

BEHAVIOURAL ANALYSIS OF DIGITAL CURRENCY AMONG INVESTORS IN INDIA

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Abstract

Purpose – The main objectives of this study to identify the investment pattern, awareness of the public and their willingness to invest in digital currencies among the people in Tamil Nadu.

Design/methodology/approach – An empirical study involving 480 respondents was conducted to gather primary data on the behavioural use of digital currency and the propensity of Tamil Nadu residents to invest in it in the future. The results were subsequently analysed using the statistical software Jamovi.

Findings – The result showed that most of the respondents are young people with qualified education and moderate level of income. From the factor analysis and questions found that most of the people have financial knowledge, openness to innovation, perceived convenience and macroeconomic factor playing a great role in the decision taken by the people to invest in digital currency.

Implications & Future Research suggestions - The study's primary implications focused on aspects related to data collecting and methodology. The survey was unavailable for a longer duration due to a time constraint. Furthermore, future studies can focus on specific regions.

Key words: digital currency, crypto currency, statistical analysis, financial knowledge, macroeconomic factors.

Introduction

Throughout modern history, governments have had a unique role in regulating and allocating money. The idea of a global currency has drawn a lot of interest in recent decades due to the movement away from nationalism and toward globalism, which is driven by international trade (Balvers & McDonald, 2021). During the COVID-19 epidemic, countries looked for contactless currency solutions to prevent liquidity problems, which sped up the introduction of digitalization and Central Bank Digital Currencies (CBDCs). The crisis brought attention to the need for alternatives to traditional currencies, and digital economies rebounded more quickly (Lee et al., 2021). Currency digitization is having an impact on the global financial system. Stablecoins (like Libra), cryptocurrencies (like Bitcoin), and central bank digital currencies (CBDCs) are the three primary types of money (Tong & Jiayou, 2021).

The digital finance landscape has rapidly changed from fintech to cryptocurrencies and now to CBDCs due to advancements in blockchain technology, digital payments, and worries about criminal activity involving cryptocurrencies (Ozili, 2023).

The idea of producing central bank digital currency (CBDC), a new kind of fiat money that makes central bank reserves digitally accessible to the public rather than just commercial banks, is being investigated by many. A CBDC would integrate peer-to-peer cash transactions with the digital aspect of deposits (Agur et al., 2019). By creating data consistency among participants, the consensus algorithm operates. As a result, it directly affects several CBDC system attributes, such as security, privacy, and performance (Jin & Xia, 2022). By carefully managing the risks to banks, issuing CBDC might increase GDP by 3% and enhance business cycle stability (Barrdear & Kumhof, 2022).

Although cash is still widely used in India, CBDC may eventually displace it due to its advantages, which include cost savings for central banks, privacy, and convenience of use. Strong technology and security are necessary for successful adoption, which can enhance monetary policy and prevent money laundering (Meena Kumari, 2021). To improve financial inclusion in India, the RBI is investigating CBDC and evaluating its effects on financial stability. It emphasizes the RBI's role in successful implementation and attempts to direct CBDC design (Banerjee & Sinha, 2023).

Cryptocurrencies are decentralized digital currency with no physical representation, valued purely on algorithmic security. Peer-to-peer networks, low transaction costs, and a rise in trading activity are what are driving their expansion (Corbet et al., 2019). Although cryptocurrencies can diversify, they are not good hedging tools, and their correlation with conventional assets varies because of financial and economic shocks (Charfeddine et al., 2020). With a maximum-diversification approach, in particular, cryptocurrencies can enhance portfolio performance; nevertheless, these advantages may be limited by liquidity concerns (Petukhina et al., 2021). The security, privacy, and financial impact of cryptocurrencies like Bitcoin, Ether, XRP, and Libra are impacted by differences in important aspects like coin supply, consensus methods, and identity management (Li & Whinston, 2020). Investments in cryptocurrencies weaken India's financial stability and have little effect on economic expansion; additional threats include inflation and worldwide disruptions (Panigrahi, 2023).

Blockchain technology is used by cryptocurrencies to safely record transactions, and cryptographic hashes make it challenging for hackers to change the expanding chain (Agrawal

et al., 2020; Mahato et al., 2022). Blockchain makes it possible for bitcoin transactions to be safe, quick, and decentralized without the need for middlemen (Hashemi Joo et al., 2019). With important uses in cryptocurrencies like Bitcoin, blockchain facilitates safe, decentralized networks and improves the utilization of already-existing resources (Yuan & Wang, 2018). The most well-known cryptocurrency is Bitcoin, although several others use encryption to ensure safe transactions (Mahato et al., 2022).

