

The Effect of Investment Strategy and Risk Management on Bitcoin Online Trading in Bitcoin Investors (Study on College Students in Bandung City, Indonesia)

Budi Rustandi Kartawinata

Telkom University
Jalan Terusan Buah Batu, Bandung 40257, Indonesia
Business Administration
budikartawinata@telkomuniversity.ac.id

Budi Santoso

Telkom University
Jalan Terusan Buah Batu, Bandung 40257, Indonesia
Business Administration
budisantoso@student.telkomuniversity.ac.id

Aldi Akbar

Telkom University
Jalan Terusan Buah Batu, Bandung 40257, Indonesia
Business Administration
aldi.akbar@telkomuniversity.ac.id

R. Susanto Hendiarso

Universitas Widyatama
Jl. Cikutra no 204 A Bandung 40124, Indonesia
r.susanto@widyatama.ac.id

Abstract

The purpose of this study is to determine the effect of Investment Strategy and Risk Management on Online Trading Bitcoin. This research method uses a quantitative approach with multiple regression analysis and is processed using SPSS. The source of this research uses primary data. Data collection of this study using a questionnaire. The sample of this study was 100 respondents using a non-probability sampling technique. The results of this study show that partially the Investment Strategy does not have a positive and significant effect on Bitcoin Online Trading whereas Risk Management has a positive and significant effect on Bitcoin Online Trading, Simultaneously the Investment Strategy and Risk Management have a positive and significant effect on Online Bitcoin Trading. The Effect of Investment Strategy and Risk Management is 0.132 which indicates that 13.2% of the Bitcoin Online Trading variable can be explained by the Investment Strategy and Risk Management variables. While the remaining 86.8% is influenced by other variables not observed outside the known model

Keywords

Investment Strategy, Risk Management, Bitcoin Online Trading

1. Introduction

Currently, financial investment is one of the main choices among investors. Financial Investment is investing a number of funds in financial assets, such as deposits, bonds, stocks, and securities. Financial investment can be done directly and indirectly. Directly which means investors buy the company's financial assets, and indirectly means buying shares of investment companies that have a portfolio of financial assets from the company directly.

In recent years, financial investment has indirectly become a way out for investors who do not have too much capital because they only need to buy shares from companies that will invest. However, the stock market is not the only way for investors to invest their funds. Some time ago digital investment was in great demand among investors. The easy system makes investors flock to make this investment. Although this type of investment is known to have the greatest risk of other types of investment, the interest in making this investment is quite high. This is because the higher the risk of an investment, the higher the return value will be. One of these types of investment is trading business. Trading today is not only on foreign currencies, but also on digital currencies. The trading business which is in its heyday is often referred to as Digital Currency Exchange or Cryptocurrency Exchanges. Cryptocurrency is a computerized currency that is managed by a peer-to-peer technology network. This transaction is carried out by two or more people without intermediaries and is not managed by an institution. This currency applies basic mathematical calculations and cryptographic principles in its application. Cryptocurrency exchanges are businesses that allow customers to exchange cryptocurrencies or digital currencies for other assets such as conventional fiat money or different digital currencies. Cryptocurrency itself comes in various types all over the world. One that is often heard is Bitcoin, then Ripple, Litecoin, also Darkcoin and so on. Of the many types of cryptocurrencies, bitcoin is the first and the largest to date. Over time since its inception, the value of Bitcoin has become high and expensive.

To start trading online on bitcoin is very easy. People who want to own bitcoins don't have to do bitcoin mining themselves on the internet. Currently, there are many agencies that act as intermediaries in buying bitcoins such as Indodax and Luno.

Prospective buyers only need to access the official website or download the application. Various transactions such as selling and buying bitcoins can be done easily.

Investing in bitcoin will be more difficult than investing in gold or forex because the price is volatile and difficult to predict. Not a few also experience losses in investing in bitcoin. As reported by Tirto.id, a man named Sean Russel from England suffered a loss of 96% of the total money he invested. The money that Sean invested was not small. The figure reached US \$ 120,000 or equivalent to Rp. 1.68 billion. He dared to invest in Bitcoin because he was tempted by high returns in a short time. After 8 months, the price of Bitcoin collapsed. In December 2017, one Bitcoin was valued at around US\$20,000. But in July 2018, Bitcoin was in the price range of US\$6,400. Sean's \$120,000 investment in Bitcoin fell 96 percent to \$4,800.

