

To Bitcoin or Not To Bitcoin; Exploring Consumer Perceptions

Ayenimo Babatope Davis¹ Petasis Andreas²

¹Postgraduate Researcher, American College

²Assistant Professor, Director of Academic Affairs, American College

Abstract: The aim of this paper is to examine whether demographic variables (age, gender, education) relate or affect the choice of purchasing Bitcoins by focusing on the demographic profiling of people. This research also investigates the reasons why people purchase Bitcoin and the reason why people don't want to purchase Bitcoin or other crypto currencies. On that the study focuses on answering the following questions: (i) Do demographic characteristics affect the choice of purchasing Bitcoin?, (ii) What are the reasons why people purchase Bitcoin?, and (iii) What are the reasons why people don't want to purchase Bitcoin? Data were collected through a distributed questionnaire and further cross-tabulated using SPSS. Results reveal that the main reasons for not purchasing Bitcoins are higher risk, fluctuating price, and lack of adequate information on how the crypto currency system works; further, those purchasing Bitcoins do it for long term investment purposes. Out of the demographic variables, gender, age and education level significantly affect the choice of investing in crypto currencies.

Keywords: bitcoin, crypto currencies, demographics.

I. INTRODUCTION

The first attempts to use cryptography to build digital currency were in the 1980s. The internet was the environment that facilitated the creation of significant online communities of people driven by common interest that needed a safe payment system for their online transactions. To this end, Wei Dai (1998) proposed for the first-time cryptocurrency under the name B-money. Wei Dai based his initiative on the fact that in a community the members exchange ideas and even goods and services. An efficient cooperation among them requires a medium of exchange (money) and a way to enforce contracts. In order to solve this issue Wei Dai considered two protocols in which one of them was similar to Bitcoin protocol, based on an undetectable network of individuals identified by digital pseudonym (Asheer, 2019).

Cryptocurrencies are digital currencies because they exist online, but they are also virtual currencies created with cryptographic algorithms. According to the definition proposed by Durlauf and Blume (2008) a virtual currency is a type of unregulated, digital money, which is issued and usually controlled by developers and used and accepted among the members of a specific virtual community. Similarly, according to the Financial Action Task Force (2014), virtual currencies are defined as a digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a conventional currency but is used by a natural or legal person as means of exchange and can be transferred, stored or traded electronically (Demchenko, 2017).

For the purpose of this research, we will be using Bitcoin as a paradigm, which began trading in January 2009. Since then, many other cryptocurrencies have been created employing the same innovations that Bitcoin introduced but changing some specific parameters of their governing algorithms. The major innovations that Bitcoin introduced which made cryptocurrencies possible is the solutions to double spending. The most popular cryptocurrency is Bitcoin, created by the Japanese programmer Satoshi Nakamoto In 2009 (Nakamoto, 2009) but we have other forms of cryptocurrency such as Litecoin, Stellar, Ethereum, Ripple, Lumen classic and Bitcoin cash which is the closest to Bitcoin because it was created to improve certain features of Bitcoin. Bitcoin was the first open source of cryptocurrency, as Bitcoin is managed by an open source software algorithm that uses the global internet network both to create Bitcoin as well as to record and verify its transactions. Being a cryptocurrency, Bitcoin uses the principle of cryptography to control the creation and

exchange of Bitcoin. Bitcoin can be stored in local wallets e.g personal computer, smartphone using an open source software or in an online wallet (Brito & Castillo, 2013; Crawford, 2014; Godshall, 2019; Irwin, 2018; Robleh, 2014). Compared to standard fiat currencies such as Euro or Dollar, a distinguishing feature of Bitcoin is that the quantity of units in circulation is not controlled by a person, group, company authority, or government, but by a software algorithm.

The aim of this paper is to examine whether demographic variables (age, gender, education) relate or affect the choice of purchasing Bitcoins by focusing on the demographic profiling of people. This research also investigates the reasons why people purchase Bitcoin and the reason why people don't want to purchase Bitcoin or other cryptocurrencies. On that the study focuses on answering the following questions: (i) Do demographic characteristics affect the choice of purchasing Bitcoin?, (ii) What are the reasons why people purchase Bitcoin?, and (iii) What are the reasons why people don't want to purchase Bitcoin?

This research is expected to enable authors to understand the reasons or factors preventing or discouraging people from using Bitcoin or accepting Bitcoin. This research will also be helpful to future researchers who might be interested to make further research on this topic or related topics.

