

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Object Overview**

Stock is a part of the capital market instruments that can be traded. Stock is also one of the ways to increase the company's fund. Stock is a capital instrument that can be bought by people, who are called investors, in the form of investment. What attracts investors to the stock is the return that the company that issues the stock is offering. Stocks are being sold and bought on a stock exchange. There are many stock exchanges, such as NASDAQ, S&P 500, and many more. In Indonesia, IDX is the stock exchange that companies and investors in Indonesia are using.

Indonesia Stock Exchange (IDX) is a merger of Surabaya Stock Exchange (BES) and Jakarta Stock Exchange (BEJ). The merger was done back on December 1, 2007. The merger was done to make the operation of the stock exchange becomes more effective. Currently, IDX is using a system that is called JATS-NextG, which is provided by OMX. IDX's headquarter is located at Indonesia Stock Exchange Building, Sudirman Commercial Area, Jalan Jendral Sudirman 52-53, Senayan, Kebayoran Baru, South Jakarta (Indonesia Stocks Exchange, n.d.).

There are 680 companies that are listed on IDX. As of March 23, 2020, the volume of the stocks that are traded on IDX is 6,598,019,298 shares/unit. In value, the stocks worth Rp 5,603,218,943,671.00. In addition, the frequency of stock trading on IDX is 367,493 times (Indonesia Stocks Exchange, n.d.). Whereas, for the number of domestic investors based on the single investor identification, at the end of 2019, there was an increase from 1.62 million investors to 2.48 million investors (Prasetyo, 2019).

Investors pay attention to a few different factors that might affect the stock market, and one of them is pandemic. Currently, the COVID-19 pandemic is the most significant factor which affects the stock market. Many countries are now

facing a hard time and unpredictable market due to COVID-19, and Indonesia is no exception.

The first case of COVID-19 was being announced by the President of the Republic of Indonesia, Joko Widodo, on March 2, 2020. This announcement is the beginning of an unpredictable stock market in Indonesia. Many sectors are being affected by this phenomenon, and one of the highly affected sectors is the property and real estate sector.

Ellen May of Ellen May Institute stated that the COVID-19 pandemic greatly impacts property and real estate sector. She took PT Bumi Serpong Damai Tbk as an example. The income that PT Bumi Serpong Damai Tbk got from the stock trading decreased by 57.1%. Also, there was an IDR1.1 trillion decrease in selling (CNN Indonesia, 2020).

It is also reported that there is a significant decrease of sales, especially on apartment sales. The leader of Real Estate Indonesia (REI) Jakarta region, Arvin F. Iskandar, stated that the decrease in apartment sales is greater than 80% (Ferry Sandi, CNBC Indonesia, 2020). As for units being sold, Senior Associate Director Research Colliers Indonesia, Ferry Salanto, stated that until the 2<sup>nd</sup> quartal, only 1,214 apartment units are being sold, whereas back in 2019, 4,682 apartment units were being sold. Therefore, there is a 74% decrease in apartment sales (Kumparan, 2020).

As stated above, it shows that there is a significant decrease of sales which affects the companies' performance. The companies' performances affect the behavior of the investor on IDX. The behavior then can be resulting in an abnormal return. Not just abnormal return, the companies' performance is also affecting the popularity of the stocks which makes the changes in stock trading volume of the stocks on IDX.

There are 63 property and real estate companies that are listed on IDX. The listed companies are being listed on table 1.1

