THE IMPACT OF THE ANNOUNCEMENT OF INSIDER TRADING SANCTION ON ABNORMAL RETURN AND TRADING VOLUME ACTIVITY

(Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)

Undergraduate Thesis

Researcher:

DONNA VITASARI S.

FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITY OF LAMPUNG
BANDAR LAMPUNG
2016

ABSTRACT

THE IMPACT OF THE ANNOUNCEMENT OF INSIDER TRADING SANCTION ON ABNORMAL RETURN AND TRADING VOLUME ACTIVITY
(Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 To January 2008)

By

Donna Vitasari S.

Insider trading is the trading of securities performed by those classified as "insiders" of the company, of these securities based on the existence of inside information that is important and contains material facts. Insider trading categorized as a crime in the capital market. The Bapepam-LK announced nine people that involved in insider trading case on PGN stocks. As reported by website hukumonline.com on Thursday December 27, 2007.

The objective of this research is to find out whether there is a significant difference between before and after the announcement of insider trading sanction to the abnormal return and its trading volume activity. This research used event study method, with abnormal return and trading volume activity as the variable. The data that used in this research is secondary data. The research object was PT Perusahaan Gas Negara (Persero) Tbk. The research conducted on October 26, 2007 to January 16, 2008, it was 30 days as estimation period, ten days before the event, ten days after the event, and one day when the event happened as the window period. So total of the research time is 51 days.

The statistical test that used to test the hypothesis was paired sample t-test, but make sure that the data was normally distributed. The test result shows that H1 is accepted but H2 is rejected, it means there is no significant difference in abnormal return before and after the announcement of insider trading sanction, but there is a significant difference on trading volume activity before and after the announcement of insider trading sanction.

Keyword : abnormal return, event study, trading volume activity.

THE IMPACT OF THE ANNOUNCEMENT OF INSIDER TRADING SANCTION ON ABNORMAL RETURN AND TRADING VOLUME ACTIVITY

(Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)

Researcher:

Donna Vitasari S.

Undergraduate Thesis

As one of requirements to achieve degree of
BACHELOR OF ECONOMICS

from

Management Department
Faculty of Economics aand Business University of Lampung

FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITY OF LAMPUNG
BANDAR LAMPUNG
2016

Judul Skripsi : **THE IMPACT OF THE ANNOUNCEMENT OF INSIDER TRADING SANCTION ON ABNORMAL RETURN AND TRADING VOLUME ACTIVITY** (Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)

Nama Mahasiswa : *Donna Vitasari S.*

No. Pokok Mahasiswa : **1211011047**

Jurusan : **Manajemen**

Fakultas : **Ekonomi dan Bisnis**

MENYETUJUI

1. Komisi Pembimbing

Prof. Dr. Mahatma Kufepaksi, S.E., M.B.A.
NIP 19600426 198703 1 001

Muslimin, S.E., M.Si.
NIP 19750411 200312 1 003

2. Ketua Jurusan Manajemen

Dr. Hj. Rr. Erlina, S.E., M.Si.
NIP 19620822 198703 2 002

MENGESAHKAN

1. Tim Penguji

   Ketua : **Prof. Dr. Mahatma Kufepaksi, S.E., M.B.A.** ....

   Penguji Utama : **Dr. Ernie Hendrawaty, S.E., M.Si.** ....

   Sekretaris : **Muslimin, S.E., M.Si.** ....

2. Dekan Fakultas Ekonomi dan Bisnis

   Prof. Dr. H. Satria Bangsawan, S.E., M.Si.
   NIP 19610904 198703 1 001

Tanggal Lulus Ujian Skripsi : **25 Mei 2016**

PERNYATAAN SKRIPSI MAHASISWA

Saya yang bertanda tangan dibawah ini:

Nama : Donna Vitasari S.

Nomor Pokok Mahasiswa : 1211011047

Fakultas : Ekonomi dan Bisnis

Jurusan : Manajemen

Judul Skripsi : The Impact of The Announcement of Insider Trading Sanction on Abnormal Return and Trading Volume Activity (Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)

Dengan ini menyatakan bahwa penelitian ini adalah hasil pekerjaan saya sendiri,

dan dalam skripsi ini tidak terdapat keseluruhan atau sebagian tulisan dari orang

lain yang saya ambil dengan cara menyalin atau meniru dalam bentuk rangkaian

kalimat atau simbol yang menunjukkan gagasan atau pendapat serta pemikiran

dari penelitian lain, yang saya akui seolah-olah sebagai tulisan saya sendiri, dan

tidak terdapat bagian atau keseluruhan tulisan yang saya salin, tiru, atau yang saya

ambil dari tulisan orang lain tanpa pengakuan peneliti aslinya. Demikianlah

pernyataan ini saya buat dengan sesungguhnya, untuk dapat dipergunakan dengan

sebagaimana mestinya.

Bandar Lampung, 13 Juni 2016

Yang membuat pernyataan,

Donna Vitasari S.
1211011047

BIOGRAPHY

Researcher was born in Pringsewu, May 16th 1994. Researcher is the youngest of four siblings, daughter of Gani Simangunsong and Deliana Rosmawati Simanjuntak.

Researcher started formal education at TK Fransiskus Pringsewu in 1998 for the kindegarten, then researcher continued study to the elementary school at SD Fransiskus Pringewu in 2000. In the middle of 2006, researcher continued to junior high school at SMP Negeri 1 Pringsewu. In 2009, researcher accepted at SMA Negeri 1 Pringsewu for Senior High School.

In 2012, researcher accepted in University of Lampung and registered as a student in Faculty of Economics and Business. Since 2nd semester , the researcher registered in Bilingual Class Batch 2012, and took financial management as her major in the 4th semester. During her study, the researcher is active as member of PKMK-FEB Unila, and also get scholarship from PPA & BBM. In the last semester (8th semester) the researcher received as one of surveyor in Bank Indonesia branch Lampung.

DEDICATION

I thank God, because of His blessing, mercy, and strength so that I can finished this undergraduate thesis. I dedicate this undergraduate thesis to :

My Father and My Mother, AKP (Pur.) Gani Simangunsong and Deliana Rosmawati Simanjuntak (✝).

"Dearest Papa and Mama, you are my biggest motivation to complete this undergraduate thesis. I thank you for your continuous love, your amazing sacrifices, and your never ending prayers. Thank you for patiently taking care of me until now. I can't found a word that can explain my gratitude to having you as my parent. I only can pray that God can give you a long life so that I can prove to you that all of your sacrifices do not end in vain. Especially for you mama, I know that you also feel my happiness from the heaven. I love you so much mama. I can't be like I'm today if not because of you. I promise you that I try my best to be a successful person like what you have dreamed."

My brothers Brigpol.Yudi Kurniawan Simangunsong and Ramos Susanto Simangunsong, S.T.

"Thank you for all the support and prayers that you have gave to me, thank you for remind and encourage me to be a successful person, thank you for giving me so much advices. I am trying my best to make both of you proud."

My Sister Hellena Simangunsong A.Md.

"For you my one and only sister, my best friend, I thank you for loving me as well, thank you for taking care of me since mama sick and passed away. Honestly, you are my motivation to finished this undergraduate thesis and catch my future idea. I want to wipe your tears and turn it into thousands of smiles. I promise you that I try my best to be a successful person like what you have dreamed."

MOTTO

"Blessed is the man who trusts in the LORD, and whose hope is the LORD. For he shall be like a tree planted by the waters, which spreads out its roots by the river, and will not fear when heat comes; But its leaf will be green, and will not be anxious in the year of drought, nor will cease from yielding fruit."

(Jeremiah 17:7)

"There are no gains without pains."

(Benjamin Franklin)

"Nothing comes as an accomplishment instantly. Success does not come overnight. Patience is the key! Grow up and be the tree; but remember it takes dry and wet seasons to become a fruit bearer, achiever and impact maker!"

(Israelmore Ayivor)

ACKNOWLEDGEMENTS

Thanks to God, all praise and glory be to the name of the Lord Jesus Christ who has giving out blessings, mercy, guidance and grace, so that I can finish this undergraduate thesis.

The undergraduate thesis entitled "The Impact of The Announcement of Insider Trading Sanction on Abnormal Return and Trading Volume Activity (Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)". This undergraduate thesis is one of the requirements to accomplish study on the management undergraduate program at Faculty of Economics and Business, University of Lampung. The researcher has received so much help and guidance from the various parties in the preparation of this undergraduate thesis. Therefore, as a form of respect, the researcher would like to thank the following parties.

1. Jesus Christ, because of His unlimited grace and blessing.
2. My primary supporter, they are my greatest papa, AKP (Pur.) Gani Simangunsong, my forever and ever mom Mrs. Deliana Rosmawati br.✝ Simanjuntak (   ), my stepmother Mrs. Songo Watna br. Simanjuntak, my dearest sister, Mrs. Hellena br. Simangunsong, A.Md., my brother-in-law Mr. Hendrik Sidauruk, A.Md., my dearest brother, Brigpol.Yudi

Kurniawan Simangunsong, my sister-in-law, Mrs. Fransisca Gistisari br. Jabat, A.Md Keb., my dearest nephew Geraldo Arsen Mujurea Simangunsong, and the last is my youngest brother Mr. Ramos Susanto Simangunsong, S.T.

3. Mr. Prof. Dr. H. Satria Bangsawan, S.E., M.Si., the Dean of Faculty of Economics and Business, University of Lampung.

4. Mrs. Dr. Rr. Erlina, S.E., M.Si., the Head of Management Department Faculty of Economics and Business, University of Lampung.

5. Mrs. Yuningsih, S.E., M.M., the Secretary of Management Department Faculty of Economics and Business, University of Lampung.

6. Mrs. Aida Sari, S.E., M.Si., the researcher's academic counselor.

7. Prof. Dr. Mahatma Kufepaksi, S.E.,M.B.A., the Advisor Lecturer.

8. Mr. Muslimin, S.E.,M.Si., the Co-Advisor Lecturer.

9. Mrs. Dr. Ernie Hendrawati, S.E., M.Si. as the Assessor.

10. My lovely KK "Abigail" with Ms Rumondang Sialagan, S.E. as the leader, and my dearest Rosanna T. Gultom (soon to be S.E.)   as my partner. I thank you for your sincerely support, your prayer, your help, and your motivation for me. I thank God that I can meet you and experienced such a wonderful sisterhood in this campus, it is because of you.

