

Cryptocurrency and Traditional Banking: An Integrative Analysis of Coexistence and Competition

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Abstract: In this study, the researcher explores the complicated relationship between cryptocurrencies and traditional banking that helps to analyse their coexistence and competition level within the financial market. In that case, rising security issues and cyber threats create negative impacts on the financial development segment. A total of 69 financial experts offered their valuable contributions to this study where primary data analysis would help to get a proper outcome for the study.

Keywords: Cryptocurrency, Traditional Banking, Consumer Trust, Regulatory Frameworks, Blockchain and Privacy etc.

Introduction

Background of the Study

The empire of finance has experienced a substantial transformation in recent years. Alongside traditional banking systems, cryptocurrencies have not only rapid growth but also shown popularity throughout financial aspects that change financial scenarios.

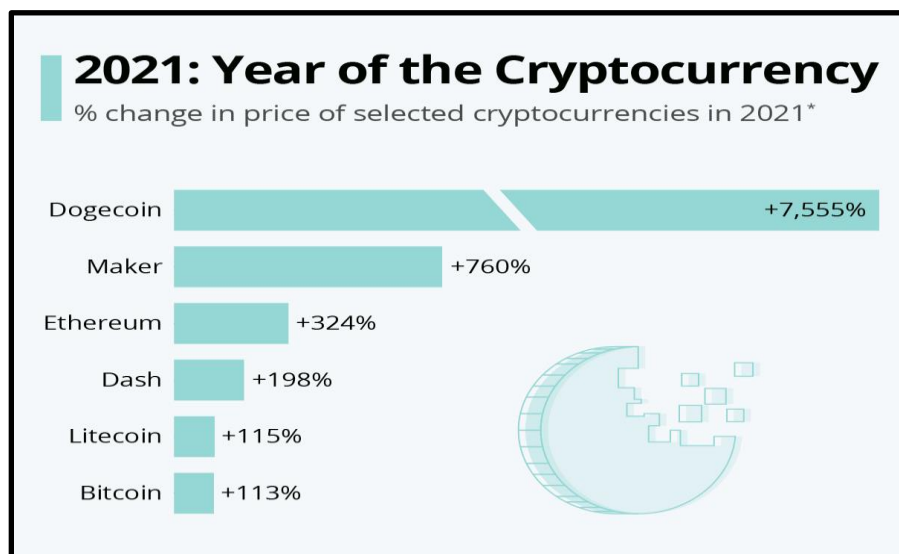


Figure 1: Growth of cryptocurrency

(Source: Statista.com, 2021)

There are several types of cryptocurrencies including Dogecoin as well as Maker, Ethereum, Dash, Bitcoin and Litecoin that represent a challenge to the conventional understanding of currency and finance and have opened up new

possibilities for financial transactions and investments. In that case, the changes in price for dogecoin was 7555 percent in 2021 that shows the wide range of popularity of this financial method (Statista.com. 2021).