Table 1.1 List of Registered Property and Real Estate Companies on IDX

No	Stock Code	Company Name	No	Stock Code	Company Name
1.	ARMY	PT Armidian Karyatama Tbk	33.	LAND	PT Trimita Propertindo Tbk
2.	APLN	PT Agung Podomoro Land Tbk	34.	LCGP	PT Eureka Prima Jakarta Tbk
3.	ASRI	Alam Sutera Realty Tbk	35.	LPCK	Lippo Cikarang Tbk
4.	BAPA	Bekasi Asri Tbk	36.	LPKR	Lippo Karawaci Tbk
5.	BAPI	PT Bhakti Agung Propertindo Tbk	37.	MDLN	PT Modernland Realty Tbk
6.	BCIP	Bumi Citra Permai Tbk	38.	MKPI	Metropolitan Kentjana Tbk
7.	BEST	Bekasi Fajar Industrial Estate Tbk	39.	MMLP	PT Mega Manunggal Property Tbk
8.	BIKA	PT Binakarya Jaya Abadi Tbk	40.	MPRO	PT Maha Properti Indonesia Tbk
9.	BIPP	Bhuwanatala Indah Permai Tbk	41.	MTLA	Metropolitan Land Tbk
10.	BKDP	Bukit Darmo Property Tbk	42.	MYRX	Hanson International Tbk
11.	BKSL	Sentul City Tbk	43.	NIRO	City Retail Developments Tbk
12.	BSDE	PT Bumi Serpong Damai Tbk	44.	NZIA	PT Nusantara Almazia Tbk
13.	CITY	PT Natura City Developments Tbk	45.	OMRE	Indonesia Prima Property
14.	COWL	Cowell Development Tbk	46.	PAMG	PT Bima Sakti Pertiwi Tbk
15.	CPRI	PT Capri Nusa Satu Properti Tbk	47.	PLIN	Plaza Indonesia Realty Tbk
16.	CTRA	Ciputra Development Tbk	48.	POLI	PT Pollux Investasi International Tbk
17.	DART	Duta Anggada Realty Tbk	49.	POLL	PT Pollux Properti Indonesia Tbk
18.	DILD	Intiland Development Tbk	50.	POSA	PT Bliss Properti Indonesia Tbk

19.	DMAS	PT Puradelta Lestari Tbk	51.	PPRO	PT PP Properti Tbk
20.	DUTI	Duta Pertiwi Tbk	52.	PWON	Pakuwon Jati Tbk
21.	ELTY	Bakrieland Development Tbk	53.	REAL	PT Repower Asia Indonesia Tbk
22.	EMDE	Megapolitan Development Tbk	54.	RISE	PT Jaya Sukses Makmur Sentosa Tbk
23.	FMII	Fortune Mate Indonesia Tbk	55.	RBMS	Ristia Bintang Mahkotasejati Tbk
24.	FORZ	PT Forza Land Indonesia Tbk	56.	RDTX	Roda Vivatex Tbk
25.	GAMA	Aksara Global Development Tbk	57.	RODA	Pikko Land Development Tbk
26.	GMTD	Gowa Makassar Tourism Development Tbk	58.	SATU	PT Kota Satu Properti Tbk
27.	GPRA	Perdana Gapura Prima Tbk	59.	SMDM	Suryamas Dutamakmur Tbk
28.	GWSA	PT Greenwood Sejahtera Tbk	60.	SMRA	PT Summarecon Agung Tbk
29.	INDO	PT Royalindo Investa Wijaya Tbk	61.	TARA	PT Sitara Propertindo Tbk
30.	JRPT	Jaya Real Property Tbk	62.	TRIN	PT Perintis Trinita Properti Tbk
31.	KIJA	Kawasan Industri Jababeka Tbk	63.	URBN	PT Urban Jakarta Propertindo Tbk
32.	KOTA	PT DMS Propertindo Tbk			

Source: [www.idx.co.id](http://www.idx.co.id)

Out of 63 property and real estate companies, there are only 41 companies that fulfill the criteria. As 22 companies do not have apartment development as one of the revenue streams and/or made a corporate action within February 17, 2020-March 16, 2020.

## 1.2 Research Background

The current commitment of money or other resources in the expectation of reaping future benefits is called an investment. (Bodie *et al.*, 2014). Investors can invest both in real and financial sectors. The real sector consists of investment in

lands, buildings, machines, and knowledge that can be used to make or produce something. Financial assets consist of securities, such as stocks and bonds. Stock investment is a part of financial asset investment, where it is no more than a piece of paper or a computer entry. It does not contribute directly to the company's productive capacity.