11. My pretty AKK "Retno Septiani and Julinda", thank you for giving me the opportunity to serve you. Thank you for all your support and your prayers. May you become an extraordinary person in God and also in your study. I love you so much.

12. Luh Gede Giri Putri, S.Pd., thank you for all the support, help, motivation, that you gave to me, thank you for our friendship since 1st semester untuil now on.

13. My dearest sisters from another mother, they are Ms. Hasna Erliana Aruan, S.E. and Ms. Yobelianna, S.E. You guys are an extraordinary people who became my role model. Thanks for any attention, love, and support since I registered on this campus until I have finished the course on this campus, your attention, love and support remain the same. Hopefully it will always be like this. You guys are the ones that made me survive to serve in PKMK-FEB Unila.

14. My awesome brother from another mother, they are Mr. Jirry Mayfella Govanda, S.E. and Mr. Johannes Kharisma Siahaan, S.E. You guys are awesome. You taught me how to be a servant of God and how to serve God in the righteousness. You also always encouraged me to catch my ideals, and from you guys I get so much advice which is so precious. Thank you for all your prayers and support for me, since I registered on this campus until I have finished the course on this campus. Hopefully it will always be like this.

15. My dearest wanita perkasa PKMK "Ms. Lorentina Nainggolan (soon to be S.E.) and Ms. Hara Regina Simamora (soon to be S.E.). Ms. General Coordinator and Ms. Secretary and Treasurer of PKMK on the period of 2015/2016. You guys taught me to survive to serve the Lord in any circumstance. Although physically and mentally you are tired, but your heart is still full of spirit to serve the Lord, you guys remained faithful

until the end. What an amazing experience to have a partner like you guys. Okey please hurry up to wear toga this year then let's enjoy the next God's promises.

16. Board of PKMK-FEB Unila on the period of 2013/2014; 2014/2015; 2015/2016. Big Thanks to "Ko Richard, Mas Daniel, Bang Ivandi, Kak Ivana, Kak Tiara, Kak Rumondang, Bang Jirry, Loren, Hara, Yuli, Dwi, Robert, Redes, Septa, Lastiur, Ririn, Hanny, Riana, Rani, Ronny , Dessy, Julian and Rachel ". Thank you for becoming my partner in service in PKMK-FEB Unila, thank you for every unforgettable moment. Thank you for any support and your prayers to accomplish my undergraduate thesis. More than three years I spend my time with you guys, I hope my presence can bring blessing to you. Success for all of us. I love you all. God Bless Us.

17. Management Bilingual Class Batch 2012, Ms. Siska Meilanda Sari, S.E. , Ms. Marlia Fitriani, S.E., Ms. Ayu Nadia Basumbul, S.E., Mr. Reza Guntara (soon to be S.E.), Ms. Citra Laras Maharani (soon to be S.E.), Ms. Lia Febria Lina, S.E., Ms. Dian Saputri, S.E., Mr. Fadil Muhammad, S.E., Ms. Ikke Nurjanah (soon to be S.E.), Ms. Elisa Nurinda (soon to be S.E.), Ms. Larasati Ahluwalia, S.E., Mr. Dirga Baskara (soon to be S.E.), Ms. Brenda Metarani, S.E., Mr. Kautsar Tanjung (soon to be S.E.), Mr. Zefri Septiabe (soon to be S.E.), Mr. Kemas Rahmat (soon to be S.E.) and Ms. Lia Hermanto (soon to be S.E.). It was a pleasure to be a part of you guys. I can be like I'm today it also because of your good influence.I

thank God that I can meet all of you guys. I wish that all of us can get the successfulness.

18. KKN team Way Kanan , Kec. Negara Batin, Desa Marga Jaya January-March 2015 period, Puspita, Lenna, Asoly, Mukhlisin, Fanny, and Eko. Thank you for unforgettable moments that we've made.

19. Financial Management Class batch 2012.

20. Board of Directors and employees of Bank Indonesia branch Lampung, especially on the Department of Statistics "Mr. Eko Listiyono, Ms. Imma Nurma Sari, Ms. Lidya Anjani, Ms. Meilan and all of Surveyor Bank Indonesia on The Period of May-Agustus 2016 "Rosinda, Priska, As Shaumi, Nerissa, and Yunita Sari. Thank you so much for the opportunity and the precious experience.

21. All parties who have contributed in the preparation of this undergraduate thesis that I can't write one by one. Thank you so much.

Bandar Lampung, June 2016

Donna Vitasari S.

TABLE OF CONTENT

REFERENCES

APPENDIX

LIST OF TABLE

LIST OF FIGURE

LIST OF APPENDIX

I. INTRODUCTION

A. Background

Along with the rapid technological developments, financial information become very easily accessed by the public. Technological developments in the field of information also trigger an increase in the number of new investors who invest their funds in the capital market. All of the convenience support the growth of Indonesian capital market in the last decade. According to ICSD (Indonesian Central Securities Depository) website is seen a rapid growth of market capitalization in the stock market, which rose by almost 700% from Rp. 679.94 trillion at the end of 2004 to more than Rp. 5 thousand trillion at the end of September 2014. This is in line with the increasing number of issuers from 331 at the end of 2004 to more than 500 listed companies at the end of 2014. Similarly, the average value of daily transactions has reached Rp. 8 trillion, whereas 10 years ago only around Rp. 1-2 trillion.

The capital market can be defined as the market for the various long-term financial instruments (securities), it can be traded, either in the form of debt and equity. Whether it is published by the government, public authorities, and private companies (Husnan, 2003). Capital Market act as a liaison between investors and

companies or government institutions through the trade of a long-term financial instruments such as bonds, stocks and others. Meanwhile, according to the Law of Indonesia Number 8 of 1995, the stock market is an activity that is concerned with the public offering and trading of securities, public companies related to the securities issuance, as well as institutions and professions related to securities.

During the existing activities in the capital market there is a general guidelines that require issuers, listed companies, and others who are subject to the Law Number 8 of 1995 about capital markets to inform the public in a timely manner all material information regarding its business or its effects which can influence the decisions of investors to the securities in question and or price of the securities, the guideline is the principle of openness which contained in article 25 of Law No. 8 of 1995.

In this case the Bapepam (Capital Market Supervisory Board and Financial Institution) as the supervisory institution is compulsory to pay attention about the completeness, adequacy, objectivity, easy to understand, and clarity of the document registration statement to ensure that the document registration statement satisfies the principle of openness.

At least there are three principles of openness in the functioning of capital markets according to Nasution (2001) :

1. The function of the openness principle is to maintain public confidence in the market. The absence of transparency in the capital markets make the investors do not believe in the market mechanism.

2. The function of the openness principle is to create an efficient market mechanism. This philosophy is based on the provision of information construction so that it will create an efficient capital market, the stock price fully reflects the entire information available.

3. The principle of openness is important to prevent fraud. Rider (1995) stated that the more information that is disclosed would minimize wrongdoing and abuse.

In practice since capital market standing, there have been some cases in violation of the principle of openness. One of the case is the allegations of insider trading activity in companies listed on the Stock Exchange. Insider trading is the trading of securities performed by those classified as "insiders" of the company, and the trading of these securities based on the existence of inside information that is important and contains material facts, where the actors Insider Trading expects economic benefits, directly and indirectly.

Insider trading practices clearly violate the principles of openness which contained in Indonesian Law Number 8 of 1995 about the Capital Market. The practice of insider trading gives injustice to others investors who do not have access to the inside information. While investors with inside information which is actually can not be accessed by public get much greater benefit than investor without inside information.

During the activity of the capital market since the stock market has been established, there were several cases of violation of the principle of openness. These company conducted insider trading activity. The company that convicted becaue of did insider trading was PT Perusahaan Gas Negara (Persero) Tbk. As

reported by the website hukumonline.com on Thursday December 27, 2007

Bapepam-LK announced nine people involved in insider trading case PGN stocks.

Based on the investigation results of Bapepam-LK, during the period September

12, 2006 to January 2007, the nine people were involved in stock transactions

coded the PGAS stocks can be seen in table 1.

Table 1. Sanctions Imposition for Each Actor of Insider Trading

Number	Name	Fines	Positions
1.	Adil Abas	Rp 30 million	Director of Development
2.	Nursubagjo Prijono	Rp 53 million	Director of Operations
3.	WMP Simanjuntak	Rp 2,3 billion	Commissioner
4.	Widyatmiko Bapang	Rp 25 million	Company Secretary
5.	Iwan Heriawan	Rp 76 million	Project Coordinator SSWJ
6.	Djoko Saputro	Rp 154 million	Engineering Planning Coordinator
7.	Hari Pratoyo	Rp 9 million	Deputy Coordinator
8.	Rosichin	Rp 184 million	Employee
9.	Thohir Nur Ilhami	Rp 317 million	Investor Relation

Source: Bapepam-LK in www.hukumonline.com

According to Bapepam-LK chairman Fuad A. Rahmany, these penalties are set by

considering the pattern of transactions and the related access to inside

information. This case began from the significant decline in stock prices PGN in

the Indonesia Stock Exchange (before Jakarta Stock Exchange), which amounted

to 23.36 percent, from Rp9.650 (closing price on January 11, 2007) to Rp7.400

per stock on dated January 12, 2007. The declining of the stock price was closely

associated with the press release made by PGN previous day (January 11th 2007).

In a press release it was stated that there was a correction on the plan of the large

volume of gas to be supplied, starting from (at least) 150 MMSCFD to 30

MMSCFD.

In addition, the board also stated that the delay in this gas (in the context of commercialization), which was originally expected in late December 2006 was delayed into March 2007. The information being released is already known by the management of the PGN since September 12, 2006 (information about the decrease in the volume of gas) and since December 18, 2006 (the delay information of this gas). Both the information was classified as material information and may affect the stock price, it was reflect on the decline in stock prices PGN on January 12, 2007.

According Jogiyanto (2010) based on the type of events, this event is an announcement event is an announcement submitted by the company or other parties outside the company, for example government, regulators and other parties. The announcement of these events make the market react.

The market will react to the events that contain the information. An event can be described as a surprise or something unexpected. Something which is not a surprise or anticipated or expected earlier will not cause a reaction. The market reacted because of the events contain information or in other words, the event contains the economic value that can change the value of the company.

