

An Empirical Study of IFRS Convergence Effect on Earning Manipulation in Indonesian Companies



UNDERGRADUATE THESIS

Submitted as Partial Requirement to Complete Undergraduate Degree
Faculty of Economics and Business
University of Diponegoro

Submitted by:

ATHUR TEDO BASUNDARA

12030110120111

FACULTY OF ECONOMICS AND BUSINESS

UNIVERSITY OF DIPONEGORO

SEMARANG

2014

THESIS APPROVAL

Author Name : Athur Tedo Basundara
Student Number : 12030110120111
Faculty/ Department : Economics and Business/Accounting

Thesis Title : **An Empirical Study of IFRS Convergence Effect
on Earning Manipulation in Indonesian
Companies**

Thesis Supervisor : Anis Chariri, SE, MCom, PhD, Akt.

Semarang, 13th March 2014

Supervisor

(Anis Chariri, SE, MCom, PhD, Akt.)

NIP. 196708091992031001

SUBMISSION

Author Name : Athur Tedo Basundara
Student Number : 12030110120111
Faculty/ Department : Economics and Business/Accounting

Thesis Title : **An Empirical Study of IFRS Convergence Effect
on Earning Manipulation in Indonesian
Companies**

Has been retained and declared in front of the Board of Reviewers on 20th March ,
2014 for fulfilling the requirement to be accepted.

Reviews Board :

1. Anis Chariri, S.E., MCom, PhD, Akt. ()
2. Dr. Darsono, S.E., MBA., Akt. ()
3. Shiddiq Nur Rahardjo, S.E., M.Si., Akt. ()



Certificate of Originality

I, Athur Tedo Basundara, hereby certify that this assignment is true and accurate to be my own work specially written for partial requirement to complete Undergraduate Program of Accounting and has not initially been presented in any other occasion. I bear full responsibility for my undergraduate thesis.

March 3rd, 2014

Athur Tedo Basundara

PREFACE

First of all, I would like to express my gratefulness to Allah SWT for giving me health, strength and ability to complete my bachelor thesis. Praise and salutation are precisely also upon the beloved of Prophet Muhammad SAW his family, his companions, and his followers until the end of the day.

After struggling in a few months full of immense effort, I finally completed this thesis entitled: **An Empirical Study of IFRS Convergence Effect on Earning Manipulation in Indonesian Companies**. However, I realize that all these process will not running smoothly without help from all related parties. Therefore, with humility and high admiration I would like to thank to:

1. Prof. Drs. Mohammad Nasir, Ph.D., Akt. and all of teachers and staffs for their knowledge, encouragement and support.
2. Prof. Dr. H. Muchamad Syafruddin., M.Si, Akt. as Chairman of the Accounting Department, Faculty of Economics and Business, University of Diponegoro.
3. Aditya Septiani, SE, M.Si, Akt as author's trustee in Accounting Department, Faculty of Economics and Business, University of Diponegoro.
4. Anis Chariri, SE., M.Com., Ph.D., Akt as great supervisor which constantly encourage, support, guide and giving valuable suggestions not only for this thesis but also the life guidance.
5. My beloved parents for the enormous support for everything that I've done, encouragement, suggestions and life guidance which makes me motivated to go beyond the limit and gain high bravery to catch all my dreams.
6. My amazing brothers for the priceless time, support, inspiration and motivation. Without your wise guidance I may ended up nothing.
7. The one and only my precious Benita Ariyani Putri who always accompany, help, giving advices and fully support in everything that I do.
8. My best friend Bob, thanks for the brotherhood, house, meal, drinks, bed and everything.
9. My best friend Bangkit for the spirit of competition and motivation.
10. All my friends and classmates in Accounting class of 2010, thanks for the togetherness, kindness, brotherhood and memories.
11. All EECC Rangers for all the memories and togetherness.

12. All of my KKN Kedungwuni friends, I hope someday we can realized what we have promised in farewell party. Thanks for the cooperation, memories and experience.
13. My best friends from EDISON Little Project: Cemal, Kandil, Mariana, Maja, Tayna, Lalita, Diego and Jordy. Thanks for the unbelievable journey, I hope we will meet again someday ☺
14. My superb awesome friends in LIMUN batch 4: Irfan, Godvin, Temi, Vicky, Fafa, Chika, Adis, Wildan and Fadhil. Thanks for togetherness, memories and best experience.
15. All of people who help me in completing this thesis which I cannot mention it one by one. Thank you very much.

I realize that this thesis yet far from perfect. Therefore, I will happily receive constructive critics and suggestions. I do hope that this thesis can be beneficial and useful for everybody who reads.

When you are inspired you get determined, when you are determined you'll going further.....

(Random Advertisement in London, UK)

Semarang, 3rd March 2014

Athur Tedo Basundara

12030110120111

ABSTRACT

This study aimed to obtain empirical evidence about the influence of IFRS Convergence effect towards earning manipulation practices in Indonesia. To detect earning manipulation this study used Beneish M-Score that was developed by Messod D. Beneish in 1999. This analysis tool used eight variables to determine the score.

The population of this study was all companies listed in Indonesian Stock Exchange (IDX) in two periods. Before IFRS period is determined by year 2006 and 2007, while the period after IFRS is determined by year 2011 and 2012. Sample consists of all companies which its data is available to be analyzed using Beneish M-Score. The total sample was 51 companies therefore the total reports is 102 reports. Data analysis was performed with normality test and hypothesis testing used Wilcoxon Sign-Rank test. Statistic program in this study used SPSS 21.

The results of this study indicated that IFRS Convergence has no significant effect to earning manipulation practices in Indonesia in period before IFRS and after IFRS in accordance with Beneish M-Score. Implication of this study shows that regulator needs to review IFRS Convergence since there is no significant different to previous PSAK in dealing earning manipulation.

Keywords: fraud detection, earning manipulation, IFRS convergence

ABSTRAK

Penelitian ini bertujuan untuk ^{vii} mendapatkan bukti empiris tentang efek konvergensi IFRS terhadap praktik manipulasi laba di Indonesia . Untuk mendeteksi manipulasi laba penelitian ini menggunakan Beneish M - Score yang dikembangkan oleh Messod D. Beneish pada tahun 1999 . Alat analisis ini menggunakan delapan variabel untuk menentukan skor.

Populasi penelitian ini adalah semua perusahaan yang terdaftar di Bursa Efek Indonesia (BEI) dalam dua periode . Periode sebelum IFRS adalah tahun 2006 dan 2007, sedangkan periode setelah IFRS adalah tahun 2011 dan 2012. Sampel terdiri dari semua perusahaan yang datanya tersedia untuk dianalisis menggunakan Beneish M - Score . Jumlah sampel adalah 51 perusahaan sehingga jumlah laporan adalah 102 laporan . Analisis data dilakukan dengan uji normalitas dan pengujian hipotesis digunakan uji statistik Wilcoxon Sign - Rank. Program yang dalam penelitian ini menggunakan SPSS 21 .

Hasil penelitian ini menunjukkan bahwa konvergensi IFRS tidak memiliki pengaruh signifikan terhadap praktik manipulasi laba di Indonesia baik di periode sebelum IFRS maupun sesudah IFRS jika diukur menggunakan Beneish M - Score . Implikasi studi ini menunjukkan bahwa regulator harus mereview Konvergensi IFRS karena tidak ada perbedaan yang signifikan dengan PSAK terdahulu dalam hal penanggulangan manipulasi laba.