Blockchain, which depends on cryptography for security, powers smart contracts and cryptocurrencies. It has weaknesses, particularly in platforms like Ethereum and Bitcoin, and defense tactics are always being improved (Ghosh et al., 2020). Trust, regulatory backing, social impact, and experience all affect how well-received blockchain and cryptocurrencies are among consumers. Two important elements that increase trust and promote adoption are regulatory support and user experience (Albayati et al., 2020).

With an emphasis on market trading, artificial intelligence, and future research to propel societal changes, fintech breakthroughs like cryptocurrencies and blockchain are revolutionizing the financial industry (Hendershott et al., 2021). CBDC, Fintech, and cryptocurrency can boost financial inclusion but pose stability risks. CBDC and Fintech help maintain stability, while cryptocurrencies require regulation to mitigate risks (Ozili, 2023a). Cryptocurrencies, green bonds, and fintech all exhibit significant volatility. While long-term holding lowers risk, short-term trading raises it. Compared to other assets, gold, oil, and green bonds are superior hedging options (Le et al., 2021).

Bitcoin is more volatile than traditional assets, yet its trading volume remains steady when it comes to U.S. macroeconomic news. Positive news increases volatility, while negative news has a stronger impact on Bitcoin (Mužić & Gržeta, 2022). Bitcoin returns are lowered by positive news regarding durable goods and unemployment, while they are raised by negative news. CPI and GDP don't really matter (Corbet et al., 2020). With elements like awareness, trust, and ease of use influencing adoption, cryptocurrencies like Bitcoin provide a new online payment method that has the potential to revolutionize the global economy (Shahzad et al., 2018).

FinTech advancements such as blockchain, IoT, and robo-advising are valuable. Nonfinancial companies' disruptive ideas have the potential to harm industries, but market leaders that invest in innovation can mitigate this impact (Chen et al., 2018). Contagion is how financial ideas spread, and early acceptance and influence are key factors in success (Hull, I, 2016). Practicality, ease of use, quick transactions, and simplicity are the main factors driving the popularity of bitcoin financial systems. Attitudes toward these systems are also greatly influenced by social variables and supportive environments (Titov et al., 2021). Due to a move toward family finance and non-financial enterprises, financial patenting has increased dramatically. Nowadays, innovations are more valuable to society than to individuals, and post-crisis rules have raised the cost of innovation, which has decreased bank investment (Lerner et al., 2024).

