CHAPTER II
THEORETICAL FRAMEWORK AND HYPOTHESIS

2.1 Definition of Dependent Variable

2.1.1 Earnings Management

Joshua and Varda (2008) defines earnings management as a way of generating accounting earnings which is done through dicretion of managerial over operating cash flows and accounting choices. According to Healy and Wahlen (1998), earnings management happen when the managers use evaluation in reporting financial and in arranging transactions to manipulate financial statements to either delude other parties about the current economic situation of the firm, or to affect contractual decisions that depend on the accounting numbers reported.

The earnings management has been studied for a long time in accounting researches. One of the most common of the research is about the manager's judgment to arrange earning using accruals or by real activities and it is still relevant nowadays (Ardison, Martinez & Galdi, 2008). Earnings management can be limited by using accounting regulation, especially those released by the regulatory agencies of capital markets that target to assure transparency and quality of the information and also to unveil the company's patrimonial position and outcome. If the regulation is effective, it can decrease the possibility for the manager to misappropriate the financial statements throughout the process. It will resulted as a higher quality of the accounting information that is created. We can expect that when the regulations are changed, there is an increase in the quality of

the information and a decrease chances for the manager to misappropriate the information (Grecco *et al*., 2014)

Joshua and Varda (2008) classified earnings management into three categories, which is white, gray, or black. The white category of earnings management increases the transparency of information; the black includes outright misrepresentation and delude; the gray is misappropriation of information within the border of compliance with bright-line standards, and that could mean either efficiency or opportunistic increasing.

Earnings management influences company's value in three different methods in the AE model setting. First, the positive component of managed earnings immediately raise the book value and company value by the same number. Second, the managed earnings are possible to influence the assumed future abnormal earnings. Last, the earnings management may influence company value through the cost of capital (Spohr, 2005).

According to Rahman, Moniruzzaman and Sharif (2013), the most effective and commonly used earnings management methods can be classified into twelve:

1. Cookie jar reserve technique. The firm will attempt to increase expenses throughout the current time to manage earnings.
2. Big bath technique. If the manager have to inform bad informations, it is preferably to inform it all at once and get it done at once.
3. Big stake on the future technique. When an acquisition happens, the firm acquiring the other is stated to have done a big stake on the future.

4. Fushing the investment portfolio. To reach strategic partnership and invest their extra capitals, a firm purchase the shares of other firm.
5. Discard a problematic child. To enhance the earnings of future time, the firm can dispose the subsidiary which does not operating well.
6. Introducing new standard. It might take about two to three years to adjust with the new accounting standard. Voluntary early adoption may have a chance to manage the earnings.
7. Eliminate the long term operating assets. The expense of long term operating assets used is writen as an amortization and depreciation expense over the time assumed to be profitted.
8. Sale/leaseback. There are some long term asset that has unrealized gain or losses. A firm can increase the earnings of the firm by selling the asset.
9. Operating versus non operating income. The manager can manipulate its earnings when doing jugment about items in those regions.
10. Early Retirement of Debt. Managers can manipulate the earnings by using the fiscal time of early retirement of debt.
11. Use of Derivatives. Derivatives can be used as a shield against some categories of business risk, such as changes in interest rate, price of commodity, price of oil and changes in exchange rates.
12. Shrink the company. Firms do not have to inform any gain or loss for repurchase of their shares on the financial statement because no profit is approved on the transaction.

2.1.2 Value Relevance

According to Kargin (2013), value relevance has the ability to disclose information by financial statements to apprehend and sum up company value. Value relevance can be evaluated by calculating the statistical relationship among information reported by financial statements and the values of market shares or returns. Barth, Beaver and Landsman (2000) stated that value relevance is illustrated in the extent literature as the relations between accounting number and the values of security market. The value relevance of book value and earnings can be measured by the response of the market to accounting information provided by companies (Omokhudu & Ibadin, 2015).

Francis and Schipper (1999) stated that the accounting information value relevance is a capability of accounting value in order to collect data that guides stock prices in order to identify the statistical relationships between stock prices and financial information. The high relation between stock price with profit and book value of company can indicate that financial information have high quality of accounting information also because company condition can be explained by two things. There are 4 understanding probabilities regarding value relevance:

1. The essential value of stock that affect the stock price which contained the financial statement information that affect the stock price.
2. The value relevance that included factors which can be used in valuation model and the estimation of factors of the financial statement information.