Kata kunci : manipulasi laba , konvergensi IFRS , deteksi kecurangan

TABLE OF CONTENTS

	Page
TITLE PAGE	i
THESIS APPROVAL	ii
SUBMISSION	iii
CERTIFICATE OF ORIGINALITY	iv
PREFACE	v
ABSTRACT	vii
<i>ABSTRAK</i>	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF APPENDIX	xiv
 CHAPTER I INTRODUCTION	
1.1 Background.....	1
1.2 Problem Formulation.....	7
1.3 Research Objectives	7
1.4 Contributions of Study.....	7
1.5 Structure of Study.....	8
 CHAPTER II LITERATURE REVIEW	
2.1 Underlying Theories	10
2.1.1 Fraud Triangle Theory	10
2.1.2 Compliance Theory.....	13
2.1.3 Earning Manipulation	16

2.1.4	IFRS Convergence in Indonesia.....	19
2.1.4.1	IFRS	19
2.1.4.2	The Development of Indonesian GAAP(PSAK)	24
2.1.5	Beneish M-Score.....	26
2.2	Prior Researches	30
2.3	Theoretical Framework.....	32
2.4	Hypothesis Development.....	33

CHAPTER III RESEARCH METHODS

3.1	Research Variables and Operational Definition	35
3.1.1	Paired Variable.....	35
3.1.2	Control Variable.....	37
3.2	Population and Sample Determination	38
3.2.1	Population	38
3.2.2	Sample.....	38
3.3	Type and Source of Data	38
3.4	Data Collection Methods	39
3.5	Analysis Method.....	39
3.5.1	Descriptive Analysis	39
3.5.2	Normality	39
3.5.3	Wilcoxon Signed Rank Test	40

CHAPTER IV RESULT AND ANALYSIS

4.1	Research Object.....	41
4.2	Data Analysis.....	42
4.2.1	Descriptive Statistics.....	42
4.2.2	Normality Test	52
4.2.3	Wilcoxon Signed Rank Test	53
4.3	Discussion.....	55

CHAPTER V CONCLUSION

5.1	Conclusion	58
5.2	Limitations of Study	59
5.3	Suggestion for Future Studies.....	59
5.4	Research Implications.....	60

BIBLIOGRAPHY

APPENDIX

LIST OF TABLES

	Page
Table 2.1 List of Prior Researches	31
Table 4.1 Population and Sample Research	42
Table 4.2 Beneish M-Score Descriptive Statistics	43
Table 4.3 Eight Indexes Descriptive Statistics.....	44
Table 4.4 Indicated Earning Manipulator Companies Before IFRS (2006-2007) ..	46
Table 4.5 Indicated Earning Manipulator Companies After IFRS (2011-2012)	47
Table 4.6 Persistent Manipulator Descriptive Statistics	49
Table 4.7 Non-manipulator to Manipulator Descriptive Statistics	49
Table 4.8 Manipulator to Non-manipulator Descriptive Statistics	50
Table 4.9 Persistent Non-manipulator Descriptive Statistics.....	51
Table 4.10 Test of Normality	52
Table 4.11 Beneish M-Score Ranks.....	53
Table 4.12 Wilcoxon Sign Rank Test Statistics on Beneish M-Score.....	54
Table 4.13 Wilcoxon Sign Rank Test Statistics on Eight Indexes.....	54
Table 4.14 Benchmarking to the Beneish M-Score Model.....	57

LIST OF FIGURES

	Page
Figure 2.1 The Fraud Triangle	11
Figure 2.2 IFRS Convergence Roadmap in Indonesia.....	26
Figure 2.3 Theoretical Framework.....	33

LIST OF APPENDIX

Appendix A Converged PSAK from 2007-2012

Appendix B List of Sample Companies

Appendix C Data of Research Variables

Appendix D Result of SPSS 21 Output

CHAPTER I

INTRODUCTION

1.1 Background

Earning manipulation issue has been seen as a popular issue for the past 20 years. According to Financial Times in 2008 there were three huge cases related with corporate earning manipulation such as Tyco International whose its CEO Dennis Kozlowski was convicted in 2005 of misappropriating more than US\$400 million, WorldComm whose its co-founder and CEO Bernie Ebbers was convicted in 2005 of the company's false financial reporting caused a subsequent loss to investors amounting to US\$11 billion, and Kenneth Lay as CEO of Enron cooperation was indicted in 2004 of doing off-balance sheet and financial reporting earning manipulation that made its company coming to downfall with \$3 billion undisclosed loss. Thus phenomenon shows that earning manipulation issues can be a critical problem or even tear down a company.

In Indonesia, earning manipulation cases are also enormously big. For instance, in 2001 PT. Kimia Farma (one of the big pharmaceutical companies in Indonesia) overstated their raw material sales that made their income lower 24.7 % or 32.6 billion rupiah, and then in 2008 Century Bank CEO has manipulated their financial statement and make the state have to bailout them with total loss has reached around 9,15trillions rupiah (Cornila, 2009). This example showed that

the prevention and detection of financial earning manipulation have not been going well in Indonesia.

Earning manipulation is the part of fraudulent financial statement fraud that conducted by managers or preparers (Beest, 2009). Managers or preparer have an intention to provide misleading information to enrich or give benefit for some particular groups (Blue, 2002). They conducted this unlawful behavior by searching the cheating loopholes within accounting standard (Blue, 2002). Accounting standard supposed to be the guidance for the managers to prepare faithful financial statement for stakeholders. Therefore, in this case accounting standard is basically important to deter and detect earning manipulation.

From 1973, international community has developed international accounting standard as international guidelines for companies. International Financial Reporting Standard (IFRS) through its standard-setting body, the International Accounting Standards Board (IASB) want to be a single set of high quality, understandable, enforceable and globally accepted accounting standard (IFRS Foundation, 2013). In other word, IASB want to develop international accounting standards which guide companies to give faithful representation in preparing financial statement.

The adoption of IFRS (International Financial Reporting Standards) has been widely accepted and adopted by many countries. According to KPMG progress report in 2008 IFRS has been adopted in 120 countries of the world such as the European Union, India, Hong Kong, Australia, Malaysia, Pakistan, Russia, Chile, South Africa, Singapore and Turkey. Furthermore, United States as the

country who have high influence in setting the accounting standard (which is U.S GAAP) also accommodate IFRS in convergence status by resulting convergence project in 2012 due to the market needs (KPMG, 2012).

Indonesia as one of emerging economy in South-East Asia started to follow IAS (accounting standard made by IASC) since 1995 but it was accelerated after G-20 forum. As G-20 member, Indonesia has made agreement in G-20 forum in Washington D.C, November 15th 2008 to converge IFRS and national accounting standard (SAK). In 2006 IAI (Indonesia Institute of Accountants) has made a roadmap to accelerate the convergence project. IAI plans to have convergence project from 2008 to 2012. Recently, according the Head of DSAK-IAI (Indonesian Financial Accounting Standard Board) on IFRS Regional Policy Forum, June 5th 2013, IFRS has been completely converged even though the commitment to enforce is still low.

There are many reasons why IFRS can be widely accepted. According to IASB the main reason is to enforce comparability in the financial report around the world and boost the quality of the information. In addition, The Institute of Chartered Accountants of Scotland in 2006 find that IFRS can also boost professional judgment, reduce complexity, more represent economic reality and prevent earning manipulation or dishonest practice.

Some prior researches found optimistic evidence that IFRS can actually deter earning manipulation. For instance, IFRS proved successfully deter the earning manipulation in European Union (Aubert & Grudnitski,2012) (Ballas, Skoutela, & Tzovas, 2010) (Verriest, Gaeremynck, & Thornton, 2010). In other

word, IFRS has potentials to deter earning manipulation not only in theoretical side but also in practical way.

