other studies also show that favorable attitudes towards financial instruments correlate with increased investment intentions (Van Rooij et al., 2011).

This is particularly relevant for university students, whose investment behaviors are influenced by their social environment and evolving cultural norms (Hossain & de Silva, 2009).

Gamel et al. (2023) conducted a study on university students' investment attitudes towards cryptocurrencies, revealing that positive attitudes were significantly correlated with higher investment intentions. Their findings align with previous literature, reinforcing the importance of attitudinal factors in financial decision-making among young investors. The study underscores the necessity of addressing attitudinal barriers to enhance cryptocurrency adoption among university students.

Thus, the hypothesis is:

H1: Attitude significantly influences Sri Lankan university students' intention to invest in cryptocurrency.

Subjective Norms towards Investment Intention

Subjective norms refer to an individual's perception of the prevailing norms and expectations within their social group. These norms significantly influence an individual's likelihood to engage in specific behaviors. Research indicates that strong societal influences positively correlate with an individual's motivation to perform a behavior, such as investing, while weak influences lead to reduced motivation (Wang et al., 2018).

Recent studies also highlight the role of

social influence in cryptocurrency investment. Norisnita and Indriati (2022) found that subjective norms were a strong predictor of cryptocurrency investment intentions, particularly in social environments that favour technological innovation. This finding is supported by Sobaih and Elshaer (2022), who demonstrated that peer influence and societal norms significantly impact young investors' decisions to engage in cryptocurrency investments.

Thus, we hypothesize:

H2: Subjective norms influence Sri Lankan university students' intention to invest in cryptocurrency.

Perceived Behavioral Control towards Investment Intention

The inclusion of perceived behavioral control (PBC) in TPB is an effective method for predicting behavioral intention (Goetze, 2011; Yzer, 2012). PBC reflects an individual's perceived capability or control over performing a behavior, significantly influencing their behavioral intentions (Ajzen, 1991). High perceived control can enhance self-confidence, leading to more assertive and impactful actions (Bandura, 1997).

In the context of investment, PBC is crucial as it affects individuals' confidence in their ability to make informed investment decisions. Research indicates that greater perceived control correlates with increased investment intentions, highlighting its importance in financial behavior (Lusardi & Mitchell, 2014).

Contemporary research by Gamel et al. (2023) supports the significant role of PBC in cryptocurrency investments. Their study demonstrated that university students with higher levels of perceived behavioral control

were more likely to invest in cryptocurrencies, as they felt more capable of navigating the complexities associated with digital investments. This finding aligns with the broader literature, emphasizing the importance of self-efficacy in financial decision-making.

Thus, the hypothesis is:

H3: Perceived Behavioral Control influences Sri Lankan university students' intention to invest in cryptocurrency.

Financial Risk Tolerance

Financial risk tolerance refers to an individual's inclination and ability to withstand uncertainty and potential financial setbacks in pursuit of higher returns (Grable, 2000). It plays a crucial role in investment decisions, differentiating between risk-averse and risk-seeking individuals. Risk-averse individuals prefer to minimize risk, while risk-seekers are willing to take on higher risk for greater potential rewards (Slovic, 1986).

Financial risk tolerance moderates the relationships between attitudes, subjective norms, perceived behavioral control, and investment intentions. Individuals with higher financial risk tolerance typically exhibit a stronger link between their attitudes and investment intentions. Those with a strong risk appetite and positive attitudes towards cryptocurrencies are more likely to invest compared to cautious investors (Grable, 2000).

Additionally, the relationship between subjective norms and investment intention tends to be stronger among risk-averse individuals. For instance, if a risk-averse person sees their acquaintances investing in a specific asset, they may feel compelled to do the same, even without fully understanding the risks involved. Similarly,

perceived behavioral control and investment intention are more strongly correlated among risk-averse individuals, who place a higher value on avoiding mistakes and monetary losses. If a risk-averse person believes they have the necessary knowledge and skills for successful investments, they are more likely to feel confident in making wise investment decisions (Hallahan et al., 2004).