The market reaction of the events is proxied by the abnormal return and trading volume activity. The bigger the surprise, the greater the reaction of the market. To find out abnormal return of an event then the first thing to be observed is the return of its stock. Stock return is a benefit due to the changes in stock prices. The realized return or the return that have been happened (real return) associated with

the announcement by Bapepam-LK regarding PT Perusahaan Gas Negara has

been proven did insider trading can be seen in Table 2.

Table 2. The Data of PGAS Realized Return on Research Period.

Date	Return	Date	Return
26-10-2007	-0,010238908	03-12-2007	-0,00887574
29-10-2007	0,013793103	04-12-2007	-0,032835821
30-10-2007	-0,023809524	05-12-2007	-0,033950617
31-10-2007	-0,024390244	06-12-2007	-0,009584665
01-11-2007	0,007142857	07-12-2007	0
02-11-2007	0	10-12-2007	0,058064516
05-11-2007	-0,007092199	11-12-2007	0,006097561
06-11-2007	0,014285714	12-12-2007	-0,006060606
07-11-2007	0,038732394	13-12-2007	-0,018292683
08-11-2007	-0,013559322	14-12-2007	-0,01242236
09-11-2007	-0,013745704	17-12-2007	-0,034591195
12-11-2007	0,006968641	18-12-2007	-0,026058632
13-11-2007	-0,020761246	19-12-2007	0,003344482
14-11-2007	0,010600707	26-12-2007	0,036666667
15-11-2007	0,104895105	**27-12-2007**	-0,009646302
16-11-2007	0,003164557	28-12-2007	-0,003246753
19-11-2007	-0,006309148	02-01-2008	-0,016286645
20-11-2007	0,006349206	03-01-2008	-0,009933775
21-11-2007	0,006309148	04-01-2008	0,023411371
22-11-2007	0	07-01-2008	0,013071895
23-11-2007	-0,018808777	08-01-2008	-0,006451613
26-11-2007	0,031948882	09-01-2008	-0,006493506
27-11-2007	-0,012383901	14-01-2008	-0,019607843
28-11-2007	0,047021944	15-01-2008	-0,053333333
29-11-2007	-0,008982036	16-01-2008	-0,091549296
30-11-2007	0,021148036		

Source : www.yahoofinance.com

Besides stock returns there is market return which is a benefit from changes in the

Jakarta Composite Index (JCI). Jakarta Composite Index includes the movements

of price for common stock and preference stock. JCI began to be introduced since

April 1, 1983 with using the basic foundation (baseline) dated August 10, 1982.

The realized return of JCI related to the events of the sanctions announcement by

Bapepam LK for the PT Perusahaan Gas Negara (Persero) Tbk can be seen in

Table 3.

Table 3. The Data of Jakarta Composite Index (JCI) on Research Period.

Date	Return	Date	Return
26-10-2007	0,010695	03-12-2007	0,014358
29-10-2007	0,016423	04-12-2007	0,009538
30-10-2007	-0,00173	05-12-2007	0,005492
31-10-2007	-0,0073	06-12-2007	0,009877
01-11-2007	0,02314	07-12-2007	-0,00588
02-11-2007	0,002204	10-12-2007	0,00407
05-11-2007	-0,02145	11-12-2007	0,007419
06-11-2007	0,011092	12-12-2007	-0,00538
07-11-2007	0,011962	13-12-2007	-0,01435
08-11-2007	-0,01318	14-12-2007	-0,00569
09-11-2007	0,010996	17-12-2007	-0,02742
12-11-2007	-0,01321	18-12-2007	-0,00701
13-11-2007	-0,00662	19-12-2007	0,00444
14-11-2007	0,014189	26-12-2007	0,021283
15-11-2007	0,005182	**27-12-2007**	0,009265
16-11-2007	-0,01372	28-12-2007	0,002237
19-11-2007	-0,0082	02-1-2008	-0,00522
20-11-2007	-0,00829	03-1-2008	-0,00602
21-11-2007	-0,02333	04-1-2008	0,018464
22-11-2007	0,002298	07-1-2008	0,004058
23-11-2007	0,005775	08-1-2008	0,003321
26-11-2007	0,024644	09-1-2008	0,016022
27-11-2007	-0,00759	14-1-2008	-0,00703
28-11-2007	0,016724	15-1-2008	-0,02859
29-11-2007	0,010449	16-1-2008	-0,05045
30-11-2007	-0,00426		

Source : www.yahoofinance.com

In addition to using abnormal return, the reaction of capital market to the

information can also be viewed via the Trading Volume Activity (TVA). When

investors assess an event contains information so that such events will give an

effect in trading decisions above normal trading decisions. Budiarto and Baridwan

(2009) in Hutami (2015), said that the market reaction as a signal to the

information that there is a particular event can affect the value of the company is reflected in the changes on the price and trading volume that occurred. Stock with high trading volumes will generate a high stocks return (Chordia, 2000) in Hutami (2015).

Table 4. The Data of Trading Volume for PGAS on Research Period.

Date	Volume
07-12-2007	38,155,000
10-12-2007	117,975,000
11-12-2007	66,192,500
12-12-2007	26,360,000
13-12-2007	23,390,000
14-12-2007	12,407,500
17-12-2007	27,482,500
18-12-2007	38,587,500
19-12-2007	18,745,000
26-12-2007	17,280,000
27-12-2007	38,790,000
28-12-2007	26,745,000
02-1-2008	27,600,000
03-1-2008	12,870,000
04-1-2008	30,047,500
07-1-2008	31,952,500
08-1-2008	22,527,500
09-1-2008	18,087,500
14-1-2008	48,707,500
15-1-2008	51,900,000
16-1-2008	110,350,000

Source: www.yahoofinance.com

Based on the description above, the author is interested doing an event study research with title "**The Impact of The Announcement of Insider Trading Sanction on Abnormal Return and Trading Volume Activity (Case Study of PT Perusahaan Gas Negara (Persero) Tbk During The Period of October 2007 to January 2008)."**

B. Problem Formulation

From the background of existing problems, the issues to be discussed in this research is whether there is a siginificant difference between before and after the announcement of insider trading sanction to the abnormal return and its trading volume activity.

C. Objectives and Benefits of The Research

1. Research Objectives

   To find out whether there is a siginificant difference between before and after the announcement of insider trading sanction to the abnormal return and its trading volume activity.

2. Research Benefits

   2.1 For the development of knowledge, this research will give an input in the capital market.

   2.2 For companies, it is expected the presence of this study can provide information or input in an effort to improve the performance of companies that will ultimately benefit for stockholders.

   2.3 For academician, the result of this research will add to the literature in finance.

II. LITERATURE REVIEW

A. Definition of Capital Market in Indonesia

The definiton of capital market in the narrow sense according Sjahrial (2009) are activities that confront sellers and buyers of long-term funds, while in the broad sense Sjahrial (2009) defines the capital market is the overall financial system organized including commercial banks and all the intermediaries in financial management and securities, both short and long term.

The stock market is an activity related to the public offering and trading of securities, public companies relating to securities issuance, as well as instutions and professions related to securities. The capital market provide a wide range of other investment alternatives such as: saving money in the bank, buying gold, insurance, land and buildings, and so on.

The capital market acts as a liaison between investors and companies or government institutions through long-term trading financial instruments such as bonds, stocks and other (Rusdin, 2005). The role of capital markets in Indonesia, according Rusdin (2005) are:

1. The stock market is a vehicle for allocating funds efficiently. Investors can invest in several companies through the purchase of new securities offered or

traded in the capital market. Instead, the company can obtain the funds needed to offer long-term financial instruments through the capital market.

2. The capital market as an alternative investment. Facilitate capital market alternative investment by providing a number of advantages with certain risks.

3. Allows the investor to have a company that is healthy and has good prospects, should not only owned by a certain number of people, because ownership is widely spread will encourage the development of the company to be more transparent.

4. The implementation of the company's management in a professional and transparent. Society participation in the ownership of the company to encourage companies to adopt a more professional management, efficient and profit-oriented, so as to create a condition of "good corporate governance" and better gains for investors.

5. The capital market will increase the activity of the national economy. In the presence of capital market, companies will be easier to obtain funds, so it will push the national economy becomes more developed, which in turn will create vast employment opportunities, and increase tax revenues for the government.

The following are the law related to The Capital Markets:

The current legislation related to the capital market in Indonesia is as follows:

1. Law No. 8 of 1995 on the Capital Market.

2. The Government Regulation No. 45 and 46 of 1995 on the Implementation of
   the Capital Market and Examination Procedures in the Capital Market.

3. Decision of the Minister of Finance.

4. The Decision of Chairman of Bapepam.

5. The Stock Exchange Regulations.

B. Insider Trading

Insider trading is a term borrowed from the practice of stock trading that is not fair in the United States associated with the use of information that is confidential by corporate officers that because of their position can attract benefit, because the information is not provided to the public (Radjagukguk, 1992) in Wulandari (2009).

In relation with the investment activity in the capital market, the public can mean investors who buy or sell stocks publicly. Gains derived by officers are done by providing confidential information or knowledge to certain parties to make choices involved or not in the activity of buying and selling stocks.

Another possibility is information or knowledge that is used solely by officers had to buy or sell stocks of the company held with the purpose of personal gain. Such acts categorized as criminal acts in American law.

Insider trading in this case is one of crime in the capital market, the trade is carried conducted by parties classified as "insiders" by using company

information that has not been published (non-public information). Such

information is material information that has an influence on the stocks

development (Safitri 2007) in Wulandari (2009).

Indonesian Capital Market under the Capital Markets law also classifies insider

trading as a crime in the capital market, as regulated in the provisions of Chapter

95, Chapter 96, Chapter 97 (verse 1) and Chapter 98 of the Capital Markets law.

Chapter 95 contains

"The insiders of publicly listed companies which have inside information is
prohibited from buying or selling of securities:
1. Issuers or public company intended, or
2. Another company that undertake in transactions with issuers or public
enterprise concerned. "

Chapter 96 contains

"The insiders as referred to Chapter 95 are prohibited from:
1. Influencing others to make a purchase or sale of securities in question.
2. Providing inside information to any party who can be expected to use such
information to make the purchase or sale of securities. "

Chapter 97 verse 1 reads:

"Each party seeks to obtain inside information from inside with unlawfully and
then obtain it will get the same ban imposed restrictions that prevail for insiders
referred to in Chapter 95."

