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Cryptocurrency vs Traditional Banking in the GCC

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Abstract

Due to the rise in popularity and adoption of cryptocurrency, various questions have been raised about its coexistence with traditional banking, particularly in the Gulf Cooperation Council (GCC). The GCC region has acclaimed its position as one of the world's largest sources of outbound remittances while lacking unified approaches to crypto regulation. This study compares cryptocurrency and traditional banking across five dimensions: transaction efficiency and cost, security, user trust, regulation, and long-term sustainability. The specific focus of the study was targeted towards the under researched perspective of young people. A sequential explanatory mixed-methods design was used, and data was collected through an online questionnaire and semi-structured interviews where 29 and 15 financially literate respondents completed respectively. Respondents' perspectives showed the following: cryptocurrency was faster (75.9%), cheaper (55.2%), more adaptable to the digital habits of younger generations (72.4%) and viewed blockchain technology as more resistant to large-scale hacking (75.9%). However, traditional banking was more trusted to safeguard wealth during a crisis (65.5%) and to protect users from fraud (58.6%), while 65.5% considered the lack of global crypto regulation too risky. The study concludes that neither will replace one another and instead they should move towards convergence where banks could adopt blockchain in areas that improve payments without weakening consumer protection.

Keywords: cryptocurrency, traditional banking, user trust, financial regulation, blockchain, gulf cooperation council, financial innovation

Introduction

The emergence of cryptocurrency over the past decade as a revolutionary substitute to traditional banking has vastly transformed the financial field. Since the inception of bitcoin in 2009, cryptocurrencies have developed to become vastly important, posing different prospects and challenges when compared to traditional banking systems. Where traditional banks have been efficient in being the core of economic saving, transactions and financial regulation by following centralised and controlled structures, cryptocurrencies' contrasting nature adopts a freer, decentralised and technology driven structure using blockchain technology to ensure security and transaction transparency. The rise of cryptocurrencies has sparked a conflict regarding long term sustainability, security, accessibility and efficiency while leaving many to question its role in society in the future and how it will work next to traditional banking systems. The conflict resides in understanding how these two opposing systems will offer a

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greater impact in evolving the financial landscape and meeting the needs of users for the present and the future.

This study explores the future potential, advantages and limitations of both financial systems. By assessing their operational models, the research seeks to provide deeper insight into how these systems will coincide with one another while competing and influencing the future of global finance.

Research Questions

1. How do cryptocurrency and traditional banking differ in terms of transaction efficiency and cost?
2. What are the comparative security strengths and vulnerabilities of each system?
3. How does user trust vary between cryptocurrency users and traditional banking clients?
4. What role does regulation play in shaping the adoption and reliability of both systems?
5. Which system offers greater long-term sustainability and adaptability in the global economy?

Hypotheses

1. Cryptocurrency transactions are more efficient and cost-effective than traditional banking transactions.
2. Traditional banking systems provide stronger regulatory protection and user security compared to cryptocurrencies.
3. Users demonstrate higher trust in traditional banks due to established legal and financial frameworks.
4. Regulatory clarity significantly influences user adoption of both cryptocurrency and traditional banking.
5. Traditional banking wins over cryptocurrency on long-term sustainability.

Significance of the Study

GCC policy makers drafting crypto regulation, retail consumers deciding where to bank, fintech start-ups assessing market gaps are going to specifically benefit from this study. This study contributes to existing knowledge on cryptocurrency and traditional banking in the following ways: to policy makers and financial regulators in the GCC this study will provide insight on how regulatory clarity will affect user trust and adoption, it will also help in making informed decisions on how to balance innovation with consumer protection as crypto adoption grows in the region.

To traditional banks and fintech companies the findings can highlight features like speed, cost, security and accessibility that users value, helping institutions to design better products or identify where they are losing ground to crypto alternatives. To young consumers and future researchers, this study addresses a specific gap on how the youth perceive these two systems. This makes the findings directly useful to a demographic that is under-represented in existing research.

To those people who are not in the banking sector, understanding cryptocurrencies' advantages could inform them about the future financial inclusion initiatives in the region.

To the researcher, this study will provide experience in mixed method research design and contribute to a regionally specific perspective.

Scope and Delimitations

This study covers a period of 2 years and focuses on cryptocurrencies and traditional banking systems in the GCC. This regional focus was chosen for a few reasons:

By limiting data collection to the GCC, I was able to make the findings usable and relevant to the target audience of this paper. By contrast, a global sample would dilute the policy relevance and would not be useful.

Limiting the scope to a regional focus allows the study to address the gap on youth perspective. That specific demographic is underrepresented in existing research. Targeting the GCC makes it realistic to target them directly in a manageable sample rather than spreading thin across countries with very different youth financial behaviours.