Recent studies have further elaborated on the moderating role of financial risk tolerance in investment behaviors. Sobaih and Elshaer (2022) found that financial risk tolerance moderated the relationship between attitudes and investment intentions, with higher risk tolerance enhancing the positive effect of favorable attitudes on investment decisions. Similarly, Norisnita and Indriati (2022) reported that risk tolerance influenced the impact of subjective norms and perceived behavioral control on investment intentions, suggesting that individuals with higher risk tolerance are more likely to act on positive social influences and their perceived control over investments.

Financial risk tolerance moderates the relationships between attitudes, subjective norms, perceived behavioral control, and investment intentions. Individuals with higher financial risk tolerance typically exhibit a stronger link between their attitudes and investment intentions. Those with a strong risk appetite and positive attitudes towards cryptocurrencies are more likely to invest compared to cautious investors (Gable, 2000). Additionally, the relationship between subjective norms and investment intention tends to be stronger among risk-averse individuals. For instance, if a risk-averse person sees their acquaintances investing in a specific asset, they may feel compelled to do the same, even without fully understanding the risks

involved. Similarly, perceived behavioral control and investment intention are more strongly correlated among risk-averse individuals, who place a higher value on avoiding mistakes and monetary losses. If a risk-averse person believes they have the necessary knowledge and skills for successful investments, they are more likely to feel confident in making wise investment decisions (Hallahan et al., 2004).

To identify the moderating effect of financial risk tolerance, the following hypotheses are formulated:

- H4: Financial risk tolerance moderates the relationship between attitudes and investment intention.*
- H5: Financial risk tolerance moderates the relationship between subjective norms and investment intention.*
- H6: Financial risk tolerance moderates the relationship between perceived behavioral control and investment intention.*

Conceptual Framework

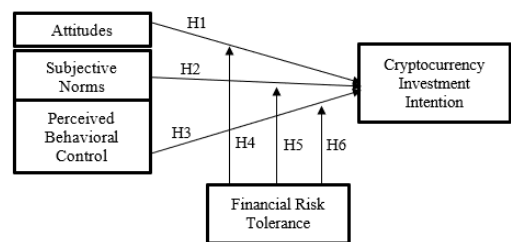


Figure 1: Conceptual Framework

Source: Author

Methodology

Research Design

This study adheres to a positivist research philosophy and employs a deductive approach using a single quantitative method. A survey strategy is adopted, utilizing a cross-sectional time horizon for data

collection. This research design is based on methodologies established in previous scholarly work (Creswell & Creswell, 2017).

Population and Study Sample

The entire university student population in Sri Lanka is considered the population for this study. According to the University Grants Commission of Sri Lanka, there are 17 state universities and 31 recognized private universities under Section 25A of the Universities Act No. 16 of 1978 (Universities Act No. 16 of 1978, 2023). The top five state and private universities, as ranked by the Webometrics ranking website, are chosen for the sample. This ensures representation from the most prominent institutions in the country.

The sample size of 350 participants is justified based on Krejcie and Morgan's (1970) formula for determining sample size, which is widely used in social science research. This sample size is sufficient to ensure statistical power and the representativeness of the findings (Krejcie & Morgan, 1970; Sekaran & Bougie, 2016).

Purposive sampling, a non-probability sampling method, is employed to select participants. This method is chosen to specifically target university students who are likely to have exposure to and interest in cryptocurrencies, thereby ensuring the relevance of the data collected (Palinkas et al., 2015). While purposive sampling is effective in targeting a specific group of interest, it has limitations in generalizing the results to the broader university student population in Sri Lanka. Purposive sampling focuses on a particular subset of individuals who are presumed to have relevant knowledge or interest, which can introduce bias and limit the study's external validity (Etikan et al., 2016). Therefore, while the

findings may provide valuable insights into the behaviors and attitudes of university students interested in cryptocurrencies, they may not be fully representative of the entire student population. Future research should consider employing probability sampling methods to enhance the generalizability of the results (Patton, 2015).