Problem Statement

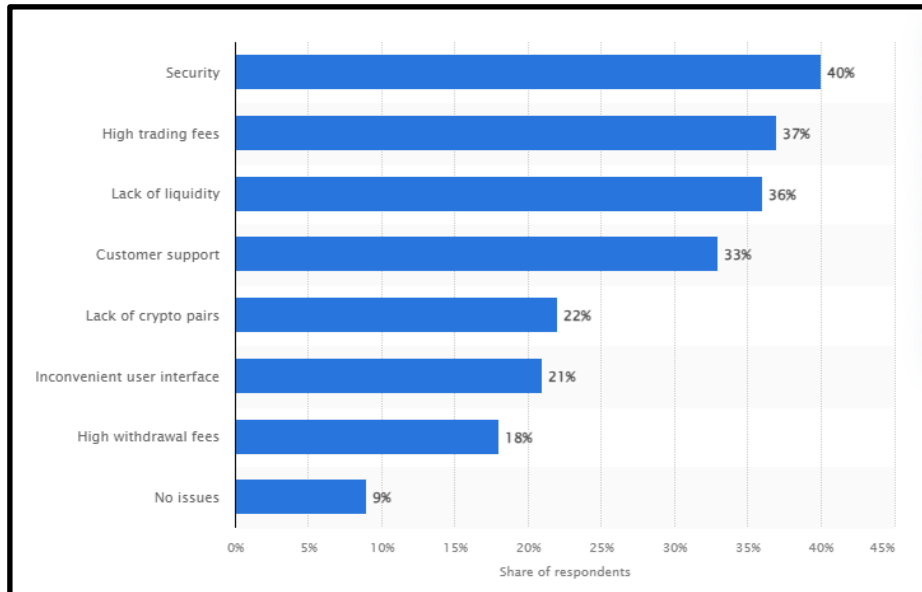


Figure 2: the biggest problems that cryptocurrency traders see in currently available exchanges (Source: Statista.com, 2023)

Traditional banking institutions face both challenges and opportunities due to the increasing popularity of cryptocurrencies. In that case, cryptocurrencies offer benefits such as decentralisation and efficiency but there are also concerns about regulatory compliance, security, and stability that need to be addressed that would affect the financial development throughout the world (Statista.com, 2023).

Research Aim and Objectives

Research Aim

The aim of this study is to analyse the coexistence and competition between cryptocurrency and traditional banking.

Research Objectives

RO1: To evaluate the present scenario of coexistence between cryptocurrencies and conventional banking systems.

RO2: To pinpoint the various elements that influence the convergence or divergence of cryptocurrencies and the conventional banking system.

RO3: To conduct a thorough evaluation of the regulatory complexities and potential avenues for collaboration presented by the concurrent existence of cryptocurrencies and conventional banking practices.

RO4: To recommend different strategies to mitigate all the regulatory challenges and opportunities associated with the coexistence of cryptocurrencies and traditional banking.

Research Questions

RQ1: what are the ways that cryptocurrencies and traditional banking currently coexist in the financial landscape?

RQ2: What factors contribute to the integration or divergence of cryptocurrencies and traditional banking?

RQ3: What are the regulatory challenges and opportunities associated with the coexistence of cryptocurrencies and traditional banking?

RQ4: What are recommended strategies that address challenges associated with the coexistence of cryptocurrencies and traditional banking?

Significance of the Study

Through the help of this study, people get a complete understanding of the evolving relationship between cryptocurrencies and traditional banking. In that case, all the findings would help the policymakers as well as financial institutions, and investors to understand different challenges and opportunities and their implementation from the coexistence of these two financial aspects.

Literature Review

Historical Evolution of Cryptocurrencies and Traditional Banking Systems

In the financial year 2009, the introduction of Bitcoin brought a new era of decentralised as well as peer-to-peer digital currency in the world economic aspects. In that case, by development different alternative cryptocurrencies and the implementation of blockchain technology helped to reshape the financial system (Hashemi et al. 2020). On the other hand, due to these changes in the banking aspects, the traditional banking systems make different changes. In that case, the integration of blockchain helps the banking sector to maintain transparency as well as effective transactions that help to maintain security. The multifaceted cryptocurrency has been observed to have different characteristics including Dogecoin, Maker, Ethereum, Dash, Bitcoin, and Litecoin (Patel et al. 2022).

Factors Influencing the Integration or Divergence of Cryptocurrencies and Traditional Banking

There are several factors that influence the integration relationship of cryptocurrencies and traditional banking. As per the study by Albayati et al. (2020), for secure and transparent transactions, the implementation of blockchain technology is one of the influencing aspects. Market demand and consumer adoption are the other factors that integrate traditional banking and cryptocurrencies (Nadeem et al. 2021). On the other hand, the regulatory framework is another influencing factor that helps traditional banks in their digital assets. Here, the legal status of cryptocurrencies plays a vital role in the adoption of cryptocurrencies that would help to understand the competition level.

Challenges and Opportunities in the Coexistence of Cryptocurrencies and Traditional Banking

The use of digital currencies like Bitcoin in traditional banking systems is a complicated process. Due to the strong rules by governments and banks, the process is still complicated. Due to less security in cryptocurrencies, people worry that it is not safe to use digital currencies (Ghosh et al. 2020). In this 21st century, with increasing fraud as well as illegal activities in the banking sector, the adoption rate of cryptocurrency decreased. On the other hand, some governments are developing digital currencies that are used as regular money. In that case, the way of dealing with issues changes as per different countries which helps to understand the competition level. In that case, by understanding the rules and regulations, it becomes easy to understand the future of cryptocurrencies in the banking sector.