In investing, investors pay attention to conditions that might bring profits and losses to them. One of the conditions is a pandemic that the whole world is currently facing, which is COVID-19. Many countries are now facing a hard time due to COVID-19, and Indonesia is no exception.

The first case of COVID-19 was being announced by the President of the Republic of Indonesia, Joko Widodo, on March 2, 2020. It was reported that the first two patients were a mother and a daughter who came into contact with a Japanese who came to Indonesia and passed away in Malaysia after being diagnosed with COVID-19.

Since then, COVID-19 has increased quite rapidly, especially in the capital of Indonesia, Jakarta. This condition made Jakarta's major take action to hold all activities in the city, including financial activities. The Major of Jakarta asked all citizens to do a large-scale social restriction. The large-scale social restriction was also applied to all businesses operating within the city. All businesses were asked to make their employees work from home and close their offices during the large-scale social restrictions, except for health (hospitals and clinics), staple goods, energy (water, gas, electricity, fuel stations), communication (communication services and communication media), finance and banking (including stock market), logistics/ distributor of goods, retail, and strategic industries located in the capital. Although those businesses were still allowed to operate, there was still a curfew also many protocols needed to be applied (Deutsch-Indonesische Industrie- und Handelskammer, 2020). Whereas for other businesses, most of their business activities had to come to a halt. The large-scale social restriction was being held for the first time on April 10, 2020, and ended in May 2020 (detikcom, detik news, 2020).

According to the Mayor of Jakarta, Anies Baswedan, large-scale social restriction gave a positive result. Anies Baswedan stated that there was a significant result as all schools and all activities which make people get together are all closed, including the public facilities. On May 25, 2020, Anies Baswedan also announced that based on the record of Public Health Faculty of University of Indonesia, almost 60% of citizens of Jakarta did not go anywhere and stayed at home, 45% of citizens of Jakarta went around by using their private transportation, 5% of citizens of Jakarta went around by MRT, and 10-12% of citizens of Jakarta went around by bus (detikcom, detik news, 2020).

As there was a positive result from the implementation of large-scale social restrictions, many cities in Indonesia also implemented the same system. As a result, businesses in many cities were also halted.

Although there was a significant result of the decrease of the case, Indonesia's economic condition kept going down as the businesses were halted. As a result of halting businesses, many employees were being laid off. According to Minister of Manpower, Ida Fauziyah, 1.9 million employees were being laid off, 1.500.156 from the formal sector, and 443.760 from the non-formal sector (Shalihah, 2020).

The declining process of Indonesia's economy did not stop there as the second large-scale social restrictions were being implemented for the second time in Jakarta (CNN Indonesia, 2020). This condition made businesses being halted for the second time. As a result, 3.5 million employees were being laid off, according to the Minister of Manpower, Ida Fauziah (CNN Indonesia, 2020).

The fact that the businesses have been halted for some time and the economic condition has been declining affect the investors' behavior on IDX. The behavior then can be resulting an abnormal return. Abnormal return is the difference of the actual and expected return (Hartono, 2016).