Chapter 98 says:

"The company that has the inside information about the issuer or public
companies are prohibited from conducting issuer securities transactions or the
public company itself, unless if:
1. The transaction conducted not on his own, but on the orders of their clients; and
2. The securities company is not providing recommendations to clients regarding
securities concerned."

From each Chapters it is clear that the activities in the capital market, the principle of which the most important is the principle of disclosure or the so-called disclosure principle, is that

> "all the information about the state of its business covering the financial aspects, legal, management, and assets of the company to the public" (Gisymar, 1996) in Wulandari (2009).

The principle of disclosure or called Disclosure Principle shall be applied to companies that go public, this is because companies that already go public should carry out the public interest and must provide protection to investors. Many fundamental changes that must be made by the issuer (party that is an individual, company, joint venture, association, or organized group conducting public offering), ranging from legal review (a review from a legal perspective), financial review (review of financial terms) to other business aspects. Therefore, if a company wants to be a company that meets international standards, then there is no alternative except to disclose (Suta, 2000) in Wulandari (2009).

Wulandari (2009) noted that insider trading is a form of securities transactions that prohibited. This is caused by:

1. Insider trading is harmful to the mechanism of fair and efficient markets. This will result in:

   1.1 Establishment of fair prices (informed market theory). The price formation is due to the lack of information that is evenly owned pre perpetrators exchanges, meaning that only owned by a person or group of people in particular who have access to insider.

1.2 Unfair treatment among market participants (market egalitarism theory or fair play).

1.3 Dangerous for the survival of the stock market. The loss of investor confidence in the exchanges will lead to changes in investment policy and ultimately the stock is no longer considered as an alternative source of financing on favorable terms.

2. Insider trading negatively impacting issuers. The loss of investor confidence in listed companies is one of the causes of the loss of investors' positive image, and if it happens it is difficult for issuers reclaim public sympathy.

3. The losses for investors. The loss was due to investors buying securities at a high price and sell it at a cheap price, so investors feel aggrieved and did not get protection.

4. Confidentiality was owned by companies (business property theory), it means that the secret of company itself can not be used arbitrarily to holders of material information, it will result in widespread economic loss for the company.

Insider trading is a technical term that is only known in the capital markets, which refers to the practice in conducting securities transactions using their proprietary information that has not been available to the public or investors. Definitions of insider trading was initially only recognize transactions made by insiders.

According to Black's Law Dictionary in Wulandari (2009) limit insider trading is

> "buying and selling of stocks by corporate officers, directors and stockholders who own more than 10% of the stock of the corporation listed on a national exchange. Such transactions must be Reported monthly to the Securities and Exchange Commission."

Another opinion expressed by FH Buckley, Mark Q. Connelly, imposes limits that

> "insider trading is pointing to the minimum securities transactions conducted by employees and directors of the company."

Meanwhile, according to the Capital Market Law Indonesia itself does not provide expressly restrictions on insider trading. Capital Market Law only imposes limits on the transactions that are prohibited, among others, insiders of issuers who have inside information are prohibited from doing business transactions over the sale or purchase of securities of issuers or other companies engaged in transactions with issuers or public companies concerned.

C. Market Efficiency

According to Hanafi (2004) to simplify the analysis, market efficiency can be grouped into three types, based on the type information. The three types are:

1. Weak Form of Efficiency

   The market is said to be efficient in the weak form if the price reflects past information. The implications of weak form efficiency is investor would not gain abnormal consistent with using past information.

2. Semi Strong Form of Efficiency

The market is said to be efficient in a semi strong if prices reflect the

information published. Examples of published information is the

announcement of the financial statements, the announcement of the contract

decision, the dividend announcement, the announcement of specific

regulations, and others. The implication of these conditions is the investor

does not get the consistent abnormal benefit with the use of the information

published.
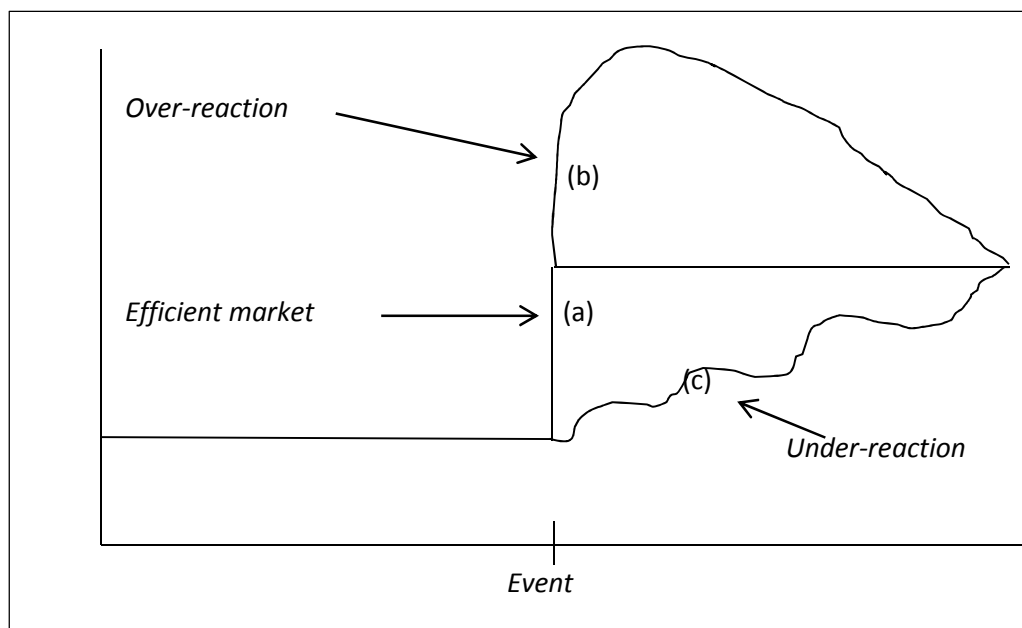
Figure 1. The pattern of the movement of stocks in event study (Hanafi, 2004)

Image (a) above demonstrate, at the time published price information directly

changed to adjust to new information. The adjustment occurs in full, so that

after the publication of this information, the price becomes stable again. Such

a pattern is the pattern expected if the efficient market in the form of a strong

half. In addition to the efficient market, there are two possible deviations

from the scenario depicted by the efficient market.

2.1 There is a possibility the market overreact (overreaction). If there is good

news, the price rise too high of an increase should be. In the following

days, the price will turn (down) to the increase in the price reflect the

increase in value. Line (b) describe the situation of reactions. For bad

news, prices will fall more sharply than it should be. Then in the

following days, the price will start to rise again (a process of reversal)

until the new equilibrium price formed.

2.2 There is a possibility the market reaction occurs slowly. The adjustment

does not happen quickly. Line (c) describe the situation when the price

reaction does not entirely occur during the announcement of the news.

Price moves up slowly until prices become stable (information entered

fully in price).

3. Strong Form of Efficiency

The market is said to be efficient in the strong form if prices reflect the

personal information or it can be called private information, as well as other

information (published and past). Personal information (inside information) is

information published. Usually the information is only circulated among

insiders (insider information) is information that has not been published.

Usually the information is only circulated among insiders, such as the directors

of the company. The implications of these conditions are the investor can not

earn abnormal profits by using the inside information, and also all of the

existing information. Of course, this kind of efficiency is a form of extreme
efficiency. Because of that insider trading is prohibited in most countries. One
reason is that insider trading is unfair for those who do not have inside
information. In other words, the perpetrator who have inside information had
steal start.

According to Fama (1991) in Gumanti and Utami (2002), the examination of
market efficiency, especially in the semi strong form called event study. Jogiyanto
(2000) in Meliza (2011) said the event study is a study of the market reaction to
an event that its information is published as an announcement.

The study examined the events due to the market reaction to an event. The market
will react to the events that contain the information. An event can be described as
a surprise or something unexpected. Something that is not a surprise or anticipated
or expected earlier will not cause a reaction. The market reaction to events is
proxied by the abnormal return. The bigger the surprise, the greater the reaction of
the market. Abnormal return of zero indicates that the market does not react on the
incident. If the markets react on the incident, it will obtain the abnormal returns
significantly different from zero. Signs of positive or negative abnormal return is
indicate the direction of the reaction because the event is good news or bad news.

Events or information regarded as good news or bad news linked to the economic
value it contains. If an event or information containing the economic value
increase (decrease) the value of companies, it is categorized as good news (bad).
Good news events (bad) is expected to be reacted positively (negatively) by the
market. In this study, the type of event in question was the type of event

announcements, the source of the event is the event from outside the company since the announcement relating to law and government. Judging from the impact of events, these events would have a specific impact on certain companies, namely PT Perusahaan Gas Negara (Persero) Tbk. Events announcements imposition of sanctions on companies doing insider trading clearly belonged bad news events (bad news) because it decreases the value of the company.

According Jogiyanto (2010) there are four categories of types of event studies research :

 1. The information content.

2. Market efficiency.

3. Model evaluation.

4. Metric explanation.

The first category event study is used to test the information content of an event. If an event or information is contain an information, it will be responded by the market indicated by the presence of abnormal returns. The second category of an event is to test the market efficiency. Testing the efficient market is the continuation of testing the information content.

 Testing the efficient markets is to test the market reaction speed. A market can called efficient market in information side if an event or the information reacted with great and quickly by the market. The third category is the study evaluating the models used in the event study to determine which model is most appropriate for the particular condition. The fourth category of this research is to try to

explain the cause of further market reaction. This study uses abnormal return as the dependent variable and variable causes, such as the characteristics of the company as dependent variables to explain the occurrence of abnormal returns itself.

Jogiyanto (2000) in Meliza (2011) said the event study can be used to test the information content of an announcement and can also be used to test the semi strong form market efficiency.

Jogiyanto (2000) in Meliza (2011) also says that testing the information content and testing of market efficiency in semi strong form are the two different testing form. Testing information content is intended to see the reaction of an announcement. If an announcement contains information, it is expected that the market will react at the time of the announcement is received by the market.