Measurement of Constructs and Data Analysis Strategies

This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) due to its ability to handle complex relationships between variables and its suitability for exploratory research. PLS-SEM is particularly advantageous for studies with smaller sample sizes and when the research model includes both reflective and formative constructs (Hair et al., 2019). The study employs a reflective measurement model, where the observed variables (indicators) are assumed to be caused by the latent constructs. This model is appropriate when the indicators are highly correlated and interchangeable (Jarvis et al., 2003).

The questionnaire for this study was developed based on established scales from previous research. Questions were adopted from Mazambani and Mutambara (2019), Lee (2009), Chen (2007), and Nga et al. (2010), ensuring the reliability and validity of each query. The questionnaire consists of two sections: Section A includes demographic attributes (gender, age, educational level, university type, and university name), along with a filtering question to identify relevant participants. Section B encompasses the variables assessed using a 5-point Likert scale ranging from strongly disagree to strongly agree.

To measure attitudes towards cryptocurrency, three items were included: "Using cryptocurrency as a currency would

be a good idea," "Using cryptocurrency as a currency would be a pleasant experience," and "I like the idea of using cryptocurrency" (Mazambani & Mutambara, 2019, p. 95). Subjective norms were assessed with three items: "People important to me think that it would be fine to use cryptocurrency," "People whose opinions are valuable to me would prefer that I use cryptocurrency," and "People who are important to me would be in favor of using cryptocurrency" (Lee, 2009, p. 78). Perceived behavioral control was measured with three items: "I have sufficient knowledge to use cryptocurrency," "Using cryptocurrency is entirely within my control," and "I have the resources, knowledge, and ability to use cryptocurrency" (Chen, 2007, p. 142). Investment intention was evaluated with three items: "I will invest in cryptocurrency frequently," "I will encourage my friends and family to invest in cryptocurrency," and "I will invest in cryptocurrency in the near future" (Nga et al., 2010, p. 110). Financial risk tolerance was measured using three statements: "If I believe an investment will carry profit, I am willing to borrow money to make this investment," "I believe I need to take more financial risks if I want to improve my financial position," and "I want to be sure my investments are safe" (Mazambani & Mutambara, 2019, p. 65; Lee, 2009, p. 120; Chen, 2007, p. 132; Nga et al., 2010, p. 88).

Reflective items were evaluated based on factor loadings, with a threshold of 0.7 for retention. Items not meeting this criterion were excluded to ensure construct validity and reliability (Hair et al., 2019). The final set of indicators and their loadings, Cronbach's alpha, composite reliability, and average variance extracted (AVE) were assessed to confirm the measurement model's robustness. Collected data

underwent descriptive analysis using SPSS. Structural equation modelling (SEM) was performed using SmartPLS 4 software. (Rahman et al., 2019; Bapat, 2020; Adil et al., 2022).

Analysis and Findings

Descriptive Analysis

Descriptive analysis of the 297 valid responses using SPSS software showed the following demographic distribution:

Gender: Male respondents constituted 54.88%, while female respondents made up 45.12%.

Age: The majority of respondents (82.15%) were aged between 20 to 29 years, indicating a notable concentration of individuals within this age group.

Education Level: Most respondents (82.15%) were undergraduate students, while the remaining 17.85% were postgraduate students.

University Type: Private university students represented a slight majority at 50.17%, compared to 49.83% from state universities. Among the top five state universities, the University of Colombo had the highest student representation at 37.16%. Other state universities also contributed significantly to the study. Among the top five private universities, NSBM Green University had the highest student representation at 36.24%, with other private universities also making substantial contributions.

Measurement Model Evaluation

Table 1: Reliability and Validity Test

Variable	Indicators	Loading	Cronbach's alpha.	Composite reliability	AVE
Suggested Threshold			> 0.7	> 0.7	> 0.5
Attitudes (AT)			0.775	0.869	0.69
	AT1	0.782			
	AT2	0.841			
	AT3	0.866			
Subjective Norms (SN)			0.867	0.919	0.791
	SN1	0.846			
	SN2	0.913			
	SN3	0.907			
Perceived Behavioral Control (PBC)			0.828	0.897	0.745
	PBC2	0.904			
	PBC3	0.846			
	PBC4	0.838			
Financial Risk Tolerance (FRT)			0.774	0.861	0.674
	FRT1	0.867			
	FRT2	0.816			
	FRT3	0.777			

Source: Authors' survey results

No Free Labor Entry: Barriers at Pre-working Stage/ Job Entrance Phase

This study found three sub-themes that restrict free labor entry for transgender individuals at the pre-working or job entrance stage.

