

Investors Attitude towards Cryptocurrency- based on Gender

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Abstract

The purpose of this study was to analyse and understand the attitude of gender towards cryptocurrency. The questionnaire was formed to collect data about knowledge, experience, trust, and other investment factors of the gender towards cryptocurrency. This paper will be beneficial to the upcoming or existing companies of cryptocurrency to estimate their future viability based on gender. The research was also aimed to the detection of gender differences within the areas of awareness, investing, mining and paying with the cryptocurrencies. The research aimed to analyse the data collected and conclude the overall attitude of male/ female towards cryptocurrency. The findings confirmed the existence of gender differences in attitude towards crypto currencies, as the male respondents were more willing to use the crypto currencies in most of the cases.

Introduction

In recent years, cryptocurrencies attracted a lot of attention, mainly due to enormous growths and falls of their exchange rates. A cryptocurrency (or crypto currency) is a digital asset designed to work as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units, and to verify the transfer of assets. Digital technological innovations have transformed the process of buying and selling commodities in India. People are using these digital wallets to buy a candy as well as to transfer money from one account to other (Malik *et al.*, 2020).

The first cryptocurrency was introduced in praxis by the person (or persons) under pseudonym Satoshi Nakamoto in 2009 when the principle of the Bitcoin was introduced in the paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System". Shortly afterward, the first bitcoin software was released and launched the bitcoin network and the first units of the bitcoin cryptocurrency were created.

The basic principle of cryptocurrency is that only a certain predefined amount of cryptocurrency is collectively produced by the entire cryptocurrency system. The rate of production is set by a predefined value and is publicly known. The different types of Cryptocurrencies available are Bitcoin, Ethereum, Litecoin and and Rippon. Bitcoin is a digital currency created in 2009. Bitcoin offers the promise of lower transaction fees than traditional

online payment mechanisms and is operated by a decentralized authority, unlike government-issued currencies. Ethereum is an open software platform based on blockchain technology that enables developers to build and deploy decentralized applications. Like Bitcoin, Ethereum is a distributed public blockchain network. Litecoin is a peer-to-peer Internet currency that enables instant, near-zero cost payments to anyone in the world. Litecoin is an open source, global payment network that is fully decentralized without any central authorities. Ripple's cryptocurrency has been adopted by banks and other financial institutions. Those companies believe Ripple's system offers both better prices and is more secure than other digital currencies, including Bitcoin. It allows users to send, receive, and hold any currency in a decentralized way via the Ripple network.

OBJECTIVES

- To analyse the impact of gender variable on investors' attitude towards cryptocurrency.
- To examine the level of importance of the factors affecting the buying of cryptocurrency among the investors.

LITERATURE REVIEW

A cryptocurrency (or crypto currency) is a digital asset designed to work as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units, and to verify the transfer of assets.

A Big Cryptocurrency Survey Was Conducted On Reddit, And The Results were Fascinating (December 13, 2017 By Zoe Biehl) The overwhelming majority of participants in this survey were men, with less than 5% being female. "Wow. That's all I could say when I saw the gender disparity. While was expecting a majority of cryptocurrency redditors to be male, I wasn't expecting as much as 95% of them to be male!"

According to Google Analytics data as of June 2018, 91.2 percent of individuals engaged in the bitcoin community are men. Investing in crypto--right now at least--is dominated by young men. That's the main takeaway from a survey Circle commissioned of 3,000+ Millennials, Gen Xers, and Baby Boomers in the U.S. using SurveyMonkey Audience panels. Highlights include:

Millennial men plan to invest in crypto over the next year at more than twice the rate of Millennial women (18% vs. 7%) 1 in 4 Millennials expressed interest in purchasing crypto over the next year, more than 10 times the rate of Baby Boomers

UTAUT Implementation of Cryptocurrency based Islamic Financing Instrument by Ritchie Jay Cheng "behavioural intention for SI influenced by gender, age, experience and voluntariness such that the effect will be higher for women, specifically older women in mandatory settings in the initial stages of experience."

Kabra, G., Mishra, P.K. and Dash M.K. (2010), studied the factors effecting investment behavior and concluded that investors age and gender are the main factors which decide the risk-taking capacity of investors.

Ashis Garg And Kiran Jindal (2014), Studied the Herding Behavior in the emerging stock market, attempt to attend the Presence of herding behavior in the stock market concluded that there is an existence of herding behaviour during the crises.