The market reaction can be measured by using the return as the value of changes in prices or by using abnormal return. If used abnormal return, it can be said that an announcement containing the information content will give abnormal return to the market. Otherwise if it does not contain the information, then it will not give abnormal return to the market as shown in Figure 2 below:

Event	Market reaction to the content of information	Result

There is
Abnormal Return

THERE IS INFORMATION CONTENT

The events Announcement

There is no
Abnormal Return

THERE IS NO INFORMATION CONTENT
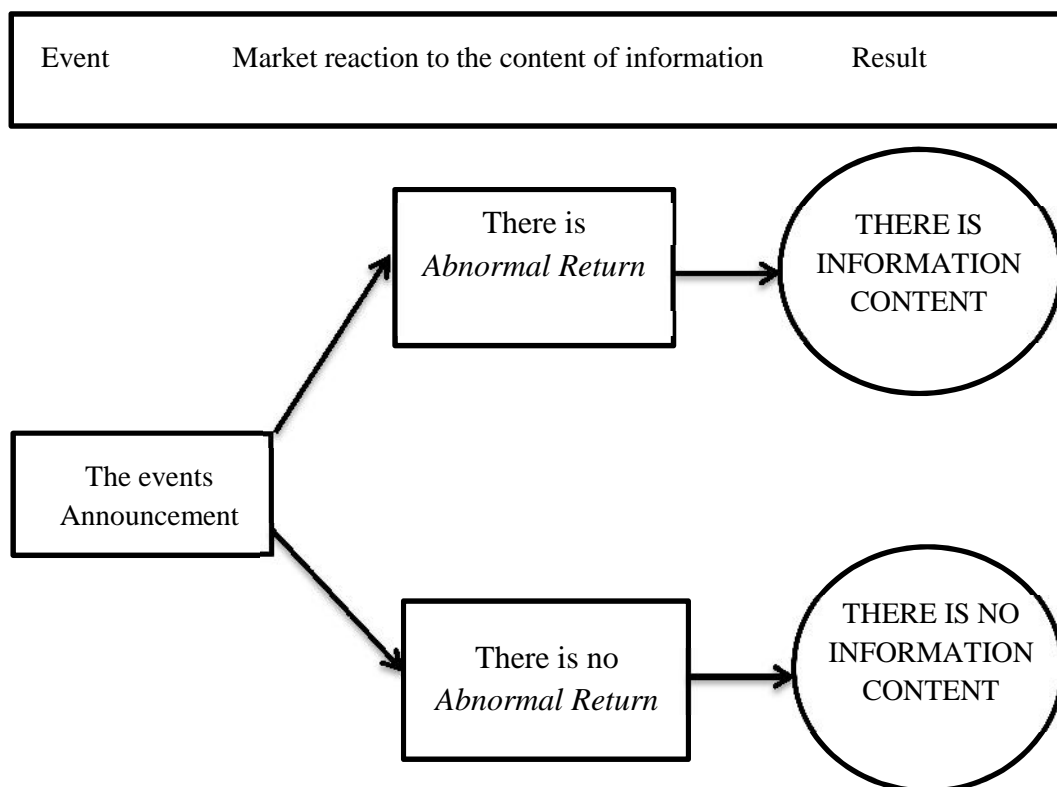
Figure 2. Information Content of An Announcement.

Testing information content just to test the reaction of the market, but did not test how fast the market to react. If the test involves the speed of reaction of the market to absorb the information that made public, then this test is a test of market efficiency in information semi strong form. The market can be said to be an efficient in semi strong form if there are no investors who acquire abnormal return of information announced or if there are abnormal returns, then the market should react quickly to absorb the abnormal return towards the new equilibrium price.

D. Return of Stocks

The base price of a stock is very closely related to the market price of a stock. A base price of stocks used in the calculation of stock price index. The stock price is a price formed on the market of buying and selling stocks. Most stocks prices differs from the value of stocks, the less information that can be obtained to calculate the value of the stock, the more distant the difference is (Jogiyanto, 2000) in Meliza (2011).

In investing in stocks, an investor always expect any return or profit. Stock return is the rate of advantage that enjoyed by an investor on an investment that their had been done (Robert Ang, 1997). In the theory of capital markets, the rate of return received by an investor from stocks traded in the capital market (stocks of go public companies) usually termed as return. In the stock market does not always promise a definite return for investors. However, some components of stock returns that allow investors to get the benefit is dividends, bonus stocks, and capital gains.

Components of a return consists of two types of current income and capital gains (profits the price difference). Current income is a gain obtained through periodic payments such as interest payments on deposits, bond interest, dividends and so forth. Also called current income means the profit earned is usually in the form of cash or cash equivalents, so it can be cashed quickly (Robert Ang, 1997). The second component of the return is the capital gain, the profit received due to the difference between the selling price and the purchase price of an investment instrument. Of course, not all investment instruments provide a return component

in the form of capital gain or capital loss. Capital gain is highly dependent on the market price of an investment instrument is concerned, which means that the investment instruments sold out on the market. Due to the existence of trade then there will be changes in the value of an investment. Investment that can provide capital gains, such as bonds and stocks, while the component that does not give a capital gain return such as certificates, deposit, savings and so on.

To get a certain return or profit, an investor must also consider the risks that they must cover if their wants to obtain a certain return. Return and risk are two things that can not be separated, because of a considerations of an investment is the trade-off of these two factors. Return and risk has a positive relationship, the greater the risk to be borned, the greater the return that should be compensated, as well as conversely.

According Jogiyanto (2000) return the results obtained from the investment. Return can be realized return that has occurred or that the expected return has not yet occurred but which are expected to occur in the future.

1. Realized Return

    According Jogiyanto (2010), realized return is the return that has occurred. Realized return calculated using historical data. Realized return is important because it is used the basis for determining the expected return and risk in the future. In the context of the event study, realized return is a real return happens. Return can actually be a total return, relative return, logarithmic relative returns and better adjusted returns adjusted for inflation or adjusted to

the exchange rate of other currencies. An event study reasearch can select one of these kinds of real return calculation.

1.1 Total return

Total Return is the overall return of an investment in a particular period. Total return is often referred to return only. Total return consisting of capital gain (loss) and yield as follows.

$$\text{Return} = \text{Capital gain (loss)} + \text{Yield}.$$

Capital gain or capital loss is the difference of the price of the securities to the price of that last period:

$$\text{Capital Gain or Capital Loss} = \frac{Pt - Pt-1}{Pt-1}$$

For stocks, the yield is a percentage of the value of dividends on stock prices earlier period. For the ordinary stocks that pay periodic dividends amounting Dt rupiah per share, the yield is equal to Dt / Pt-1 and total return can be expressed as:

$$\text{Stock Return} = \frac{Pt - Pt-1 + Dt}{Pt-1}$$

1.2 Real Return

Total return can be negative or positive. Sometimes, for certain calculations, such as geometric mean using rooting calculations, we need a return that should be positive. Real return can be used, by adding a value of 1 to the total return value as follows:

$$\text{Relative return} = (\text{Return Total} + 1)$$

Or:

$$\text{Relative Return} = \frac{Pt - Pt - 1 + Dt}{Pt - 1} + 1$$

1.3 Logarithm Real Return

Many capital market research using the data relative return. The reason is
these studies using statistical tools that have the classic assumption that
the data should be normally distributed. Usually the stock return data is
not normally distributed. To be able to use statistical tools that assume a
normal distribution of data (ex. using regression), then the stock return
data that not normally distributed needs to be transformed in order to
become a normal distribution. One technique that is widely used is the
logarithmic transformation. The value of logarithm relative return is:

$$\text{Real Return logarithm} = \log\left(\frac{Pt + Dt}{Pt - 1}\right)$$

1.4 Inflation Adjusted Return

Return discussed earlier is the nominal return that only measures the
change in the value of money but does not consider the level of
purchasing power of the currency value. To take this into account,
nominal returns need to be adjusted for inflation exist. This return called
the real return or inflation adjusted return as follows:

$$\text{RIA} = \frac{(1+R)}{(1+IF)} - 1$$

notation:

RIA = inflation adjusted return

R = nominal return,

IF = rate of inflation.

1.5 Exchange Rates Adjusted Return

International diversification is now increasingly discussed, because such diversification can reduce risk levels which had been could not be lowered again due to domestic diversification. If the investment is made abroad, the obtained returns need to be adjusted to the prevailing currency exchange rate as follows:

$$REA = \left[RR \cdot \frac{\text{Final Value Currency Domestic}}{\text{Initial Value Currency Domestic}} \right] - 1$$

2. Normal Return or Expected Return

According to Jogiyanto (2010), abnormal return calculated from the difference between the actual return to normal return or expected return and to calculate the number of normal return or expected return required a model for estimate it. Normal return is the return which should be obtained if there is no event. Due to the fact that an event occurs, then return that happens is not normal return again, but the actual total return. Because the normal return does not occur, then the normal return is necessary estimated or expected. Normal return

estimated by assuming if the event will not occur. Therefore, normal return is also called the expected return or estimated returns.

Some models can be used to calculate the normal returns or expected return. The models are commonly used in studies to calculate the return to normal (normal returns) or the expected return (expected return) can be grouped into three categories:

2.1 Model Without Risk Adjustment

Models without adjustment in risk is not considered in estimating normal return. The model that include in this model are:

2.1.1 Mean-Adjusted Model

Mean adjusted model assumes that the expected return is constant equal to the previous average realized return in estimation period, as follows:

$$E(Ri, t) = \frac{\sum_{j=t3}^{t4} Ri, j}{T}$$

notation:

E (Ri, t) = the expected return to the companies i in the period

events t.

Ri, j   = realized return of the company i on the estimation period j

T   = length of the estimation period, it is from t3 to t4

2.1.2 Market Adjusted Model

Model market adjusted model considers that the best predictor for estimating the returns of a security is the market index return at that time. By using the estimated period to establish a model estimation, because the estimated return of the securities is equal to the return of a market index as follows:

$$E (Ri, t) = Rm, t$$

notation:

E(Ri, t) = the expected return to the companies-I in period t to the event.

 Rm,t = return period event to market-t can be calculated by the formula Rm,t = (JCIt - JCIt-1) / JCI t-1 with JCIt is Jakarta Composite Index to the period-t.

2.1.3 Random Walk Model

Random walk model assumes that the distribution of return data is random has no clear pattern so that making it difficult to use for expecting. Because it is difficult to use to expecting, it is necessary to choose a value that have the most opportunity to recur in the future as the value expectations. The most value that have the opportunity to recur in the future is the last value that happen, which is the one value from the previous period, so that this value is taken as the value of its expectations as follows:

$$E(Ri, t) = R_i, t\text{-}1$$

notation:

$E(R_i,t)$ = the expected return to the companies i in period t to the
event.