According to Table 1, all variables' indicators demonstrated the required reliability, as evidenced by loading values exceeding the 0.7 threshold. Both Cronbach's alpha and Composite reliability also surpassed the 0.7 threshold, confirming internal consistency and reliability. Additionally, the variables met the Average Variance Extracted (AVE) criterion by exceeding the 0.5 threshold. Therefore, the data in Table 1 confirm that all variables are reliable and valid.

Discriminant Validity

Table 2: Fornell-Larcker criterion-Matrix

	AT	FRT	II	PBC	SN
AT	0.831				
FRT	0.443	0.821			
II	0.571	0.504	0.832		
PBC	0.461	0.169	0.501	0.863	
SN	0.461	0.231	0.469	0.376	0.889

Source: Authors' survey results

The Fornell-Larcker matrix assesses discriminant validity by comparing the correlation between each model construct to the square root of its average variance extracted (AVE). Discriminant validity is sufficient if a variable's square root of the AVE is higher than its correlations with other variables. Based on Table 2, the square root of the AVE for each variable (bolded) is higher than the correlations with other variables, indicating that all variables demonstrate sufficient discriminant validity. The reflective measurement model was employed in SmartPLS, as indicated by the tests used (Hair et al., 2012). This study did not present HTMT.85 results due to its traditional reliance on the Fornell-Larcker criterion, which has been widely accepted in previous research. However, future studies should consider HTMT.85 for a more rigorous assessment of discriminant validity (Henseler et al., 2015). Additionally, Q² and f² results, which establish the predictive relevance of the endogenous constructs, were not reported. This omission is acknowledged as a limitation of the study. Reporting these values in future research will provide a more comprehensive understanding of model fit and predictive power (Hair et al., 2019).

Structured Model Evaluation

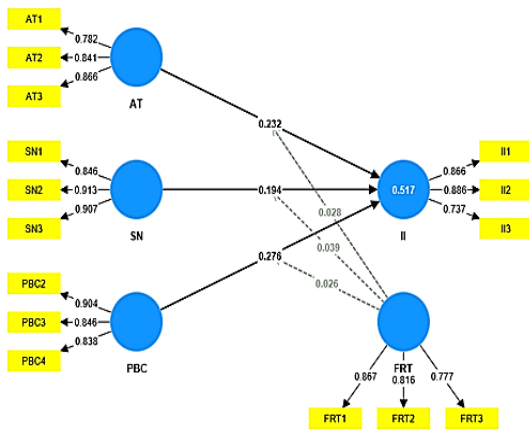


Figure 2: Inner and Outer Model

Source: Authors' survey results

According to Sobaih and Elshaer (2023), Gotz et al. (2009), and Pratama et al. (2023), the adjusted R² is a measure of how well a structural equation model (SEM) explains the variance in endogenous latent variables. It is calculated by taking the squared correlation between the predicted and actual values of these variables. Adjusted R² is one method of assessing model fit.

Previous scholars suggest that if the adjusted R² is 0.70 or higher, the model is considered substantial and accepted. An adjusted R² between 0.50 and 0.70 indicates a moderate model, where acceptance depends on factors such as statistical significance, accuracy of outcomes, and absence of outliers. If the adjusted R² is less than 0.50, the model is deemed inadequate. A low adjusted R² might indicate missing important variables, inclusion of irrelevant variables, or weak relationships between variables.

In this study, the R² is 0.517 (51.7%). However, as previously stated, adjusted R² is preferred for measuring model fit. The adjusted R² is 0.506 (50.6%), representing a moderate model. Despite this, the model is

still acceptable because the variables are statistically significant, the outcomes are accurate, and there are no outliers in the dataset.