II. LITERATURE REVIEW

Bitcoin is a cryptocurrency which isn't managed by a bank or agency but in which transactions are recorded in the blockchain that is public and contains records of each and every transaction that takes place. The cryptocurrency is traded by individuals with cryptographic keys that act as wallets. Bitcoin was first invented in 2009 by Satoshi Nakamoto (Nakamoto, 2009). Bitcoins are moved in blocks every 10 minutes on a decentralized ledger that connects blocks into a coherent chain dating back to the first genesis block. It was originally described as a peer-to-peer electronic cash, but the technology has evolved to emphasize being a settlement layer rather than a payment network. This has left integrated second layer solutions, like Lightning Network, to prioritize that use case. It has remained the largest cryptocurrency by market cap (Acheson, 2013) Bitcoin is the first electronic cash that allows final transfer, not mere copying of digital assets in a way that can be verified by users without trusting other parties. This is accomplished through the clever use of public key cryptography, peer - to - peer networking and a proof of work system. For example, like Paypal, the Bitcoin system employs a ledger called block chain. All transactions in the Bitcoin economy are recorded in the block chain, however unlike Paypal's ledger, the block chain is not maintained by any central authority instead the block is a public document that is distributed in a peer- to- peer fashion across thousands of nodes in the Bitcoin network. New transactions are checked against the block chain to ensure that the same bitcoins have not been previously spent. The work of verification of transactions is not done by any trusted third party but the work is distributed among thousands of users who contribute their computing capacity to reconcile and maintain the block chain ledgers, so the work of one trusted party is taking over by peer-to-peer network (Nakamoto, 2009).

Bitcoin's most important characteristic is that it is decentralized. No single institution such as central banks controls the bitcoin network, so the transactions cannot be reversed after one hour it as been recorded on the network, so transactions on Bitcoin network cannot be modified or tampered with once it is recorded on the network (Ciaian et al., 2016). The Bitcoin network is maintained by a group of volunteers' coders and run by an open network of dedicated computers spread around the world. This attracts individuals and groups that are uncomfortable with the control that banks or government institutions have over their money (Juhasz et al., 2018). Bitcoin also solves the "double spending problem" of electronic currencies (in which digital assets can easily be copied and re-used) through an ingenious combination of cryptography and economic incentives. In electronic fiat currencies, this function is fulfilled by banks, which gives them control over the traditional system. With bitcoin, the integrity of the transactions is maintained by a distributed and open network, owned by no-one (Acheson, 2013).

2.1 Price volatility of Bitcoin

According to Robleh (2014), volatility means the quality or state of being likely to change suddenly, so price volatility of Bitcoin is the degree at which Bitcoin price changes from time to time. Because Bitcoin is Volatile, it means that it is risky to hold – on any given day, its value may go up or down substantially (Amnous, 2018). The more volatile an asset, the more people will want to limit their exposure to it, either by simply not holding it or by hedging. Volatility also increases the cost of hedging, which is a major contributor to the price of merchant services. If Bitcoin volatility decreases, the cost of converting into and out of Bitcoin will decrease as well (Vardar & Aydogan, 2019). The price of Bitcoin was stable from 2009 to 2011 but after 2011 the price fluctuates a lot, for some time and it was appreciating and after a few some time it was depreciating, after 2011 the value grew rapidly from US \$ 0.30 dollars to \$ 32, after it fell to \$ 2 dollars and by the end of 2012 Bitcoin was trading at \$ 13. When it was generally accepted, the price increased again substantially (Moser et. al., 2014). Bitcoin really started to take off in 2013. The digital currency began the year trading at

around \$13.50 per bitcoin. The price rallied in early April 2013 to get to over \$220 briefly before dropping back down to around \$70 by mid-April. This was the first real rally and associated crash for the currency. Bitcoin began to rally in October and November of 2013. The currency was trading at around \$100 in early October. It reached around \$195 by the end of October. In November, the price went from around \$200 to over \$1,120 by the end of the month. The rally was caused by new bitcoin exchanges and miners in China entering the marketplace. This period was also when a Japanese exchange company called Mt. Gox exchange was operating, Mt. Gox was involved in around 70% of all bitcoin transactions (Yermack, 2014).

The price began to get very volatile after reaching these highs (Fendi et al., 2019; Kj et al., 2018). Rumors of a lack of security through Mt. Gox, as well as poor management, made the market nervous. People had problems withdrawing their money from the exchange. The price reached a high of \$1,230 on Dec. 4, 2013. This fell to around \$750 by December 7, a drop of around 39% over a couple of days. Trading stabilized to some degree to around \$920 in January 2014. However, there was another major crash in early February, around the time the Mt. Gox exchange filed for bankruptcy protection in Japan (Yermack, 2014).