3. To know the influence of investors on financial statement information on stock price so that the relationship can measured by knowing the financial statement capabilities in affecting stock price because it can make investors improve their expectations.
4. Capability in covering a variety of information which affect stock price to measure value relevance

Barth, Landsman and Lang (2008) stated that value relevance has the explanation power of stock return for earnings, net income and equity book value for prices. They define an increase of explanation power as a proof of better value relevance. According to Devalle, Magarini and Onali (2009), IFRS are assumed to be able to create a higher accounting quality and to a closer relation among accounting-based and market-based performance, or also known as value relevance.

2.2 Literature Review

Researches on the influence of International Financial Reporting Standards (IFRS) on the earnings management have been largely done by previous researchers from various countries. Different independent variables and dependent variables will lead to research results that varied widely between one researcher and another.

Sarkar, Sarkar and Sen (2006) examined about the effect of board characteristics on earnings management of 500 firms in India. The board characteristics used was board independent and directors' characteristics which

will likely have a large impact on earnings management. The results showed that a more diligent board will result in a lower profit manipulation.

Jeanjean and Stolowy (2008) analysed the impact of the International Financial Reporting Standards (IFRS) on earnings quality in Australia, France and UK. In this study, the dependent variable used is earnings management while the independent variable is IFRS. From this research, they can know the pervasiveness of earnings quality, especially because earnings management did not show any decreasing sign after the IFRS, and in fact raised.

Barth *et al*. (2008) did research to evaluate the quality of accounting before and after the introduction of IFRS that voluntarily apply IAS in 21 countries between 1994 and 2003. They discovered proof of earnings management decreased and the increase of value relevance after the convergence to IFRS accounting standard.

Aharony, Barniv and Falk (2010) analysed the influence of IFRS convergence on the value relevance models by the price and return-based in the European Union countries. The research focused on the revaluation of assets, goodwill, and the expenses of research and development (R&D). The results showed that the IFRS influence on information quality is higher among local standards and IFRS.

Rahman, Danbatta and Chaharsoughi (2010) examined board, management, and earnings quality of 114 firms in Tehran. The timeline used was from 2008 until 2010. The independent variable used was board independent, board size, and managerial ownership.

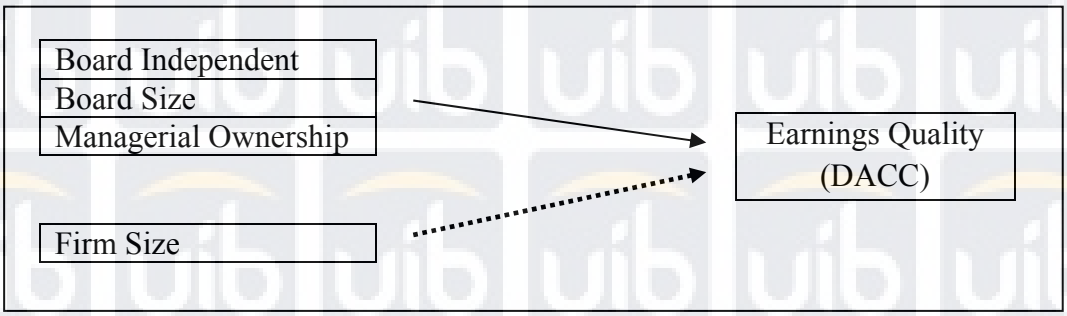

Figure 2.1 Research Model "Board, Management and Earnings Quality in Iranian Public Listed Companies", source: Rahman, Danbatta and Chaharsoughi, 2010.

Karampinis and Hevas (2011) evaluated whether IFRS adoption was useful for improving value relevance and conditional conservatism in Greece. They found evidence that IFRS adoption had no significant effect on the two variables of accounting earnings.

Rudra and Bhattacharjee (2012) and Tort (2013) did research to examine whether the adoption of IFRS have increased or decreased the scope for earnings management. Rudra and Bhattacharjee (2012) did research in India, while Tort (2013) focused on Spain. The findings in India showed that companies adopting IFRS have higher probability to smooth earnings compared to non-adopting companies, while findings in Spain showed that varitions in earnings management might be due to some room for manipulation under IFRS when compared with local standards.