On the other hand, there are some researchers who oppose the use of IFRS regarding to earning manipulation. First is from professional judgment element. This element will be present to vary degrees in all of possible types of financial statement earning manipulation schemes, which are aimed at deceiving parties that rely on financial statements (Cancino, 2010). Second, from the practical side there are a different of results regarding to the IFRS and earning manipulation. Earning manipulation has intensified since the adoption of IFRS in Europe with sample of non-financial firms listed on 11 EU stock markets (Calao & Jarne, 2010). Furthermore, on his research Beest (2010) said that:

“These results suggest that changing the discretion in accounting standards may affect the nature of earnings manipulation, but is unlikely to prevent earnings manipulation applications.”

On the other word, Beest (2010) found that actually IFRS is not preventing earning manipulation but only the natures.

Thus pros and cons about the connection between IFRS and earning manipulation are inconclusive. First, thus researches did not compare same industries which make significant deviance in results. Second, there are still limited empirical studies about the connection between IFRS and earning manipulation in developing countries. Whereas, accounting standards in developing markets are typically different from those of developed markets, which make it harder for investors to judge the true performance of a firm in a

developing financial market and thus make rational investment decision (Ismail *et al*, 2013) .

This research is focused on providing an empirical study between IFRS and earning manipulation with sample from all companies both from financial institution or non-financial institution that listed in Indonesian Stock Exchange (IDX) Indonesia using Beneish financial ratio or well-known as Benesih M-Score.

Beneish M-Score was introduced by Messod D. Beneish back in 1999. Beneish M-Score represents the model's variables to capture either the effects of manipulation or precondition that may prompt firms to engage in earning manipulation (Beneish, 1999). This model consist of the combination of eight ratios that capture either financial statement distortions that can result from earning manipulation which are DSRI (Day Sales in Receivables Index), AQI (Asset Quality Index), DEPI (Depreciation Index) and TATA (Total Accruals to Total Assets) or indicate a predisposition to engage in earning manipulation which are GMI (Gross Margin Index), SGI (Sales Growth Index), SGAI (Sales General and Administrative Expenses Index) and LEVI (Leverage Index) (Voisin, 2012).

The ratios which are capture financial statement distortions have the specific explanation. The predictive ratios focusing on financial distortions capture unusual accumulations in receivables (DSR, indicative of revenue inflation), unusual expense capitalization and declines in depreciation can be seen from AQI and DEPI which indicate expense deflation (Beneish, 1999). TATA can show the cash profit which is the extent of accounting profits (Beneish, 1999).

Furthermore, the other indexes that can indicate a predisposition to engage in earning manipulation is also have certain explanation. GMI and SGAI, both are signals of declining prospects which are suggest propitious condition for manipulation deteriorating gross margins and increasing administration costs (Beneish, 1999). While the increasing firm's financial risk and likelihood of earning manipulation related to debt agreement constraints can be seen from SGI and LEVI. SGI shows the high sales growth indicates incentive to manipulate earnings to make it possible to raise capital and LEVI which shows reliance of debt financing (Beneish, 1999).

Based on number of researches, Beneish M-Score most likely can predict and identify earning manipulation in promising probability whether from researchers (Voisin, 2012) (Warshavsky, 2012) (Fridson, 2002) or professionals (Ciesielski, 1998) (Merril Lynch, 2000) (Wells, 2001). The M-Score has been shown to correctly identify 76% of manipulators on an out of sample basis (Voisin, 2012). For instance, there is a report that this ratio was used by Cornell University student to identify Enron as an earning manipulator back in 1998, before the firm's shenanigans were exposed (Voisin, 2012). In other word, Beneish M-Score has the capacity to designate and envisage earning manipulation which may work in Indonesian companies. In brief, this study aims to test the effect of IFRS adoption to Indonesian companies using indexes from Beneish M-Score which are DSRI,AQI,DEPI,TATA, GMI, SGI, SGAI and LEVI as single index or as formula.

1.2 Problem Formulation

Previous researches have shown evidences of adopting IFRS in a developed country comes vary but when it comes to developing country there are still few studies to investigate the use of IFRS in dealing with earning manipulation.

The adoption of IFRS may provide different results between developing countries and developed countries. The differences in culture and business environment are so vast that cause different understanding, usefulness and enforcement (Prather-Kinsey, 2006). Therefore researcher want to provide an empirical study of IFRS related with earning manipulation in developing country through question:

- Does IFRS Convergence have impact on earning manipulation in Indonesia?

1.3 Research Objectives

This research is intended to provide an empirical study about relation between IFRS and earning manipulation in Indonesia.

1.4 Contributions of Study

Contribution of this study is based on background, problem formulation and research objectives. There are several contributions, such as:

1. For researchers, the result of this study is expected to give contribution on IFRS study and forensic accounting study especially in earning manipulation.

2. For the management of the companies, the result of this study is expected to give prevention and warning when prepares financial statement.
3. For the standard setter, the result of this study is expected to give empirical evidence and consideration when prepare and converge IFRS with national accounting standard.
4. For investors, the result of this study is expected to give a warning and consideration when they do investment.
5. For society, the result of this study is expected to give knowledge in order to control the corporate behavior in doing dishonest practice.

1.5 Structure of the Study

CHAPTER I : INTRODUCTION

This chapter consists of background, problem formulation, research objectives and purposes, and the structure of this research.

CHAPTER II : LITERATURE REVIEW

This chapter consists of theories that formed from the basic of this study such as fraud triangle theory, compliance theory, and other concepts that relevance with this research. In addition to explain the theory and the relevant concepts, this chapter also explains the previous researches and the hypothesis development.

CHAPTER III : RESEARCH METHODS

This chapter describes about research design, type and source of data, data collect method, research object and data analysis. This research is quantitative approach with regression analysis using SPSS 21.

CHAPTER IV : RESULT AND ANALYSIS

This chapter explains about the research object, data analysis that consists of descriptive statistic, the goodness fit of the model, hypothesis test result and interpretation of results.

CHAPTER V : CONCLUSION

This chapter consists of conclusion that can be drawn from the analysis result, research implications, the limitations of the study and suggestions for future research.

CHAPTER TWO : LITERATURE REVIEW

2.1 Underlying Theories

2.1.1 Fraud Triangle Theory

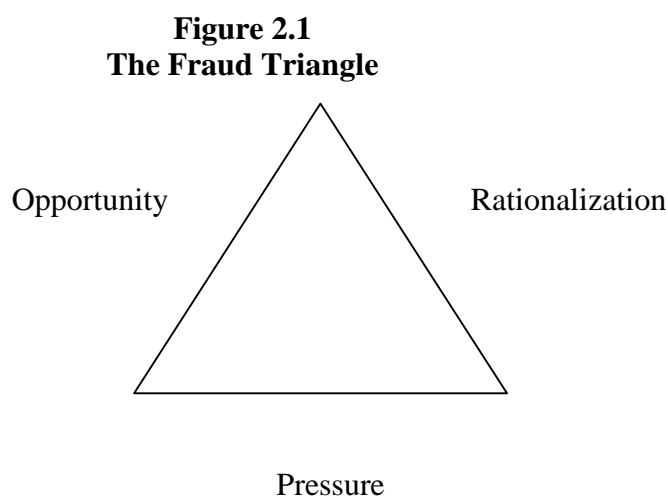
Many researchers use fraud triangle theory to identify the factors that cause someone to commit occupational fraud (Dorminey *et al*, 2010) (Cancino, 2010) (Blue, 2002) (Auditor of Public Accounts, 2011). Moreover, identifying factors is really important to evaluate which part of company's element that needed attention in order to create prevention and detection of fraud (Dorminey, 2010).

The concept of the Fraud Triangle was originally developed by American criminologist and sociologist Donald R Cressey. This theory identify there are three elements why fraud happened which are pressures, rationalization and opportunities (Singleton, 2010). While Fridson (2002) defined fraud triangle as follow:

“Fraud triangle is convergence of perceived pressure, perceived opportunity, and rationalization to facilitate fraud.”

In other word, fraud triangle has three elements which are pressure, opportunity and rationalization.