Martin Vejacka and Dana Palova analysed the attitude of gender towards cryptocurrencies in

the state of Slovakia and investigated gender differences in attitude towards cryptocurrencies in the conditions of Slovakia. The main findings were the neutral or slightly negative attitude of women towards crypto currencies and significantly more positive attitude of male respondents towards crypto currencies.

RESEARCH METHODOLOGY

Methodology is usually a guideline system for solving a problem, with specific components such as phases, tasks, methods, techniques and tools. It can be defined also as follows

Primary Data

Data that has been collected from first-hand-experience is known as primary data. Primary data has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings, therefore its validity is greater than secondary data. The information needed for this study was collected from the investors in the form of survey i.e. Google forms. SPSS software is used. t-test has been applied for analysing the result on the basis of gender. Sample size is 55. Data is collected from Delhi-NCR region

DATA ANALYSIS AND INTERPRETATION

Gender wise purchase intension of cryptocurrency

Table 1

		Have you ever bought a cryptocurrency?			Total
		Yes	No	Willing to invest in near future	
Gender	Male	14	9	7	30
	Female	5	8	12	25
Total		19	17	19	55

As per the table, 14 males had bought cryptocurrency, 9 didn't and 7 males are willing to invest in near future, out of 30 total males. 5 females had bought cryptocurrency whereas 8 didn't and interesting 12 number of females (out of 25 total females) are interesting to invest in near future that is more than that of males who were willing to invest

GENDER WISE TYPES OF CRYPTOCURRENCIES THEY OWN

Table 2

		Types of cryptocurrencies owned or they willing to own											Total	
		Bitcoin	Ethereum	Ripples	Litecoin	Ripples, Litecoin	Bitcoin, Litecoin	Ethereum, Ripples	Ethereum, Litecoin	Bitcoin, Ripples	Bitcoin, Ethereum	Bitcoin, Ethereum, Litecoin	None	
Gender	Male	11	1	2	1	2	2	1	2	3	2	1	2	30
	Female	10	3	3	1	2	1	1	2	1	1	0	0	25
Total		21	4	5	2	4	3	2	4	4	3	1	2	55

As per table, out of 30 total males, 11 males own or they willing to own bitcoin, 1 male own or he is willing to own Ethereum, 2 males own or they willing to own ripples, 1 male own or he is willing to own litecoin, 2 males own or they willing to own ripples & litecoin, 2 males own or

they willing to own bitcoin and litecoin, 1 male owns or he is willing to own ethereum, ripples, 2 males own or they willing to own ethereum and litecoin, 3 males own or they willing to own bitcoin and ripples, 2 males own or they willing to own bitcoin and ethereum ,1 male owns or willing to own bitcoin Ethereum and litcoin and 2 doesn't own anything. Out of 25 females, 10 females own or they willing to own bitcoin, 3 female own or she is willing to own Ethereum, 3 females own or they willing to own ripples, 1 female own or she is willing to own litecoin, 2 females own or they willing to own ripples & litecoin, 1 female own or they willing to own bitcoin and litecoin, 1 female owns or she is willing to own ethereum, and ripples, 2 females own or they willing to own ethereum and litecoin, 1 female own or they willing to own bitcoin and ripples, 1 female own or she is willing to own bitcoin and Ethereum.

GENDER WISE NUMBER OF CRYPTOCURRENCIES RESPONDENT OWN OR THEY WANT TO OWN

Table 3

		No. of Cryptocurrencies owned or they want to own				Total
		1	2	3	4 or more	
Gender	Male	8	13	4	5	30
	Female	14	7	3	1	25
Total		22	20	7	6	55

As per table, out of 30 males, 8 males own or want to own one number of cryptocurrency, 13 males own or willing to own two number of cryptocurrencies, three number of cryptocurrencies are owned or willing to be own by 4 males, 5 males own or willing to own four or more cryptocurrencies. Out of 25 females, 14 females own or want to own one number of cryptocurrency which is interesting higher than number of male had, showing females are more inclined towards buying or willing to own single currency. 7 females own or willing to own two number of cryptocurrencies which is less than males, shows that males are more inclined towards more number of currencies. 3 females own or want to own three number of cryptocurrencies which is similar to that of male's mind set. 1 female owns or want to own four or more number of cryptocurrencies which is lesser than males, shows that females are not into that much investing or usage of more number of cryptocurrencies.