Capkun, Collins and Jeanjean (2012) did research to re-verify whether the changes to IFRS deters or eases higher earnings management (earnings smoothing) in European Union countries. Previous research from Barth *et al.* (2008) discovered a decline in earnings management for early adopter companies, while research from Ahmed, Neel and Wang (2010) discovered a raise in earnings

management for late adopter companies. This research showed that a raise in earnings management were found from before 2005 and after 2005 for early adopter companies and late adopter companies in states that granted early IFRS adoption, and for mandatory adopter companies in states that didn't grant early IFRS adoption. Greater flexibility in IFRS has led to higher earnings management (smoothing) under the IFRS reporting regime.

Brad *et al*. (2014) did research to analyse the financial statement and if any differences between the Romanian accounting standards and the IFRS can be seen when earnings management elements are taken into consideration. Results in this research showed that significant improvements in the accounting quality were observed in the year of IFRS adoption. Higher variability of net income, cash flows and the ratio between net income and cash flows were identified, lower used of accruals regarding earnings management were calculated and lesser positive earnings were showed.

Grecco *et al*. (2014) did research to examine whether changes in accounting practices after IFRS implementation can lead to a decline in earnings management practices in companies listed in Brazil or not. The dependent variable in this research is earning management, while the independent variable are categorical independent variable.

Marra and Mazzola (2014) conducted a study to measure earnings management in Milan. The independent variables are board size, board independent, board of commissioners, independent commissioners, and CEO duality. The timeline used in this research are from 2003 to 2007.

Manzano and Conesa (2014) did research to evaluate whether applications of IFRS has converted Mexican GAAP into high quality standards by raising the comparability with US GAAP and decline earnings management. Results showed that convergence accounting standards have raisen the comparability of accounting earnings. But the adaptation to IFRS is not related with low levels of discretionary accruals.

Sellami and Fakhfakh (2014) did research to evaluate whether the IFRS adoption within listed companies in French pleads to higher earnings quality. In this research, the dependent variable used is earnings management while the independent variable is IFRS.

Ferentinou and Anagnostopoulou (2014) did research to evaluate the use of accrual-based earnings management and the real earnings management by Greek companies, before and after International Financial Reporting Standards (IFRS) implementation. Result of the study found proof on a statistically important change from accrual-based earnings management to real earnings managements after the adoption of IFRS, showed the replacement of one form of earnings management with another.

Christensen, Lee, Walker and Zeng (2015) evaluated the influence of financial statements incentives on accounting quality changes around IFRS convergence in Germany. They focused on three parts of accounting quality which is value relevance, earnings management, and timely loss recognition.

Khoo and Ahmad-Zaluki (2015) did research to test the activities earnings management before and after IFRS implementation in Malaysian

companies. They have also examined board characteristic, which included board size, board independent, ethnicity, and political influence. This research showed that IFRS adoption could decline the activities of earnings management. But the board's characteristics variable did not indicate any prominent difference before and after the IFRS adoption.

Hastuti, Ghozali and Yuyetta (2016) did a study to test the influence of IFRS on the real earnings management (REM) done by the internal control structure in Indonesia. The research showed that convergence of the IFRS had a positive influence on the real earnings management and good corporate governance proxied by internal control structure weaken the positive influence of the IFRS convergence on the real earnings management.