$R_i, t\text{-}1$ = return of the previous period.

2.2. Risk Adjusted Model

Risk adjusted model considering the risk into estimate normal return.The
models that belonging to this model are:

2.2.1 Market Model

Market model using market risk to adjust the expected return according
to risk level. Market model is often called the single index model
because it uses a market index.

Calculation of the expected return with this market model is done in
two stages: (1) Forming the expected model using realization data
during the estimation period and (2) Using this expected model to
estimate the expected return in the window period. The expected
models can be formed using the technique of OLS regression (Ordinary
Least Square) by the equation:

$$Ri, t = i + i. Rm, t + i, t$$

Notation:

Ri,t = realization return of securities i in the estimation period t

$\quad$ i $\quad$ = intercept for securities i

$\quad$ i $\quad$ = coefficient of slop which is a Beta of securities i

Rm,t = market return of period event t can be calculated by the formula

$\qquad$ Rm,t = (JCIt - JCIt-1) / JCI t-1 with JCIt is Jakarta Composite

$\qquad$ Index to the period-t.

2.2.2 Multi Index Model

Multi index models in Jogiyanto (2010) is the development of a single

index model by replacing the return of the market with many market

return of some index as follows:

$$Ri, t = \ i + \ _{1i}I_{1t} + \ _{12}I_{2t} + ... + \ ni\ Int + \ i,t$$

Index I_{1t} is a multi index, for example is the market return of sectoral

indexs. IDX can be used for example in the return market from each

sector there.

2.2.3 CAPM Model

CAPM (Capital Asset Pricing Model) often used to estimate the returns

of a security because this model is also used market risk to adjust the

expected return. The risk that used in CAPM is the market risk or

systematic risk as measured by beta. Standard form of the first time

develop separately by Sharpe (1964), Lintner (1965) and Mossin

(1969), so this model is often called Sharpe-Lintner –Mossin CAPM form. The formula of the CAPM (Capital Asset Pricing Model) is as follows:

$$E(R_i, t) = R_f, t + \beta_i, t (R_m, t - R_f, t)$$

Notation:

$E(R_i,t)$ = the expected return to the company-i in estimation period t

R_f, t = risk-free return period t.

β_i,t = beta of the company i period t.

R_m, t = market index return in estimation period t can be calculated by the formula $R_m,t = (JCI_t - JCI_{t-1}) / JCI_{t-1}$ with JCI is Jakarta Composite Index.

E. Abnormal Return

Event study analyzing abnormal return of securities that may occur around the announcement of an event. Abnormal returns or the excess return is the excess of the return that is really going to return to normal. Abnormal returns is the difference between the return actually happens with the expected return that can be calculated as follows:

$$AR_i, t = R_i,t - E(R_i,t)$$

notation:

AR$_i$,t   = abnormal return of securities i in event period t.

R$_i$,t   = actual return that happen for the securities i in event period t.

E(R$_i$,t) = expected return of securities i for the event period t.

G. Trading Volume Activity (TVA)

Trading Volume Activity (TVA) is an instrument that can be used to look at the capital market reaction to information through trading volume activity parameter (Marwan Asri and Faisal, 1998) in Pramana and Mawardi (2012). The development of trading volume activity reflects the strength between supply and demand which is a reflection of the investors' behavior (Robert Ang, 1997). The rising of trading volume represents the increase in trading activity of investors in the exchange. Increasing of supply and demand volume for a stock, the greater the influence on stock price fluctuations in the exchange, and the increasing volume of trading shows the stock's interested in the community so that it can bring impact on rising prices or stock returns. Trading Volume Activity (TVA) is also one of the indicators to see the liquidity of a stock. Beaver (1981) in Primastono (2006) claim things that indicate changes in the liquidity of the stock is trading volume, change of ownership, and changes the frequency of transactions.

Mathematically Trading Volume Activity (TVA) can be formulated as follows:

$$TVA = \frac{Total\ securities\ i\ traded\ at\ t\ time}{Total\ securities\ i\ outstanding\ at\ t\ time}$$

Robert Ang (1997)

Trading Volume Activity is a ratio between the number of stocks traded at certain times of the number of stocks outstanding at any given time. The number of stocks issued is the number of stocks when the company is doing issuance of stocks.

H. **Review of Empirical Research**

No.	Researcher	Event	Variable and Research Method	Result
1.	Gunthorpe (1997) in Jogiyanto (2010)	Capital Markets Penalize Public Companies for Business Practices Unethical	Average Abnormal Return and Event Study	The research's results show that market events react quickly during the first day on day 0 with negative average abnormal return. These results indicate that the market penalize public companies that really acted unethically. This rapid market reaction is only in a single day (day 0) indicates the market is efficient in carrying semi strong form.
2.	Ilyas (2011)	Indomie Withdrawal News In Taiwan On August 5 To October 22	Abnormal Return and Event Study	The research found there was no significant difference in abnormal return. Abnormal return which did not differ between the information of Indomie withdrawal in Taiwan has no effect on the abnormal return of PT Indofood Sukses Makmur Tbk (INDF).

Review of Empirical Research (Cont.)

3.	Meliza (2011)	The Substitution of The Director of PT Bank Mandiri Period April to June 2010	Abnormal Return and Event Study	The results indicate that there was no significant difference in abnormal return. Abnormal return which did not differ between before and after the turn of the President Director of PT Bank Mandiri Tbk indicates that this information does not affect the abnormal stock return BMRI.
4.	Lasmanah and Bagja (2014)	Stock Split at Indonesia Stock Exchange Period 2010-2013	Average Abnormal Return , Trading Volume Activity and Event Study	There was no significant difference between the abnormal return and trading volume activity before and after stock split event on companies listed at IDX period 2010-2013.

Source : Published Journal

The Similarities and differences between this research with previous studies are:

1. Most of the previous research did not use a Trading Volume Activity as a variable to measure the market reaction. They only use the abnormal return in measuring market reaction.

2. The topic of Gunthrope research almost same to this research, the difference is the sample that Gunthrope used was the foreign companies in the United States, and the sample size was 69 companies, whereas in this study there is only one company.

3. The research by Ilyas (2011) and Meliza (2011) have similarity with this study, it is the sample is only one. However, the thing that makes it differ is the topic or event that is discussed. There is a difference between the expected return.

calculation model of this research with the research Meliza (2011) that if

Meliza (2011) used the Market models, this research uses CAPM models.

4. The similarity of this study with the research by Lasmanah and Bagja (2014) is

equally calculate abnormal return and trading volume activity, but the

difference is Lasmanah and Bagja (2014) used the Average Abnormal Return,

while this study is not, and topics, and the calculation of its expected return

was different.

I. Hypothesis Development

Return is the result obtained from the investment. The return may be actual return, it is a return that already occurred and then expected return, it is a return that has not happened, but that is expected to occur in the future (Jogiyanto, 2010).

Stock return is assumed to change when there are new information and its absorbed by the market. One of this information is the announcement of insider trading sanction. Testing the event of the announcement of insider trading sanction done by event study that is a study that examines the market reaction to an event.

The capital market' reaction to the content of the information in an event can be measured by using the return as a change value of the price or abnormal return. The Abnormal return which is the reaction of the market is the difference between the actual return minus the normal return (Jogiyanto, 2010).

The actual return is the return that has occurred. While the normal return is the return if the event that is researched does not happen. If a particular event which happens contains good news will have an impact on the increase in abnormal return, and will affect a decrease in abnormal return when the information is considered to be bad news.

Based on the description above about the abnormal return so the hypothesis that proposed by the author is:

H1: Allegedly, there is no significant difference on the abnormal return before and after the announcement of insider trading sanction.

Trading Volume Activity (TVA) is an instrument that can be used to look at the capital market reaction to information through trading volume activity parameters. If the event of the announcement of insider trading sanction on PT Perusahaan Gas Negara (Persero) Tbk contain material information so it will affect the stock, it is seen from the changes in trading volume activity. The magnitude of this effect is reflected in the magnitude of the changes that occurred in the trading volume activity.

Trading Volume Activity is a ratio between the number of stocks traded at Certain times of the number of stocks outstanding at any given time, after that the TVA before the announcement compared with TVA after the announcement. When there is a significant difference means that the event of the announcement of insider trading sanction on PT Perusahaan Gas Negara (Persero) Tbk affect the trading volume activity.

Based on the description above about the trading volume activity so the hypothesis that proposed by the author is:

H2: Allegedly, there is no significant difference on the trading volume activity before and after the announcement of insider trading sanction.

Based on the background, problem formulation, research objectives, and hypothesis above, so that it can described into a framework as follows :