Bitcoin was trading at around \$911 on February 4, but it cratered to \$260 by February 16. This is a decline of around 71%. The price did recover somewhat by March 2014, trading at around \$620. The price then fell into a slower and more gradual decline. The currency was trading at around \$600 in the middle of July 2014. It eroded away to around \$315 at the beginning of 2015. The price stabilized to some extent during the summer of 2015 (Fendi et al., 2019; Kj et al., 2018). However, early November saw another massive spike. The currency went from around \$275 on October 23 to a brief close of about \$460 on November 4 on certain exchanges. The currency sold off somewhat and traded around \$360 at the end of November 2015. Through 2016 Bitcoin steadily rose, breaking through \$1,000 in early 2017 (Barone, 2019).

In the fall of 2017, the price Bitcoin began to rise and rise and rise. In October of that year it broke through \$5,000, and in November doubled again to \$10,000. Then, in December 2017 the price of one bitcoin reached nearly \$20,000. Several commentators and critics called this a price bubble, many making comparisons to the Dutch Tulipmania of the 17th century. Indeed, just a few weeks later, the price of Bitcoin fell rapidly, crashing all the way down below \$7,000 by April 2018 and below \$3,500 by November 2018 (Barone, 2019). In 2019, Bitcoin has seen a new resurgence in price and volume, rising in fits and bursts to around \$10,000, about where it trades to November 2019. The Bitcoin market is very volatile and susceptible to changes at any time (Fendi et al., 2019; Kj et al., 2018). According to Barone (2019) Bitcoin pricing is influenced by factors such as the supply of bitcoin and market demand for it, the number of competing cryptocurrencies, and the exchanges it trades on (Irwin, 2018).

In case of normal or traditional currencies, Countries without fixed foreign exchange rates can partially control how much of their currency circulates by adjusting the discount rate, changing reserve requirements, or engaging in open-market operations. With these options, a central bank can potentially impact a currency's exchange rate but in case of Bitcoin the value is affected both demand and supply. The supply of bitcoin is impacted in two different ways. First, the bitcoin protocol allows new bitcoins to be created at a fixed rate. New bitcoins are introduced into the market when miners' process blocks of transactions and the rate at which new coins are introduced is designed to slow over time. For instance, Bitcoin growth slowed down from 6.9% (2016), to 4.4% (2017) to 4.0% (2018) (Irwin, 2018). This can create scenarios in which the demand for bitcoins increases at a faster rate than the supply increases, which can drive up the price. The slowing of bitcoin circulation growth is due to the halving of block rewards offered to bitcoin miners and can be thought of as artificial inflation for the cryptocurrency ecosystem. Secondly, supply may also be impacted by the number of bitcoins the system allows to exist. This number is capped at 21 million, where once this number is reached, mining activities will no longer create new bitcoins. For example, according to (Irwin, 2018) the supply of bitcoin reached 18.1 million in December 2019, representing 86.2% of the supply of bitcoin that will ultimately be made available. Once 21 million bitcoins are in circulation, prices depend on whether it is considered practical (readily usable in transactions), legal, and in demand, which is determined by the popularity of other cryptocurrencies. The artificial inflation mechanism of the halving of block rewards will no longer have an impact on the price of the cryptocurrency. However, at the current rate of adjustment of block rewards, the last bitcoin is not set to be mined until the year 2140 or so. Even though several existing studies have focused on finding the drivers behind the Bitcoin price. The findings are somewhat inconsistent. In reference to Kristoufek (2015), due to the dynamic nature of Bitcoin and its rapid price fluctuations, it is logical that the drivers behind the price will vary over time.

According to Bouoiyour et al. (2015), the rapid price movements in Bitcoin may be caused by attention from the media and speculation in this new phenomenon. In reference to Ciaian et al. (2016), Bitcoin price to a large extent is driven by supply and demand and claims that standard economic currency models partly can explain changes in Bitcoin's price. Kristoufek (2015), on the other hand, says that the price behavior cannot be explained through standard economic theory. This is justified by the fact that Bitcoin is a digital currency that is not driven by macroeconomic variables like the standard fiat currencies. An algorithm sets the supply of Bitcoin and the demand is driven by the

investor's expected profit of buying and selling Bitcoins. There are no interest rates or other benefits of just holding a digital currency. Because of these features, Bitcoin has a more speculative nature, which is dominated by short-term investors.

Earlier studies have found that the Bitcoin price and volume are driven by what people assign to it and its popularity (Polak et al., 2015). Preis et al. (2013) analyzed Google search queries for terms related to the financial market. The study found that the Google search volume reflected the current state of the stock market and that the search volume may predict future trends. According to Kristoufek (2015), the frequency of online searches on Bitcoin is a good proxy for measuring its interest and popularity, and most studies examining the interest in Bitcoin are following this path.