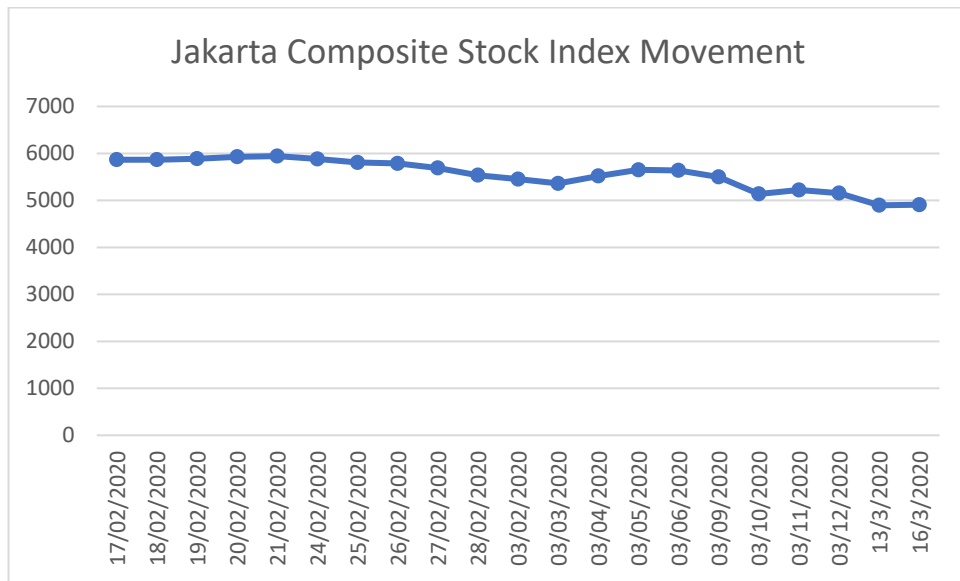


Figure 1.1 Jakarta Composite Index Stock Movement  
17<sup>th</sup> February 2020 to 16<sup>th</sup> March 2020

Source: [www.finance.yahoo.com](http://www.finance.yahoo.com)

Figure 1.1 is the capture of the stock movement on IDX that started on 17<sup>th</sup> February to 16<sup>th</sup> March 2020. The first COVID-19 case in Indonesia was announced on 2<sup>nd</sup> March 2020. As figure 1.1 shows, before the announcement of the first COVID-19 case in Indonesia, the stock price was relatively stable, although nearing the end of February, the price went lower. After the announcement of the first COVID-19 case in Indonesia, the price went up for two days. Then, since 5<sup>th</sup> March the price was fluctuating, but the trend was going down.

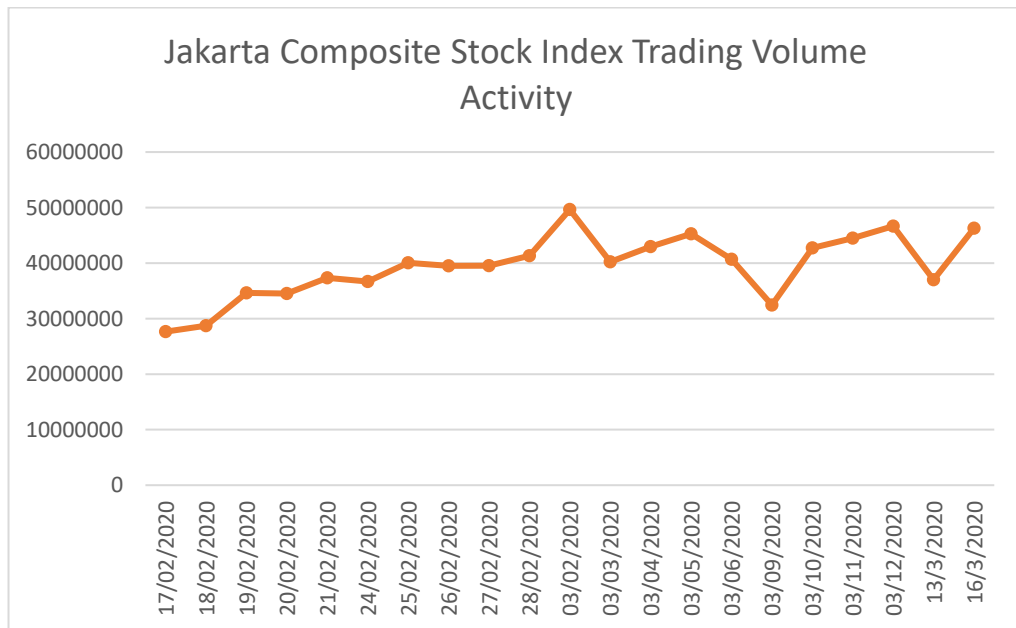


Figure 1.2 Jakarta Composite Index Stock Movement  
17<sup>th</sup> February 2020 to 16<sup>th</sup> March 2020

Source: [www.finance.yahoo.com](http://www.finance.yahoo.com)

Figure 1.2 shows the trading volume that happened over IDX between 17<sup>th</sup> February 2020 and 16<sup>th</sup> March 2020. As shown by Figure 1.2, the trading volume kept increasing until the announcement day of the first COVID-19 case in Indonesia. Since the announcement, the trading volume was fluctuating extremely.