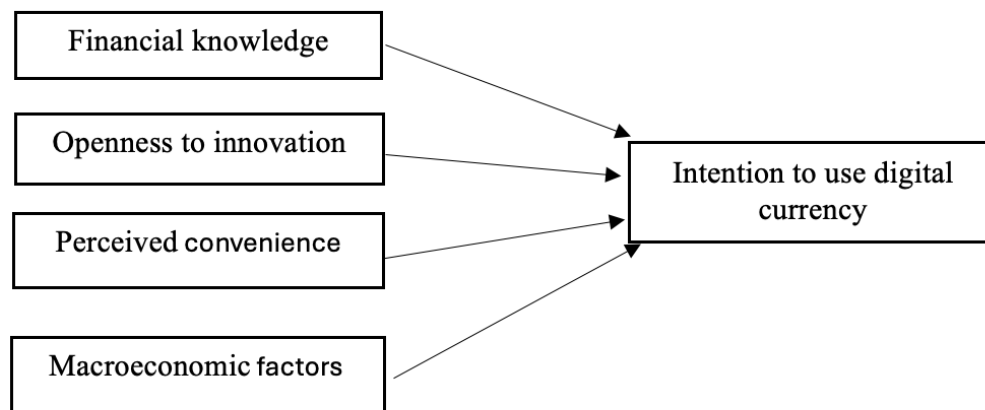


Figure 1: Factors influencing intention to use digital currency

Review of Literature

Digital Currency

(Chiappini & Ferrari, 2024) this study looks at how socio-political objectives are impacted by the architecture, governance, and scale of digital currency infrastructures. In addition to highlighting the need for more research into the technological, political, and geographic elements of digital currencies, it analyzes three projects: Digital Euro, REC, and Commoncoin. (Islam et al., 2023) this research, an auditable coin on a permissioned blockchain is used to offer a frictionless, affordable cross-border payment system. With the use of decentralized identities (DIDs) and a proof of authority consensus method, it guarantees transparency, privacy, and auditability, providing a viable option for blockchain-based payments. (Zhang et al., 2021). Function in currency control and national policy needs more investigation, as do more experiments for the use of smart contracts. (Herskind et al., 2020) this study conducts a systematic review of privacy in digital currencies, tracing their evolution from electronic cash to cryptocurrencies and highlighting techniques to improve user privacy. Despite their promise, existing systems have privacy laws requiring further research. (Kyriazis et al., 2020) the 2013 and 2017 bubbles in Bitcoin, Ethereum, Litecoin, and other digital currency markets are the main topics of this paper's analysis of scholarly research on pricing bubbles in these markets. It concludes that Bitcoin has been in a bubble since 2015, but there is little proof that other cryptocurrencies have started to exhibit bubble-like characteristics after 2018. (Patel et al., 2020) with an emphasis on Litecoin and Monero, this study suggests a hybrid cryptocurrency price prediction model that combines LSTM and GRU. High accuracy in predicting their prices is demonstrated by the data, indicating that the algorithm may also be able to anticipate prices for other cryptocurrencies.

Cryptocurrency

(Littrell et al., 2024) according to a survey of 2,001 Americans, 30% of them hold cryptocurrencies, and those that do exhibit a range of political opinions, conspiracy theories, and narcissistic tendencies. Maleness, alternative social media use, and anti-authoritarianism are important signs that point to the necessity for more study on the characteristics of cryptocurrency investors. (Cai et al., 2024) the study pinpoints three primary areas of interest:

(1) the features of cryptocurrencies, (2) the market dynamics, and (3) the effects of blockchain technology. Although they are a distinct asset class with benefits for diversification, cryptocurrencies shouldn't be regarded as a trustworthy haven investment. They are also demonstrating increasing promise as a store of value and a means of exchange. (Wątopek et al., 2021) this review explores the cryptocurrency market's evolution, statistical properties, and network dynamics, focusing on price fluctuations, correlations, and investment strategies. It highlights unique market behaviours, including arbitrage opportunities and the impact of the COVID-19 pandemic. (López-Martín et al., 2021) with an emphasis on Bitcoin, Litecoin, Ethereum, Ripple, Stellar, and Monero, this study investigates the effectiveness of cryptocurrency marketplaces. In accordance with the adaptive market hypothesis, the results demonstrate that market efficiency often rises with time, with Bitcoin, Litecoin, and Ethereum displaying steady gains and Ripple, Stellar, and Monero displaying alternating periods of efficiency and inefficiency. (Sun et al., 2020) this study combines information from 42 cryptocurrencies with important economic factors to estimate cryptocurrency price patterns using the Light GBM algorithm. The findings demonstrate that Light GBM performs better than alternative techniques in terms of accuracy and resilience, providing investors with insightful information to help them construct portfolios and reduce risks. (Bariviera & Merediz-Solà, 2020) this study uses a hybrid methodology combining bibliometric analysis and traditional literature review to explore cryptocurrency research in economics. By analysing 98 papers, it provides a comprehensive overview of bitcoin economics, identifies key research challenges, and highlights areas for further study. (Fosso Wamba et al., 2020) this essay examines Bitcoin, Blockchain, and Fintech, examining its uses, advantages, and difficulties in many sectors. It shows their changing importance in giving businesses a competitive edge and stresses the necessity for research to improve strategies and decision-making through a systematic review of 141 papers.

Financial knowledge

(Cristofaro et al., 2023) according to the study, financial literacy has no effect on the usage of cryptocurrencies for e-commerce, but attitude, norms, and herding behavior do. These interactions were impacted by cultural differences, with China experiencing unfavorable outcomes and the USA experiencing positive ones. Key impacts were found using a poll that received 2,532 responses from Chinese and US users. Cronbach's alpha of 0.822, which indicates reliability, was validated. Structured equation modeling was then used to assess the findings. (Gupta et al., 2021) according to this study, which analyzes the primary drivers of bitcoin investing, effort anticipation is the least significant element, while social influence and financial literacy are the most significant. It gives regulators and practitioners important insights into investor objectives using theories like UTAUT, TAM, and social support. (Angerer et al., 2021) by examining 50 scholarly and practical works, this study does a thorough literature assessment of the perceived and actual hazards of cryptocurrency investing. It highlights three areas of promising future research: non-standard financial hazards, adoption of cryptocurrencies through innovation research, and subjective risk perception.

H_{1a}: Financial Knowledge positively influencing intention to use digital currencies.