According to Barone (2019), one major concern for investors looking toward bitcoin as a safe haven asset is its volatility. One needs to look at the price history of bitcoin in the last two years for evidence. At its highest point, around the beginning of 2018, bitcoin reached a price of about \$20,000 per coin. About a year later, the price of one bitcoin hovered around \$4,000 (Barone, 2019). It has since recovered a portion of those losses but is nowhere near its one-time high price point. Besides overall volatility, bitcoin has historically proven itself to be subject to market whims and news. Particularly as the cryptocurrency boom swept up a number of digital currencies into record-high prices around the end of 2017, news from the digital currency sphere could prompt investors to make quick decisions, sending the price of bitcoin upward or downward quickly, the price of Bitcoin fell below \$10,000 by the end of February 2020 due to the outbreak of coronavirus.

III. METHODOLOGY

In order to investigate demographic variables can determine whether an individual will purchase or use Bitcoin, it is very important to have access to adequate and comprehensive information about Bitcoin, so a lot of data and information were retrieved from online academic journals, websites such as coindesk.com, survey and several articles from proquest.com, relevant and related books published online about this topic were also searched using google scholar. Due to the fact that Bitcoin is new, a lot of academic research are being carried out around the world and a lot of articles are written on a daily basis about bitcoin and how it can become a global currency or method of payment that will be accepted around the world for payments and also why it can't become a global currency or method of payment that will be accepted around the world like mastercard, paypal, visa card.

After gathering and analyzing the data and information, we were able to have a clear understanding and knowledge about bitcoin and I was able to gain a lot of insight about how demographic variables can determine whether an individual can purchase bitcoin or not. We made use of both primary data and secondary data, including data from surveys and questionnaires and also from library, books, journals, magazines and other periodicals, conference papers and other articles relevant to the research topic. These gathered data were rigorously analyzed to enable the authors to arrive at a logical conclusion and sound recommendations. For this research, the authors collected the primary data by distributing questionnaires to the respondents. In order to acquire adequate background knowledge about Bitcoin, the authors collected data from books, websites, journals, newspapers, blogs, and Government records.

The target population of this study includes people with different levels of education, people from the age of 18 to 64 years, it will also include a large proportion of both male and female respondents. The questionnaire will be given only to people who have heard or are familiar with Bitcoin/cryptocurrencies.

In this study the research instrument will be a survey (self-designed questionnaire) for the collection of data and responses from the respondents. The questionnaire will be sectioned into two parts i.e. Section A consisting of questions on demographic factors of the respondents and Section B consisting of questions that will help the authors to gain insight on the perception of people about Bitcoin. The questionnaire that will be used, is the structured questionnaire in which the item for response has already been written and all the respondents need to do is complete the blank spaces. The reason for using this type of questionnaire is that it sets a limit over the extent to which the respondents can answer a question and the relative outcome is that information collected through this means is generally quantifiable, that is, in organizing, tabulating and analysis of data.

The procedures for carrying out this research involves sharing of questionnaire and, the respondent will complete the questionnaire and give it back to the authors, the authors will proceed with proper analysis and interpretation of response received from the respondent. The data for the result of this study will be analyzed using the simple package statistic for social sciences (SPSS) method.

IV. FINDINGS

The questionnaire is divided into two sections, section A examines the demographic characteristics of the sample. As mentioned in Research Methodology, in Section 3.3 population and Sampling. Section B of the questionnaire comprises of questions about Bitcoin and cryptocurrencies and this section is also divided into two parts, part one consists of questions designed for people who had already purchased Bitcoin or any cryptocurrency while part 2 consist of questions designed for people who have yet to purchase Bitcoin or any cryptocurrency. An effort to have the same percentage of men and women and proportional participation of all the age scales has been made but the authors couldn't have the same percentage of men and women because only the people who have heard or are familiar with Bitcoin/cryptocurrencies will be given the questionnaire. The sample size is 300 participants with 32% women and 68% men.

The 20% of the participants are from 18 – 25 years old, 42% were from 26 – 35 years old, 25% are from 36 – 45 years old, 10% were from 46 – 55 years old, and the rest 3% were from 55 and above. The 32% of the participants are female and 68% are male. The 10% of the participants had a high school Diploma, the 12% had some college/university experience, 38% had bachelor's degree, 13% had postgraduate degree, 20% were professionals, 4% had a doctorate and 3% other.

