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Cryptocurrency Market: Behavioral Finance Perspective*

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Abstract

The cryptocurrency market has received immense consideration in media and academia since the beginning of 2013 because of its huge price fluctuation. This study focuses on Arab investors who invest in the cryptocurrency market by investigating the influence of behavioral finance factors on investment decisions in the cryptocurrency market. A quantitative approach was used by employing a snowball sampling method through 112 questionnaires. The results show that herding theory, prospect theory, and heuristic theory have a significant effect on investors' investment decisions in the cryptocurrency market. This emphasizes the significant role of the proposed behavioral factors as determinants of the investors' investment decisions. This study contributes to the existing research by consolidating the results of different researches in this study. It also contributes to the investors' understanding of the dynamics of the cryptocurrency market and it enhances the ability to make informed decisions based on their understanding. The implication of the findings will prepare hit and run investors to be progressively prepared to stay in the cryptocurrency market and develop their abilities on the most proficient method to settle on sound venture choices. Furthermore, the findings of this study will encourage financial specialists to realize that information on the traditional finance theory is not adequate to excel in the cryptocurrency market.

Keywords: Cryptocurrencies, Bitcoin, Herding, Prospect, Heuristic

JEL Classification Code: G40, G41, D91

1. Introduction

The relationship between behavior finance factors and return on assets is described in two contradicting financial theories including classical finance theory and behavior finance theory. The classical finance theory states that prices will not be influenced by behavior finance factors due to neutralized demand by arbitragers' transactions, thereby reducing the potential impact of emotional investors. On the contrary, the theory of behavior finance assumes that asset prices are influenced by behavior finance factors (Almansour, 2017).

The turbulence in financial markets has led most investors to search for new investment opportunities. The cryptocurrency market is a new investment platform for investors to invest their capital in addition to common financial equity markets (Chowdhury & Mendelson, 2013). Therefore, individuals, as well as institutional investors, pay attention to the development of the cryptocurrency market, where Bitcoin is gaining more attention from investors (Kristoufek, 2015; Khan et al., 2020).

On several occasions, Bitcoin prices have been showing a bubble behavior. Garcia et al. (2014) suggested that Bitcoin is considered as a financial bubble because there is a difference between the fundamental value of Bitcoin and its exchange rate. It takes only a few investors to overreact to any news which can then trigger a flow of aggregate information. Since the cryptocurrency market comprises unsophisticated traders, their reactions can trigger a bubble behavior in the prices of Bitcoin. Kristoufek (2015) identified several behavior factors that make Bitcoin price in high volatility such as mimetic contagion, fads, and herding behaviors. A common problem with regards to investors is the representativeness heuristics, which gives weightage to recent experiences over long term averages when analyzing prospects and their probabilities (Ritter, 2007). Because of this, irrational investors are controlled by some factors such as feelings, bias and sentiments to determine their decisions in approaching financial markets.

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Information about Bitcoins can be collected by investors from several sources. There is a great presence of unacquainted noise traders in Bitcoin markets, which implies erroneous possibility assessment that may explain the excessive volatility in Bitcoin prices. The market liquidity also increases due to the noise traders' presence in the market; this liquidity may explain a speedy hike in the volume of Bitcoin trading since the appearance of this currency in the market (Rogojanu & Badea, 2014). This will lead to uncertainty which could be increased by high risks, lack of regulation, and anonymity.

1.1. Problem Statement

The bubble behavior of Bitcoin fed by noise traders which imply the market inefficiency will increase; hence there is a notion of experience of "fad" in the Bitcoin market, and this will produce a combination of different market news and events will cause a strong effect on price volatility of Bitcoin (Kjærland et al., 2018). The bubble-like behavior, explained by Robert Schiller, also explains increased volatility as a result of increased trading. Unsophisticated noise traders of Bitcoin get easily affected by expectations and behaviors of others; this can lead to "herding behavior" and so the decisions are mostly made in the light of heuristics instead of incorporating actual assessments (Jalal, Sargiacomo & Fayyaz, 2020).