In investing we can not carelessly or just follow the trend. It is very risky and can result in losses. Therefore, in order to gain profits, an investment strategy is needed. Based on the research results of Ni Luh Putu Wiagustini (2008), the investment strategy used is proven to increase investment returns in the capital market. In addition to investment strategies, investors also need to pay attention and consider the risks that must be faced so that investors can get various conveniences in investing. According to the research results of Widigdo Sukarman (2007) and Thomas Suselo (2007), a risk management is needed to reduce the level of risk that may arise in online trading.

Both of these are supported by research conducted by Lawrence Hasiolan Hutabarat and Sujoko (2010) risk management and investment strategies have a positive influence on investors in online Forex trading. Thus, investment strategies and risk management are needed to be applied to bitcoin online trading.

The interesting thing in this research is what investment strategy investors do in bitcoin online trading and whether these investors carry out risk management to minimize the level of risk they face.

1.1 Objectives

Based on the descriptions above, the researcher is interested in conducting research development with the title "Influence Of Investment Strategies And Risk Management On Bitcoin Online Trading On Bitcoin Investors", with investment strategy and risk management as independent variables and dependent variable is bitcoin online trading. The objectives of this research are as follows: To determine the effect of investment strategies on the level of Bitcoin Online Trading, and to determine the effect of Risk Management on the level of Bitcoin Online Trading.

2. Literature Review

Investment comes from Latin, namely investire (to use), while in English, it is called investment. (Salim and Budi Sutrisno: 2008: 31). Experts have different views regarding the theoretical concept of investment. According to

Fitzgerald, investment is an activity related to the withdrawal of resources (funds) that are used to procure capital goods at the present time, and with capital goods, new product flows will be generated in the future (in Murdifiin Haming and Salim Basalamah, 2003: 04).).

Risk is a state of uncertainty and the level of uncertainty is measured quantitatively. Risk can be categorized into pure risk or speculative risk. Pure risk is risk that can result in loss, but no possibility of profit. While speculative risk is a risk that can result in two possibilities, detrimental or profitable, for example, the foreign exchange business can experience a decline and increase. (Djohanputro, 2008).

This is common in business life because every thing has various risks and the scientific understanding of risk also varies, among others. According to Gallati (2003:7) risk is defined as "a condition in which there exists an exposure to adversity".

"Bitcoin is a decentralized electronic cash system using peer to peer networking to enable payments between parties without relying on mutual trust," according to Satoshi Nakamoto in his journal Bitcoin: A peer to peer Electronic Cash System. The basic concept of bitcoin is to create a decentralized authority transaction system without a third party that can verify it using the concept of a digital signature on every transaction (Satoshi Nakamoto: 2008). Research by Florian Glaser, Kai Zimmerman, Cristian M Weber, Michael Along & Martin Haferkom (2014) "bitcoin : asset or currency?" get the results that "we find strong indications that especially uninformed users approaching digital currencies are not primarily interested in an alternative transaction system but seek to participate in an alternative investment vehicle" which can be concluded that bitcoin has indications that it is not primarily used as an alternative payment instrument but as a alternative investment tools.

One of the conveniences for investing in bitcoin is trading, or Bitcoin Exchange trading, currently many online sites provide Bitcoin Exchange facilities because the exchange rate can be said to be fantastic. In 2017 became the peak of bitcoin's glory with the exchange rate reaching 1800% of the initial price, or an increase of more than 1000%. Due to its limited value and convenience, bitcoin has become one of the sought-after assets as a business mine.

3. Methods

Quantitative research method is a research method based on positivism, used to examine certain populations or samples, collect data using research instruments, analyze quantitative data (statistics), with the aim of testing the established hypothesis. Quantitative research emphasizes the freedom of information and not depth, so that the quantitative method is suitable for use for a wider population with limited variables (Sugiyono, 2015:64) Sugiyono (2014:81) concludes that the survey research method is a quantitative research method used to obtain data that occurred in the past or present, about beliefs, opinions, characteristics, behavior, variable relationships and to test several hypotheses about sociological and psychological variables. from samples taken from certain populations, data collection techniques with observations (interviews or questionnaires) that are not in-depth, and research results tend to be generalized.