As explained above, the main event that will be studied in this study is the COVID-19, especially focusing on the announcement of the first COVID-19 case in Indonesia. This study will focus on the stocks of companies that are under the property and real estate sub-sector on IDX. Because companies under property and real estate sub-sector are greatly affected, as the first COVID-19 case was announced, many policies are implemented, which makes the condition unpredictable. This condition leads to a decrease in customers' buying power, and many investors are holding back their investment as the condition at the current moment is unpredictable.

This condition is reflected in the companies' sales revenue. It shows that there is a significant decrease in sales, especially in apartment sales. The leader of Real



Estate Indonesia (REI) Jakarta region, Arvin F. Iskandar, stated that the decrease of apartment sales is greater than 80% (Ferry Sandi, CNBC Indonesia, 2020). Also, it is reported by Coldwell Banker Indonesia that COVID-19 affected the apartment sales in Jakarta, Bogor, Depok, Tangerang, and Bekasi. The decrease in Jakarta's apartment sales has reached 68.8%, in Bogor, Depok, and Bekasi is 75.8%, and in Tangerang is 45.1% (Rosiana Haryati, Kompas.com, 2020). In terms of units being sold, Senior Associate Director Research Colliers Indonesia, Ferry Salanto, stated that until the 2<sup>nd</sup> quartal, only 1,214 apartment units are being sold. In contrast, back in 2019, there were 4,682 apartment units being sold. Therefore, there is a 74% decrease in apartment sales (Kumparan, 2020). Senior Associate Director Research Colliers International Indonesia, Ferry Salanto, also stated that in September 2020, only 1,382 apartment units are being sold (Saumi, 2020).

According to the founder of Ellen May Institute, Ellen May, stated that sub-sector property and real estate is greatly impacted because of the COVID-19 pandemic. She took PT Bumi Serpong Damai Tbk as an example. The income that PT Bumi Serpong Damai Tbk got from the stock trading decreased by 57.1%. In addition, there was also an IDR1.1 trillion decrease in selling (CNN Indonesia, 2020).

Property and real estate companies sell and rent lands and buildings as one of their revenue streams. In addition to selling and renting lands and buildings, property and real estate companies also seek more capital by selling stocks in the stocks market. Therefore, property and real estate companies get their funds from selling and renting land and building, also selling stocks at the stock market.

Just like other businesses, property and real estate companies also need funds. The greater the funds will generate a greater profit for the company. In addition, greater funds will also increase the assets of the company.

Unfortunately, the current condition of COVID-19 makes the market unpredictable. This condition causes the investors holding back in investing. This leads to the loss that the companies must suffer, which then is reflected in the

companies' performances. The companies' performances affect the behavior of the investor on IDX. The behavior then can be resulting in an abnormal return.

Not just the returns that are being affected, but the trading volume is also being affected. Trading volume is the volume of stocks that are being traded at a period of time. The trading volume will increase when the stock has become "popular," and the volume will diminish when the stock's disfavor is revealed. Conolly and Strivers (2003) explain that the past trading volume can show the important link between "momentum" and "value" strategies.

There is a hypothesis in the stock market that stock price is believed to have reflected all available information. This hypothesis is called efficient market hypothesis (Bodie *et al.*, 2014).

However, the market cannot be efficient all the time. There are some anomalies. The anomalies that happen in the stock market is being called market anomalies. Market anomalies happen when such findings are difficult to be reconciled with the efficient market hypothesis. Bodie *et al.* (2014: 366) explain that market anomalies can be known through semistrong tests.