Additionally, 75% of the respondents believe they have enough information about bitcoin or cryptocurrencies, the 18% believe they don't have adequate information while 7% are either not sure or have no opinion. The 72% of the respondent have purchased Bitcoin/cryptocurrencies, the 28% have not. The 86.6% of the respondents who have purchased bitcoin/cryptocurrencies are male and 13.4% are female. The 15% of the respondents are between 18 – 25 years old, 39% are between 26 – 35 years old, 25% are between 36 – 45 years old, 14% are between 46 – 55 years old while 7% are 56 years and above. 7.8% have high school diploma, 30.1% have some college/university experience, 37% have bachelor's degree, 14.8% have postgraduate degree, 5.6 % are professionals, 2.8% have doctorate degree and 1.9% other. The 30% of the respondent said they would consider Bitcoin/cryptocurrencies as a means of payment in the future, 66% said no, 4% are either not sure or have no opinion.

Out of the respondents who had purchased Bitcoin/cryptocurrencies, 70% of the participants replied that they have purchased Bitcoin/cryptocurrencies for investment purpose, 5% replied that they purchased it because of the anonymity of the user, 17% buys bitcoin to avoid transaction fees when they send money, 8% to make payment online. The 22.2% of the respondents that have purchased Bitcoin/cryptocurrencies said they consider Bitcoin more like currency, 45.3% considers it more like an asset, 32.4% consider it as both currency and asset. The 22.2% of the respondents said Bitcoin/cryptocurrencies can be useful in our daily life, 59.7% said no, 18.1% are not sure or have no opinion. The 38% of the respondents said they trust the technology for a long time, 30% said no, 32% are not sure or have no opinion. The 39% of the respondents said Bitcoin will be a dominant currency in 5 to 10 years, 28% said no, 33% are not sure or have no opinion. The 36% of the respondent believes it is more profitable to invest in Bitcoin/cryptocurrencies, 30% believes it is more profitable to invest in stock market, 24% believes both are profitable, 10% are not sure or have no opinion. The 20% of the respondents said the stock market is riskier, 53% said Bitcoin/ cryptocurrencies is riskier, 22% said both are risky, 5% are not sure or have no opinion.

Out of the respondents who as not purchased Bitcoin/cryptocurrencies, 5.95% said they can't afford it at the moment, 21.4% said the Bitcoin have high risk, 15.5% said they don't have enough information on how the system works, 2.4% do not believe that they are properly regulated, 11.9% said they find other types of investment more attractive, 9.5% said they are not interested in digital or cryptocurrencies, 7.1% said they are not interested in investing at the moment, 20% are concerned about the fluctuating price, 3.6% are concerned about the decentralized nature of cryptocurrencies, 2.4% have other reasons.

According to the information extracted from section A (Demographic profile of people who admitted they have heard and are familiar with Bitcoin/cryptocurrencies) of the questionnaire, 185 respondents which is the 67% of the population sample are between the age of 18 – 35 years old, 75 respondents which is 25% of the population are between the age of 36 – 45 years old, 30 respondents which is 10% of the population sample are between the age of 46 – 55 years old, 3% are 55 years old and above. This indicates younger generation are more attracted to Bitcoin/cryptocurrencies than the older generation because the population sample comprised only of the people who admitted they have heard and are familiar with Bitcoin/cryptocurrencies. 68% (203 respondents) of the respondents identified themselves as male, 32% (97 respondents) of the respondents identified themselves as female, this shows that the population sample contains 32% female and 68% male that have heard and are familiar with Bitcoin/cryptocurrencies. Information extracted from section 4.4 also shows 38% of the population sample have bachelor's degree, 13% have postgraduate degree, and 20% are professionals. This indicates people that are familiar with Bitcoin/cryptocurrencies have a certain level of education.

To Bitcoin or Not To Bitcoin; Exploring Consumer Perceptions

75% of the respondents believed that they have enough information about Bitcoin/cryptocurrencies, this indicates that majority of the people who admitted that they have heard and are familiar with Bitcoin/ cryptocurrencies have enough information about Bitcoin/cryptocurrencies. 72% of the respondents have purchased Bitcoin/cryptocurrencies. This shows that majority of the respondent had already purchased Bitcoin/cryptocurrencies. 86.6% of the of the respondent who had already purchased are male, 13.4% are female, this indicates men are more interested in Bitcoin/cryptocurrencies than women taking into consideration the information extracted from section 4.3, out of 300 people who admitted that have heard and are familiar with Bitcoin/cryptocurrencies, 203 identified themselves as male and 189 respondents that have bought bitcoin identified themselves as male, this means 93% of the male have already purchased Bitcoin/cryptocurrencies. On the other hand, 97 female respondents identified themselves as female and only 29 respondents which is 30% of the female respondents had purchased Bitcoin/cryptocurrencies compared to male respondents where 93% have bought Bitcoin/cryptocurrencies.