To simplify the definition see:



Source : (Dorminey, 2010) (Singleton, 2010)

According to Singleton, pressure (or incentive, or motivation) refers to something that has happened in fraudster's personal life that creates a stressful need that motivates him to steal. Furthermore, in University of Michigan released report stated that most pressure comes from significant financial need or problem. Pressure is frequently what causes a person to commit fraud (University of Michigan, 2010). In addition, social and political survival provides incentives too, in the form of egocentric and ideological motives, especially in financial statement frauds. However, there is one further category that might be called psychotic because it is cannot be explained in terms of rational behavior such as pathological liar, professional confidence man and kleptomaniac (Singleton, 2010). In brief pressures can be categorized by financial, social and political, and other irrational terms.

The second element of fraud triangle is opportunity. Based on Blue (2002) definition opportunity can be defined as below:

“A situation where someone believes they have a favorable or promising combination of circumstances to commit an undetectable fraud”

Circumstances in this definition can be seen as a combination of situation and capacity. Which mean that perceived opportunity only can transformed into fraudulent action if it meets with person who have the capacity. Based on that argument, opportunity can be seen as the element over business owner that have most control (Association of Chartered Certified Accountant, 2009).

Many researches find that opportunities occur when internal control is weak. A weakness in or absence of internal control provides the opportunity for fraudsters to commit their crimes (Singleton, 2010). For instance, employees and managers who have been around for years will know where are the weaknesses placed in the internal control and have adequate knowledge of how to pledge the fraudulent acts successfully. In other word, if the company wants to deter fraudulent action they need to strengthen their internal control effectively so that the opportunity is getting smaller for the fraudsters.

The third element of fraud triangle is rationalization. Rationalization is morally defensible justification for actions seemingly out of character for the fraud perpetrator (Dorminey, 2010). In other word, rationalization appears when fraudsters try to legalize their action so that their mind is not burden with fact that they do things that is illegal according to the society. For example, when an employee want to steal some cash from the company for their own purposes their mind will try to compromise with reasons such as: “I just borrow it in a short time, I will repay it later”, “I do it for a better purposes”, or even “ this company deserve it”. As a result, in every illegal act rationalization always carried out to

make a view of illegal act as acceptable, thus preserving his self-image as trustworthy person (Auditor of Public Accounts : Commonwelath of Virginia, 2011).

From those three elements, there is only one element that can be easily controlled by company which is opportunity element. Rationalization and pressure are not readily observable characteristic, because it's impossible to see what someone may be thinking (Dorminey, 2010). On the contrary, opportunity can be easily to observe based on the performance of internal auditor (Dorminey, 2010).

The fraud triangle theory is relevant to this research. IFRS as new accounting standard provide guidelines for the company to prepare financial statement. This standard will affect three elements of fraud triangle because it is related with company behavior, specifically management behavior, how they prepare financial statement according to IFRS.

2.1.2 Compliance Theory

Compliance has a various definitions according to terms that supported by number of researchers. In psychology, compliance refers to a response specifically, a submission made in reaction to a request (Cialdini & Goldstein, 2003). The influence resulted from its reaction mostly centered on social behavior which defined as the effect that the words, actions, or mere presence of other people have on our thoughts, feelings, attitudes, or behavior, social influence is the driving force behind compliance (Cialdini & Goldstein, 2003). Where in terms of regulatory compliance, compliance defines as conforming to a rule, such as a specification, policy, standard or law (Silveira *et al*, 2012). Moreover, regulatory

compliance describes the goal that corporations or public agencies aspire to achieve in their efforts to ensure that personnel are aware of and take steps to comply with relevant laws and regulations (Silveira *et al*, 2012). Accordingly, this scope of compliance is focusing more on organizational/ corporation rather than individual behavior. Therefore compliance definition in terms of regulation is more relevant to be discussed since this research identifies company's behavior.

The relation between compliance with company's behavior has a significant linkage. According to Lunenburg (2012) organizations can be classified by the type of power they use to direct behavior of their members and the type of involvement of the participants. In most organizations, types of power and involvement are related in three predictable combinations: coercive-alienative, utilitarian-calculative, and normative-moral but a few organizations may combine two or even all three types (Etzioni, 1975).

According to Etzioni (1975), when an organization employs coercive power, participants usually react to the organization with hostility, which is alienative involvement. Utilitarian power usually results in calculative involvement; that is, participants desire to maximize personal gain. Finally, normative power frequently creates moral involvement; for instance, participants are committed to the socially beneficial features of their organizations.

Some organizations employ all three types of power, but mostly tend to emphasize only one, relying less on the other two (Etzioni, 1975). Power specialization occurs because when two types of power are emphasized

simultaneously with the same participant group, they tend to neutralize each other (Lunenburg, 2012).

In order to achieve expected compliance, an organization must identify their power and involvement. However, if they are not identifies their power and its involvement it may cause disobedience. For instance, some teachers' unions use both utilitarian and normative power to gain compliance from their members. Nevertheless, school officials who attempt to use types of power that are not appropriate for the environment can reduce compliance. Schools tend to be normative organizations. According to this logic, oppressive use of coercive and utilitarian power with teachers and students can be dysfunctional (Lunenburg, 2012).

As explained above, company can be identified as ulitarian-calculative combination. In this term, calculative involvement refers to the orientation of a company to an object, characterized in terms of intensity and direction shaped as desire to maximize corporate objectives.

Nowadays, the relation between compliance and corporate objectives has been realized as important points. According to Nordea (2002) in PwC (2002):

“The compliance function strengthens the principles of conducting business in accordance with all applicable law, rules, codes and standards required by regulators, respecting the principles of integrity and fair dealing at all times, which is essential for the Group.”

Furthermore, good compliance can enhance reputation through improved services and efficient implementation of new business initiatives (Nordea, 2002).

In other word, reputation and trustworthiness are points that concerned by

management to enhance corporate value, whereas higher corporate value will maximize profit and others corporate goals. There are many countries, mostly in Europe, which already realized that compliance as a key component of successful business proved by availability of specific regulatory requirement for investment firm and banking such as: Belgium, Germany, France, Italy, Poland, Sweden, United Kingdom (Pricewaterhouse Coopers, 2002). In addition, compliance has also been seen to enhance the practice of good corporate governance (Pricewaterhouse Coopers, 2002). In short, by comply regulations, corporate can maximize its objectives.

The relevance of theory regarding to this research is to explain the result of corporate behavior when they comply new accounting standard IFRS. IFRS demand full compliance of the corporate to ensure high quality accounting in delivering accounting information for stakeholders. As global accounting standard, the development of IFRS adoption has been widespread across the world due to its advantages, mainly to ensure comparability. This phenomenon may calculated by corporate and the react to this rule which consequently change its behavior. In short, IFRS may affect corporate behavior towards the need of compliance.

2.1.3 Earning Manipulation

Earning manipulation may be categorized as part of fraud action. This definition supported by Shah (2006) classification of fraud. This classification classifies fraud into three categories, which are corruption, asset misappropriation and fraudulent financial statement. Further, Warzhavsky (2010) stated that

fraudulent reporting can result from distorted records, falsified transactions, or misused accounting principles. Therefore earning manipulation is part of fraudulent financial statement which is categorized as fraud.

However there are mixed definition between earning manipulation and earning management among researchers. Strobl (2012) defines earning management as earning manipulation because there is similar act of management which produces financial statement which is not correspond economic reality. On the contrary, Chen (2006) proposes earning management as prevalent act in certain level of flexibility that permit by GAAP. Since GAAP-compliant earning management is acceptable and lawful, most executives manage their companies' earnings to achieve specific objectives such as sustaining firm value while earning manipulation is excessively aggressive approaches to inflating profitability and firm value in the form of channel stuffing, premature revenue recognition and measurement abuse that becomes unlawful behavior. This definition is supported by Thomson (2005) that stated there are 12 popular techniques to manage earning which is considerably legal by GAAP. In other word, earning manipulation is the excessive unlawful approaches from earning management or illegal earning management. Therefore, in order to observe how the work of earning manipulation in company, we can identify the methods of earning management initially.