The variables used in this study are the independent variable and the dependent variable. The independent variable is Investment Strategy and Risk Management and the dependent variable is Bitcoin Online Trading

According to Sugiyono (2017: 92) the measurement scale is an agreement that is used as a reference to determine the length of the short interval in the measuring instrument, so that the measuring instrument used can produce quantitative data. The scale used to measure the variables in this study is ordinal scale, with a Likert scale instrument in order to obtain precise and correct research results. The population chosen by the researcher to be studied will be the limiter of the research results obtained. The population of this research is bitcoin investors who do online trading in Indonesia. The researcher used a sample of 100 respondents who traded bitcoins for an unknown number. The sampling technique used non-probability sampling.

4. Data Collection

Based on the source, the data in this study used primary data and secondary data. According to Sugiyono (2017: 267) states that validity is the degree of determination between data that actually occurs in the object of research and data that can be reported by researchers. So that valid data is data that is not different from that reported by researchers on the object of research. In this study, the technique used to determine the error is the product moment correlation technique. The reliability test of this research instrument will use the Cronbach's Alpha formula. Cronbach's Alpha is a method used to calculate the level of reliability of a test.

5. Results and Discussion

Based on the results of the validity test, the following results were obtained:

Table 1. Validity Test

No	Correlation Value	Critical Value	Description	No	Correlation Value	Critical Value	Description	No	Correlation Value	Critical Value	Description
X1.1	0.513	0.195	Valid	X2.1	0.706	0.195	Valid	Y1	0.623	0.195	Valid
X1.2	0.535	0.195	Valid	X2.2	0.409	0.195	Valid	Y2	0.699	0.195	Valid
X1.3	0.627	0.195	Valid	X2.3	0.633	0.195	Valid	Y3	0.772	0.195	Valid
X1.4	0.706	0.195	Valid	X2.4	0.382	0.195	Valid	Y4	0.701	0.195	Valid
X1.5	0.397	0.195	Valid	X2.5	0.719	0.195	Valid	-	-	-	-
X1.6	0.321	0.195	Valid	X2.6	0.728	0.195	Valid	-	-	-	-
X1.7	0.152	0.195	Invalid	X2.7	0.542	0.195	Valid	-	-	-	-
X1.8	0.276	0.195	Valid	X2.8	0.691	0.195	Valid	-	-	-	-
X1.9	0.599	0.195	Valid	-	-	-	-	-	-	-	-
X1.10	0.496	0.195	Valid	-	-	-	-	-	-	-	-
X1.11	0.480	0.195	Valid	-	-	-	-	-	-	-	-
X1.12	0.482	0.195	Valid	-	-	-	-	-	-	-	-
X1.13	0.391	0.195	Valid	-	-	-	-	-	-	-	-
X1.14	0.552	0.195	Valid	-	-	-	-	-	-	-	-

Based on the table 1 above, for the item regarding Investment Strategy (X1) which consists of 14 statements, there is one invalid statement, namely the seventh statement (X1.07) because it has a correlation value below the critical value so that the statement can be omitted. While the other statements have a validity coefficient value above 0.195 so it can be said that all of the statement items are valid. For the Risk Management item (X2) which consists of eight statements and all of them have a coefficient value above 0.195 so that the statement items are all valid. Likewise with Bitcoin Online Trading (Y) items which have four statements and all of them have a validity coefficient value above 0.195 so it can be said that all of the statement items are valid.

The results of the research reliability test are as follows:

Table 2. Reliability Test

Variable	Reliability Index	Description
Investment Strategy	0.722	Reliability
Risk Management	0.754	Reliability
Bitcoin Online Trading	0.624	Reliability

Based on the results of the table 2 above, the reliability coefficient value of the item regarding Investment Strategy is 0.722, the item regarding Risk Management is 0.754 and the reliability coefficient value of the Bitcoin Online Trading item is 0.624. The three reliability coefficient values are already greater than the standard set, namely 0.6. Thus it can be concluded that the questionnaire or questionnaire used by the researcher is feasible to be used in this study.

The t-test was used in this study to determine the level of significance of the influence of each independent variable on the dependent variable. The hypotheses used in this study are::

H0: $\beta = 0$ Investment Strategy and Risk Management partially have no significant effect on Bitcoin Online Trading

H1: $\beta \neq 0$ Investment Strategy has a significant influence on Bitcoin Online Trading

H2: $\beta \neq 0$ Risk Management has a significant influence on Bitcoin Online Trading.