Strategies that addressed challenges associated with the coexistence of cryptocurrencies and traditional banking

Several strategies would help to mitigate the coexistence of cryptocurrencies and traditional banking. The banking sector should promote collaborative partnerships that would help to increase bonds between crypto platforms and traditional banks. By exploring blockchain, the banking sector not only enhances transparency but also improves security (Garg et al. 2021). By implementing fair regulations through regulators, the banking sector can ensure compliance. On the other hand, by providing education about cryptocurrencies, the banking sector can enhance trust and awareness. The banking sector should develop effective risk management that not only improves cybersecurity but also helps mitigate challenges associated with cryptocurrencies.

Methodology

In terms of methodology, this study used a primary methodology that helps to analyse all the numeric data. In that case, positivism research philosophy used to understand the different evidence associated with the study. On the other hand, the deductive research approach used to get exact hypotheses for this study. Primary data collection used to gather data where online surveys used (Braun et al. 2021). Here, total of 69 respondents who are financial experts took part and gave their valuable responses as per the asked questions. In terms of data analysis, this study used quantitative analysis where all the data were

analysed by using the SPSS tool. In terms of analysis, a frequency test, descriptive, linear regression, validity test and correlation test have been performed.

Hypotheses development

H1: Cryptocurrencies and traditional banking can coexist in a complementary manner

H2: Increased adoption of cryptocurrencies may lead to a shift in consumer trust and preference away from traditional banking.

H3: Regulatory developments will play a crucial role in shaping the coexistence or competition between cryptocurrencies and traditional banking.

Findings

Demographic analysis

Age of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
1	19	27.5	27.5	27.5
2	10	14.5	14.5	42.0
Valid 3	20	29.0	29.0	71.0
4	20	29.0	29.0	100.0
Total	69	100.0	100.0	

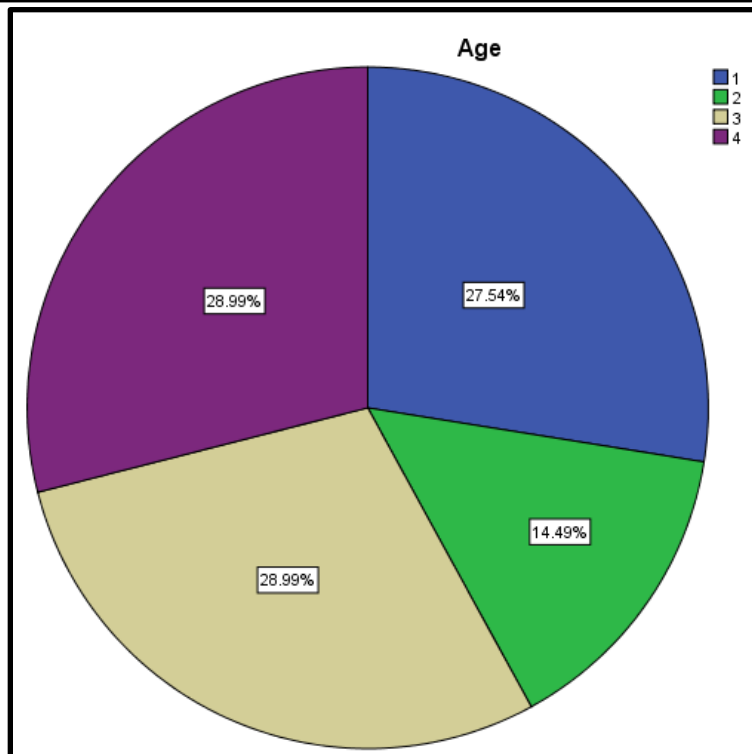


Figure 3: Age brackets of the respondents

(Source: SPSS)

As per the above table and chart, the age group of respondents analysed. In that case, there are 19 respondents from the 35 to 35 years age group whereas 10 respondents from the age group 36 years to the 40 years. On the other hand, for age

groups 41 to 45 and 46 to 52 years, there are 20 respondents for each category. The above table also stated that financial experts from higher aged groups and their expertise would help in this study.