Based on Scott (2011), there are two methods how earning management works in a company either changes on the accrual process or the deviation from

normal business activity. Those methods often called by AEM (Accrual-based Earnings Management) and latter REM (Real Earnings Management).

Roychowdhury (2006) defines REM as departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals which have been met in normal course of operations. Level of REM methods, such as reduction of discretionary expenditures and price discounts, can still considerably legal and can be called optimal actions as long as it is represent economic circumstances. Nevertheless, if manager put these activities more extensively than is normal given their economic circumstances, with the objective of meeting an earning target, they are engaging in real activities manipulation (Roychowdhury, 2006). In brief, when REM aggressively conducted more than economic circumstances it will be considered as earning manipulation.

AEM can be defined as the selection of accounting policies to achieve desire financial reporting result (Li *et al*, 2011). They are the amount of income and expenses that were created in a specific period due to the economic activities of a firm and are accrued and depicted in specific accounts. Total accruals are equal to the difference between net income and operating cash flows (De Fond & Jambalvo 1992).

Total accruals are divided in two parts; discretionary and non-discretionary accruals. Discretionary are the normal accruals that are used to show the economic effects of the business activity a firm is involved in. Non-discretionary is the abnormal accruals and is used as a replacement for earnings management; it is

often managers use discretionary accruals to manipulate earnings. Cancino (2010) describes discretionary accruals as adjustments to cash flows selected by the manager; he has the option to choose from generally accepted procedures that are rationalized to the GAAP requirements such as methods of depreciation for long-lived assets. Accruals modify the timing of reported earnings; consequently discretionary accruals give the ability to managers to transfer earnings between periods (Strobl, 2012). This leads to a form of earnings management, which is called income smoothing. Income smoothing is the reduction of fluctuations in the series of reported earnings (Dorminey, 2010).

These manipulations are considered legal as long as it is not violating GAAP even if it is unethical for being opportunistic. On the other hand the manipulation will be considered as illegal if it is violates GAAP and make the stakeholder take the wrong decision.

2.1.4 IFRS Convergence in Indonesia

2.1.4.1 IFRS

IFRS stands for International Financial Reporting Standards. IFRS is a guideline of an international accounting in which to manage and report financial information that developed by IASB (International Accounting Standard Board) and its predecessor IASC (International Accounting Standard Committee).

Its forerunner the International Accounting Standards Committee (IASC) was shaped in 1973 and developed International Accounting Standards (IAS) for 27 years; its argumentative statement was that the new international standards that released must be capable of rapid acceptance and implementation world-wide

(IFRS Foundation, 2013). The IASC was reorganized and swap the International Accounting Standards Board (IASB) in 2001. The new accounting standards released by the new organization are named IFRS, with the first one being available on June 2003 (IFRS 1: First-time Adoption of International Financial Reporting Standards). IASB has important focus on developing a single set of high quality standards to promote global accounting harmonization (KPMG, 2012).

New conceptual framework is design by IASB which is IFRS. The framework is used as guidelines, based on which new IFRS are developed and current is revised. Furthermore, it helps management extend and apply a proper accounting policy using judgment, in the case that an existing Standard or an Interpretation does not resolve a specific transaction (Calao & Jarne, 2010). The conceptual framework contain the objective of financial statements, the qualitative characteristics of useful financial information, the definition, recognition and measurement of the elements from which financial statements are constructed, concepts of capital and capital maintenance. (IFRS Foundation, 2013) According to the framework, the purpose of financial statements is to provide information about the financial position, performance and changes in financial position of the reporting entity. Its main users are existing or potential investors and creditors of the firm. The financial statements published under IFRS are the balance sheet, income statement, statement of recognized income and expense or a statement of all changes in equity, statement of cash flows and notes including accounting policies (KPMG, 2012)

The basic qualitative characteristics of useful financial information are:
(IFRS Foundation, 2013)

- 1) Relevance when it can make a divergence in the decisions made by users and faithful representation which means that it must have predictive or confirmatory value, or both.
- 2) Faithful representation when it represents the economic circumstances it purports to represent; this leads to completeness, neutrality and freedom from error.

Financial information must have also some characteristics that improve its quality
(IFRS Foundation, 2013):

- 1) Comparability, means that the information can be compared with similar information from other economic entities or the same entity but from another period
- 2) Verifiability, which means that different observers can reach harmony that an economic phenomena is faithfully portrayed through IFRS
- 3) Timeliness, which means in time availability of information for decision-making
- 4) Understandability which means that certain knowledge of business and economics is easy to absorb by users.

Financial statements are assembled by particular elements relating to the financial position of an entity which is represent in the balance sheet such as assets, liabilities and equity of the company, and income and expenses are related to the performance of the firm and are represented in the income statement. These

elements are identified in the financial statements when they satisfy two criteria; it is probable that future economic benefit related to the item will flow to the enterprise; and the item's cost or value can be measured reliably. For measurement tools, IFRS are using historical cost, current cost and the net realizable value method (The Institute of Chartered Accountants of Scotland, 2006)

In the globalized economic environment of today use widespread accounting language is also the most efficient method of communicating business information (Calao & Jarne, 2010). Currently, IFRS are adopted by almost 120 countries around the world. Furthermore, some countries will adopt them such as EU, UK and Hong Kong and others have plans to converge their local accounting principles with IFRS in the future such as Indonesia, United States and Brazil (PwC, 2011). Moreover, all of the listed enterprises and in some cases unlisted enterprises are obliged to prepare and distribute their financial statements according to IFRS in these countries. Consequently, IFRS have hugely contributed to uniformity in financial reporting in a global scale. This can be useful for investors who seek information in financial statements in order to make investment decisions. Comparison between companies is also easier when they use the same accounting rules. Furthermore, multinational enterprises with subsidiaries in countries that use IFRS can use one accounting language which lowers the cost of information (Ballas *et al*, 2010). Reporting under common accounting rules puts pressure to managers to report reliable information and use less earnings manipulation, since supervising and comparing financial reports across borders is now easier (Chen, 2006).

IFRS are considered principle based accounting standards differ to US GAAP that is rule based. This means that for similar transactions under IFRS, different interpretations may be given (KPMG, 2012). Principles-based accounting standards refer to fundamental understandings that inform transactions and economic events (Ballas *et al*, 2010)

Rules based accounting standards is a system of financial reporting that has very extensive and precise elaborations concerning what is or is not allowed (The Institute of Chartered Accountants of Scotland, 2006). After the accounting fraud scandals of Enron and WorldCom, a change is made in the direction of the use of principle accounting standards in the USA. The Sarbanes-Oxley act imposes that the SEC should redesign US GAAP according to accounting principles rather than rules.

The important difference between the two types of standards is the degree of professional judgment needed to determine how a transaction will be recorded; principles based standards involve a bigger use of judgment. (The Institute of Chartered Accountants of Scotland, 2006). For instance, the fair value was introduced by IFRS initially. According to IAS 16, fair value is the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction (KPMG, 2012). IAS 36 *Impairment of assets* imposes a review of assets including intangible assets with an indefinite useful life for impairment and measurement of recoverable amounts on an annual basis. Impairment losses are recorded as expense in income statement. (IFRS Foundation, 2013) IAS 38 *Intangible assets*, requires the recognition of an

intangible asset like goodwill in the balance sheet, if its cost can be determined accurately and future advantages are expected from it by the company. (KPMG, 2012). IFRS 3 *Business combinations*, allows only the purchase method for business combinations. (IFRS Foundation, 2013) All particular assets and liabilities are valued at fair value. These changes are probable to increase the level of information of IFRS earnings and book values. It decreases the possibility of earnings management through sales of assets, which can be executed with historical cost accounting since with this method the market value of the asset is usually bigger than the historical price with which is recorded in the balance sheet (The Institute of Chartered Accountants of Scotland, 2006). Moreover, IAS/IFRS have greater disclosure requirements which reduces the ability of managers to manage earnings (Calao & Jarne, 2010).