Openness to innovation

(Otabek & Choi, 2024) this review looks at how trading techniques are enhanced by precise bitcoin price forecasts. It highlights how several approaches, such as machine learning, sentiment research, and economic theories, might be used to control market volatility. The significance of algorithmic trading, technical analysis, and ongoing model improvement is emphasized throughout the article. To promote long-term growth in the bitcoin business, it urges more research on hybrid models, data integration, and ethical issues. (Sagheer et al., 2022) This study examines how Bitcoin users are impacted by technology awareness, danger, utility, and simplicity of use, with government support for the relationship being strengthened. It recommends that to increase the acceptability of cryptocurrencies, financial institutions in Pakistan should implement cutting-edge digital technology and laws. (Wu et al., 2021) this paper examines network modelling and detection in the analysis of cryptocurrency transactions, emphasizing issues and potential paths forward. Even with a great deal of research, the area is still complicated and needs more study. (Jiang et al., 2021) using bibliometric techniques, this study examines research trends in cryptocurrencies from 2009 to 2019 to pinpoint important publications, researchers, and discoveries. It demonstrates a change in research priorities from economic applications to basic technology. Most research institutions with complementary skills are in China and Europe. It is anticipated that future studies would combine econometrics and sophisticated computer science, with an increasing focus on cryptocurrency applications. (Wingreen et al., 2020) this study identifies five value systems within the Bitcoin community using the Q-methodology and concourse theory. It advises more research to examine alternative value systems in cryptocurrencies and offers testable theories on money, risk, and culture. (Stanciu et al., 2024) using data from 714 German citizens, this study examines how human values affect the adoption of cryptocurrencies in Germany. It finds that self-enhancement values motivate ownership and purchase, while openness to change values raise awareness. Additionally, socioeconomic considerations influence the shift from knowledge to ownership. The study's non-probabilistic sample precludes making any wide generalizations. (Fang et al., 2024) this study employs machine learning to forecast changes in the price of Bitcoin with 78% accuracy using high-frequency data from the WebSocket API of the GDAX exchange. It finds characteristics shared by all cryptocurrencies that enhance prediction models. The study examines more than 61 million records and presents a retraining technique for real-time data. The data utilized starts in 2018. (Fang et al., 2022) this study examines 118 research studies on bitcoin trading, including technical trading, trading methods, volatility forecasting, and portfolio building. It examines industry trends, information, and technological advancements, pointing to exciting prospects for further study in bitcoin trading. (Aspembitova et al., 2021) in this study four categories of Bitcoin users were identified by this study using machine learning, and it was discovered that Ethereum users are more reliable while Bitcoin users are more sensitive to market fluctuations. It recommends more studies on agent-based models and behavioural switching.

H_{1b}: openness to innovation positively influencing intention to use digital currencies.

Perceived Convenience

(Shahen Shah et al., 2023) through a thorough literature study, this paper investigates privacy and security concerns with Bitcoin, pointing out that existing solutions fall short of providing

robust anonymity and expose systems to intrusions. To overcome these issues and create practical security solutions for Bitcoin and other cryptocurrencies, it urges more study. (Mikhaylov, 2020) this study analysis reveals that EOS cryptocurrency emerges as the most promising and effective option in the market. Its low complexity, minimal transaction fees, and ability to integrate third-party applications distinguish it from other digital currencies. These factors position EOS as a strong candidate for sustained growth. The findings suggest EOS as the optimal choice for future investment and development. (White et al., 2020) this study categorizes Bitcoin as a speculative bubble rather than a money or investment and recommends more investigation into its valuation techniques and financial effects, particularly for investors switching to more conventional assets. (Marella et al., 2020) this study analyzes 1.97 million forum threads to investigate the technology-driven trust in Bitcoin. It highlights 11 crucial characteristics pertaining to usefulness, dependability, and functionality that affect customers' confidence in Bitcoin. These qualities emphasize the significance of technology in the absence of conventional financial support and are essential for establishing and maintaining trust in cryptocurrencies. (Mendoza-Tello et al., 2019) according to the report, perceived usefulness is a better predictor of bitcoin adoption in e-commerce than trust, risk, and ease of use. It emphasizes the need for more varied research populations and additional investigation of social and technological aspects using 186 samples from SmartPLS 3.0.

H_{1c}: Perceived Convenience positively influencing intention to use digital currencies.