Capital Market

⇩

PT Perusahaan Gas Negara (Persero) Tbk Doing *Insider Trading*

⇩

Sanctions Announcements because of Have Proven Conduct an Insider Trading

⇩

Liquidity of Share	**Return of Share**

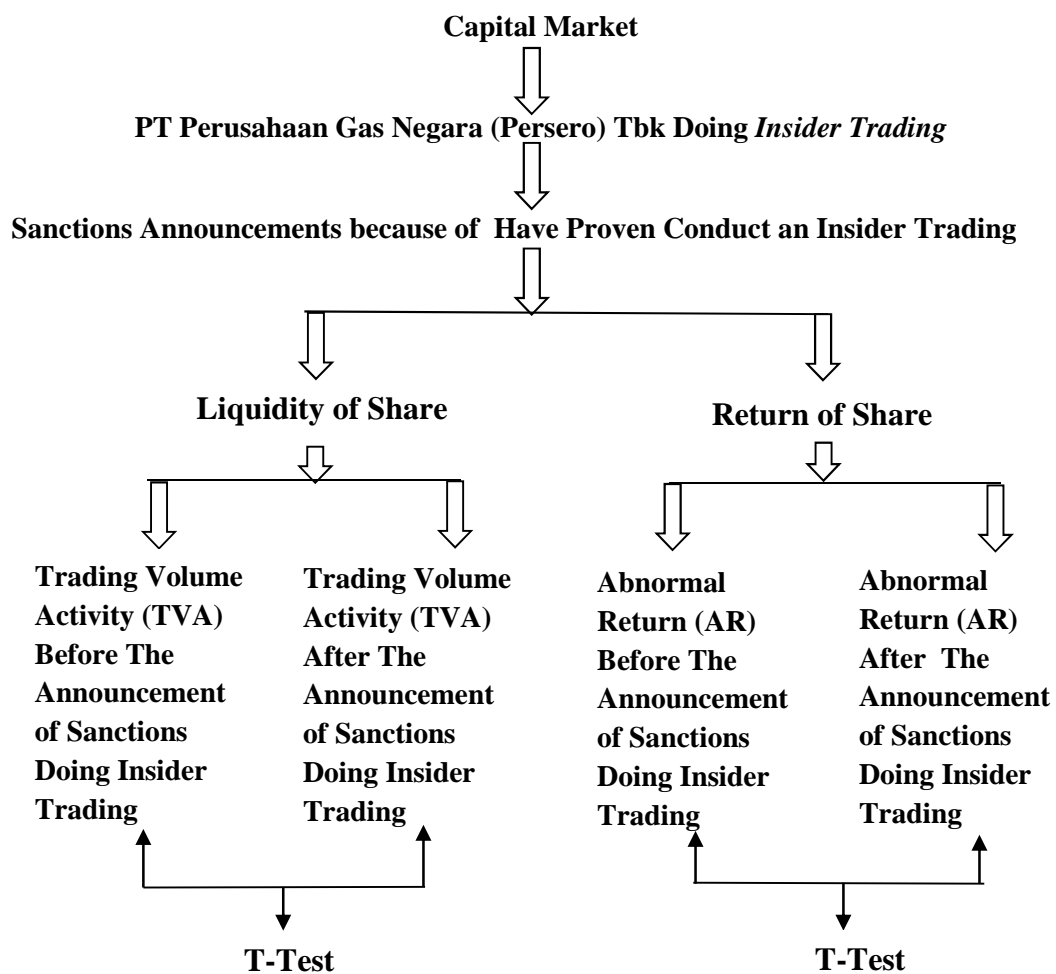| **Trading Volume Activity (TVA) Before The Announcement of Sanctions Doing Insider Trading**	**Trading Volume Activity (TVA) After The Announcement of Sanctions Doing Insider Trading**	**Abnormal Return (AR) Before The Announcement of Sanctions Doing Insider Trading**	**Abnormal Return (AR) After The Announcement of Sanctions Doing Insider Trading**

T-Test   **T-Test**

Figure 3. The framework of the differences of Abnormal Return (AR) and
Trading Volume Activity (TVA) before and after the announcement of
insider trading sanction.

III. RESEARCH METHODOLOGY

A. The Nature of Research

Research that conducted is an event study that looked at the effect of an event at a certain period. In this case the event that will be observed is about the announcement of the insider trading ssanction to the nine people (insiders) of PT Perusahaan Gas Negara as a result of doing insider trading with 51 days as the total observation period, 30 days estimation period,10 days before the event for the window period, one day when the event occurs and 10 days after the event.

B. Data Types and Sources of Data

The type of data used in this research is quantitative data or secondary data. This data derived from other parties that have been collected and processed into data for the analysis purposes, which obtained through the internet from the website: www.idx.co.id, www.yahoofinance.com and www.bi.go.id. The data that required is the daily data:

1. The development of the share price (closing price) PGAS.

2. The development of Jakarta Composite Index during the time period.

3. The BIC (Bank Indonesia Certificates) data during the window period.

C. Data Collection Techniques

1. Research Literature

Literature research conducted by collecting and reading from some literature, references and financial journals both in the form of books, newspapers, or on the Internet, and then study the theories related to this research.

2. Field Research

Field research conducted by visiting the Capital Market Reference Center at the Indonesian Stock Exchange. The method used in this field of research is the method of documentation, it is data collection techniques performed by recording the data owned by the company in accordance with the purposes of the discussion in this study. Data obtained from the website: www.idx.co.id, www.yahoofinance.com and www.bi.go.id .

D. Object and Time of The Research

1. Research Object

The object of this research is PT Perusahaan Gas Negara (Persero) Tbk. This study analyzed the event of the announcement of insider trading sanctions to the nine people (insiders) of PT Perusahaan Gas Negara (Persero) Tbk will affect the abnormal return and the trading volume activity of PT Perusahaan Gas Negara (Persero) Tbk with stock code PGAS.

2. Research Time

The research time conducted on October 26, 2007 to January 16, 2008.

E. Research Variable and Operational Definition

According to Sugiyono (2009) in Pramana (2012), the research variable is everything that defined by the researcher to be studied in order to obtain the information about it, then the conclusions can be drawn. Some of the types of variables are independent variable and the dependent variable. The independent variable is a variable that affect or be the cause of the emergence of the dependent variable. While the dependent variable is the variable that influenced or a variabel as the result of the independent variable.

1. Research Variable

The dependent variable in this research is the abnormal return and trading volume activity. While the announcement of insider trading sanction in this study as the independent variable and it will be examined on the two dependent variables.

2. The Definition of Operational Variable

To avoid the ambiguity of the meaning of the variables that will be analyzed in this research, then the operational definitions of the variables which used must be presented as follows:

No.	Variable	Definition	Measurement
1.	Abnormal Return	The difference between the return actually happens with the expected return. (Jogiyanto, 2010)	Ari, t = Ri,t - E(Ri,t)
2.	Trading Volume Activity	A ratio between the number of stocks traded at certain times of the number of stocks outstanding at any given time. (Yusuf et.al, 2009:799) in Wardhani (2013)	$\dfrac{Total\ securities\ i\ traded\ at\ t\ time}{Total\ securities\ i\ outstanding\ at\ t\ time}$ $\dfrac{t\ time}{at\ t\ time}$

Source : Published journal and literature.

F. Data Analysis Tools

1. Normality Test

Normality test is conducted to determine whether the regression, dependent variable and independent variable have a normal distribution or not. To avoid bias, the data that used must be distributed normally. A good regression model must have a normal or close to normal Data (Ghozali, 2011: 160) in Hutami (2015). If this assumption is violated, the statistical test become invalid for a small number samples.

Normality test in this study using a one sample Kolmogorov-Smirnov test and histogram graph analysis and P-P plot. In a test of one sample Kolmogorov-Smirnov test, the variables have asymp. Sig (2-tailed) below the significant level of 0.05, means that these variables have a normal distribution, and vice versa (Ghozali, 2011: 165) in Hutami (2015). So it can be tested by using paired samples t-test (Ghozali, 2011) in Hutami (2015).

If the inference is obtained that the variable has not normal distribution data, then it can not be passed into parametric statistical analysis, which in this case the relevan measurement tool is with the paired sample t-test. If the normality requirement doesn't fulfill, Foster (1986) in Jogiyanto (2010) suggests several solution to make the data distribution become normally distributed, which is by data transformation, trimming and winsorizing. The other way is the test can be performed using non-parametric test, that is Wilcoxon rank test (Santoso, 2006) in Hutami (2015).

2. The Event Study Analysis Technique

The analysis is performed using the event study analysis techniques to process and discuss the data obtained. The event study methodology is generally follow the following procedure (Elton and Gruber, 2005) in Hutami (2015) :

2.1 Collecting the sample of companies that have an event to be observed.

2.2 Determining the exact day or date of the announcement and determine as day 0.

2.3 Determining the research period.

2.4 For each sample company can been seen from its return and trading volume activity in each unit period (daily, weekly or monthly)

2.5 Calculating the abnormal return of return that has been obtained for each company.

2.6 Calculating Trading Volume Activity for each firm.

2.7 Calculating the average abnormal return and Trading Volume Activity for each unit period (daily, weekly or monthly) for the entire sample.

The model that used to estimate the expected return is Capital Asset Pricing Model (CAPM). Unit research period is used daily. In this research uses only one sample of PGAS so the average abnormal return, does not calculated.

3. The Observation Period

The observation period contain two type of period. There are estimation period and window period. The estimation period (estimation period) generally is the period before the event period. The estimation period determined to calculate the actual return that will be used in the window period for calculating the expected return and eventually used in the calculation of abnorml return to this event Determining. Meanwhile, the event period is also called event window. The estimation period used in this study was 30 days before the window period. While the determined window period are 10 days before and 10 days after, one day event that occurred.

Estimation Period   Window Period

t-40   t-11   t-10   t0   t+10
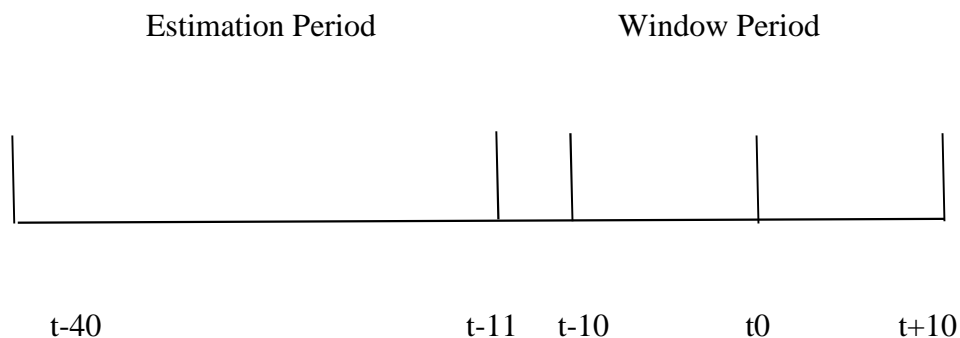
4. The Hypothesis Testing

4.1 The hypothesis testing 1

The first hypothesis in this research is there is no significant differences in the abnormal return before and after the announcement of insider trading sanction. The calculation is conducted as follows:

4.1.1 Calculate the actual return by using the formula:

$$R_{it} = \frac{Pt - (Pt-1)}{Pt-1}$$

notation:

Rt   = realized return on day t

Pt   = share price (closing price) on day t (in rupiah)

Pt-1   = share price (closing price) on day t-1 (in rupiah)

4.1.2 Calculate the market return by using the Jakarta Composite Index, it calculated based on market- adjusted model.

$$R_{mt} = \frac{JCIt - JCIt-1}{JCIt-1}$$

notation:

Rmt   = market return.