In investing, investors are expected to deal with risk. According to Husnan (2005), the risk that the investors have to take is measured and expressed in the form of the standard deviation of the portfolio profit rate, which can also be referred as a cumulative risk.

Aside from the risk, the investors expect a return from an investment. Halim (2015), states that return is a benefit that is gained from an investment. There are two kinds of returns, which are actual and expected returns. Actual return is the actual gain (return) that investors get from an investment and is calculated from the historical data. In contrast, the expected return is the gain (return) that an investor expects from an investment.

In the real-world, the amount of actual return is not always the same as the expected return. This condition leads to an abnormal return. Tandelilin (2010)

explains that abnormal return is the difference between the actual return and expected return. Abnormal return can occur when the information is not published yet, or when the information is lost after it is being published.

In calculating abnormal return, there are three models that can be used, which are the mean-adjusted model, market-adjusted model, and market model (Hartono, 2016). In this research, the market-adjusted model is used, as according to Brown and Warner (1980), the market-adjusted model is a model that is commonly used and takes the market-wide movements which occurred at the same time of the event that the sample firms experienced into account. Therefore, the writer believes that this model would give a better capture of how the market also reacts, not just how the firms react toward the event.

Besides abnormal returns, trading volume is also one of the factors that the investors see. According to Pasaribu (2010), trading volume activity is the total number of shares that are traded at a certain period. A sharp increase means that there is also a sharp increase in investors' interest. A small volume of trades means that there are only a small number of investors interested in the stock or less interest in investing in the secondary market. In contrast, a big volume indicates that there is more interest in buying and selling the stock and shows the number of shareholders.

In order to measure the effect of an event on stock prices and trading volume, an event study is usually used. Bodie *et al.* (2014), states that abnormal return is a technique that can be used in order to know how an event affects the stock price. While Pasaribu (2010), explains that trading volume activity can be used in order to measure the investors' interest in the stock, which is affected by the event on stock prices.

Therefore, an event study helps in seeing and analyzing the capital market reaction with the changes of stock prices for a particular event. An event study is conducted on a particular event window to compare the difference and see whether such an event is actually affecting the changes in stock prices or not.

Similar researches also have been done by many researchers in the past. The results of the research regarding the impact of COVID-19 on the stock.

Junaedi & Salistia (2020) states that the Indonesian composite stock price index's movement is influenced by both internal and external factors. Internally, COVID-19 pandemic and large-scale social restrictions policies influence the stock market's dynamics. Externally, the COVID-19 pandemic in China and the NASDAQ's dynamics have a negative impact on the Jakarta Composite Index's movement, while the COVID-19 pandemic in Spain and the dynamic of Hangseng and FTSE100 give a positive impact to the Jakarta Composite Index.

While according to Nurmasari (2020), based on her study on PT. Ramayana Lestari Sentosa, there is a significant difference on the stock price of PT Ramayana Lestari Sentosa Tbk. The stock price goes lower after the announcement of the first COVID-19 case in Indonesia was announced. In addition. There is also a significant difference on the trading volume of PT Ramayana Lestari Sentosa Tbk. The trading volume goes up after the announcement of the first COVID-19 case in Indonesia was announced.

In contrast, Anh & Gan (2020) explain that during the pre-lockdown, there is a significant negative impact on Vietnam's stock returns. Whereas, during the lockdown period, there is a significant positive influence on the entire market's and different business sectors' stock performance. In addition, the study also states that there is an adverse impact between COVID-19 cases and stock returns in Vietnam.

Whereas Junaedi & Salistia (2020) state that the Indonesian composite stock price index's movement is influenced by both internal and external factors. Internally, COVID-19 pandemic and large-scale social restrictions policies influence the stock market's dynamics. Externally, the COVID-19 pandemic in China and the NASDAQ's dynamics negatively impact the Jakarta Composite Index's movement, while the COVID-19 pandemic in Spain and the dynamic of Hangseng and FTSE100 give a positive impact to the Jakarta Composite Index.