This delimitation is practical as primary data collection is easier to access for a GCC resident researcher as I have access to a network and population centred around the GCC.

The usage of specifically GCC countries allows for consistency as they share similar characteristics like the following:

- Currencies pegged to the US dollar
- Oil driven economies
- Central banking structures that are broadly comparable.

This helps select a control group as macroeconomic differences could otherwise affect how transaction cost and efficiency or security perceptions are compared if the sample included countries with very different economic systems.

Definition of Terms

- Cryptocurrency: A digital or virtual currency secured by cryptography and typically operating on decentralized blockchain technology.
- Traditional Banking: A regulated financial system involving banks that offer services such as deposits, loans, and money transfers.
- Blockchain: A distributed ledger technology used to record and verify cryptocurrency transactions.
- Decentralization: A system structure where control is distributed rather than managed by a central authority.
- Regulation: Government rules and policies that shape how financial systems operate and ensure consumer protection.

The remainder of this paper is organised as follows. Section 2 reviews the literature and sets out the theoretical framework. Section 3 describes the methodology. Section 4 presents the

findings. Section 5 discusses the findings against each hypothesis and offers recommendations, and Section 6 concludes.

2. Literature Review

This section breaks down how both systems work and reviews how money has changed over time, as well as what is known about cryptocurrencies and traditional banking systems. Currently there are conflicts between people who predict digital currencies to be the future and people who think regular banks should remain.

What We Know

What Is Money

To start with what we know we open with what money is. In The Bitcoin Standard (Ammous, 2018), money is described as being backed by something physical, real and "hard", like gold. Eventually inflation and reduced value of money is also mentioned in this book due to governments transitioning to fiat currencies. Governments discontinued their use of the gold standard and started printing too much money which ultimately resulted in inflation. Ammous also believes bitcoin is a modern version of gold because the supply is limited by code and governments cannot print more of it.

How They Work

Traditional banking has all transactions, funds, and decisions managed by a single central authority like a commercial bank or a central bank. This is known as traditional banks being centralised. Opposingly, cryptocurrency completely differs from this centralised idea. Instead, it utilizes blockchains to support economic transactions. A blockchain is a digital ledger that computers use globally and it is these computers that approve transactions without a bank teller. One advantage of this is: where traditional banking systems can take days to send money across borders and charge high fees, crypto does it much faster and cheaper. One way crypto can do this faster and cheaper is that it essentially removes the middleman (Catalini & Gans, 2020).

Privacy and Security

In traditional banking, user trust is placed with the institution. They are the ones who protect you from the likes of fraudulent behaviour etc. For example: if you lose your credit card, you can contact customer service to cancel your card and to get your money back. In the case that a bank goes under, trust is with the government. Users trust that the government will protect your account if the bank goes under and that the bank won't lose your money. One downside is that hackers may breach and gain access to databases in central banks. In doing so they gain access to people's private information. On the other hand, crypto users' trust is placed in computer code and cryptography. Blockchain technology enables the use of cryptography to protect users' information. Blockchain ledgers are too difficult to hack and change. One downside of crypto is that users are susceptible to scams and in cryptocurrency there is no customer service which can recover your money and details. If you send money to the wrong address or lose your password, you cannot retrieve your money, and it is lost forever.

Conflicts

A significant topic of conflict is financial inclusion and helping the unbanked. In this case it heavily favours cryptocurrency as it aids people who are not a part of the financial systems. This could be due to a multitude of factors like the following: being unable to afford minimum balance fees, not attaining the correct paperwork, living too far from a physical bank. According to the World Bank's Global Findex Database, more than a billion people worldwide do not have a bank account (Demirgüç-Kunt et al., 2022). This shows the sheer magnitude of people who aren't part of regular financial systems. Crypto avoids these common issues and is more readily accessible to users as it only requires an internet connection and a smartphone that can download a digital wallet. There is ongoing research on how cryptocurrency can help people who aren't currently part of financial institutions by allowing them to skip past these institutions and receive money from overseas without paying massive fees. These massive fees are normally required by financial institutions, and this massively helps the lives of those who are involved in international remittances.

The Future

Currently, the use of cryptocurrency has not appeased the governments and central banks as they have no control and cannot enforce any regulations. In a paper titled 'The digitalization of money', the writer's reference that crypto threatens governments' powers (Brunnermeier et al., 2019). Due to the use of crypto, central banks lose their fundamental ability to control the economy through the enforcement of monetary policies and interest rates. As more users turn away from fiat currencies, central banks lose more control of the economy.