2.1.4.2 The Development of Indonesian GAAP (PSAK)

Indonesia Institute of Accountant (IAI) was established in December 23rd 1957 and legitimate by ministry of justice in February 11th 1959 (No. J.A.5/13/16). Initially the objectives of IAI are guiding the development of accounting as well as enhance the quality of accounting education and enhance the work quality of accountants. Moreover, this organization starts to develop Indonesian Generally Accepted Accountant Principle (PSAK). There are three milestones in the development of accounting standard in Indonesia.

The first milestone is before the reactivation of the capital market in Indonesia in 1973. At that time was the first time IAI codified principles and

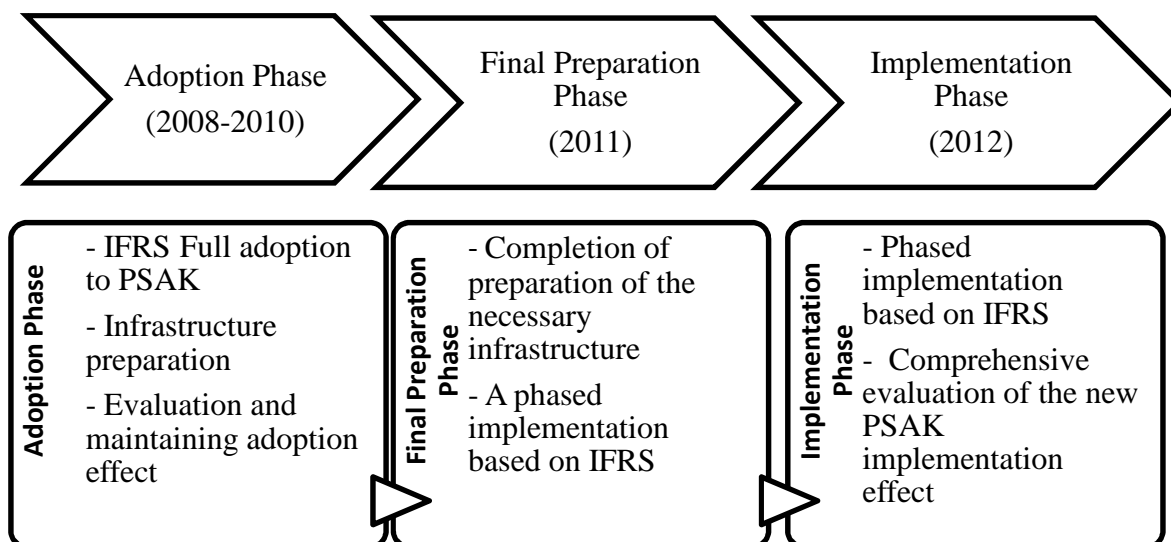
applicable accounting standards in Indonesia in a book "Principles of Accounting Indonesia (PAI).

Then, the second milestone occurred in 1984. At that time, the committee revised fundamentally PAI and codified it in 1973 in the book "Indonesian Accounting Principles 1984" with a view to adjusting the accounting provisions of the business development. The interesting point at this time is Indonesia still inspired by U.S GAAP.

Next in 1994, IAI revised PAI totally in 1984 and codified in the book Indonesian Accounting Standard (SAK) as of October 1, 1994." Since 1994, IAI has also decided to harmonize with international accounting standards in the development of the standard.

In 2006, DSAK (Indonesian Financial Accounting Standard Board) take a visionary step which is a roadmap in order to convergence International Financial Reporting Standard (IFRS) into Indonesian Accounting Standard Principle (PSAK). The road map can be illustrated as follow:

Figure 2.2
IFRS Convergence Roadmap in Indonesia



Source : www.iaiglobal.or.id (2006)

Based on that roadmap, in 2012 all PSAK is converged with IFRS. Periodically, IAI updates the PSAK to IFRS. According to DSAK IAI progress report in June 2013 there are plenty new PSAK still in the exposure draft (ED) or even still in terms of public hearing for instance there are IFRIC 21 (levies), IAS 41 (Agriculture), revised IAS 32/39 (Financial Instruments). In short, IAI keep updates the latest change of IFRS.

2.1.5 Beneish M-Score

Beneish M-Score developed by Professor Messod Daniel Beneish , Indiana University back in 1990. This model includes eight variables to detect earning manipulation in financial statement. The variables are measured using data from fiscal year of the first fraudulent reporting. These variables intended to capture distortions that appear from manipulation by comparing financial

statement measures in the year of first reporting violation to the year prior. The variables are not measured contemporaneously with manipulation discovery since manipulation becomes public on average 19 months after the end of the fiscal year of the first reporting violation (Beneish, 1999). The interesting fact is this method was used by student of Cornell University to detect Enron' fraudulent financial statement before it's exposed in 1998.

Here is the explanation regarding eight variables to detect earning manipulation based on Beneish (1999) research:

1. Days Sales in Receivables Index (DSRI):

DSRI is the ratio of days sales in receivable in the first year in which earnings manipulation is uncovered (year t) to the corresponding measure in year t-1. This variable gauges whether receivables and revenues are in or out-of-balance in two consecutive years. A large increase in day sales in receivables could be the result of a change in credit policy to spur sales in the face of increased competition, but disproportionate increases in receivables relative to sales may also be suggestive of revenue inflation. It is expected as a large increase in day sales in receivables to be associated with a higher likelihood that revenues and earnings are overstated.

2. Gross Margin Index (GMI):

GMI is ratio of the gross margin in year t-1 to the gross margin in year t. When GMI is greater than 1, it indicates that gross margins have deteriorated. Gross margin deterioration is a negative signal about firms' prospects. If firms with poorer prospects are more likely to engage in earnings manipulation, it is

expected as a positive relation between GMI and the probability of earnings manipulation.

3. Asset Quality Index (AQI):

Asset quality in a given year is the ratio of non-current assets other than property plant and equipment (PPE) to total assets and measures the proportion of total assets for which future benefits are potentially less certain. AQI is the ratio of asset quality in year t , relative to asset quality in year $t-1$. AQI is an aggregate measure of the change in the asset realization risk analysis. If AQI is greater than 1 it indicates that the firm between AQI and the probability of earnings manipulation. An increase in asset realization risk indicates an increased propensity to capitalize and thus defer costs.

4. Sales Growth Index (SGI):

SGI is the ratio of sales in year t to sales in year $t-1$. Growth does not imply manipulation, but growth firms are viewed by professionals as more likely to commit financial statement fraud because their financial position and capital needs put pressure on managers to achieve earnings targets (National Commission on Fraudulent Financial Reporting (1987), National Association of Certified Fraud Examiners (1993)). In addition, concerns about controls and reporting tend to lag behind operations in periods of high growth (National Commission on Fraudulent Financial Reporting (1987)). If growth firms face large stock prices losses at the first indication of a slowdown, they may have greater incentives to manipulate earnings. To this effect, almost invariably, companies try to dispel the impression that their growth is decelerating, since that perception can be so costly

to them. In brief, it is expected as a positive relation between SGI and the probability of earnings manipulation.