Understanding crashes in stock markets has been a major issue for economists for several years. Crashes happen when investors panic about certain events in their countries or across the world such as natural disasters, excessive economic optimism, and excessive use of margin debt. The behavioral economics reveal systematic deviations from rationality exposed by investors; instead, individuals are victims of their cognitive biases, leading to the existence of financial market inefficiencies, fragility, and anomalies. Because of this, investors become so emotional concerning investment in cryptocurrency markets. Their inner brains send negative pulses and create disastrous scenarios about losing money and the fear of bankruptcy. In general terms, the inefficiency of markets is only a psychological behavior from people. Cryptocurrency markets resemble in great fashion to the criticisms of financial markets expressed by behavioral finance supporters.

The use of Bitcoins in form of currency has been under discussion by researchers around the globe (Barots, 2015; Baur & McDermott, 2012; Ciaian et al., 2016; Kjaerland et al., 2018; Poyser, 2018). Based on the author's limited knowledge, there is a scarcity of studies done on investigating the effect of behavioral factors that assist the investors to make investment decisions in the cryptocurrency market. Moreover, several studies have focused on considering variables like herding factors, the volatility of the cryptocurrency market, and market sentiment in the cryptocurrency market. However, this study seeks to advance literature pertaining to the cryptocurrency market by taking into consideration various underlying aspects and factors of behavioral finance, for instance, herding, heuristics, and prospect factors (Luu & Luong, 2020). The inclusion of these variables aims at offering insights for making more sound and steady investment decisions in the highly dynamic cryptocurrency market. Furthermore, this study also seeks to shed light on understanding the volatile cryptocurrency market and its transparency levels, as an attempt to help policymakers in making more informed decisions to ensure the sound economic health of the countries.

2. Literature Review

The concept of cryptocurrency has been widely recognized in the past few years. These are digital currencies that make use of encryption for verification of a transaction. Bitcoin is a digital currency that is based on public-key cryptography. The major innovation of Bitcoin is to have the decentralization of technology. The Bitcoin database is distributed across a network of contributing computers instead of storage of transactions on a single server (Böhme et al., 2015). The database holding Bitcoin database is called "Blockchain", where blocks are added in the chain during the process of Bitcoin mining. The mining process revolves around the solution of compound computational puzzles. In doing so, miners receive the incentive of Bitcoin rewards and transaction fees (Kjærland, Meland, Oust and Øyen, 2018).

Barots (2015) conducted a study to test whether Bitcoin follows efficient market hypothesis or not. In his study, the characters as well as features of Bitcoin were introduced and analyzed. The results showed that Bitcoin's prices followed an efficient market hypothesis; this indicates that the price of Bitcoin will react directly to new public information. It is argued by Madhavan (2000) that the structure and efficiency of information in financial markets are vital for understanding investor's behavior. In other words, the vast amount of published information guarantees that investors have a good deal of information for decision making.

From the behavioral finance point of view, the crowd activity literature is titled herding. The herding is described as a decision-making approach characterized by imitating other peoples' behavior. It is also defined by Almansour (2015) and Almansour (2017) as a situation in which rational investors tend to act irrationally by imitating others' judgments when it comes to making such investment decisions. It is stated that the herding factors affect

asset prices significantly, which is considered as part of the capital assets pricing theory. Moreover, herding can cause some emotional biases, including conformity, congruity and cognitive conflict, home bias, and gossip theories (Almansour, 2017; Balcilar Demirer & Hammoudeh, 2012). In the equity financial market, several studies investigated the influence of herding factors on investors' investment decisions in equity markets (Alevy, Haigh & List, 2007; Almansour, 2017; Celen & Kariv, 2004; Park & Sabourian, 2011). They concluded that the herding factors significantly affected investors' investment decisions in equity markets, which means that herding factors caused emotional biases in these decisions.

Poyser (2018) in his study of behavioral finance in the cryptocurrency market employed only herding theory as a behavior finance factor. Based on his analysis, the results indicated that herding theory played an important role to determine prices in the cryptocurrency market. That is to say, prices in the cryptocurrency market are driven by behavior finance factors. In this aspect, investors do not pay attention to their private information rather than public information in the cryptocurrency market.