Information Gap

Some information gaps of current literature are how the young generation view the two systems. Many economists have written research about the math-oriented blockchains and theories of cryptos, they miss in looking into how young consumers use and evaluate the systems and which of the systems they trust more for their money. There is an obvious lack of research on whether teenagers and the youth trust digital cryptocurrencies in comparison to traditional banks. Additionally, there is a gap in knowledge of how crypto can be used every day and for micro transactions. Economists write many detailed papers on cryptos being an asset you can buy and hold onto forever. They ignore its ability to buy everyday items and the difficulties in substituting it in microtransactions.

Theoretical Framework

How They Operate

How the two systems operate. Traditional banking systems function through centralisation (transactions, fund storage) and decision making are managed by commercial or central banks. Cryptocurrency systems instead rely on blockchain technology maintained collectively by a global network of computers which validates transactions without requiring a centralized authority such as a bank teller (Nakamoto, 2008). This structural difference produces measurable differences in cost and speed. Traditional transfers can take several business days and involve intermediary fees whereas crypto transfers are faster at a lower cost and without any intermediaries.

The Bitcoin Standard (Ammous, 2018) states that this shift in monetary history is because of scarcity of gold and that government departure from the gold standard towards fiat currency enabled monetary inflation to grow. Ammous argues that bitcoin replicates gold scarcity through code enforced supply limits, positioning it as a deliberately inflation resistant store of value.

Transaction Efficiency and Cost

Speed and cost are two of the most distinct differences between the two systems. Crypto transaction fees are often significantly cheaper. The GCC region is a hub for international transfers as it ranks as the largest source of global remittances. It is estimated that a total of 131.5 billion dollars was sent abroad by workers in 2023, which is more than any region in the world (GCC Statistical Centre, 2025). Saudi Arabia alone accounted for roughly 38 billion dollars of outbound transfers in 2024 (Saudi Central Bank, 2025). Traditional bank account funded transfers average a fee of around 8.81%, compared to 5.06% for digital remittance services, showing that even within traditional channels digital delivery already reduces cost (World Bank, 2025). However, this does not mean that crypto transfers are more efficient. Most users are required to convert local currency into crypto in the sending process and upon receiving the transfer, users are required to convert it back to local currency. These conversions have their own trading fees and withdrawal costs that reduce the headline savings (Kim et al., 2026). So overall, while cryptocurrencies have less of a structural cost in comparison to traditional banking transactions, it is heavily dependent on access to compliant on and off ramps and local liquidity.

Trust, Security and Vulnerability

Trust theory: This study draws on trust theory in financial systems which states that users are willing to engage with a financial system only when they are confident in its reliability, transparency and capacity to protect their assets (Mayer et al., 1995). In traditional banking, trust is institutional, placed in customer service mechanisms, deposit insurance schemes and regulators. In cryptocurrency, trust is algorithmic, placed in cryptographic code and the transparency of a public ledger rather than in any single institution. This distinction underlies several of the comparisons explored in this section and forms a conceptual basis for the hypothesis on trust and security.

The two systems differ sharply where trust is placed and what type of risk that trust carries. In traditional banking, trust sits with institutions and the state. Deposit insurance and customer service mechanisms like card cancellation and fraud reversal protect users from individual error or theft, and government backed guarantees protect depositors even if a bank fails. However, centralised record keeping, unlike cryptocurrency, creates a concentrated target. A breach of a bank's database can expose large volumes of customer data at once. Cryptocurrency hacks totalled over 2.17 billion dollars by mid-2025 (Chainalysis, 2025b), and another analysis found cryptocurrency theft hit a new high in 2025, with Chainalysis recording 3.4 billion dollars stolen from January to early December (Chainalysis, 2025c). Hackers linked to North Korea's Lazarus Group were responsible for over 2 billion dollars of 2025 stolen funds, a 51% year-on-year increase. Hence this risk is structurally different from bank fraud. Once a crypto transaction is confirmed there is no customer support or any kind of mechanism to reverse it.

This is in contrast with the institutional safety net that the traditional banking system provides. However, despite high profile losses, illicit crypto activity remains under 1% of total transaction volume (Chainalysis, 2025a), suggesting that while individual incidents can be severe, they may not be representative of typical user experience.

Regulatory Clarity and Adoption

Regulation is one of the most important factors that ultimately corresponds to how comfortable users are with engaging with either financial platform. Of the GCC countries, the UAE had the biggest pre-emptive approach to regulation as it had dedicated regulators like VARA in Dubai and FSRA in Abu Dhabi (Kolkaila, 2025). By the end of 2024 the DFSA was overseeing 902 regulated entities (Dubai Financial Services Authority, 2025). Without a unified GCC framework, the regulatory unevenness will cause crypto activity to tend to be most used in countries like UAE and Bahrain rather than Saudi Arabia. Therefore, the predominant platform for the majority of the GCC remains traditional banking.