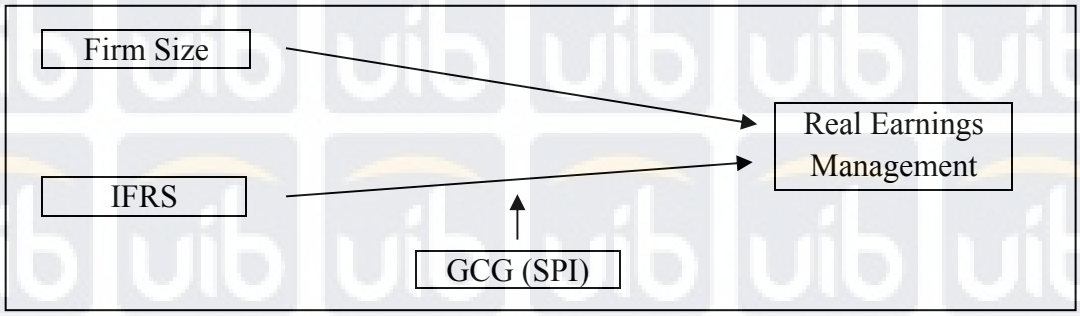

Figure 2.2 Research Model "The Effect of IFRS on the Real Earnings Management and Internal Control Structure as a Moderating Variable", source: Hastuti, Ghozali and Yuyetta, 2016

Bello *et al*. (2016) did research to analyse the impact of IFRS convergence on earnings management of non-financial listed companies in Nigeria. Earnings management is the dependent variable used and measured by discretionary accruals while the independent variable is accounting standards (1 if

company adopt IFRS, 0 otherwise). Firm size, Audit quality (BIG4), Financial Leverage, Growth and Return on Assets are control variables.

Rathke *et al*. (2016) did research to investigate the extent of earnings management in Latin America after the convergence of the IFRS and analyse the role of cross-listing in the US. The research indicates that Latin American companies provide a higher extent of earnings management than Continental European and Anglo-Saxon companies.

Murtini and Lusiana (2016) did research to examine the accounting information quality pre and post the IFRS convergence on Financial Accounting Standards in Indonesia. The dependent variable used in this study is share price while the independent variables are earning per share (EPS) and book value per share (BVPS).

Fourati and Ghorbel (2017) did research to evaluate the consequences of International Financial Reporting Standards (IFRS) convergence in Malaysia. The result showed evidence that IFRS convergence improves earning quality. In particular, we found a significant decline in the absolute value of discretionary accruals in the partial IFRS-convergence period (2007-2011), whereas this effect is restrictive after the complete IFRS- implementation.

Siswanti and Hudayati (2017) did research to find evidence regarding the impact of IFRS adoption and the proportion of woman in audit committee on earnings management in Indonesia. The research showed that IFRS adoption and the proportion of woman in audit committee will raise the financial information quality.

2.3 Hypothesis Development

2.3.1 IFRS and Its Effect on Earnings Management

IFRS is an international based accounting standard that is used in preparing financial statements with improved quality and transparency. The IFRS based financial statements can be compared by investors, creditors and other parties in decision making and capital allocation (Sellami & Slimi, 2016). Rudra and Bhattcharjee (2012) stated that a country with a high accounting standard doesn't mean it will also have a high financial information. Merely adopting IFRS is not enough to increase the accounting quality.

Research done by Grecco *et al*. (2014) showed that the implementation to IFRS had a restrictive impact on earnings management in Brazil after the full adoption. Among the restrictive elements, the most effective one is the regulatory environment.

The result of the research done by Sellami and Fakhfakh (2014) showed that the absolute value of discretionary accruals is significantly declined six years after the implementation of IFRS. They also found a negative relationship among the real earnings management and the mandatory implementation of IFRS. They assumed that earning quality is increased in the post-IFRS time.

Another research done by Bello *et al*. (2016) in Nigeria showed that adoption of IFRS does not significantly affects the tendency of Nigerian companies to manipulate earnings in general. It is specifically written that high audit quality did result in a situation where IFRS adoption affects earnings management.

Research by Murtini and Lusiana (2016) showed no significant difference among the earnings management before and after the adoption of the IFRS and the value relevance before and after the implementation of IFRS. The earnings management is calculated by discretionary accruals and the value relevance is calculated by the price model

Based on above descriptions, we can assume that:

H_1: IFRS have significant positive influence on earnings management.

2.3.2 Board Size and Its Effect on Earnings Management

Board size is the number of board of directors in the company. More boards in the company usually will give a form of monitoring in the company and will result in a better performance for the company (Isshaq, Bokpin & Onumah, 2009).

The board of directors is an important role in conducting supervision that can affect the company's earnings management. According to Lin (2011), the size of the board of directors has expertise in financial statements and governance to guide a manager in maximizing benefits in a company decision. A large board size can effectively exert a supervisory effect for managers to engage in earnings management and increase effective value for company.