Gender of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	49	71.0	71.0
	2	15	21.7	92.8
	3	5	7.2	100.0
	Total	69	100.0	100.0

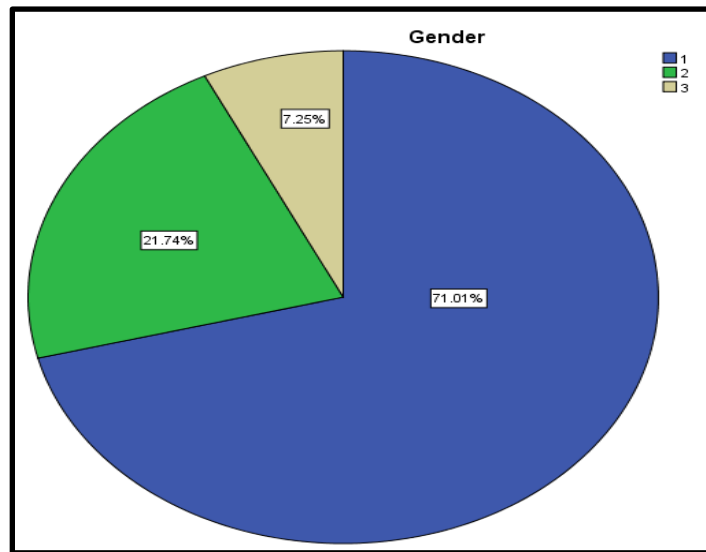


Figure 4: Gender of the respondents

(Source: SPSS)

This table provides information on the distribution of respondents based on gender. Out of 69 respondents, 49 respondents were male who offered their valuable time in an online survey. On the other hand, in terms of female respondents, 15 respondents took participated. In terms of another category, there are a total of 5 respondents. The diversified respondents offer less biased outcomes from this study.

Years of experience in marketing

Experience				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	29.0	29.0
	2	9	13.0	42.0
	3	20	29.0	71.0
	4	20	29.0	100.0
	Total	69	100.0	100.0

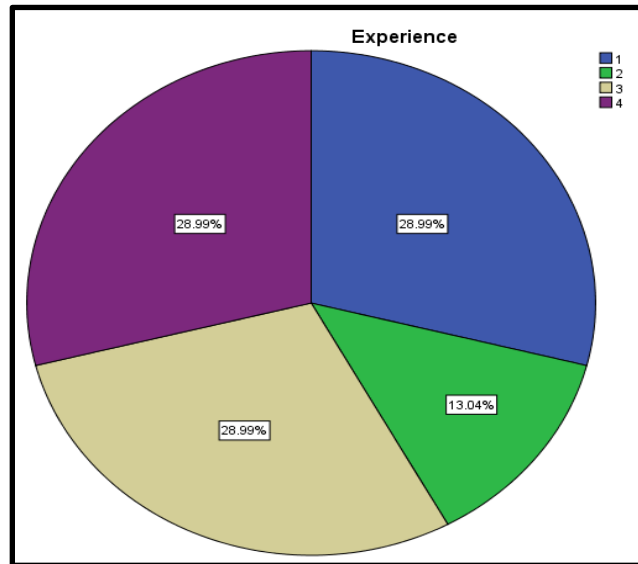


Figure 6: Years of experience in marketing of the respondents

(Source: SPSS)

The above table provides information on the distribution of respondents based on their years of experience in marketing. Here, Out of 69 respondents, 20 respondents have experience of about 11 years to 15 years. Similarly, the number of respondents who have experienced 6 to 10 years is also 20. On the other hand, 9 respondents have 3 to 5 years of experience in their job field. Here, 20 respondents have less experience in this field although it's important to consider it.

Variable-related analysis

Descriptive test

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DV	69	3.00	11.00	5.1304	2.75955	1.222	.289	.353	.570
IV1	69	3.00	9.00	5.8406	2.32394	-.163	.289	-1.558	.570
IV2	69	3.00	12.00	6.3188	3.57480	.608	.289	-1.316	.570
Valid N (listwise)	69								

Table 1: Descriptive analysis

(Source: SPSS)

Table 1 presents the frequency results and their summary, shown as descriptive statistics. The table indicates that the total number of elements, denoted by N, is 69. This value represents the total number of participants in the study. Here, for DV, the STDV is 2.75 whereas IV1 and IV2 have 2.32 and 3.57 respectively. In that case, The standard deviation serves as a metric to quantify the level of dispersion or variability of scores relative to the mean value. Additionally, skewness and kurtosis offer valuable insights into the shape of the distribution and the characteristics of its tails, further enhancing our understanding of the data (Arevalillo & Navarro, 2021). Through the help of this descriptive analysis, this study gets the distributional characteristics of the variables in your dataset.