Long-Term Sustainability and Adaptability

Sustainability refers to the environmental cost as well as the ability of each system to adapt to changing economic and technological conditions. Environmentally, the impact of cryptocurrency's intensive mining process is a serious concern (Lasut & Mesra, 2023). On the adaptability side it is more even between the two systems. GCC states such as Saudi Arabia and the UAE are working on wholesale central bank digital currencies through initiatives like the mBridge project. This uses blockchain infrastructure within the traditional banking system instead of treating it like a competitor (Kolkaila, 2025). This means that in the long term, it may see a combination. Banks can absorb the efficiency benefits of blockchain while retaining regulatory backing. Even so, the broader regional crypto market remains comparatively small, valued at around 744.3 million dollars in 2024 against a projected compound annual growth rate of 16.75% through 2033 (Kolkaila, 2025). This indicates that while cryptocurrency is growing quickly off a low base, traditional banking still holds the larger share of long-term financial infrastructure in the region for now.

3. Methodology

Research Design

The methodology adopted was a sequential explanatory mixed-methods design. It started with a cross-sectional online survey across GCC countries, followed by interviews to explain the patterns in the quantitative results.

The study was carried out in 2 phases:

Phase 1, a multilingual online survey across GCC countries using validated scales for trust, awareness, usefulness, ease of use, perceived risk, regulatory clarity, facilitating conditions, and adoption intention, completed by 29 respondents.

Phase 2, 15 semi-structured interviews with participants sampled across countries and user groups to explain why respondents trust banks more, when they prefer crypto for remittances, and how regulation changes willingness to adopt.

The survey tested a theory-based model and reported percentages, because cryptocurrency adoption studies repeatedly use TAM, UTAUT, TPB, or diffusion models to explain how trust, usefulness, ease of use, awareness, risk, and regulation shape intention or use. For this study, the core model was an extended UTAUT. It fits better than TAM because this paper is not just about app usability; it is about trust in banks versus code, regulatory clarity, youth adoption, and practical support conditions, and it better captures the institutional and behavioral factors.

- Trust matters because adoption rises when users believe the system is reliable, and several studies identify trust as a central or strongest predictor.
- Perceived risk matters because volatility, fraud, and irreversible mistakes shape willingness to adopt, especially in non-regulated financial settings.
- Regulatory support matters because users trust crypto more when government oversight and legal protections are visible.
- Awareness matters because understanding crypto improves perceived usefulness and ease of use, which then supports adoption.
- Facilitating conditions matter because users adopt more readily when they have the resources, infrastructure, and support needed to use crypto.

My sampling strategy used the internet in the form of a Google Form to collect statistical data from 29 respondents, while 15 interviews provided explanations and word-based answers. Additionally, this approach helps to answer the research questions in Section 1 because if I had only used one method it would not have captured the full picture. The quantitative part answers how many people prefer crypto or traditional banking, and the qualitative part answers the reasoning for their decision. Using both sets of data, they align to answer my statement of the problem effectively.

Population and Sampling

The target population, which is the specific group of people a researcher wants to study and draw conclusions about, was individuals who are related to the banking sector and the youth. I used a purposive sampling technique to answer the questions. This is a non-random technique where I intentionally selected participants based on traits and expertise. The reason I specifically used this technique is so that only people with financial literacy would answer the questionnaire and interviews, because if a random sampling technique had been used, it would have meant including participants who would not have any understanding about finance. In total, 29 participants completed the questionnaire and 15 took part in interviews, ensuring that the data came directly from those who are familiar with and understand financial systems. Descriptive statistics were used, where percentages, frequencies and averages were given to draw a reliable conclusion.

Data Collection Instruments

The tools and instruments I used to collect data were interviews and questionnaires. Interviews are face to face, semi-structured conversations where I asked questions and recorded the spoken answers. Questionnaires, on the other hand, are a list of questions that participants answer individually, and these were answered on a Google Form. My questionnaire had 15 questions

which were directly designed to answer the research questions in Section 1. The questions were a mix of multiple choice and open-ended questions and were answered on a Likert scale. Each interview lasted 20 minutes and was held either in person or by video call.

Data Analysis

After collecting the data from all the participants, I analysed and interpreted it. I used a statistical method to display and convert the survey data into percentages, averages, and charts. Qualitative data came from the interviews.

Ethical Considerations

I followed strict ethical rules and made sure to treat all participants with the utmost respect. Initially, I explained my research to the target population and only then sent out surveys and interviewed participants, after gaining their consent to participate in my research. Data collected was kept confidential and data security was addressed. No private details were leaked. I respected all those taking part in the study, and they were able to choose to stop participating at any time. They were informed of their rights and privacy beforehand. Data was stored using codes instead of names, in password-protected files, and will be deleted after study completion.