GENDER WISE USAGE OF CRYPTOCURRENCY OR WANT TO USE

Table 4

		Gender		Total
		Male	Female	
Usage of cryptocurrency or want to use	To make purchases	1	2	3
	Online gambling	1	4	5
	To transfer fund	3	3	6
	For investment purpose	10	10	20
	out of preference of not wanting to use a bank	1	0	1
	To transfer funds (within country), for investment purpose	2	0	2
	Online gambling, for investment purpose	5	1	6
	To make purchases, online gambling	1	0	1
	To make purchases, for investment purpose	3	1	4
	To make purchases, to transfer funds (within country), for investment purpose	1	1	2

As per table, out of 30 males, 1 male use cryptocurrency to make purchases i.e. anything like household items or other kind of purchases. 1 male uses cryptocurrency for online gambling i.e. buy and sell and immediately gain/loss return, 3 males uses cryptocurrency for transfer of fund i.e. from peer to peer etc, 10 males invest in this for investment purpose, whereas 1 male uses it out of preference of not wanting to use a bank. There are multiple uses as well i.e. 2 male uses it to transfer of funds and also for investment purpose, 5 males uses for online gambling and for investment purpose, 1 male to make purchase and also for investment online gambling, 3 males use it to make purchases and for investment purpose, 1 male to male purchases, to transfer funds and also for investment purpose, 2 males use it for online gambling, out preference of not wanting to use a bank. Out of 25 females, 2 female use cryptocurrency to make purchases i.e. anything like household items or other kind of purchases which is higher than that of male, showing females are more using it for purchase things, 4 female uses cryptocurrency for online gambling i.e. buy and sell and immediately gain/loss return which is more than males number showing female’s mindset are towards gaining through gambling, 3 females uses cryptocurrency for transfer of fund i.e. from peer to peer etc, 10 females invest in this for investment purpose, whereas 0 female uses it out of preference of not wanting to use a bank shows female still believe in using banking system for things. There are multiple uses as well i.e. 0 female uses it to transfer of funds and also for investment purpose but they have separate usages, 1 females uses for online gambling and for investment purpose which is less than that of male showing females are less towards both simultaneous usage , 1 female use it to make purchases and for investment purpose, 1 female to make purchases, to transfer funds and also for investment purpose, 1 female use it for online gambling, out preference of not wanting to use a bank and 1 female to make purchases , to transfer funds and 1 female for online gambling and transfer of funds.

GENDER WISE PURPOSE OF INVESTING IN CRYPTOCURRENCY

Table no. 5

		For return gain	For transaction purpose	For transfer of fund	For transfer of fund, For return gain, For transaction purpose	For transfer of fund, For return gain	For return gain, For transaction purpose	For transfer of fund, For transaction purpose	Total
Gender	Male	16	1	6	2	1	2	2	30
	Female	11	3	8	0	0	2	1	25
Total		27	4	14	2	1	4	3	55

Table 5 depicts that majority of males invest in cryptocurrency to gain return (profit) i.e. 16 males out of 30 total males, whereas females outnumber the male where their purpose is for transfer of funds. There are multipurpose for investing in cryptocurrency, where both equal number of male and female prefers to invest i.e. for return gain and for transaction purpose. There are females who have different mindset in accordance to investing in cryptocurrency for transfer of fund & for return gain and for transaction purpose i.e. 0 females are there.

GENDER WISE USAGE PERIOD OF CRYPTOCURRENCY

Table 6

		Usage period of cryptocurrencies			Total
		less than 1 year	between 1 and 2 year	more than 2 years	
Gender	Male	10	14	6	30
	Female	16	7	2	25
Total		26	21	8	55

Table 6 depicts that out of 25 total females, 16 females are using cryptocurrencies for less than 1 year which outnumbers the male numbers i.e. 10 males out of 30 males. Probable reason could be that cryptocurrency is a new trend going where majority of females had just started using currencies. Majority of males i.e. 14 out of 30 has been using cryptocurrency between 1 & 2 year followed by less number of males i.e. 6 males has been using for more than 2 years whereas there are lesser females are using in same time frame.