Almansour (2017) offered a basis for an idea of enclosed investor rationality, which implies that in the face of uncertainty, the process of decision making of investors, influenced by simple rules, such as heuristics, herding, prospect, and familiarities, creates predisposition in conclusions. The rules of thumb are, many times, quite useful and offer successful predictions. The results indicated that behavior finance factors significantly affected investment decisions in the equity financial market. Ritter (2007) described heuristics as thumb rules that could encourage decision making in an uncertain environment by reducing the difficulty of probability assessments as well as predicting values for simpler judgments. Commonly, the heuristics are considered useful and suitable when the time is limited (Waweru, Munyoki & Uliana, 2008), but sometimes it leads to biases (Almansour, 2017).

Zhang et al. (2018) studied the relationship between the cryptocurrency market and Dow Jones industrial average. The authors concentrated on the largest 20 cryptocurrencies, and the data was gathered from the 28th April 2013 to the 4th January 2018. Based on their analysis, they constructed a Cryptocurrency Composite Index (CCI). The results indicated that the cryptocurrency composite index and Dow Jones industrial average were cross-correlated.

Bouri et al. (2019a) conducted a study on herding behavior in the cryptocurrency market. They found that herding theory occurred as uncertainty increases. The results produced valuable insight into portfolio management, risk management, trading techniques, and efficiency of the financial market. In another study, Bouri, Shahzad, and Roubaud (2019b) analyzed whether explosivity in one cryptocurrency could lead to explosivity in other cryptocurrencies, finding evidence of connections between those assets.

Geuder, Kinateder, and Wagner (2019) investigated the behavior of Bitcoin prices over the period 2016 – 2018. They employed two methods: namely PSY methodology and the log-periodic power law. The PSY method was employed to find multiple bubble periods as well as to show explosive behavior. The log-periodic power law identified bubble growth and potential critical bubble termination times. The results indicated that the bubble behavior was common and re-occurring characteristic of Bitcoin prices.

In the equity financial market, the impact of heuristics factors on investment decisions has been investigated (Chowdhury, 2016; Mayfield et al., 2008; Pasewark & Riley, 2010; Waweru et al., 2008). Pasewark and Riley (2010) explored the relationship between heuristics factors and investment decisions in the equity financial market. Their results showed that the investment decisions made by investors were significantly affected by heuristics factors. In other words, they found that there was a positive relationship between behavior finance factors and investment decisions.

Furthermore, in a study related to investor sentiment in the equity financial market, Almansour (2015) stated that overreaction could be seen by the majority of people due to overdramatic and unexpected news or events which led to the divergence of prices from their primary values. When there is a consistency in the pattern of news, such as numerous positive announcements over some time, the investors tend to consider these events as agents of the future direction of prices. Similarly, it has been found by Stambaugh and Yuan (2015) that there was an asymmetric effect of sentiments on prices, the overpricing was caused by high sentiments, which implied optimism, and underpricing, caused by low sentiments.

Baur and McDermott (2012) investigated whether Bitcoin should be best considered as a medium of exchange or an asset for speculation by adopting data from July 2010 to June 2015. They argued that it was not a safe haven due to its weak correlation with conventional assets, such as stocks, bonds, and commodities in normal times but also during crises. Findings indicate that Bitcoin is mostly used for speculative trading rather than as a medium of exchange and a new form of currency. Additionally, Hayes (2017) stated that the determinants for value formation of cryptocurrencies can be approached by employing cross-sectional analysis for sixty-six of the most used digital currencies. He suggested that the level of competition in the network of producers, the rate of unit production, and the difficulty of algorithm mining are determinants of cryptocurrency value. In this regard, Feng, Wang, and Zhang (2018) proposed a novel indicator for estimating the informed trades ahead of events related

to cryptocurrencies and provided evidence that informed trading takes place in the Bitcoin market before such events. The preference of such traders was announced for taking their positions two days before large positive events and one day before large negative events. This triggers large profits from trading.