JCIt   = price of the securities market i in i period

JCIt-1   = price of the securities market i in j period at previous time

4.1.3 Calculating the rate of beta of the security with regressing (Ri-Rf) and (Rm-Rf) to form the CAPM model.

$$E\ (R_i) = R_f + (R_m - R_f)$$

Regressed into:

$$(R_i-R_f) = \quad (R_m - R_f)$$

notation:

$E(R_i)$ = Expected Return

R_f = Return of risk-free assets using SBI (Bank Indonesia Certificates)

R_m = Market returns (Jakarta Composite Index)

   = Beta of securities i

4.1.4 Calculating the abnormal return obtained from the difference between the expected return with the obtained return . To calculate the abnormal return from stock i on day t use the following formula:

$$AR_i,t = R_i,t - E(R_i,t)$$

notation:

AR_i, t   = abnormal return securities i in the event period t.

R_i, t   = actual return happens for the securities i in the event period t.

E(R$_i$, t) = securities expected return i for the event period t.

4.1.5 The calculation of statistical test using t-test. The paired t-test (paired t-test)

This test is one method of testing the hypothesis that the data used is not free (in pairs). The most characteristics that frequently encountered in pair case is an individual (object of study) are subject to a 2 pieces of different treatments. Although using the same individuals, the researchers still obtain 2 kinds of sample data, which is the data from the first treatment and the data from the second treatment. The writter use this test to find out if there are differences Abnormal Return (AR) before and after the event happened. Tests conducted using SPSS 22. Paired t-test is done by comparing the t-test with t-table as follows:

1.1 If the t count> t-table, then Ho is rejected and Ha accepted

1.2 If t <t-table, then Ho is accepted and Ha rejected

Comparing t count with t table can concluded based on statistical tests that have been used. The writter uses 95% as the confidence level or $= \frac{5\%}{2}$ (0,025).

4.2 Hypothesis Testing 2

The second hypothesis testing in this research is there is a significant differences on the trading volume activity before and after the announcement of insier trading sanction. The calculation is conducted as follows:

4.2.1 Calculating Trading Volume Activity (TVA) PGAS stock before and after the announcement of the sanctions imposition on the PT Perusahaan Gas Negara (Persero) Tbk by the equation:

$$TVA = \frac{Total\ securities\ i\ traded\ at\ t\ time}{Total\ securities\ i\ outstanding\ at\ t\ time}$$

(Yusuf et.al, 2009:799) in Wardhani (2013)

4.2.2 The calculation of statistical test using t-test. The paired t-test (paired t-test)

This test is one method of testing the hypothesis that the data used is not free (in pairs). The most characteristics that frequently encountered in pair case is an individual (object of study) are subject to a 2 pieces of different treatments. Although using the same individuals, the researchers still obtain 2 kinds of sample data, which is the data from the first treatment and the data from the second treatment. The writter use this test to find out if there are differences Trading Volume Activity (TVA) before and after the event happened. Tests conducted using SPSS 22.

Paired t-test is done by comparing the t-test with t-table as follows:

1.1 If the t count> t-table, then Ho is rejected and Ha accepted

1.2 If t <t-table, then Ho is accepted and Ha rejected

Comparing t count with t table can concluded based on statistical tests that have been used. The writter uses 95% as the confidence level or $= \frac{5\%}{2}$ (0,025).

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusion

Based on the research about the differences of abnormal return and trading volume activity before and after the event of the announcement of insider trading sanction can be concluded as follows:

1. The calculation results of the abnormal return over 10 days before the announcement obtained negative abnormal return on a t-7, t-6, t-5, t-4 and t-3. While the t-10, t-9, t-8, t-2 and t-1 obtained positive abnormal return. Meanwhile, the calculation results of the abnormal return over 10 days after the announcement obtained a negative abnormal return at t + 1, t + 2, t + 3, t + 6, t + 7, t + 8 t + 9, and t + 10. While at t + 4 and t + 5 obtained positive abnormal return. Positive abnormal return indicates that the market reacted positively to the announcement of events, and vice versa. From the normality data test's result, acquired the significance value more than 0.05 it tells that all the data are normally distributed.

2. The result of paired samples t-test for abnormal return indicates that there is no significant difference on the abnormal return before and after the announcement of insider trading sanction. The result indicates that the event of

the announcement of insider trading sanction is not an unexpected event, so the market (investors) have been anticipating the announcement of the event or within a longer period, the events of the announcement of insider trading sanction, the information has been absorbed by the market. When analyzed using efiiciency market theory, this condition tells that the market reaction can not be categorized as semi strong-form of efficiency, because the investor still get the consistent abnormal return with use the information published. The market can be categorized as semi strong-form of efficiency if the price at the time or when the news published (t_0), it directly changed to adjust to the new information (abnormal return at $t_0 = 0$)

3. The Results of paired samples t-test for the trading volume activity indicates that there is a significant difference on the trading volume activity before and after the announcement of insider trading sanction. This is because there was a significant differences between the number of PGAS's stock outstanding in 2007 and 2008 that are 4.539.885.805 in 2007 and 22.967.185.965 in 2008. It happens because of PT Perusahaan Gas Negara (Perero) Tbk listed its stock in larger amount than the previous year. The reason is in 2008 PT Perusahaan Gas Negara (Persero) Tbk will complete the path gas transmission pipeline project which was delayed in 2007. PT Perusahaan Gas Negara (Persero) Tbk forecasts that more investors will buy PGAS stock because that project.

B. Suggestions

The author proposes some suggestions for investors and future investors, companies as well as for further research. As for suggestions which would be presented as follows:

1. Investors and future investors who will take the decision to invest at the event, they should seek first about the clarity of the events that occurred, whether it will cause negative or positive sentiment for investors. If these events will lead to negative sentiment and severe systemic problem, and it is expected to be permanent, then the stock should be sold. If an event leads to positive sentiment and long last time then the stock should be detained until it is estimated to be in the top position.

2. Public companies should obey the existing regulations in the Law No. 8 of 1995 regarding capital markets, which is contain of the principle of openness. Any material information must be disclosed to the public, because the information can influence the investor's decisions. Insider trading is a crime in the capital markets, and can destroy the name of the company in the long run. Therefore, awareness of the importance of obeying the law should be owned by all companies, especially public companies that have been listed their stocks on the IDX, because they have a responsibility to the public.

3. For further research, this research used CAPM model in estimating the expected return, the next event study researchers are advised to try other models that still considering the risks, such as market model and multi-index models.

REFERENCES

Ang, Robert. 1997. *Smart Book : Indoneisan Capital Market*. Media Soft
    Indonesia, Jakarta.

Dermawan, Sjahrial. 2009. *Finacial Mangement*. Third Edition. Mitra Wacana
    Media, Jakarta.

Gumanti, Utami. Mei, 2002. *Market Efficiency Form and Its Examination*. Journal
of Accounting & Finance, Volume IV, No. 1.

Hanafi,M. Mamduh.2004.*Financial Management.* First Edition, First published.
    BPFE, Yogyakarta.

Hutami, 2015. *Abnormal Return and Trading Volume Activity Before and After
    Direct Presdient Election of 9th July 2014 (Case Study on LQ 45 Stocks).*
    Scripts of Faculty Economics and Business, Diponegoro University.
    Semarang.

Ilyas, Khairiah. 2011. *The influence of Indomie Withdrawal News in Taiwan
    Toward Return of PT. Indofood Sukses Makmur Tbk (Case Study period
    August 2010 till October 2010).*Management Scripts University of
    Lampung. Lampung.

Jogiyanto. 2010. Event Study : *Reaction test As a result of a Capital Markets
    Event*. First Edition, first published. BPFE, Yogyakarta.

Lasmanah, Bagja. April, 2014. *Abnormal Return and Stock Trading Volume
    Analysis on the Company Taking Stock Split at Indonesia Stock
    Exchange Period 2010-2013.* International Journal of Science and
    Research (IJSR), Volume II.

Meliza, Eka. 2011. *The Analysis of Abnormal Returnof PT Bank Mandiri Tbk Stock Post Substitution Director Period April to June 2010*. Management Scripts University of Lampung. Lampung.

Nasution, Bismar. 2001. *The Openess on Capital Market*. First Edition, first published by postgraduate program on Faculty of Law, University of Indonesia. Jakarta.

Pramana, Mawardi. 2012. *The Comparison Analysis of Trading Volume Activity (TVA) and Abnormal Return Before and After Stock Split*. Diponegoro Journal Management, Volume II, No. 1.

Primastono, Indra. 2006. *The Comparative Analysis of Cabinet Announcement Event nn Mutual Cooperation and United Indonesia Cabinet to The Reaction of Stock Prices And Stock Liquidity (Case Study on LQ 45 in The Stock Exchange Jakarta).* Thesis of Management Magister, Diponegoro University. Semarang.

Priyatno, Duwi. 2014. SPSS 22 Most Practical Data Processing. First Edition, first published. C.V Andi Offset, Yogyakarta.

Rusdin. 2008. *Capital Market*. CV Alfabet. Bandung.

Rica, Wiwik,Fitriani, September 2012, *The impact Substitution Finance Minister in 2010 against Abnormal Return Banking Companies Listed on the Stock Exchange*.E_Journal Binar Accounting. Volume 1, No.1.

Rider, Barry. *Global Trends in Securities Regulation: The Changing Legal Climate*. Dickinson Journal of International Law, volume 29. Spring 1995.

Suad, Husnan. 2003. *The Basics of Portfolio Theory*. Second Edition. AMP YKPN, Yogyakarta.

Supranto, J.M.A. 1992. *Capital Market Statistics*. Third Edition. PT Rineka Cipta. Jakarta.

Wardhani, Swastika. 2013. *The Reaction of Indonesia Stock Exchange Toward The Election Event of Jakarta's Governor Second Round 2012 (Event Study on The Stock Member of Index Kompas 100)*. Accounting Script of Faculty Economics and Business, Brawijaya University. Malang.

Wulandari, Dewi. 2009.*Insider Trading According to the Law of Capital Market.*Thesis of Law Faculty Airlangga University.Surabaya.

_____. PGN Consolidated Financial Statement 2007 & 2008. Accessded on November 11, 2015.

_____. www.yahoofinance.com: *PGAS Stock Price List*. October 2007 until January 2008. Accessed on December 16, 2015.

_____. www.yahoofinance.com: *JCI Price List*. October 2007 until January 2008. Accessed on December 16, 2015.

_____. www.hukumonline.com: Bapepam LK Reveals The Puppeteer of Insider Trading.December 2007. Accessed on August 24, 2015.