GENDER WISE PORTFOLIO WORTH MORE THAN RESPONDENT’S INITIAL INVESTMENT

Table 7

		Current cryptocurrency portfolio worth more than initial investment			
		Yes	About the same	No	Total
Gender	Male	9	14	7	30
	Female	6	13	6	25
Total		15	27	13	55

Here table 7 depicts, that 9 male’s portfolios are worth more than their initial investment, interestingly for both male (14 out of 30) and female (13 out of 25), their value of portfolio is same as their initial investment. Probable reason could be that recently there was huge fluctuation in prices of cryptocurrencies So, if investor have played well during that time frame they were lucky to increase their worth of cryptocurrency

GENDER WISE RESPONDENT’S PREFERENCE FOR INVESTMENT OTHER THEN CRYPTOCURRENCIES

Table 8

		Other investment avenues except cryptocurrency				
		Stock market	Commodities Market	Mutual funds	Currency market	Total
Gender	Male	16	2	9	3	30
	Female	7	8	8	2	25
Total		23	10	17	5	55

Above table 8, depicts that majority of males will prefer to investment in stock market i.e. 16 males out of 30 males whereas lesser females have preference in investing stock market where as there are least number of both males (3) and females (2) who are in favour of currency market. Probable reason for this could be that currency market is of volatile nature.

GENDER WISE RESPONDENTS THEY CONSIDER THEMSELVES AS.

Table 9

		Respondents consider themselves			
		Day trader	Trader	Holder	
Gender	Male	7	13	10	30
	Female	2	12	11	25
Total		9	25	21	55

Table 9, shows that majority number of males i.e. 7 out of 30 consider themselves as day trader whereas least number of number females consider themselves as day trader. Day traders are those who buy and sell on same day. Probable reason is that there are high fluctuations in cryptocurrency market as prices are determined by demand and supply and is decentralised. Both number of males (13) and females (12) considers themselves as trader and holder (male 10 and female 11). This shows there is no major difference when it comes to trade or to hold as they think for investment purpose, that could be one of the probable reasons. In the study, we have examined the importance of 4 factors relatively important for investors in purchasing cryptocurrency.- Level of regulation, Level of government intervention, Privacy of payment and Security of payment

Table 10

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
level of regulation	Male	30	1.97	1.066	0.195
	Female	25	2.12	1.301	0.260
Level of government intervention	Male	30	2.77	1.135	0.207
	Female	25	2.12	0.927	0.185
Privacy of payment	Male	30	1.60	0.814	0.149
	Female	25	2.16	0.943	0.189
Security of payment	Male	30	1.60	1.003	0.183
	Female	25	1.60	0.913	0.183

Table 11

		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
level of regulation	Equal variances assumed	0.399	0.531	-0.480	53	0.633	-0.153	0.319	-0.793	0.487
	Equal variances not assumed			-0.472	46.357	0.639	-0.153	0.325	-0.807	0.501
Level of government intervention	Equal variances assumed	2.482	0.121	2.283	53	0.026	0.647	0.283	0.078	1.215
	Equal variances not assumed			2.325	52.986	0.024	0.647	0.278	0.089	1.205
Privacy of payment	Equal variances assumed	0.431	0.514	-2.364	53	0.022	-0.560	0.237	-1.035	-0.085
	Equal variances not assumed			-2.332	47.782	0.024	-0.560	0.240	-1.043	-0.077
Security of payment	Equal variances assumed	0.691	0.410	0.000	53	1.000	0.000	0.261	-0.523	0.523
	Equal variances not assumed			0.000	52.562	1.000	0.000	0.259	-0.519	0.519

FINDINGS AND CONCLUSIONS

The Study shows that both male and female investors are inclined towards cryptocurrencies . Further, various investors of different gender have different mindset related to buying, purpose/usage, importance levels towards cryptocurrencies depending on their age. Test shows that Investors of all the genders considers using cryptocurrency mainly for return and for transaction purpose. Investors of age group of 18-25years and above 45 years considers level of regulation and privacy of statement as highly important. Male investors consider level of regulation, privacy of payment and security of payment as highly important. Females are also actively participating in investing cryptocurrency. Study shows that there are few investors who uses cryptocurrency over banking functions like for transferring fund etc. Interesting fact is that there are very less investors who uses for gambling purpose which is a good sign for country's economy. Single investors consider level of regulation, government intervention, privacy of statement, security of payment as highly important as they want their investment to be safe. On analysing the investors behaviour based on gender, study reveals that investors are more in-cling towards usage of cryptocurrency.Males are more getting involve in this hot trend as it is whole new concept foe investment purpose. Besides investing in this, male investors prefers to invest in stock market and mutual funds. Majority of investors considers themselves as trader. Another interesting fact is that majority's investors current portfolio worth is same as their initial investments. Study depicts that investors mostly prefers to invest in bitcoin, as probable reason could be word of mouth. Investors diversifies their risk by investing in multiple number of cryptocurrencies and different currencies.

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