The analyses of the literature review on the status of the effect of behavior finance factors on investment decisions have been reviewed, and this study differs from other studies on the following points. First, this study focuses on Arab investors who invest in the cryptocurrency market. To the author's knowledge, no study has been done on behavior factors that influence investment decisions in the Arab region. Second, this study is aimed at investigating the effect of behavior finance factors on investors' decisions by taking into consideration various underlying aspects and factors of behavioral finance for instance Herding Factors (HERD), Heuristics Factors (HEUR), and Prospect Factors (PROS). Previous studies focused on the herding factor and its effect on investment decisions (Alevy, Haigh & List, 2007; Almansour, 2017; Celen & Kariv, 2004; Park & Sabourian, 2011; Bouri et al. 2019a). Therefore, this study is considered comprehensive in terms of taking several factors together. Thirdly, this study is important in understanding behavior finance theory in the Arab region. It determines the factors, which affect investors' decisions in the cryptocurrency market.

3. Research Methodology

This study aims to investigate the effect of behavior finance factors on individual investors' decision-making in the cryptocurrency market. To investigate this effect, a quantitative approach was used. Due to the difficulty of determining the sampling frame, a snowball sampling was selected. This study carries out various statistical tools, mainly demographic analysis, descriptive statistics for all variables, and multiple regression analysis.

3.1. Population and Sampling

The study focuses on individual investors who invest in the cryptocurrency market in the United Arab Emirates (UAE). The study has involved all investors in the cryptocurrency market. Data was collected by constructing an online questionnaire, and it was sent to investors via email. A snowball sampling has been selected and the questionnaire employs a Likert scale. A list of statements has been adopted and prepared in this study (Almansour, 2017). The respondents were asked to rate each statement on the scale, ranging from strongly agree to strongly disagree. A total of 112 useable questionnaires were collected within the context of the United Arab Emirates (UAE).

3.2. Research Design

To investigate the influence of behavioral finance factors on investment decisions in the cryptocurrency market, a quantitative approach is employed. The questionnaire has been adopted based on previous studies (Almansour, 2017; Tan et al., 2008; Tversky & Kahneman, 1974). Therefore, Table 1 illustrates the factors used in the questionnaire.

The theoretical model has been developed in this study based on research design, Figure 1 illustrates the research framework employed in this study.

Table 1: Factors Used in the Questionnaire

Variables/ Items	Author(s)
Herding Factors	Almansour (2017) and Tan, Chiang, Mason & Nelling (2008)
Other investors' decisions of choosing cryptocurrency types have an impact on your investment decisions	
Other investors' decisions of the cryptocurrency volume have an impact on your investment decisions	
Other investors' decisions of buying and selling cryptocurrency have an impact on your investment decisions	
"You usually react quickly to the changes of other investors' decisions and follow their reactions to the cryptocurrency market	
Heuristics Factors	Almansour (2017), Ritter (2003) and Tversky & Kahneman (1974)
You believe that your skills and knowledge of the cryptocurrency market can help you to outperform the market	
You rely on your previous experiences in the market for your next investment"	
You forecast the changes in cryptocurrency prices in the future based on the recent cryptocurrency prices	

Table 1: Continued

Variables/ Items	Author(s)
Prospect Factors	Almansour (2017), Ritter (2003) and Tversky & Kahneman (1974)
After a prior gain, you are more risk-seeking than usual	
After a prior loss, you become more risk-averse	
My instinct has often helped me make a good investment	
I am capable of identifying the low point of the market"	
You avoid selling cryptocurrency that has decreased in value and readily sells cryptocurrency that has increased in value	
Investment Decisions	Almansour (2017), Ritter (2003) and Tversky & Kahneman (1974)
I would never make go hang-gliding or bungee jumping	
I would stick to the rules	
I would avoid dangerous situations	
I would make my investment decision based on other investors opinions	

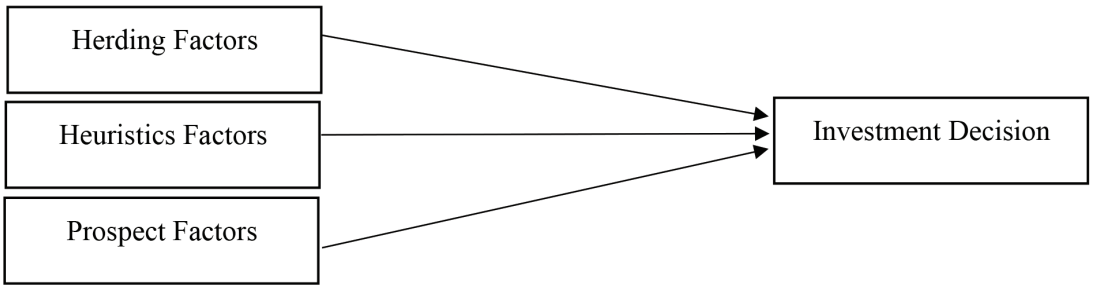

Figure 1: Research Framework

Based on the above research model, the following hypotheses are formulated:

- There is a significant effect of herding on investors' investment decisions in the cryptocurrency market.
- There is a significant effect of heuristic on investors' investment decisions in the cryptocurrency market.
- There is a significant effect of prospect on investors' investment decisions in the cryptocurrency market.

3.3. The Model

To investigate the influence of behavior finance factors on investment decisions in the cryptocurrency market, the general equation is estimated using multiple regression as follows:

$$INV_i = \beta_0 + \beta_1 HERD + \beta_2 HEUR + \beta_3 PRO + \varepsilon_i$$

Where,

INV: Investment Decision
HERD: Herding Factors
HEUR: Heuristics Factors
PROS: Prospect Factors
e: Error
B_0: Constant

To employ multiple regression, it is necessary to consider the problem of spurious regression such as linear relationship, multicollinearity, and normality. Such assumptions are basic conditions to be met before applying regression analysis and drawing inferences about the results of the model.

4. Data Analysis

4.1. Descriptive Statistics

To investigate the effect of behavior finance factors on investment decisions in the cryptocurrency market, regression analysis is employed. The descriptive analysis is used to identify the sample characteristics. Tables 2 and 3 illustrate respondents' demographic analysis and descriptive statistics for each item/variables used in this study.

Table 2: Respondents' Demographic Analysis

Criteria		n	%
Gender	Male	98	87.5%
	Female	14	12.5%
	Total	112	100.0%
Age	Younger than 30 years	15	13.4%
	From 30 – 40	82	73.2%
	From 40 – 50	12	10.7%
	More than 50 years	3	2.7%
	Total	112	100.0%
Education Level	Secondary School	3	2.7%
	Bachelor Degree	89	79.5%
	Master Degree	16	14.3%
	PhD Degree	4	3.6%
	Total	112	100.0%

Table 2 illustrates the demographic variables employed in this study. The demographic variables are classified into gender, age, and, education level. It is observed that of the overall investors, 98 investors are male with a percentage of 87 and 14 investors are female with a percentage of 12.5. This indicates that the majority of investors are male which is consistent with the Arab culture (Elrehail, 2018). Further, age distribution shows that the majority of the respondents' age are ranged between 30 to 40 years which records a percentage of 73.2, this indicates that the majority of respondents are mature investors in the cryptocurrency market. Concerning education level, the dataset shows that 79.5% of the respondents' profiles are bachelor degree holders, which reflects that most of the investors in Arabian countries are bachelor degree holders as of now, as per this study. Moreover, only 20% of the respondents held masters or above degrees which shows that only a small percentage of investors believe in the importance of having higher degrees as far as a career in investments is concerned.

The results of the descriptive statistics show the calculated mean and standard deviation for each item/variable listed in the questionnaire. From the herding theory perspective, it can be noticed that investors in the cryptocurrency market can easily change their thoughts of investment in making decisions. The results show that "other investors' decisions of buying and selling cryptocurrency types have an impact on the investment decisions and records the highest average, a value of 3.75 with a standard deviation value of 0.82.

Table 3: Descriptive Statistics for Each Item/ Variables

Item/Variable	Mean	Std.
Herding Factors		
H1	3.32	0.77
H2	3.59	0.99
H3	3.75	0.82
H4	3.70	0.87
Overall Average	3.593	0.865
Heuristics Factors		
HEU1	3.62	0.87
HEU2	3.92	0.84
HEU3	3.91	0.73
Overall Average	3.824	0.8180
Prospect Factors		
P1	3.87	0.83
P2	3.80	0.78
P3	3.48	0.92
P4	3.46	0.80
P5	3.32	0.96
Overall Average	3.589	0.86309
Investment decisions		
INV1	3.20	0.98
INV2	2.97	0.63
INV3	3.15	0.72
INV4	3.80	0.81
Overall Average	3.283	0.791