5. Depreciation Index (DEPI):

DEPI is the ratio of the rate of depreciation in year t-1 versus the corresponding rate in year t. The depreciation rate in a given year equals is equal to $\text{depreciation}/(\text{depreciation}+\text{net PPE})$. A DEPI greater than 1 it indicates that the rate at which assets are depreciated has slowed down--raising the possibility that the firm has revised upwards the estimates of assets useful lives or adopted a new method that is income increasing. It is expected as a positive relation between DEPI and the probability of manipulation.

6. Sales General and Administrative Expenses Index (SGAI):

SGAI is calculated as the ratio of SGA to sales in year t relative to the corresponding measure in year t-1. The variable would interpret a disproportionate increase in sales as a negative signal about firm future prospects. It is expected as a positive relation between SGAI and the probability of manipulation.

7. Leverage Index (LVGI):

LVGI is the ratio of total debt to total assets in year t relative to the corresponding ratio in year t-1. A LVGI greater than 1 indicates an increase in leverage. The variable is included to capture debt covenants incentives for earnings manipulation. Assuming that leverage follows a random walk, LVGI implicitly measures the leverage forecast error. It uses the change in leverage in the firms' capital structure given evidence in Beneish and Press (1993) that such changes are associated with the stock market effect of default.

8. Total Accruals to Total Assets (TATA):

Total accruals are calculated as the change in working capital accounts other than cash less depreciation. Either total accruals or a partition thereof has been used in prior work to assess the extent to which managers make discretionary accounting choices to alter earnings (see for example Healy (1985), Jones (1991)). It uses total accruals to total assets to proxy for the extent to which cash underlies reported earnings, and expect higher positive accruals (less cash) to be associated with a higher likelihood of earnings manipulation.

Those variables are categorized into two categories of signal in order to detect earning manipulation (Beneish, 1999) .First category is financial statement distortions signal which are consist of DSRI, AQI, DEPI and TATA. Second category is indication of a predisposition to engage in earning manipulation which consists: GMI, SGI, SGAI and LEVI. In brief those variables are formulated and becomes Beneish M-Score, Swhich for some researchers this model has been shown to correctly identify 76% of manipulators on an out of sample basis (Voisin, 2012).

2.1 Prior Researches

The prior researches show inconclusive result. There are various results regarding the effect of IFRS in earning manipulation between researchers. For those who in favor, have an opinion that IFRS can deter the earning manipulation through better professional judgment, better rules, and interpretation which will boost the quality of financial statement. Furthermore, the comparability aspect has made IFRS repelled earning manipulation practices (Aubert & Grudnitski , 2011).

On the contrary, some researches provide empirical evidence regarding IFRS which its professional judgment point has turn out to be the cause of earning manipulation by the management. Mostly, the researches took sample from developed country such as European Union or United States while there is only few of it has a sample practice from developing countries. However, there are also researches that state there is no significant differences before and after IFRS implementation.

Here is following summary of prior researches:

Table 2.1
List of Prior Researches

NO.	Researcher	Purposes/ Objectives of Research	Data Analysis	Sample	Result
1	Beest (2009)	Examine the effects that discretionary room in accounting standards has on both the level and nature of earnings management decisions	ANOVA analysis	326 managers of EU listed companies	Change of the nature of earning management
2	Callao & Jarne (2010)	Examine whether the adoption of IFRS in the European Union has increased or decreased the scope for discretionary accounting practices by comparing discretionary accruals in the periods preceding and immediately after the regulatory change	-Kruskal and Wallis Test - Wilcoxon Test	Non-financial firms on 11 EU stock market	The earning management practice has improved since IFRS adoption
3.	Ballay <i>et al</i> (2010)	Examine the relevance of IFRS in emerging markets, with special reference to the case of Greece.	Regression	Manager in 100 firm in Greek	Introduction of IFRS increasing the accounting information quality

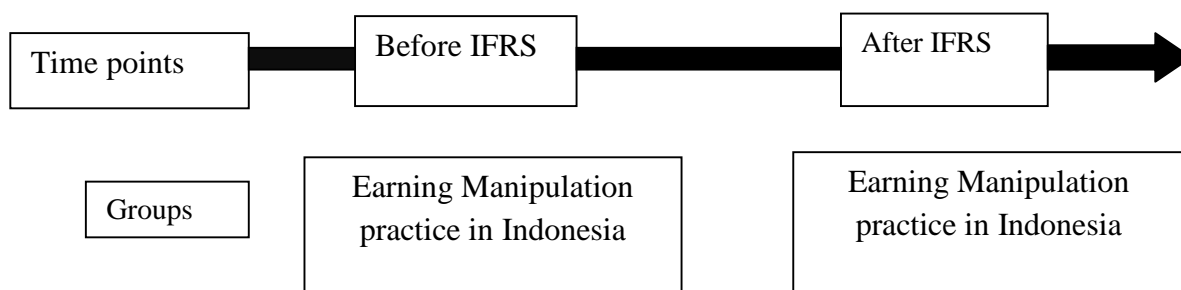
4	C.A (2011)	Ton	(Ton, 2011)Examine the introduction of IFRS in The Netherlands result in a reduction of accruals based earnings management, in the period 2002-2007 for small and large companies, listed on the Dutch stock exchange	Regressio n	69 firms that operated in Dutch	There is no significant change before & after IFRS
5	Aubert & Grudnitsky (2012)		Examine whether mandatory adoption of International Financial Reporting Standards (IFRS) in the European Union reduced earnings manipulation, as proxied by the difference between a firm's reported earnings and ex post estimate of earnings by financial analysts.	Regressio n	15.304 firms from 20 European countries	There is significant change on the proxy decreasing of earning manipulation after IFRS adoption

2.2 Theoretical Framework

In this study, in order to know the effect of IFRS towards earning manipulation practice in Indonesia this research is comparison of data. Earning manipulation practice as paired variable. IFRS has a role as control variable which is the time point, while earning manipulation practice has a role as a group who exposed by it. Those group are the same sample but different in times of measurement which is measured before IFRS and after IFRS.

Based on that explanation, theoretical framework is arranged to describe the relation between variables.

Figure 2.3
Theoretical Framework



2.3 Hypothesis Development

Fraud triangle theory explains the factors that cause someone commit a fraud (one of it is earning manipulation). Those factors are opportunity, rationalization and pressure. Remind that, it is hard to identify rationalization and pressure due to subjectivity, the use of accounting standard expected to curtail opportunity elements in earning manipulation practice since only opportunity element that can be controlled by corporate (Blue, 2002). If accounting standard can effectively diminish possibility doing earning manipulation, there will be a different of earning manipulation practice.

IFRS has proven by many researchers as accounting standard that ensure higher quality of financial information (Ballas, Skoutela, & Tzovas, 2010; Aubert & Grudnitsky, 2012; Ismail *et al*, 2013). According to Pereira (2012) IFRS has proven to boost transparency of financial information in Kenya. This is because IFRS limits managerial discretion and imposes greater disclosure requirements compared to domestic GAAP. Same result also proved in Ismail *et al* (2013) research that took sample of Malaysian companies. Due to the greater disclosure

requirements and greater emphasis on the use of fair value, earning quality has significant positive association with the adoption of IFRS-based accounting standard in Malaysia (Ismail *et al*, 2013). Moreover, Barth *et al* (2008) also confirm that firms which adopted IAS, exhibit less earnings management than those which continue to report under domestic standards. In short, IFRS has the ability to ensure high quality financial information and accordingly, deter earning manipulation.

Moreover, based on compliance theory, company is grouped as utilitarian-calculative organization which means they most likely do calculative involvement refers to the orientation of a company to an object, characterized in terms of intensity and direction shaped as desire to maximize corporate objectives. As discussed before, complying IFRS might result of high quality financial information and boost comparability that will increase the company's trustworthiness and reputation which in the end will maximize corporate objectives. In short, compliance theory, explain the reason why the company wants complies IFRS.