54% of the respondents who had already bought bitcoin/cryptocurrencies are between 18 - 35 years old. So, taking into consideration information extracted from section A, 62% of the respondents who claim they are familiar with Bitcoin/cryptocurrencies are between 18 - 35. This indicates that young people are more likely to be interested in buying and investing in Bitcoin/cryptocurrencies. Information shows that 13.8% of the respondents who had purchased Bitcoin/cryptocurrencies have some college experience, 53% are undergraduates or have college degrees, 15% have postgraduate degrees. This indicates the majority of the people who have bought or invested in Bitcoin/cryptocurrencies are educated.

This question provides us with some information about respondent propensity to buy or invest in Bitcoin/cryptocurrencies in the future. 73% of the respondents agree that it is extremely likely/very likely for them to buy Bitcoin/cryptocurrencies in the future. This indicates that that the percentage of people that will buy or invest in Bitcoin/cryptocurrencies might increase in the future due to the fact that 72% of the population have already purchased Bitcoin/cryptocurrencies. 30% of the respondents said yes, 66% said no, this indicates most people don't see Bitcoin/cryptocurrencies as means of payment yet. 70% of the respondents who had purchased Bitcoin/cryptocurrencies agreed that they bought it for investment purposes, this shows that most people purchase Bitcoin/ cryptocurrencies for investment purposes not necessary to be used as a currency. 45% of the respondents who had already purchased considers Bitcoin/cryptocurrencies as an asset, 22% as a currency, 32.4% considers Bitcoin/cryptocurrencies as both. This shows that Bitcoin/cryptocurrencies as an asset more than a currency. 59.7% of the respondents who had already purchased Bitcoin/cryptocurrencies replied no to this question, 18.1% have no opinion or are not sure. This shows that the probability that Bitcoin/cryptocurrencies will generally be accepted as means of payment in the nearest future is still low. 38% of the respondents who had purchased Bitcoin/cryptocurrencies said yes, 30% said no, 32% said they are not sure or have no opinion, this shows that not all Bitcoin owners trust its technology in the long term. Only 38% believe they can trust its technology in the long term, this indicates that a large percentage of people that have purchased Bitcoin/ cryptocurrencies still have certain doubts about its technology in the long run.

39% of those people that had already purchased bitcoin/cryptocurrencies think Bitcoin/cryptocurrencies will be the dominant currency in 50 to 10 years, 28% replied no, and 33% are not sure or have no opinion. This shows that the majority of the people that had already purchased Bitcoin/ cryptocurrencies don't see it as a currency that can compete with fiat currency in the future. 36% of the respondents who had already purchased Bitcoin/cryptocurrencies said Bitcoin/cryptocurrency is more profitable than investing in the stock market, 24% said both are profitable. This shows that Bitcoin/cryptocurrencies owners believes it is more profitable to invest in cryptocurrencies. 53% of respondents who had purchased Bitcoin/cryptocurrencies agree that Bitcoin/ cryptocurrencies is riskier than the stock market, 22% said both are risky, these results shows Bitcoin/cryptocurrencies is riskier, so buying cryptocurrencies comes with higher risk than stock market. There are three main reasons why the 84 respondents have not purchased Bitcoin/cryptocurrency, one of the reasons is because the respondents believe investing in Bitcoin/cryptocurrencies comes with higher risk, another reason is the fluctuating price of Bitcoin/cryptocurrencies and some replied they don't have enough information on how the cryptocurrency system works.

V. CONCLUSION

Based on this study we realize that the majority of the people who own or are attracted to Bitcoin/cryptocurrencies are young generations that are between 18 to 35years, we also realize that men are more familiar and are more interested in Bitcoin/ cryptocurrencies than women. We also found out that people who own or had purchased Bitcoin/cryptocurrencies had a certain level of education. This indicates that the Bitcoin/cryptocurrencies market is dominated by educated young men, this shows that age, gender, level of education can influence or determine whether an individual will be interested in purchasing or investing in Bitcoin/cryptocurrencies.

Due to information the authors gathered from the respondents, we can say Bitcoin or cryptocurrencies is still

dominated by men and the chances that a man will be willing to invest or buy Bitcoin/cryptocurrencies is higher than women because 93% of the male respondent who participated in this have already bought Bitcoin/cryptocurrency while only 30% of the female participants have bought Bitcoin or any cryptocurrency.