The findings show that other investors' decisions of choosing cryptocurrency types have an impact on investment decisions and has a mean value of 3.32 with a standard deviation value of 0.77. This indicates that investors' investment decisions in choosing the type of digital currencies will be affected by others' choices. The results demonstrate that other investors' decisions of the cryptocurrency volume have an impact on investment decisions and records a mean value of 3.59 with a standard deviation value of 0.99, whereas the results of the item "*You usually react quickly to the changes of other investors' decisions and follow their reactions to the cryptocurrency market*" shows a mean value of 3.70 with a standard deviation value of 0.87. The overall average value for herding theory is 3.59 with a standard deviation value of 0.865, indicating that the herding theory plays an important role in determining investors' investment decisions in the cryptocurrency market.

From the heuristics theory point of view, the "*You rely on your previous experiences in the market for your next investment*" and "*You forecast the changes in cryptocurrency prices in the future based on the recent cryptocurrency prices*" show the highest values with 3.92 and 3.91, and standard deviation values of 0.84 and 0.73, respectively. This indicates that investors in the cryptocurrency market rely on their experience when they make their next investment decisions; furthermore, investors assume that they have the required skills and knowledge to make decisions. The results show that "*You believe that your skills and knowledge of the cryptocurrency market can help you to outperform the market."* records a mean value of 3.62 with a standard deviation value of 0.87. The overall average value for heuristics theory is 3.824 with a standard deviation value of 0.81, indicating that heuristics theory plays an important role in determining investors' investment decisions in the cryptocurrency market.

From the prospect theory perspective, findings record the highest average for "*After a prior gain, you are more risk-seeking than usual"* with a value of 3.87 and a standard deviation value of 0.83. This means that investors in the cryptocurrency market will be more involved in buying more assets when they succeed in their former investments. In other words, investors will gradually become a risk-taker. On the contrary, investors will not make investment decisions if they lose their investment and become risk-averse. The results show that the lowest average for "*You avoid selling cryptocurrency that has decreased in value and readily sells cryptocurrency that has increased in value"* records a value of 3.32 with a standard deviation value of 0.96. This indicates that investors behave as speculators in the cryptocurrency market. The results show that *"After a prior loss, you become more risk-averse"* which records a mean value of 3.80 with a standard deviation value of 0.78. This result indicates that when the cryptocurrency market goes down, investors will pay attention to the risk aspect and become risk-averse. Furthermore, it can be observed in the results that *"My instinct has often helped me make a good investment" and "I am capable of identifying the low point of the market"* record mean values of 3.48 and 3.46 with standard deviation values of 0.92 and 0.80 respectively. The overall average value for prospect theory is 3.589 with a standard deviation value of 0.863, indicating that the prospect theory plays an important role in determining investors' investment decisions in the cryptocurrency market.

4.2. The Influence of Behavior Finance Factors on Investment Decisions

This study aims to investigate the effect of behavior finance factors on investment decisions in the cryptocurrency market. To investigate this effect, multiple regression analysis is employed. Before employing the regression model, it is important to test the assumptions of regression analysis. It is observed that all assumptions have been met to employ regression analysis. The reliability and validity analyses were conducted to assess the measurement of each item. The results of Cronbach's Alpha show that all values are accepted since they are ranged between 0.787 and 0.856. The results of multiple regression analyses are illustrated in Table 4. The results in Table 4 show that herding theory, prospect theory, and heuristics theory scored 14.7% of the variance in investors' decisions in the cryptocurrency market. The findings of the regression analysis indicate that there are no multicollinearity issues. Furthermore, the findings show that the general model is acceptable due to a high F-statistic, which records a value of 6.218.

Table 4: The Influence of Behavior Finance Factors on Investment Decisions in Cryptocurrency Market

		Std. Error	Beta	t-value	Sig.
Constant		.351		5.570	.000
Herding		.068	.206	2.236	.027
Prospect		.069	.262	2.928	.004
Heuristics		.059	.155	1.676	.097
R^2	0.147				
F	6.218				
VIF	All values less than 10				
Normality	The data is normally distributed				

It can be seen that the herding theory factors, prospect theory, and heuristic theory have a significant effect on investors' investment decisions in the cryptocurrency market, where they record probability values of 0.027, 0.004, and 0.097, respectively. This is an indication that the cryptocurrency market is determined by behavior finance factors. In other words, investment decisions of selling or buying cryptocurrencies' types are decided based on investors feeling as well as the sentiment. However, the value of R squire (14.7%) indicates that other important factors can also have an impact, and this gives room for more research concerning this issue.