Hypotheses Testing

Table 3: Direct Hypotheses

Direct Hypotheses	Std. deviation	T - Value	P values	Decision
H1 AT -> II	0.078	2.994	0.003	Accepted
H2 SN -> II	0.063	3.081	0.002	Accepted
H3 PBC -> II	0.067	4.141	0	Accepted

Source: Authors' survey results

Based on the findings presented in Table 3, it is evident that there exists a statistically significant positive influence between Attitudes (AT) and Investment Intention (II). This conclusion is supported by a P value less than 0.05, leading to the acceptance of the H1 hypothesis.

Similarly, the relationship between Subjective Norms (SN) and Investment Intention (II) shows a significant positive impact, as indicated by a P value less than 0.05, validating the H2 hypothesis.

Additionally, Perceived Behavioral Control (PBC) has a significant positive influence on Investment Intention (II), supported by a P value less than 0.05, thus accepting the H3 hypothesis.

In summary, all three hypotheses formulated in accordance with the theory of planned behavior have yielded significant results.

Table 4: Moderating Hypotheses

Moderating Hypotheses	Std. deviation	T - Value	P values	Decision
H4 FRT x AT -> II	0.06	0.459	0.647	Rejected
H5 FRT x SN -> II	0.059	0.66	0.509	Rejected
H6 FRT x PBC -> II	0.063	0.416	0.678	Rejected

Source: Authors' survey results

The findings in Table 4 indicate that Financial Risk Tolerance (FRT) does not moderate the relationship between Attitudes

(AT) and Investment Intention (II). This is supported by the statistical analysis, which shows a P value greater than 0.05. Consequently, the H4 hypothesis is deemed insignificant and rejected.

Similarly, FRT does not influence the relationship between Subjective Norms (SN) and Investment Intention (II), as evidenced by a P value greater than 0.05. Therefore, the H5 hypothesis is also deemed insignificant and rejected.

Furthermore, FRT does not moderate the relationship between Perceived Behavioral Control (PBC) and Investment Intention (II), supported by a P value greater than 0.05. Consequently, the H6 hypothesis is deemed insignificant and rejected.

In conclusion, none of the hypotheses regarding the moderating effect of financial risk tolerance yielded statistically significant results. This suggests that the relationships between attitudes, subjective norms, and perceived behavioral control in relation to investment intention are not moderated by an individual's financial risk tolerance.

The roles of Attitude (AT), Subjective Norms (SN), and Perceived Behavioral Control (PBC) in the structural model may be influenced by various factors, such as cultural context, economic conditions, and individual psychological traits. Understanding these factors is essential for interpreting the relationships in this study. For instance, cultural attitudes towards risk and innovation can significantly impact how individuals perceive and engage with cryptocurrencies. Economic conditions, such as inflation and currency stability, might also influence investment intentions. Furthermore, individual psychological traits, such as optimism or anxiety about financial markets, could affect how attitudes, norms, and perceived control translate into actual investment behaviors. Future research

should consider these contextual and psychological variables to provide a more comprehensive understanding of investment intentions in cryptocurrencies (Hair et al., 2019).

Discussion

The results of this study provide critical insights into the factors influencing the investment intentions of university students in Sri Lanka with regard to cryptocurrencies. Consistent with the Theory of Planned Behavior (TPB), the findings indicate significant positive relationships between attitudes, subjective norms, perceived behavioral control, and investment intentions.

The statistically significant positive influence of attitudes on investment intention ($P < 0.05$) aligns with prior research that highlights the importance of personal attitudes in financial decision-making (Ajzen, 1991; Fishbein & Ajzen, 1975). Positive attitudes towards cryptocurrencies likely stem from the perceived potential for high returns and the innovative nature of blockchain technology, which is often viewed favorably by younger, tech-savvy populations (Bouri et al., 2017). This finding underscores the necessity for educational initiatives that can further enhance positive attitudes towards cryptocurrencies, fostering informed and confident investment decisions.