Macroeconomic factors

(Shi, 2024) this study concludes that digital currencies have an impact on interest rates, exchange rates, and the money supply, lowering commercial bank loans and exchange rates while accounting for 10.89% of the variance in the money supply. (Kutera, 2022) this study reveals cryptocurrency-related financial fraud as a developing research subject using bibliometric and descriptive analysis. There is a lot of room for more research, even though the number of publications is small in comparison to other subjects. The necessity for stricter legal rules is highlighted by the fact that money laundering and financial pyramids are the two most common types of fraud. (Wang & Chong, 2021) this study concludes that while macroeconomic and attentional factors are less important, scale, momentum, value-to-growth, and liquidity are the main drivers of excess returns in cryptocurrencies. Cryptocurrency returns can be adequately explained by a factor model based on these components. The top 100 coins and tokens are the subject of the study, which filters for those with more than 500 days of trading history. Size and momentum are used to build portfolios, which compare returns from the top and bottom 20%. (Peláez-Repiso et al., 2021) this study looks at how blockchain technology and cryptocurrencies affect taxes, with a particular emphasis on how they affect social ties and taxation. Strict supervision and adaptability are necessary to ensure innovation in this developing industry, according to a bibliometric review of 349 papers published between 2015 and 2019. (Guo & Donev, 2020) this research on cryptocurrencies is growing quickly, but there isn't enough international cooperation. The early years' foundational literature continues to influence the subject and connect different areas of study. The focus of current trends is on market analysis, which includes trading dynamics and market behaviours. (Belke & Beretta, 2020) the balance between traditional currency and digital currencies in preserving financial stability is examined in this essay. Given the hazards associated with cryptocurrencies

and central bank digital currency (CBDCs), it proposes a two-tier structure that combines both. Given the changing nature of payment systems, more research should be done on the function of money.

H_{1d}: Macro Economic factors positively influencing intention to use digital currencies.

Intention to use

(Doumenis et al., 2021) this study examines the performance of Bitcoin in comparison to the S&P 500, gold, and the TLT ETF using secondary data. The Dickey-Fuller test validates the second hypothesis, reveals that Bitcoin is more volatile, and supports a correlation between Bitcoin and the other assets. In contrast to other studies, it demonstrates that during the COVID-19 pandemic, Bitcoin had more risk and returns while other assets saw reduced volatility and higher returns. (Albayati et al., 2020) this study uses descriptive statistics and PLS-SEM to analyze 251 responses to investigate consumers' intentions to use blockchain-based cryptocurrency transactions. Although actual usage is modest, it finds that regulations and user experience affect blockchain confidence. Future studies ought to concentrate on actual usage and further connections. The emphasis on knowledgeable responses is a drawback. (Ghosh et al., 2020) this review compares platforms such as Bitcoin, Ethereum, and Hyperledger and discusses the structure, consensus techniques, transaction lifecycle, and smart contracts of blockchains. It draws attention to security flaws and problems and provides fixes for them. The writers want to learn more about smart contract languages for practical uses. (N. A. Kyriazis, 2020) by contrasting it with more conventional financial assets, this study examines herding behavior in bitcoin markets. It concludes that while herding is less obvious in bear markets, it is more visible in bull markets, particularly under extreme circumstances. The study provides valuable insights for investment decisions in cryptocurrencies.

Research gap

Research on digital currency investment in Tamil Nadu is still scarce, even though interest in cryptocurrencies has grown significantly worldwide, particularly in the wake of events like Trump's election. Regarding the adoption of cryptocurrencies, factors like regional economic conditions, cultural attitudes, and technological accessibility are not well studied. There isn't enough empirical data to show how these factors explicitly affect investment intentions in Tamil Nadu, even though existing literature indicates major drivers of bitcoin investment, such as financial literacy and openness to invest. By investigating the causes and reasons affecting bitcoin investment decisions in the area, this study seeks to close this gap.

Methods & Measurement:

- Financial knowledge, Intention to use, Openness to innovation, Perceived convenience constructs were measured with the 5item scale (Wu et al., 2022).
- Macroeconomic factors construct was measured with the 3item scale (Bui, L. 2022).

The Study is expressive in nature. A structured questionnaire was used to collect the data on people's intention to use digital currency and future willingness to buy or invest in cryptocurrency. The primary data was collected from the people of India by communicating with the help of structured questionnaire. The sample size of the study was 480 from various cities of India. For analysis the people were categorized based on different demographics like age, gender, educational level, occupation and more. The Respondents were asked to rate the

statements given in five points Likert scale (5-Strongly agree, 4-Agree, 3-Neutral, 2-Disagree, 1-Strongly disagree). The primary data collected were analysed by using statistical tools like percentage analysis, factor wise analysis, reliability Analysis, goodness of fit and Garrett ranking.