Validity and Reliability

To ensure validity and reliability I followed these steps: 1) member checking (asking participants if I recorded their interview quotes correctly) 2) triangulation (using multiple sources of data to study the same problem, ensuring the conclusion is backed up from all angles). The triangulation method was effective in validating my research as I did not rely on just one survey. By utilizing both surveys and interviews, I gained reliable data. If the methods of data collection all point to a similar or same direction/conclusion, it indicates my research is reliable.

4. Findings

Transaction Efficiency and Cost (Findings)

Respondents tended to view cryptocurrency as faster and cheaper, especially for international transfers. Out of 29 respondents, 75.9% either strongly agreed or agreed that cryptocurrency transactions are faster than traditional banking, compared to just 6.8% who disagreed. Perceptions around costs varied however pointed in one direction. 55.2% of respondents agreed or strongly agreed that crypto is cheaper than traditional banking, especially for international transactions, while only 10.3% disagreed. This remains in line with the previous argument, part of the literature review, centred around remittance costs in the region. When respondents were asked whether traditional banking offers better transaction efficiency than cryptocurrency, results were far more split. 37.9% agreed while 34.4% disagreed and 27.6% remained neutral, suggesting there was no dominant winner overall. Respondents are fairly convinced cryptocurrency has the edge on speed and cost. Yet, they aren't certain that traditional banking has fallen behind on overall transaction efficiency.

Participant Insights

Participants highlighted that cryptocurrency offers fast cross-border settlement, but conversion

costs set total efficiency gains. One respondent noted:

> *"When I send money internationally through a bank, it can take two to three business days. The exchange rate markup is also quite high. However, Crypto is nearly instantaneous. The downside though is converting local currency into crypto and back into fiat when you are on the receiving end and this introduces network gas fees and exchange withdrawal costs that narrow the savings gap."*

Security Strengths and Vulnerabilities (Findings)

It remains fairly balanced between both systems rather than one system being clearly more superior when it comes to security and vulnerability. 75.9% of respondents agreed or strongly agreed that blockchain technology offers more secure network infrastructure against centralized database hacking than regular banks, with only 6.8% disagreeing. This suggests a strong confidence in blockchain's structural resistance to large scale breaches. This same trust does not remain when it comes to fraud protection with the survey showing 58.6% of respondents agreed that traditional banking institutions do a better job of protecting clients from fraud and scams, compared to 31% who disagreed. This shows that respondents see a difference between infrastructure level security and everyday consumer protection and it's this distinction that is supported by responses to permanent user error. 79.3% agreed that cryptocurrency networks are more vulnerable to permanent mistakes like losing a password or account access, with a minuscule 3.4% of disagreement. Additionally, 62.1% of respondents agreed that traditional bank accounts are safer places to store wealth during an unexpected global economic crisis. Overall, the data suggests respondents view cryptocurrency as structurally more secure but believe that traditional banking offers a stronger protective safety net at the individual user level.

Respondent Insights

Participants suggested that there is a clear difference between systemic network hacks and personal user errors. They recognize that decentralized ledgers are resilient against centralized data breaches but still favoured traditional banks for everyday consumer safety. One participant stated:

> *"It's not that I don't trust that a major blockchain network, since it won't easily get hacked. Instead, it's the idea that I don't trust myself to never make a mistake. If I input a wrong wallet address or lose my private key, my funds are permanently gone. With my bank account, I can call customer support, block the card, and request a chargeback if my card is compromised,"*

User Trust (Findings)

When it comes to user trust, there is a gap between both systems from the survey results with traditional banking coming out ahead across every trust related question in this section. 65.5% of respondents agreed or strongly agreed that they trust traditional banking institutions to safeguard their wealth during an economic crisis. In comparison, only 20.7% disagreed. There was a noticeable lack of trust in decentralized blockchain code with only 34.5% agreeing or strongly agreeing that they trust blockchains to manage transactions without human intervention. On the other hand, 44.8% sat on the fence at neutral which could suggest many

respondents simply do not feel confident enough to take a firm position on algorithmic trust. Similarly, trust in traditional banking was partial with 51.7% agreeing that government backed safety nets like FDIC insurance make banking systems completely reliable. This left a combined 48.3% who either were neutral or in disagreement, showing that even within a system respondents generally favour, a meaningful percentage of people remain sceptical that regulation alone guarantees reliability. 44.8% agreed that the lack of clear legal regulation makes cryptocurrency too untrustworthy for the average consumer, 24.1% disagreed and 31% stayed neutral. Overall, these results suggest that user trust does not split evenly between the two systems. Traditional banking, however, holds a bigger advantage in perceived reliability. This is due to its institutional and regulatory backing. Trust in cryptocurrency remains comparatively uncertain and closely tied to how respondents feel about the absence of formal regulation.