Gonzales and Meca (2014) conducted a study of the relationsip between earnings management as measured by accrual discretion and corporate governance in Latin American. They documented that the role of external directors was limited. In addition, if directors hold many meetings, they can monitor insider behavior more often. This can reduce the activities of profit manipulation.

Salihi and Jibril (2015) found that there was significant positive effect between board size on earnings management. They explain that if the size of the board gets higher then the earnings manipulation activity will be higher. This can happen because a high board size will cause communication between boards to be ineffective and the delay in decision making by the board, so that the opportunistic of earnings management will be even greater.

Talbi, Omri, Guesmi and Ftiti (2015) explained that if the proportion of board size can be reduced, it will facilitate communication between all parties of the company and decision making. A large board size will make it easier for management to do earnings management because managers can trick the boards that pay less attention to the company.

From the explanation above, we can conclude that:

H_2: Board size have significant positive influence on earnings management.

2.3.3 Board Independent and Its Effect on Earning Management

Board independent is a member of the board directors who is not affiliated with management and shareholders. Board of directors is a group of people who were chosen to be leaders in a company and who can influence its ability to act independently or solely for the benefit of a company (Mashayekhi & Bazaz, 2010).

In general, the existence of board independent can decrease the level of earnings management. Jaggi, Leung and Gul (2009) conducted study in Hong Kong stated that board independent are effective in monitoring earnings management, even though they have difference in the institutional environment.

The results of the investigation done by Bouchareb, Ajina and Souid (2014) stated that the proportion of independent directors in board members has a positive significant effect on earnings management. This indicates that the number of board independent is increasingly causing oversight activities on management performance is not efficient or does not have clear independence in investigating management errors. This can provide opportunities for managements to manipulate earnings.

According to Iraya, Mwangi and Muchoki (2015), board members who can increase the independence of the management in a company will produce a lower earnings management. Therefore, inviting an independent supervisory board to carry out its duties in the board structure will decrease the chances for manager to do activities that will result in earnings manipulation

Based on above descriptions, we can assume that:

H_3: Board independent have significant positive influence on earnings management.

2.3.4 Earnings per Share and Its Effect on Value Relevance

The size of the company's profit given to the company's shareholders is known from the company's earnings per share. This data is used by investors as a basis for decision making, because earnings per share can explain the company's future opportunities (Tandelilin, 2001).

A study shows that EPS is becoming an important data after the adoption of IFRS, even though the overall explanatory power is growing. Gjerde, Knivsfla and Saettem (2008) did research to test whether the figures of IFRS is related with

a stock market value. They found proof of higher value relevance after the IFRS adoption. But when earnings per share was used as the explanatory variables, the value relevances is declined after the IFRS adoption.

Perera and Thrikawala (2010) did the research to describe the relevance of accounting information in Sri Lanka. They found evidence that earnings per share did not declined the value relevance. The research done by Clarkson, Hanna, Richardson and Thompson (2011) to evaluate the influence of IFRS convergence in Australia and Europe found evidence that there were a decline (increase) in the value relevance of EPS after IFRS adoption.

Kargin (2013) examined about the value relevance of accounting information before and after IFRS adoption in Turkey during the 1998 and 2011. The study showed that there was no significant increase in value relevance of earnings per share. Another research done by Omokhudu and Ibadin (2015) showed the value relevance in Nigeria. The results showed that earnings has significant relation with value relevance.

From the explanation above, we can conclude that:

H_4: Earnings per share have significant positive influence on value relevance.

2.3.5 Book Value per Share and Its Effect on Value Relevance

Book value per share is the amunt of stock accepted if the company is liquidated on the basis of the amount reported in financial statements. It is used to measure a company's net assets (Kieso, Weyhandt & Warfield, 2007).

According to Clarkson *et al*. (2011), book value can be viewed as one of the summary descriptors of value. From book value, we can explore how the

implementation of IFRS can effect the changes of value relevance. Tsalavoutas, Andre and Evans (2009) evaluate the accounting information before and after the IFRS adoption in Greek companies. As the results they find no significant difference in the value relevance of book value per share in the period 2004 and 2005. There is also no significant difference in the accounting information during the two years period.