Based on the result of the survey, we can also say that the Bitcoin/cryptocurrencies market is dominated by young people and the probability that a young investor or person will purchase or invest in Bitcoin is higher than old person. From the result of this research we realize that 53% of the respondents who had purchased Bitcoin are 18 to 35 years old.

Survey conducted by Coindesk in 2015 (Brenig et al., 2015), out of the 3,515 respondents who said they owned bitcoin, almost 60% were under 35 years old. If we compare the outcome of this research that was conducted in 2015 with the outcome of this research, it clearly shows the cryptocurrency market is still dominated by the younger generations and it as not really attracted the attention of older generations. This survey that was conducted by Coindesk in 2015 (Brenig et al., 2015) also claim that 90% people who claim to own bitcoin or cryptocurrencies are male, if we compare the outcome of this research that was conducted in 2015 with this research, this shows that the men are still dominating the cryptocurrency market. This survey conducted by Coindesk (Brenig et al., 2015) in 2015 also reported that 83.4 percent of people who claim to own Bitcoin had at least some college or university experience and if we compare this outcome to this research 53% of the respondents had bachelor's degrees, 15% had postgraduate and 14% had some college experience. This outcome shows that cryptocurrencies market is dominated by educated people.

The authors also found out from the response of the participants that own bitcoin/ cryptocurrencies that most people purchase Bitcoin or cryptocurrencies for investment purposes not for them to use it for online payments or to save transaction cost. The 70% of the respondents said they purchased Bitcoin/cryptocurrencies for investment purposes when they were asked why they purchased Bitcoin/cryptocurrencies. Only 39% of respondents who had purchased, or own Bitcoin/cryptocurrencies believes cryptocurrencies can be a dominant currency in five to ten years, also 59.7% believes cryptocurrencies cannot be useful in our daily life like fiat currencies.

Based on the result of this research, the authors also found out that there are three main reasons while people might not be interested in purchasing or investing in Bitcoin or cryptocurrencies, these reasons are higher risk, fluctuating price, and lack of adequate information on how the cryptocurrency system works.

5.1 Suggestions for further studies

This research was conducted in the content of postgraduate work and it is subject to certain limitations, which cannot allow the generalization of its result. First of all, the sample of the research is small because we couldn't access a larger sample because of the coronavirus outbreak, Secondly, the area that the questionnaire was distributed (Lagos, Nigeria and Nicosia, Cyprus), in other to generalize the result of this research, the respondents must be from different part of the world where cryptocurrencies are more popular. Lastly the questionnaire was given to respondents who admitted they are familiar with Bitcoin or cryptocurrency. These limitations can be considered in case of further exploitation of the subject.

REFERENCES

- [1] W. Dai, B money, [Online] Available from: <http://www.weidai.com/bmoney.txt>. Décary-Héту, D. and Dupont, B. (2013), Reputation in a dark network of online criminals, *Global Crime*, 14(2/3),1998, 175-196, [online] Available from DOI: 10.1080/17440572.2013.801015.[Last Accessed 27 January 2020].
- [2] J.R. Asheer, Bitcoin as a new asset class, *Meditari Accountancy Research*, 27(1), 147-168. doi:<http://dx.doi.org/10.1108/MEDAR-11, 2019, 2017-0241>.
- [3] S. Durlauf and L.E. Blume, *The New Palgrave Dictionary of Economics*, 3rded. United Kingdom: Palgrave Macmillan, 2008.
- [4] Financial Action Task Force, Virtual currencies: key definitions and potential AML/CFT Risks: *FATF Report*, <http://www.fatfgafi.org/media/fatf/documents/reports/virtual-currency-key-definitionsand-potential-aml-cft-risks.pdf>. [Last Accessed 27 January 2020], 2014.
- [5] O. Demchenko, Bitcoin: Legal definition and its place in legal framework, *Journal of International Trade, Logistics and Law*, 3(1), 2017, 23-42. Retrieved from <https://www.proquest.com/scholarly-journals/bitcoin-legal-definition-place-framework/docview/1919521839/se-2?accountid=176465>.
- [6] S. Nakamoto, Bitcoin v0.1 released, [Online]. Available from: <https://www.metzdowd.com/pipermail/cryptography/2009-January/014994.html>. [Last Accessed 27 January 2020], 2009.
- [7] J. Brito and A. Castillo, Bitcoin: A Primer for Policymakers, [Online]. Available from: https://www.researchgate.net/publication/269707314_Bitcoin_A_Primer_for_Policymakers, 2013.