Based on the description, this study proposes hypothesis as follows:

H_A: There is a different in earning manipulation practice between period before IFRS convergence and after IFRS convergence in Indonesian companies.

CHAPTER III

RESEARCH METHODS

3.1 Research Variables and Operational Definition

3.1.1 Paired Variable

Earning manipulation practice is the paired variable of this research. This variable is measured using Beneish M-Score. Beneish M-Score gives information whether company manipulated its earning. According to Beneish (1999) Beneish M-Score consist of eight indexes which are calculated from data in company financial reports issued in two consecutive years (except for Total Accruals to Total Assets(TATA)), as follow:

1. Day's Sales Receivables Index (DSRI)

$$DSRI = [(Net\ Receivables_t / Sales_t)] / [(Net\ Receivables_{t-1} / Sales_{t-1})]$$

This measures the ratio of days' sales in receivables versus prior year as an indicator of revenue inflation.

2. Gross Margin (GMI)

$$GMI = [(Sales_{t-1} - COGS_{t-1}) / Sales_{t-1}] / [(Sales_t - COGS_t) / Sales_t]$$

This is measured as the ratio of gross margin versus prior year. A firm with poorer prospects is more likely to manipulate earnings.

3. Asset Quality Index (AQI)

$$AQI = [1 - ((Current\ Assets_t + PP\ \&\ E_t) / Total\ Assets_t)] / [1 - ((Current\ Assets_{t-1} + PP\ \&\ E_{t-1}) / Total\ Assets_{t-1})]$$

Asset quality is measured as the ratio of non-current assets other than plant, property and equipment to total assets, versus prior year.

4. Sales Growth Index (SGI)

$$\text{SGI} = \text{Sales}_t / \text{Sales}_{t-1}$$

This measures the ratio of sales versus prior year. While sales growth is not itself a measure of manipulation, the evidence suggests that growth companies are likely to find themselves under pressure to manipulate in order to keep up appearances.

5. Depreciation Index (DEPI)

$$\text{DEPI} = [(\text{Depreciation}_{t-1} / (\text{PP\&E}_{t-1} + \text{Depreciation}_{t-1})) / (\text{Depreciation}_t / (\text{PP\&E}_t + \text{Depreciation}_t))]$$

This is measured as the ratio of the rate of depreciation versus prior year. A slower rate of depreciation may mean that the firm is revising useful asset life assumptions upwards, or adopting a new method that is income friendly

6. Sales, General and Administrative expenses Index (SGAI)

$$\text{SGAI} = [(\text{SG\&A Expense}_t / \text{Sales}_t) / (\text{SG\&A Expense}_{t-1} / \text{Sales}_{t-1})]$$

This measures the ratio of SGA expenses to the prior year. This is used on the assumption that analysts would interpret a disproportionate increase in sales as a negative signal about firm future prospects.

7. Leverage Index (LVGI)

$$\text{LVGI} = [((\text{Current Liabilities}_t + \text{Total Long Term Debt}_t) / \text{Total Assets}_t) / ((\text{Current Liabilities}_{t-1} + \text{Total Long Term Debt}_{t-1}) / \text{Total Assets}_{t-1})]$$

This measures the ratio of total debt to total assets versus prior year. It is intended to capture debt covenants incentives for earnings manipulation.

8. Total Accruals to Total Assets (TATA)

$$\text{TATA} = \frac{[(\text{Income from Continuing Operations}_t - \text{Cash Flows from Operations}_t) / \text{Total Assets}_t]}{}$$

This assesses the extent to which managers make discretionary accounting choices to alter earnings. Total accruals are calculated as the change in working capital accounts other than cash less depreciation.

Based on those indexes the Beneish Model takes a company's results of these eight variables and applies them in the following formula :

$$\mathbf{M = -4.84 + 0.92*DSRI + 0.528*GMI + 0.404*AQI + 0.892*SGI + 0.115*DEPI - 0.172*SGAI + 4.679*TATA - 0.327*LVGI}$$

According to this formula, the figure of - 4.84 is applied as a constant in the formula, and each of the eight variables is multiplied by its respective constant number. When applying the Beneish Model, a score of greater than -2.22 (i.e., less of a negative) is an indication that the company's financial statements may have been manipulated.

3.1.2 Control Variable

Control variable in this study is IFRS Convergence Effect. IFRS Convergence Effect is defined as the effects contribute to differences of targeted variable due to IFRS convergence implementation in a particular country. This variable has the role as the time control of paired variable, which are period before IFRS and after IFRS. As discussed in previous chapter, PSAK start the IFRS

convergence from 2007 and will be converged in 2012, as a result the IFRS convergence effect will be appears once the score is compared.

3.2 Population and Sample Determination

3.2.1 Population

The population of this research consists of all companies listed in the Indonesia Stock Exchange (IDX) for the period before IFRS and after IFRS. Considering that Beneish M-score needs two consecutive years therefore this research uses 2006 and 2007 as the period before IFRS, 2011 and 2012 as the period after IFRS.

3.2.2 Sample

In this study, sample selection was conducted by purposive sampling by following criteria:

1. Company publishes financial reporting in the IDX website
2. Company has a complete financial reporting
3. Company used Indonesian Rupiahs (IDR) in their financial reporting
4. Company declared using IFRS/ not using historical cost in 2012

3.3 Type and Source of Data

This study used secondary data. They were obtained from another party in publication form. This study used secondary data which are companies annual financial reporting 2006, 2007, 2011 and 2012; IAI authorized report; books and journals that related to this topic. The sources of data are taken from IDX website, Indonesian Capital Market Directory (ICMD) and other research website.

3.4 Data Collection Method

Data in this study are collected by:

1. Literature study

Data and theory in this study were obtained from the literature, articles, journals and previous researches which are relevant to this research and anvil theory.

2. Documentation study

This study uses secondary data which is the financial information of listed companies in Indonesia Stock Market in 2006,2007,2011 and 2012.

3.5 Analysis Method

3.5.1 Descriptive Analysis

Descriptive statistical analysis is used to provide a statistical description of the variables. Descriptive statistic in this study consisted of average (mean), median, maximum, minimum and standard deviation of each variable. The variables consist of two groups: Beneish M-Score of companies in the period before IFRS and after IFRS convergence.

3.5.2.1 Normality

Normality aims to test whether disturber or residual variable in the model has normal distribution. There are two methods to detect residual which has normally distributed, namely graph analysis and statistical test (Ghozali, 2011). This study uses both of analysis.

The graph analysis that is used in this study is Q-Q plot analysis. Q-Q plot shows observed value and expected value are plotted on a graph. Expected values are expressed by diagonal straight line, while the observed values are the dots. If

the value varies more from a straight line, then the data is not normally distributed. Otherwise data will be normally distributed. (Ghozali, 2011).

Another statistical test used in this study is Shapiro-Wilk test. Shapiro-Wilk test is compare between the normal distribution score and given data. (Laerd Statistics, 2013). Here is the following formula:

$$W = \frac{\left(\sum_{i=1}^n a_i x_{(i)}\right)^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Where

W = the correlation between given data and ideal normal scores

If W=1 means that the data is normally distributed, but when W is significantly smaller than 1 meaning that the data is not normally distributed.

3.5.3 Wilcoxon Signed Rank Test

Wilcoxon Signed Rank Test is non-parametric test in comparing two related samples, matched samples, or repeated measurements on a single sample to assess whether their samples mean ranks differ. This measurement is grouped as non-parametric test.

The test is done by significance level at 0.05 (5%). Acceptance or rejection of hypothesis uses following criteria:

1. If significance value of t is > 0.05 , then H_A is rejected. Rejection of H_A shows independent variable has no significant effect to dependent variable.
2. If significant value of t < 0.05 , then H_A is accepted. Acceptance of H_A shows that independent variable has significant effect to dependent variable.