Participant Insights

Trust in traditional banking correlated to the following: physical presence, legal accountability, and central bank backing. In contrast, algorithmic trust felt abstract to non-technical users. One participant explained:

> *"Knowing there is a physical branch, clear legal contracts, and government deposit insurance allows me to trust in a traditional bank if the institution fails. Trusting code on the other hand requires technical knowledge and literacy that most everyday consumers simply don't have. I think it's this concept that makes it hard for people to commit primary savings to a decentralized platform."*

Regulation (Findings)

Regulation is a pivotal characteristic in determining how each system is perceived. The literature frames regulation not just as legal control, but as a mechanism for consumer protection, AML compliance, financial stability, and international coordination, which helps explain why users respond to it so strongly in the survey data. Predominantly, users view traditional banking's legal backing as an advantage, with 55.1% agreeing or strongly agreeing that it is a superior system because it functions under strict legal laws and government supervision, and notably 0% strongly disagreed, meaning there was no outright rejection of this view. Cryptocurrency drew an even stronger reaction, 65.5% agreed or strongly agreed that the lack of global regulatory rules makes it too risky to be a stable financial system, compared to only 17.2% who disagreed. This suggests users are not simply endorsing traditional banking on its own merits, they are reacting more decisively to the absence of regulation in crypto as a specific risk. This matters analytically because it implies regulation functions less as a straightforward trust builder and more as a risk filter, users seem less concerned with how much oversight exists and more concerned with whether meaningful protections, such as consumer safeguards and AML compliance, exist at all. This would explain why traditional banking benefits from a ceiling effect where opposition stays close to zero, while cryptocurrency's lack of a unified framework is treated as an active vulnerability rather than a neutral gap. Read together, this suggests regulation shapes reliability perception asymmetrically, protecting traditional banking from rejection more than it actively earns trust, while its absence actively erodes confidence in cryptocurrency. This is consistent with the regional pattern discussed

earlier, where GCC states with clearer frameworks, like the UAE and Bahrain, have seen adoption accelerate specifically because regulatory clarity reduces this perceived risk.

Respondent Insights

Interviewees agreed that regulation acts primarily as a risk filter rather than an unwanted constraint. They indicated that a lack of clear rules does discourage users from mainstream usage:

> *"The lack of clear government guidelines, consumer protection laws, and tax guidelines makes the use of crypto feel similar to a gamble rather than financial management. In regions like the UAE which have clearer guidelines, people have more confidence that exchanges are legitimate and operating transparently."*

Long-Term Sustainability and Adaptability (Findings)

For the last research question point, the survey results end in an interesting split. Respondents attribute cryptocurrency with being more adaptable but still see traditional banking as the more environmentally sustainable option. 72.4% of respondents agreed or strongly agreed that cryptocurrency is more adaptable to the digital habits of younger generations than traditional banking. Only 6.9% disagreed which indicates a fairly one-sided result in favour of crypto's adaptability. When it comes to environmental sustainability however, 58.6% of people agreed or strongly agreed that traditional banking infrastructure is more environmentally sustainable than cryptocurrency mining networks and just 10.3% disagreed. This gap suggests that respondents are not treating "sustainability" and "adaptability" as the same thing. Cryptocurrency is seen as the more future facing system in terms of how well it fits changing user behaviour and digital expectations, but traditional banking is still viewed as the environmentally safer long-term option.

Participant Insights

Interviewees were optimistic for a hybrid model approach. They wonder if banks could modernize their backend technology using distributed ledgers. One interviewee stated:

> *"Younger users prefer easy processes and I think they want instant, mobile-first, and friction-free banking. For sure Traditional banks won't vanish. They're important because they hold institutional trust, but they probably will be forced to integrate blockchain technology behind the scenes to speed up cross-border payments."*

Conclusion of Findings

Taken together, the findings across all five research questions do not support a simple winner-loser conclusion but rather point toward a pattern of coexistence between the two systems. Cryptocurrency shows clear advantages in transaction speed, cost efficiency, and financial access, particularly for cross-border payments and underserved users, this is reflected consistently in the survey data on transaction efficiency and adaptability. However, these advantages are constrained by real limitations, respondents' concerns around cybersecurity, low financial literacy, and uneven regulation all surfaced strongly enough across the findings to

suggest that crypto's efficiency gains cannot be considered in isolation from these risks. Traditional banking on the other hand remains the more trusted system overall, respondents consistently favoured it on regulatory protection, customer recourse, and institutional trust, largely because it benefits from established legal oversight and safety nets that cryptocurrency currently lacks. That said, traditional banking is not without its own pressure to evolve, the strong perception of cryptocurrency's adaptability to younger, more digitally native users suggests that banks face growing pressure to modernize through blockchain integration, fintech collaboration, and improved customer education if they want to remain competitive in the long run. Overall, these findings suggest that cryptocurrency and traditional banking are not simply competing to replace one another, cryptocurrency appears stronger on efficiency and digital fit, while traditional banking remains stronger on trust, regulation, and user protection, meaning the more realistic long-term outcome for the GCC region is one where both systems continue to coexist and gradually converge rather than one fully displacing the other.