- [8] D. Crawford, Four new ways to make Bitcoin payments anonymous, *Bestvpn.com* 7 May 2014, <https://www.bestvpn.com/blog/9698/four-new-ways-to-make-bitcoin-payments-anonymous/>, 2014.
- [9] M. Godshall, Bitcoin Transaction Fees, [Online]. Available from: <https://unhashed.com/cryptocurrency-terms-faq/bitcoin-transaction-fees-explained-complete-guide/>.. [Last Accessed 16 April 2020], 2019.
- [10] A.S.M. Irwin, Bitcoin transactions: a digital discovery of illicit activity on the blockchain, *Journal of Financial Crime*, 25(1), 2018, 109-130.
- [11] A. Robleh, The Economics of Digital Currencies, [ONLINE] Available at: <https://www.bankofengland.co.uk/-/media/boe/files/digital-currencies/the-economics-of-digital-currencies.pdf?la=en&hash=BE28BE59F18E79CCE705643CF14F36DF8897E56D>. [Last Accessed 18 February 2020], 2014.
- [12] N. Acheson, How to store your Bitcoin, [Online]. Available from: <https://www.coindesk.com/learn/bitcoin-101/how-to-store-your-bitcoins>, 2013.
- [13] P. Ciaian, M. Rajcaniova and K. D'Artis, The economics of Bitcoin price formation, [Online]. Available from: *Journal of Applied Economics*, 2016.
- [14] P.L. Juhász, J. Stéger, D. Kondor and G. Vattay, A bayesian approach to identify bitcoin users, *PLoS One*, 13(12), 2018, doi:<http://dx.doi.org/10.1371/journal.pone.0207000>.
- [15] S. Ammous, Can bitcoin's volatility be tamed?, *Journal of Structured Finance*, 24(1), 2018, 53-60. doi:<http://dx.doi.org/10.3905/jsf.2018.24.1.053>.
- [16] G. Vardar and B. Aydogan, Return and volatility spillovers between bitcoin and other asset classes in turkey, *EuroMed Journal of Business*, 14(3), 2019, 209-220. doi:<http://dx.doi.org/10.1108/EMJB-10-2018-0066>.
- [17] M. Möser, R. Böhme and D. Breuker, Towards risk scoring of bitcoin Transactions, *First Workshop on Bitcoin*, [ONLINE] Available at: DOI: 10.1007/978-3-662-44774-1_2. [Last Accessed 27 January 2020], 2014.
- [18] D. Yermack, Is Bitcoin a Real Currency? [ONLINE] Available at SSRN: <https://ssrn.com/abstract=2361599>. [Last Accessed 27 January 2020], 2004.
- [19] U.A. Fendi, A. Tahtamouni, Y. Jalghoum and J.M. Suleiman, The study of bubbles in bitcoin behavior, *Banks and Bank Systems*, 14(4), 2019, 133-142. doi:[http://dx.doi.org/10.21511/bbs.14\(4\).2019.13](http://dx.doi.org/10.21511/bbs.14(4).2019.13).
- [20] F. Kjø, M. Meland and A. Oust, How can bitcoin price fluctuations be explained? *International Journal of Economics and Financial Issues*, 8(3), 2018, 323-332. Retrieved from <https://www.proquest.com/scholarly-journals/how-can-bitcoin-price-fluctuations-be-explained/docview/2056362746/se-2?accountid=176465>.
- [21] A. Barone, The Future of Cryptocurrency in 2019 and Beyond, [ONLINE] Available at: <https://www.investopedia.com/articles/forex/091013/future-cryptocurrency.asp>. [Last Accessed 27 January 2020], 2019.
- [22] L. Kristoufek, What Are the Main Drivers of the Bitcoin Price? Evidence from Wavelet Coherence Analysis, *PLOS One*, 10, 2015, 6 - 11.
- [23] S.R. Bouoiyour, What Does Bitcoin Look Like? *Annals of Economics and Finance*, 16(2), 2015, 449-492.
- [24] M. Polak, A. Piotrowka and T. Wisniewski, Price Fluctuations and the Use of Bitcoin: An Empirical Inquiry, *International Journal of Electronic Commerce*. 20(1), 2015, 9 - 49.
- [25] T. Preis, H. Moat and H. Stanley, Quantifying Trading Behavior in Financial Markets Using Google Trends, [ONLINE] Available at: <https://doi.org/10.1038/srep01684>. [Last Accessed 19 April 2020], 2013.
- [26] C. Brenig, R. Accorsia and G. Muller, Economic analysis of cryptocurrency backed, *ECIS 2015 Proceedings*, (Ecb 2012), 2015, 1-18.