Objectives:

- To investigate the awareness of the public on cryptocurrencies.
- To measure the impact of various factors, influence in investing in digital currency.
- To measure the intention to invest in cryptocurrencies among the public.

Results & Discussion:

Percentage Analysis

The data has been collected from 480 people from the people of India.

Table 1: Classification of Demographic Variables

Age	Frequency	% of Total
18 – 25 years	179	37.3%
26 – 40 years	81	16.9%
41 – 55 years	134	27.9%
Above 55 years	86	17.9%
Education level	Frequency	% of Total
High school or equivalent	59	19.6%
UG	217	100.0%
PG	164	54.8%
Doctoral degree	35	7.3%
Others	5	20.6%
Occupation	Frequency	% of Total
Full time worker (Profession)	319	66.5%
Unemployed	4	0.8%
Business	102	21.3%
Part time worker	13	2.7%
Student	42	8.8%
Annual income	Frequency	% of Total
Below 5,00,000	98	40.2%
5,00,001 – 9,00,000	193	27.1%
9,00,001 – 13,00,000	130	12.3%
Above 13,00,000	59	20.4%
Location	Frequency	% of Total
Rural	33	6.9%
Urban	445	92.7%
Semi urban	2	0.4%
Familiar with cryptocurrencies	Frequency	% of Total
Yes	314	65.4%
No	12	2.5%

Somewhat	154	32.1%
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From the demographic profile, most of the respondents are 8-25 years of aged people and most of them were well educated with full time work or business. It is seen that most of the people have moderate level income. Majority of them live as a family of 4 or 3. For this study, one of the significant things to be considered is the behavioural analysis of the public. From the survey, majority of the people are aware about cryptocurrency.

Table 2: Purchase of cryptocurrency

Purchase of cryptocurrency	Counts	Total %
Bitcoin	40	13.60%
Ethereum	23	7.82%
Beldex	99	33.67%
Ripple	81	27.5%
Tron	51	17.34%

The above table shows that Beldex is the most purchased cryptocurrency (33.67%), followed by Ripple (27.5%) and Tron (17.34%). Bitcoin (13.6%) and Ethereum (7.82%) have lower adoption and where the few people also investing in other type of cryptocurrencies.

Reliability Analysis:

Table 3: Reliability Analysis

Item Reliability Statistics				
Statements	Mean	SD	Cronbach's α	CR
FK-1: I think that I am familiar with finance related terms and concepts	3.45	0.691	0.793	0.79
FK-2: I consider myself to be financially literate	3.86	0.667	0.79	
FK-3: I consider my knowledge of finance to be sufficient	4.07	0.789	0.788	
FK-4: I can make informed judgments of financial products or services	3.81	0.742	0.789	
FK-5: I have the ability to apply basic knowledge in everyday financial choices	3.93	0.789	0.79	
PC2- I think that digital currency is more flexible to use than paper currency	3.87	0.876	0.788	0.788
PC1- It is easy to become skillful in using digital currency	3.83	0.831	0.79	
PC3- There is no difficulty in settling payments via digital currency.	3.95	0.875	0.788	
PC4- It is convenient to use digital currency.	3.86	0.904	0.789	
IU 1- I will use digital currency if given the opportunity to do so.	3.84	0.722	0.785	0.785

IU 2- I will use digital currency on a regular basis in the future	3.95	0.729	0.784	
IU 3 - I have no objection to use digital currency for transactions.	3.93	0.737	0.784	
IU 4- I intend to use digital currency frequently for payments	3.94	0.735	0.787	
IU 5 - I would recommend my friends to use digital currency	3.86	0.788	0.786	
OI 1 - I am interested in innovative technologies.	3.19	1.198	0.788	0.779
OI 2 - I am open-minded to try new things.	3.82	1.291	0.775	
OI 3 - I have the courage to envision new possibilities.	3.9	1.197	0.78	
OI 4- I am eager to absorb new knowledge.	3.73	1.313	0.775	
ME 1 - Macroeconomic news about increases and decreases in interest rates affects me greatly (Returns from cryptocurrency)	3.9	1.099	0.782	0.78
ME 2 - An increase in tax rates will affect me to adopt cryptocurrencies. Namely Bitcoin.	4.11	1.045	0.777	
ME 3 - Economic uncertainties, for instance, the Covid-19 pandemic, positively affect me to seek alternative investment choices such as assets in the cryptocurrency market	4	1.147	0.782	
ME 4 - The interest return rates are higher when compared to other investment avenues.	3.92	1.216	0.78	

The Data taken for the study for all the statements was found that has a greater reliability coefficient (Cronbach alpha) about 0.793, as values above 0.7 are generally considered acceptable which implies that implication obtained from these data is greatly reliable in nature.