Devalle *et al*. (2009) analyse the influence of IFRS adoption on value relevance of 3,721 companies in Europe. They found proof that value relevance of accounting information is increased during the IFRS implementation, while the impact on the book value is declined. Another research done by Keener and Tampa (2011) shows that the value relevance of book value per share has stayed relatively constant and there is no significant variation in the value relevance of earnings.

Research done by Suadiye (2012) found evidence that the value relevance of book value and earnings has positive relation with IFRS. But when compared with both variables, book value has more value relevance than earnings. This result is the same as the research done by Cheebane and Othman (2014) which found that value relevance of book value per share is positively related with the IFRS adoption in Africa and Asia.

From the description above, we assume that:

H_5: Book value per share have significant positive influence on value relevance.

2.4 Research Model

The dependent variables chosen in this research model were earnings management and value relevance, which can explain the quality of financial statements. The independent variables specified in this research model were IFRS, board size, board independent, earnings per share and book value per equity share while the control variables were firm size, leverage, and audit quality. The research model can be seen in the picture below.

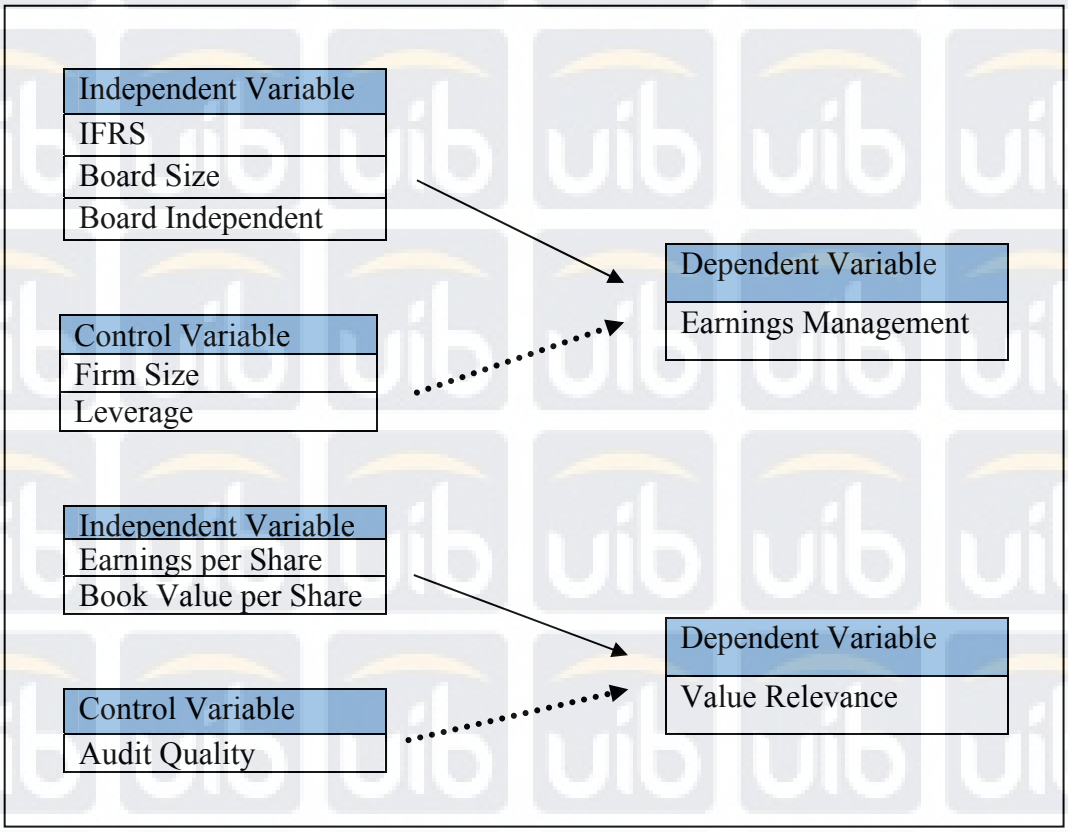

Figure 2.3 Research Model "Analyze the Impact of IFRS Implementation and Board Characteristics on Earnings Management and Value Relevance of Companies in IDX", source: Author, 2019.