By using the IBM SPSS 25 application program, the following output is obtained:

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.	Collinearity	
		B	Std. Error	Coefficients Beta			Tolerance	VIF
1	(Constant)	10,175	1,673		6,081	,000		
	Investment Strategy	-,036	,043	-,089	-,830	,408	,785	1,274
	Risk Management	,216	,058	,396	3,714	,000	,785	1,274

a. Dependent Variable: Y

Figure 1. T Test

From the data as shown on figure 1. above it can be concluded that:

For X1 the value of tcount (-0.830) is smaller than ttable (1.664), it is also obtained that the p-value > (0.05) is 0.408 > 0.05, so it can be concluded that H0 is accepted and H1 is rejected. This means that the Investment Strategy does not have a significant effect on the dependent variable, namely Bitcoin Online Trading.

For X2 the value of tcount (3.714) is greater than ttable (1.664) and the p-value < (0.05) is 0.000 < 0.05, so it can be concluded that H0 is rejected and H1 is accepted. This means that Risk Management has a significant influence on the dependent variable, namely Bitcoin Online Trading.

The f test is used in this study to determine all independent variables or independent variables included in the model have a joint influence on the dependent variable or the dependent variable. The hypotheses used in this study are:

H0: $\beta = 0$ Investment Strategy and Risk Management Simultaneously do not have a significant effect on Bitcoin Online Trading

H1: $\beta = 0$ Investment Strategy and Risk Management simultaneously have a significant effect on Bitcoin Online Trading

By using the IBM SPSS 25 application program, the following output is obtained:

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77,999	2	39,000	7,404	,001 ^b
	Residual	510,902	97	5,267		
	Total	588,902	99			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Figure 2. F Test

Based on the results of the data as shown in figure 2. above, then:

The value of fcount = 7.404

Ftable value = 2;100-2-1

Ftable value = 3.09

So it can be concluded that $F < 0.05$ or $0.00 < 0.05$ and f_{count} (7.404) is greater than f_{table} (3.09) which means H_0 is rejected and H_1 is accepted. This means that the Investment Strategy and Risk Management simultaneously have a significant influence on Bitcoin Online Trading.

6. Conclusion

Based on the results of the research and discussion previously described regarding the Effect of Investment Strategies and Risk Management on Bitcoin Online Trading, then the author can draw the following conclusions: Investment Strategy is included in the good category which shows that bitcoin investors in Indonesia do not only trade bitcoin at random but use investment strategies well. Risk Management is included in the good category which shows that bitcoin investors in Indonesia trade bitcoin with good risk management in order to avoid losses and maintain profits. Bitcoin Online Trading is included in the good category, which shows that bitcoin investors in Indonesia value both the advantages and the ease of doing Bitcoin Online Trading.

Investment Strategy (X1) has no significant effect on Bitcoin Online Trading (Y). This happens because even though they have adequate knowledge and skills, they do not have the courage to take investment in investors in Indonesia. Risk Management (X2) has a significant influence on Bitcoin Online Trading (Y). This shows that risk management is very important for bitcoin investors in Indonesia in conducting Bitcoin Online Trading. By managing risk management, even poor methods can still make a profit. Investment Strategy and Risk Management simultaneously have a positive and significant effect on Bitcoin Online Trading. The effect of the Investment Strategy and Risk Management variable is 0.132, which means that this result indicates that 13.2% of the Bitcoin Online Trading variable can be explained by the Investment Strategy and Risk Management variable. While the remaining 86.8% is influenced by other variables.