Factor Analysis:

Table 4: Factor Analysis

Factor Loadings							
Constructs	Measured Variables	Factor					KMO – MSA
		1	2	3	4	5	
Intention to use digital currency	IU 2- I will use digital currency on a regular basis in the future	0.93					0.851
	IU 1- I will use digital currency if given the opportunity to do so.	0.88					0.863

	IU 3 - I have no objection to use digital currency for transactions.	0.87					0.888
	IU 5 - I would recommend my friends to use digital currency	0.83					0.91
	IU 4- I intend to use digital currency frequently for payments	0.73					0.93
Macroeconomic factor	ME 3 - Economic uncertainties, such as the Covid-19 pandemic made me to invest in cryptocurrency and to earn alternative source of money.		0.9				0.828
	ME 4 - The interest return rates are higher when compared to other investment avenues.		0.85				0.857
	ME 2 - An increase in tax rates will affect me to adopt cryptocurrencies. Namely Bitcoin.		0.81				0.884
	ME 1 - Macroeconomic news about increases and decreases in interest rates affects me greatly (Returns from cryptocurrency)		0.76				0.89
Perceived Convenience	PC3- There is no difficulty in settling payments via digital currency.			0.95			0.712
	PC2- I think that digital currency is more flexible to use than paper currency			0.89			0.736
	PC4- It is convenient to use digital currency.			0.82			0.78
	PC1- It is easy to become skilful in using digital currency			0.53			0.768
Financial Knowledge	FK-4: I can make informed judgments of financial products or services				0.85		0.749

	FK-5: I have the ability to apply basic knowledge in everyday financial choices				0.81		0.761
	FK-3: I consider my knowledge of finance to be sufficient				0.64		0.847
	FK-2: I consider myself to be financially literate				0.61		0.814
	FK-1: I think that I am familiar with finance related terms and concepts				0.56		0.853
Openness to innovation	OI 4- I am eager to absorb new knowledge.					0.89	0.801
	OI 2 - I am open-minded to try new things.					0.79	0.837
	OI 3 - I have the courage to envision new possibilities.					0.73	0.878
	OI 1 - I am interested in innovative technologies.					0.66	0.855
Note. 'Maximum likelihood' extraction method was used in combination with a 'ProMax' rotation							

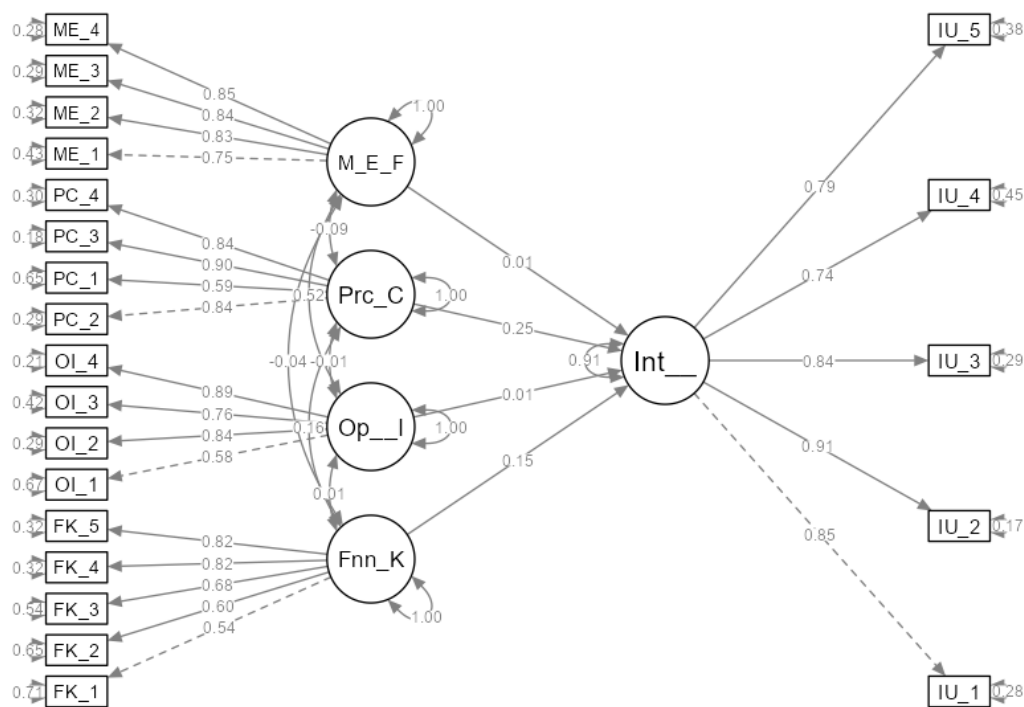
The high KMO-MSA values (above 0.7) indicate good sampling adequacy, supporting the validity of the factor structure and all the factors from the survey shows that it is above 0.7. Therefore, it indicates good sampling adequacy. Each factor is loaded and sorted with more than 0.5 resulted on 5 factors based on the confirmatory factor analysis (CFA). In CFA 'Maximum likelihood' extraction method was used in combination with a 'ProMax' rotation to identify the factor loadings.