5. Discussion

Research Question 1 – Transaction Efficiency and Cost

The first hypothesis: Cryptocurrency transactions are more efficient and cost-effective than traditional banking transactions.

Findings from the survey show strong support for the hypothesis in terms of speed. Crypto was viewed as faster than traditional banking as 75.9% of respondents were in agreement. This aligns with the remittance cost data as previously shown in the literature review, where GCC cross border transfers remain comparatively slow and expensive through conventional means of transfer. Though, the cost dimension only partially supports the hypothesis as 55.2% agreed crypto is cheaper. This is a noticeably weaker cohort than the speed result. When respondents were asked directly whether traditional banking offers better efficiency there was close to an even split of 37.9% agreement, 34.4% disagreement, and 27.6% neutrality and showing the lack of shared views amongst the respondents. This highlights that the hypothesis is truer for speed than it is for cost. Respondents seem to treat "faster" and "more efficient overall" as two separate categories instead of one and it is worth pointing out since the hypothesis had initially grouped them both under one single efficiency claim.

Research Question 2 – Security Strengths

The second hypothesis: Traditional banking systems provide stronger regulatory protection and user security compared to cryptocurrencies.

The findings don’t entirely support this as "security" does not conform to a single variable in the data. Cryptocurrency was favoured by respondents with 75.9% agreeing that blockchain technology is able to offer stronger protection against centralized database hacking in comparison to regular banks. This directly works against the hypothesis at an infrastructural level. However, when it comes to individual users, the hypothesis is strongly supported, 58.6% agreed that traditional banks do a better job protecting clients from fraud and scams. 79.3% agreed cryptocurrency is more vulnerable to permanent user error and 62.1% agreed traditional accounts are safer during a global economic crisis. The disparity suggests that the way the original hypothesis is posed is too broad. Respondents don’t see traditional banking as more

secure in general. Instead, they view it as having stronger user level protection and opposingly, they view cryptocurrency as structurally more resilient at the network level. The results ultimately depend on the type of security being measured.

Research Question 3 – User Trust

The third hypothesis: Users demonstrate higher trust in traditional banks due to established legal and financial frameworks.

The hypothesis is clearly supported by the findings. Traditional banking exceeded cryptocurrency across the trust related questions. With 65.5% trusting traditional banks to safeguard wealth during a crisis compared to 34.5% expressing trust in decentralized blockchain code. There was a large neutral response to the blockchain trust question (44.8%). This may strengthen the hypothesis by suggesting that many respondents were not rejecting crypto outright. Instead, they were unable to fully commit to a system without the institutional framework that they have trust in. Trust in traditional banking was similar as it was not absolute. 51.7% agreed that FDIC style safety nets make banking completely reliable which means that the hypothesis remained true although, it should not be read as evidence that traditional banking has unconditional trust. It just has a relative advantage over cryptocurrency specifically.

Research Question 4 – Regulation

The fourth hypothesis: Regulatory clarity significantly influences user adoption of both cryptocurrency and traditional banking.

The findings heavily support the hypothesis. Regulation was clearly linked to reliability in the perspective of the respondents with 55.1% viewing traditional banking's legal backing as a strength as opposed to 65.5% viewing cryptocurrency's lack of global regulation as a risk. There was a stronger negative response to crypto's regulatory gap than there was a strong positive response to banking's regulatory strength. This shows that respondents react more strongly to the absence of protection than to its presence. Regulatory clarity appears to influence adoption as it reduces the perceived risk, rather than building confidence which supports the hypothesis but perhaps for different reasons than originally thought. This phenomenon is consistent with the regional pattern noted earlier where GCC markets with clearer frameworks, such as the UAE and Bahrain, have seen faster adoption.

Research Question 5 – Long-Term Sustainability

The fifth hypothesis: Traditional banking wins over cryptocurrency on long-term sustainability.