Subjective norms also significantly influence investment intentions ($P < 0.05$). This result is supported by previous studies demonstrating that social pressures and the perceived expectations of important others (e.g., family, friends, and peers) can shape individual investment behaviors (Ajzen, 2002; Hsu & Lu, 2004). The strong impact of subjective norms suggests that social influence plays a critical role in the

investment decisions of university students. Educational campaigns and peer influence can be leveraged to promote positive perceptions and responsible investment behaviors in the cryptocurrency market.

Perceived behavioral control significantly impacts investment intentions ($P < 0.05$), confirming that individuals who believe they have the necessary skills and knowledge are more likely to invest in cryptocurrencies (Bandura, 1986; Ajzen, 1991). This finding emphasizes the importance of enhancing financial literacy and providing resources that empower potential investors to feel competent and confident in their investment choices. Financial education programs tailored to university students could address knowledge gaps and build confidence in managing cryptocurrency investments.

Contrary to expectations, financial risk tolerance did not moderate the relationships between attitudes, subjective norms, perceived behavioral control, and investment intentions. The lack of significant moderating effects ($P > 0.05$) suggests that risk tolerance does not significantly alter the impact of these TPB constructs on investment intentions. This finding diverges from prior studies that identified financial risk tolerance as a crucial factor in investment decisions (Grable, 2000; Hallahan et al., 2004).

One possible explanation for this divergence is the unique context of cryptocurrency investments, which are inherently volatile and attract individuals with a high-risk appetite. Thus, the baseline level of risk tolerance among cryptocurrency investors might already be high, diminishing the moderating effect. Additionally, university students, often early adopters of new technologies, may have a greater inherent interest in innovative financial instruments like cryptocurrencies, regardless of their

general risk tolerance (Hossain & de Silva, 2009).

Recent literature further illuminates the findings of this study. For instance, Norisnita and Indriati (2022) observed similar results among Malaysian university students, where attitudes, subjective norms, and perceived behavioral control significantly influenced investment intentions towards cryptocurrencies, but financial risk tolerance did not play a moderating role. Sobaih and Elshaer (2022) also found that in the context of emerging markets, social influence and perceived behavioral control are stronger predictors of investment behavior than financial risk tolerance. Gamel et al. (2023) highlighted that the rapid evolution of the cryptocurrency market and its allure among younger demographics can overshadow traditional risk considerations. This suggests that the inherent volatility of cryptocurrencies is an accepted risk factor among university students, aligning with their propensity for innovation and technological adoption. Consequently, financial education programs need to incorporate contemporary market dynamics and technological trends to remain relevant and effective.

Implications Limitations and Future Research

The findings of this study have several practical implications. Educational institutions and policymakers should prioritize enhancing financial literacy and fostering positive attitudes towards cryptocurrencies through targeted programs and resources. Such initiatives can encourage informed investment decisions and support the responsible adoption of digital financial tools. By promoting a better understanding of cryptocurrencies,

stakeholders can help mitigate risks and harness the benefits of this emerging financial technology.

This study has some limitations that should be acknowledged. The focus was solely on the top five state and private universities in Sri Lanka, which may limit the generalizability of the findings to the broader student population. Additionally, the sample size was limited to 350 individuals due to time constraints, which might affect the robustness of the results. The study primarily relied on the Theory of Planned Behavior to investigate investment intentions, potentially overlooking other relevant factors.

Future research should further explore the factors influencing cryptocurrency investment intentions across different demographic segments and geographical contexts. Longitudinal studies could provide deeper insights into how attitudes, social influences, and perceived control evolve over time and impact investment behaviors. Additionally, qualitative approaches could enrich the understanding of the motivations and concerns underlying cryptocurrency investments among university students.

Expanding the scope of the studied population and utilizing a larger sample size and diverse data collection methods could enhance the reliability and validity of the findings. Future research should also consider additional variables beyond those outlined in the Theory of Planned Behavior to capture a more comprehensive understanding of investment intentions. Implementing these recommendations can significantly enhance the body of knowledge in this field and inform better strategies for promoting cryptocurrency adoption and financial literacy.

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