5. Theoretical and Practical Implications

Overall, the results of this study offer several theoretical and practical implications. Concerning theoretical implications, these findings extend theoretical research in the area of behavior finance by declaring that herding, prospect, and heuristic factors are all important and significantly influence investors' decisions in the cryptocurrency market (Bouri *et al.,* 2019a; Poyser, 2018;

Almansour, 2017; Park & Sabourian, 2011). The important objectives of behavior finance theory are that behavior finance theory does not declare that each investor will suffer from a similar illusion, rather it sheds light on taking such appropriate steps to prevent these illusions which influence investors' decisions in the cryptocurrency market.

The implication of the findings of this study on the influence of behavior finance factors on investment decisions in the cryptocurrency market is enormous. First, it will prepare hit and run investors to be progressively prepared to stay in the cryptocurrency market and develop their abilities on the most proficient method to settle on sound venture choices. Second, it will encourage financial specialists to realize that information on the traditional finance theory is not adequate to excel in the cryptocurrency market. Thus, they need to have a better understanding and be more knowledgeable about behavioral finance. Third, financial specialists will explore different reasons why investment decisions go amiss from expected and various methods for overcoming the difficulties encountered when arriving at an investment decision. Fourth, this will remind investors that understanding money related settings before contributing is fundamental. Finally, it will allow policymakers in the financial exchange to comprehend the speculators' conduct.

6. Conclusion and Recommendations

Traditional finance theory states that investors' behavior does not significantly affect the prices of assets. The argument behind that is determined by the investors' demand that will be neutralized by the arbitrageurs' transaction and by the trades. Investors believe that they make their investment decisions logically and rationally (Almansour, 2017). However, the behavior finance theory states that investors' behavior significantly affects the prices of assets. This indicates that behavior finance factors play a significant role in affecting investment decisions made by investors in the cryptocurrency market. The bubble existing in the cryptocurrency market is caused by noise traders which makes the market inefficient. Noise traders thus provide a hypothesis to behavior finance factors such as herding, prospect, and heuristic theories to be important factors in studying the cryptocurrency market.

This study aims at exploring the effect of behavior finance factors on investment decisions in the cryptocurrency market. The results declare that investors' choices of selecting the types of digital currencies are affected by other investors' choices and therefore, will significantly affect their investment decisions. Besides, the results show that when investors make a profit on their investment, they will make another investment decision in selecting their next portfolios based on their experience, knowledge, and skills, which concludes that investors behave as speculators in the cryptocurrency market.

Table 5: Summary of Results and Hypotheses Testing

Hypotheses	Sig	Decision
There is a significant effect of herding on investors' investment decisions in the cryptocurrency market.	.027	Accepted
There is a significant effect of heuristic on investors' investment decisions in the cryptocurrency market.	.004	Accepted
There is a significant effect of prospects on investors' investment decisions in the cryptocurrency market.	.097	Accepted

The results also illustrate that the herding theory factors, prospect theory, and heuristic theory have a significant effect on investors' investment decisions in the cryptocurrency market. The results indicate that the herding factors have a significant positive coefficient of 0.151 with a probability value of 0.027. Furthermore, it is seen that the prospect factors have a significant positive coefficient of 0.201 with a probability value of 0.004. Moreover, the heuristics factors have a significant positive coefficient of 0.098 with a probability value of 0.097, which is acceptable at a significant level of 0.10. This leads the market to be inefficient and this concludes that market prices of digital currencies do not always reflect their true values and this pushes prices to high fluctuation or high volatility. Based on the analysis and findings, the results can be summarized in Table 5.

In this context, interested parties may focus on the relationship between exchange rates and cryptocurrencies by taking several digital currencies. Moreover, future studies may concentrate on the volatility of cryptocurrencies as well as on exploring the association between global financial markets indices and cryptocurrencies.

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