Support is generally in favour of this hypothesis from the findings, depending on how sustainability is defined. Specific to environmental sustainability, the hypothesis is supported with 58.6% agreeing that traditional banking infrastructure is more environmentally sustainable than cryptocurrency mining networks. On adaptability however, it is the opposite with 72.4% agreeing that cryptocurrency is more adaptable to the digital habits of younger generations. This was one of the most one-sided results in the entire study. This might suggest that the hypothesis as originally framed is too basic and generic. Traditional banking does not

excel across the board on long term sustainability, instead, it wins specifically on the environmental aspect. It loses clearly on the behavioural or digital aspect. This distinction is important for the study's conclusions because long term sustainability in this context is not a single measurable outcome. It is two separate categories in which the two systems currently dominate different sides of that divide.

Recommendations

Cryptocurrency

Cryptocurrency adoption appears to improve when platforms reduce uncertainty, improve usability, and add visible trust safeguards. Regulation does not just constrain use, it tends to legitimize the market and increase user confidence when it is clear and balanced, this is consistent with the strong reaction to regulatory absence found in the survey data. Based on this, a few practical improvements stand out:

- Create clear regulatory frameworks for exchanges, dispute resolution, AML, and consumer protection (Benson et al., 2024)
- Improve wallet and platform usability with simpler interfaces, mobile access, and stronger facilitating support for less technical users (Mai et al., 2020)
- Strengthen security and privacy through multifactor authentication, cold storage, audits, encryption, and smart-contract verification (Benson et al., 2024)

Traditional Banking

Traditional banks appear to improve most when digital transformation targets convenience, speed, personalization, and trust at the same time. The evidence consistently supports automation, AI, cloud systems, and data-driven design, but only when banks also address cybersecurity, legacy infrastructure, and confusing interfaces, otherwise modernization efforts risk adding complexity without improving user confidence. With this in mind, the following improvements are recommended:

- Automate routine processes and modernize legacy systems
- Use user-centred, omnichannel, personalized design
- Expand fraud detection, privacy controls, and clear communication

Shared Priorities

Both systems benefit from user education, because familiarity, awareness, and transparent communication increase confidence and adoption regardless of which system is being used. Both also need stronger privacy protection and clearer communication of those protections, since users respond not only to safety features themselves but to whether they actually understand them (Shahzad et al., 2024). This suggests that going forward, neither system can rely on technical improvements alone, and the following shared priorities apply across both:

- Build digital literacy programs for new and low-confidence users
- Make privacy and transparency visible in design and communication

- Pursue hybrid integration, with banks adopting blockchain where it improves payments and access

Conclusion

Overall, the study concludes that the first hypothesis is only partially supported. Cryptocurrency appears to outperform traditional banking most clearly in transaction speed and cross-border efficiency, especially where conventional systems remain slow, intermediary-heavy, and costly (Arner et al., 2020).

However, the evidence also shows that lower cost does not always mean better overall efficiency, because scalability limits, congestion, and usability barriers can reduce crypto's practical advantage in mainstream banking contexts (Schär, 2021).

The second hypothesis is also supported, but only in qualified form. Respondents' views and the literature suggest that security depends on the level being measured. Blockchain systems are often seen as more resilient at the infrastructure level because decentralization, immutability, and transparency reduce manipulation and centralized attack risk (Eyadat et al., 2025).

Yet traditional banking has an advantage in protecting users from fraud, scams, technical mistakes, and crisis-related losses, particularly because consumer protection mechanisms, dispute resolution, and institutional safeguards are more established in banking than in cryptocurrency markets (Lasut & Mesra, 2023).

Trust and regulation emerge as the strongest explanatory factors across the study. The findings support the third hypothesis by showing that users place greater trust in traditional banks because they are embedded in familiar legal, financial, and supervisory systems, whereas cryptocurrency adoption depends heavily on awareness, ease of use, and trust-building conditions (Shahzad et al., 2024).

The fourth hypothesis is strongly supported, as regulation appears to shape adoption less by creating enthusiasm than by reducing uncertainty, clarifying responsibilities, and lowering perceived risk (Auer & Claessens, 2018).

The fifth hypothesis is again partially supported, because long-term sustainability is not a single outcome. Traditional banking appears stronger in environmental and stability-related terms, especially given concerns around energy-intensive mining and broader systemic volatility in cryptocurrency markets (Lasut & Mesra, 2023).

By contrast, cryptocurrency appears more adaptable to digital-native behaviour, financial innovation, and emerging models such as DeFi, tokenization, and blockchain-enabled banking services (Schär, 2021).

In conclusion, the study finds that neither system fully replaces the other. Cryptocurrency's main strengths lie in speed, innovation, and structural efficiency, while traditional banking's strengths lie in trust, regulation, and customer protection. The most sustainable path is therefore not pure competition, but gradual integration in which banks adopt useful blockchain applications and regulators create balanced frameworks that support innovation without weakening financial stability or consumer safety.

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