References

- Andi, D. (2019, Februari 12). *Luno Indonesia: Bitcoin akan tumbuh positif sepanjang tahun 2019*. Diambil kembali dari Kontan: <https://investasi.kontan.co.id/news/luno-indonesia-bitcoin-akan-tumbuh-positif-sepanjang-tahun-2019>
- Basalamah, M. H. (2003). *Studi Kelayakan Investasi: Proyek dan Bisnis*. Jakarta: PPM.
- Bayu. (2011, Juli 4). *seputarforex*. Diambil kembali dari Manajemen Risiko Forex: <https://www.seputarforex.com/artikel/manajemen-resiko-pada-forex-62019-31>
- Brama, A. (2019, April 28). *Investasi.kontan.co.id*. Diambil kembali dari Kontan.co.id: <https://investasi.kontan.co.id/news/sekitar-90-investor-saham-indonesia-gagal-simak-cara-ampuh-para-investor-ini>
- Brama, A. (2019, April 28). *Kontan.co.id*. Diambil kembali dari Kontan.co.id: <https://investasi.kontan.co.id/news/sekitar-90-investor-saham-indonesia-gagal-simak-cara-ampuh-para-investor-ini>
- Darmawan, H. (2017, Mei 23). *Cara Manajemen Risiko Yang Dapat Anda Lakukan Ketika Trading Forex*. Diambil kembali dari finansialku: <https://www.finansialku.com/manajemen-risiko-trading-forex/>
- Djohanputro, B. (2008). *Manajemen Risiko Korporate, Pendidikan dan Pembinaan Manajemen*. Jakarta: PPM.
- Futures, M. I. (2018, November 26). *3 Alasan Penting Mengapa Anda Harus Membuat Rencana Trading dan Mematuhinya*. Diambil kembali dari Monex Investindo Futures: <https://mifx.com/blog-read/tips-ahli/200/3-alasan-penting-mengapa-anda-harus-membuat-rencana-trading->
- Indrawati. (2015). *Metode Penelitian Manajemen dan Bisnis*. Bandung: Refika Aditama.
- Laucereno, S. F. (2017, September 8). *Bitcoin Si 'Uang Sakti' Sudah Biasa Dipakai di Negara-negara Ini*. Diambil kembali dari Detik Finance: <https://finance.detik.com/moneter/d-3633834/bitcoin-si-uang-sakti-sudah-biasa-dipakai-di-negara-negara-ini>
- Luno. (2017, November 21). *Apa itu Bitcoin? Bagaimana Bentuknya? Dan Apa Fungsinya?* Diambil kembali dari finansialku: <https://www.finansialku.com/apa-itu-bitcoin/>
- Lupiyoadi, R., & Ikhsan. (2015). *Pratikum Metode Riset Bisnis*. Jakarta: Salemba Empat.
- M. Daud Darmawan. (2007). *Mengenal Bisnis Valuta Asing Untuk Pemula, Edisi Pertama*. Yogyakarta: PINUS Book Publisher.

- Pinem, W. (2018). *Apa itu Bitcoin? Simak Penjelasan Lengkap Mengenai Bitcoin!* Diambil kembali dari koinworks:
<https://koinworks.com/blog/apa-itu-bitcoin/>
- Riduwan, A. (2011). *Rumus dan Data dalam Aplikasi Statistika*. Bandung: Alfabeta.
- Salim, B. S. (2008). *Hukum Investasi Indonesia*. Jakarta: PT Raja Grafindo Persada.
- Sarwono, J., & Narimawati, U. (2015). *Membuat Skripsi, Tesis, dan Disertasi Partial Least Square SEM (PLS-SEM)*. Yogyakarta: ANDI OFFSET.
- Sarwono, J. (2013). *Mengubah Data Ordinal ke Data Interval dengan Metode Suksesif Interval (MSI)*.
- Sawidji Widoatmodjo, L. R. (2007). *Forex Online Trading Tren Investasi Masa Kini, Edisi ke tujuh.* Jakarta: Elex Media Komputindo.
- Sekaran, U. d. (2017). *Metode Penelitian untuk Bisnis*. Jakarta: Salemba Empat.
- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: ALFABETA.

Biography

Budi Rustandi Kartawinata is a lecturer in Business Administration Program at Telkom University, Bandung, Indonesia. He is now in his final year of Doctoral in Management at Pasundan University, Bandung Indonesia. His research interests are management and business policies.

Aldi Akbar is a lecturer in Business Administration Program at Telkom University, Bandung, Indonesia. He is now in his final year of Doctoral in Management at Universitas Pendidikan Indonesia (UPI). His research interests are management and business policies.

Budi Santoso is a graduated in business administration at Telkom University.

R. Susanto Hendarjo is a lecturer in Management Program at Widyatama University University, Bandung, Indonesia. He is now in his final year of Doctoral in Management at Pasundan University, Bandung Indonesia. His research interests are management and business policies.