Linear Regression

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.507 ^a	.257	.234	2.41469	.305

a. Predictors: (Constant), IV2, IV1
b. Dependent Variable: DV

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	132.997	2	66.499	11.405	.000 ^b
	Residual	384.829	66	5.831		
	Total	517.826	68			

a. Dependent Variable: DV
b. Predictors: (Constant), IV2, IV1

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.716	.835		2.055	.044
	IV1	.521	.262	.439	1.987	.051
	IV2	.058	.171	.076	.343	.733

a. Dependent Variable: DV

Table 2: Regression Analysis

(Source: SPSS)

The above table provided information about regression analysis that contains contains performance as well as the relationship between three variables. In that case, the R square value for this test is 0.257. This value indicates that 25.7 percent of variances are dependent on two independent variables. On the other hand, this regression model is signified by this ANOVA test where the F value is 11.40. In terms of the coefficient test, the t value is 1.98 for IV 1 and for IV 2, this value of 0.343 signified this analysis.

Validity Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.618
	Approx. Chi-Square	116.701
Bartlett's Test of Sphericity	df	3
	Sig.	.000

Table 3: Validity Test

(Source: SPSS)

The above table offers information on KMO and Bartlett's Test for the dataset. Here, the KMO value is 0.618 which is acceptable. In that case, the range of the acceptances is 0 to 1. In that case, this value shows a moderate level of sampling adequacy in the dataset.

Correlation Test

		Correlations		
		DV	IV1	IV2
DV	Pearson Correlation	1	.505**	.461**
	Sig. (2-tailed)		.000	.000
	N	69	69	69
IV1	Pearson Correlation	.505**	1	.877**
	Sig. (2-tailed)	.000		.000
	N	69	69	69
IV2	Pearson Correlation	.461**	.877**	1
	Sig. (2-tailed)	.000	.000	
	N	69	69	69

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4: Pearson Correlation test

(Source: SPSS)

The above table provides information on the Pearson correlation test that helps to understand the relationships between three different variables. All the variables make positive relationships with each other. In that case, Pearson's correlation coefficient's positive value indicates a direct proportional relationship between variables whereas a negative value refers to an indirect proportional relationship (Alsaqr, 2021).

Discussion

Through the help of this study, future researchers explore the complex dynamics between cryptocurrency and traditional banking systems that not only help to understand their coexistence in the banking sector but also help to understand the competition between these two aspects (Hairudin et al. 2022). In that case, through the help of the regression analysis, the researcher examined the relationships between a dependent variable (DV) and two independent variables (IV1 and IV2) that help to understand different influencing factors for the integration of traditional banking and cryptocurrencies. On the other hand, the R-square value which is 0.257 indicates a moderate level dependency on the dependent variable. Similarly, the ANOVA test result shows that there is a significant relationship between cryptocurrency and banking. In that case, at least one variable helps to understand how the two are related. The lower value in the Durbin-Watson statistic which is 0.305 brings issues in autocorrelation aspects.

Conclusion

In the end, it can be concluded that this study provided a complete understanding of the valuable relationship between cryptocurrencies and traditional banking systems. Through the help of the regression analysis, this study is valuable information that is associated with the factors influencing their coexistence and competition in economic development. On the other hand, the utilisation of statistics analysis tools and the assessment of factor analysis suitability provide a comprehensive perspective on the dataset under consideration. These findings not only provided valuable information into the integration and divergence of cryptocurrencies within traditional banking systems but also helped to understand their impact on the financial market. This competition also provided an in-depth understanding of patterns of market trends as well as different investment patterns and their associated risk factors during issues of cryptocurrencies for customers. This study also helped the customers in their informed decision-making process which can help in the future investment segment.

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