SEM:

Structural equation modelling was adopted to test the relationship proposed in the hypothesized model with suitable goodness of fit indices. The TLI values 0.95 suggest a good fit, as they are above the recommended threshold of 0.90. The RMSEA value of 0.0534 is well below the 0.08 threshold, indicating a good approximation of the model fit.

Table 5: Model Fit Measures

Model Fit Measures							
	RMSEA 90% CI				Model Test		
RMSEA	Lower	Upper	TLI	BIC	χ^2	df	p
0.0534	0.05	0.06	0.95	- 504	283	131	<.001



Goodness of fit indices of the measurement model

χ^2	GFI	RMSEA	NFI	IFI	TLI	CFI
283	0.992	0.0534	0.921	0.952	0.944	0.952

The above model shows an excellent fit with all indices meeting the recommended thresholds (GFI, NFI, IFI, TLI and CFI >0.9; RMSEA <0.08), indicating the hypothesized model fits the data well.

It shows that H₁ is accepted with the significance of less than 0.05 results that financial knowledge, openness to innovation, Perceived convenience and macro-economic factors are significantly impact on intention to use the digital currency to the people in India.

Managerial Implications

The study emphasizes the need for management accountants to assess risks in cryptocurrency investments, update financial reporting to include digital assets, and stay informed about regulatory changes. Managers should also consider how cryptocurrencies can be integrated into business models, weighing the associated risks and benefits (Stashchuk, 2024).

Organizations should improve security with encryption, multi-factor authentication, and user education. Ongoing transaction monitoring and staying updated on regulations will help protect digital assets and ensure compliance (Weichbroth et al., 2023).

To handle possible disruptions in financial systems, organizations should assess how stablecoins may affect their business models, keep abreast of regulations, and put robust risk management techniques into place (Morgan, 2023).

To address the environmental impact of blockchain and cryptocurrencies, businesses need to implement sustainable practices. To lessen possible financial system disruptions, it is crucial

to keep abreast of legislation changes and create effective risk management procedures (Drollette, 2022b).

Several management implications are suggested by a behavioural analysis of digital currency investing in Tamil Nadu. People should be made aware of the advantages of cryptocurrencies, with an emphasis on security and flexibility, to promote adoption. It's critical to provide high-return items in unpredictable economic times and to create easily accessible digital currency solutions, such wallets and applications, that don't delay payments. Keeping investors updated on changes to the law would also increase confidence. These tactics will enable companies to take advantage of the expanding digital currency sector and adapt to changing investor demands.

Limitations and future directions

Since this survey only looked at India, it may be expanded throughout each corner of the region or even specific part of India to find out how many people there are planning to utilize digital money. The sample size is only 480, which is too little to determine the precise public response. The platform for digital currency is constantly expanding and changing quickly. Future research can be conducted in a wider area and with new technology.

Conclusion

This research paper used empirical study to analyse the behaviour of the public in India and their intention to use digital currency as the innovation is extending greatly. Cryptocurrency now becoming worldly accepted digital money by many people, there is also the possibility of getting increased more in coming days. There is a certain factor which also hesitate people to adopt to cryptocurrency like constant change in government regulations, delay in payment or settlement of money after selling their coin, ease of use significantly influences the adoption rate. The findings suggest that while many investors are optimistic about the potential of digital currencies, concerns about volatility and regulatory uncertainties remain prevalent. To provide the confidence for investing to investor government support and technology easy to use, it should also be available in all regions of India.

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