From the explanation above, it can be seen that the result is varied and not consistent. This becomes the reason why we need to do the research. Abnormal return is given to the investors in the capital market when there is an anomaly event happening. The study which studies the market reaction to the anomaly event is referred to as an event study. A research which is conducted under the event study is usually divided into three kinds of group; (1) pre-event range (10 days before the event, (2) D day (the day of the event), and (3) post-event range (10 days after the event). Twenty-one days are used as the event window as it would show a better and more precise reaction. If the event window is longer, other events, such as the large social restriction, can affect the stock prices and trading volume activity.

So, the research that will be conducted is the impact of the announcement of the first COVID-19 case in Indonesia on the property and real estate companies' stock returns and trading volume. The research will use the quantitative method and event study by relying on the secondary data that have been published.

### **1.3 Problem Statement**

As stated before, COVID-19 might affect the stock and give an abnormal return to the investors. The current condition caused by COVID-19 resulted in a fluctuation of stock trading and trading value, including the property and real estate companies listed on IDX. The fluctuation is the factor that affects the stock price and abnormal return for the investors.

The fluctuation of the price also resulted in the volume of the trade. Just like the returns, the trading volume in the property and real estate sub-sector is also highly affected. If the price goes down, then the investors would prefer to put their stock on hold until the price is rising again, but if the price goes up, then the investors would put their stocks in the market and do the trading.

In order to find out the impact of COVID-19 on the property and real estate companies, there are several research questions, which are:

1. Is there any significant difference in average abnormal return in the property and real estate companies that are listed on IDX, after the first COVID-19 case

was announced in Indonesia and before the first COVID-19 case was announced?

2. Is there any significant difference in cumulative average abnormal return in the property and real estate companies that are listed on IDX, after the first COVID-19 case was announced in Indonesia and before the first COVID-19 case was announced?
3. Is there any significant difference in the average trading volume activity of property and real estate companies that are listed on IDX, between after the first COVID-19 case was announced in Indonesia and before the first COVID-19 in Indonesia was announced?

#### **1.4 Research Purposes**

1. To analyze whether there is a significant difference in average abnormal return of property and real estate companies that are listed on IDX before the first COVID-19 case was announced in Indonesia and after the first case of COVID-19 case was announced.
2. To analyze whether there is a significant difference in cumulative average abnormal return of property and real estate companies that are listed on IDX before the first COVID-19 case was announced in Indonesia and after the first case of COVID-19 case was announced.
3. To analyze whether there is a significant difference in the trading volume of property and real estate companies that are listed on IDX, between after the first COVID-19 case was announced and before the first COVID-19 case was announced.

#### **1.5 Benefits of Research**

1. Theoretical Benefit

This research will enrich the knowledge of the financial market, especially stock instruments, and as a reference for further research in the field of abnormal return and volume of trade on the event study case.

## 2. Practical Benefit

This research is expected to enrich investors' and companies' knowledge regarding the effect of COVID-19 on the stock price, returns, and volume of trade.

### **1.6 Systematic Writing**

The writing structure is arranged to provide a general overview of the research performed. The structures are:

#### **CHAPTER I INTRODUCTION**

This chapter consists of an overview, research background, problem statement, research questions, benefits of the research, and the scope of the research.

#### **CHAPTER II THEORIES AND FRAMEWORK**

This chapter explains the theories that support this research. The Research Framework will also be explained in this part of the mini-thesis.

#### **CHAPTER III RESEARCH METHODOLOGY**

This chapter describes the research methods, approaches, and analysis techniques in order to solve the research questions.

#### **CHAPTER IV ANALYSIS AND RESULT**

This chapter contains the discussion and explanation regarding the research based on the analysis of the data gathered and the theories that support the research, which has been stated in Chapter II.

#### **CHAPTER V CONCLUSION AND RECOMMENDATION**

This chapter contains the restatement of the problem, a brief description of the research and the research procedure, principal findings and conclusion, and the last is the recommendation for further research.