# CORPORATE DIVERSIFICATION: DESTROYING OR INCREASING FIRM VALUE? AN EMPIRICAL EVIDENCE FROM INDONESIA

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# Abstract

This study aims to investigate the influence of corporate diversification, family ownership and several control variables, i.e, leverage, Tobin's q, earnings growth, company size, company age, business segment, and business sectors (i.e, main sector, manufacturing sector, and service sector) on firm value in the Indonesian listed companies. By using five years (2011-2015) company data, this study uses OLS regression to test the hypotheses. The findings show that corporate diversification negatively influences on firm value, while family ownership does not have a significant influence on firm value. Moreover, from the control variables, findings document that leverage and company size positively influence on firm value, while the rest of control variables do not have a significant influence on firm value which is measured by excess value of the firm.

**Keywords:** Corporate Diversification, Family Ownership, Control Variables, Firm Value **JEL Classification:** M41

# **1.INTRODUCTION**

Extensive economic globalization creates uncertain, complex, competitive, and dynamic business environment. This rapid changing condition triggers many corporations to reconsider their business strategies, including financial strategies in order to accomodate all stakeholders' interests so that they can compete in the very competitive business environment. One of those possible financial strategies that could be choosen by the company under the chalanging business environment by implementing is corporate diversification, which is an effort by the business to expand its segments, in either related or unrelated business segments (Pitt and Hopkins, 1982; Bettis and Mahajan, 1985; Lang and Stulz, 1994; Berger and Ofek, 1995; and Servaes, 1996). With the diversification, the company is expected to be able to map the various business potentials. Therefore, it is expected that the company will be able to maximize its profits so that the diversified company will eventually be able to increase the firm value. The next rising question is whether the company's strategy to diversify truly will be able to increase firm value, where the main concern of this study is to prove this argument.

Extant literature in the link between corporate diversification and firm value is still very limited and with contracting findings. Several previous studies document that diversified corporations with more business segments have less firm value compared to those companies which focus in single segment (Berger and Ofek, 1995; Lang dan Stulz, 1994; and Servaes, 1996). Similar studies in Indonesia document same findings, such as Harto (2007) and Setionoputri et al. (2009). These findings indicate that companies under the studies can not exploit the benefit of diversification costs such as the creation of internal capital market (Williamson, 1975; Stein, 1997), benefit of tax from debt (Lewellen, 1971), and economic scale benefit (Teece, 1980). When the diversified company can maximize the creation of internal capital market which is both a capital allocation method and a department within a company that disperses money to other sections of the company, the company will be able to maximize the diversification costs to increase firm value. The similar condition will occur when the company can be benefiting from debt to reduce tax expenses and maximize the whole scale of economic benefit.

The findings from previous studies at above indicate that corporate diversification destroys firm value when the diversified companies can not exploit the benefit from diversification costs. However, it needs to make further observation to find out whether there are other factors destroying firm value. It should be proven that not because companies with lower firm value tend to diversify, so it is looked like that the diversification lowers the firm value.

Berger and Ofek (1995) documented that companies with more unrelated business segments have lower firm value compared to those companies operating several related business segments. This finding is supported by Lamont (1997) who found that when oil prices fall, companies engaging in the oil business lower their investments in non-oil segments. Shin and Stulz (1988) found that the company's cash flow in the business segment will affect cash flow in the other business segments. It means that when the diversified company is not able to exploit the benefit from the diversification costs, the diversification will create lower cash flow from diversified segments, where it will decline the whole company cash flow.

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So, if this is the case, the diversification will destroy firm value. Rajan et al. (2000) presented a model in which resources flow to the divisions that are not efficient, depending on the size and investment opportunities. Furthermore, they found that firm value is negatively related to diversification in investment opportunities.

In other side, several previous studies in developed countries documented that corporate diversification positively related with firm value (e.g, Villalonga, 2004, Santalo and Becerra, 2008). Moreover, Lamont and Polk (2001) found that business conglomerate has higher required rates of return compared to single business. It happens when the capital market structure is more efficient, so that the diversified company will be easier to maximize the creation of internal capital market and be benefiting from debt to reduce taxes, and soforth. However, other studies show that corporate diversification is not related with firm value (Hyland, 2000; Campa and Kedia, 2002).

Lins and Servaes (1999) tested whether corporations in Germany, Japan, and UK are able to maximize diversification costs, so that corporate diversification is able to increase firm value. The study was conducted in three countries with different ownership structure, in which Germany and Japan with concentrated ownership structure. while UK with spreading ownership structures as in the US. They found different findings, which for Germany diversification does not correspond to firm value, while for Japan and UK, diversification lowers firm value at different level of diversification discount, namely 10% for Japan and 15% for UK. This shows that the decline in firm value due to smaller diversification level in countries with concentrated ownership structure (Japan) than countries whose ownership structure tends to spread (UK). While this study is done in Indonesia where the ownership structure tends to be more concentrated in family members or group of the company to figure out other factors destroying firm value, such as ownership concentration on the family members.

Furthermore, some previous studies argued that diversification discount occurs because of bias in the sample selection of the study. Villalonga (1999), Campa and Kedia (2002), and Graham et al. (1999) found empirical evidence that many companies made a selling at a discount price before the diversification process, which means that occurs not as a result of the diversification discount. Therefore, when the sample bias could be overcome, it could be the diversification no longer brings the discount and will possibly bring a premium. Further Graham et al. (1999) proved that diversification does not undermine firm value when the diversified company is able to exploit the diversification costs.

Those different findings from previous studies on the link between diversification and firm value create a gap to conduct further research to prove whether corporate diversification increases or destroys firm value. This study tries to examine further the effect of diversification on firm value in developing countries (by using listed companies in Indonesia), which generally have significant portion of family ownership. To bridge the gap on those previous studies, this study attempts to insert the other variables which have possibility to influence the firm value, such as: family ownership as well as a set of control variables, i.e, leverage, Tobin's q, earnings growth, company size, company age, business segment, and business sectors (i.e, main sector, manufacturing sector, and service sector).

The importance of family firms throughout the world has motivated abundant theoretical and empirical literature, as documented in several previous studies (Miller et al., 2007; Martikainen et al., 2009). In this regard, La Porta et al. (1999) explained that family control is the most common of organizational structure in developing countries, including Indonesia, that normally do not have proper protection of minority shareholders. including inappropriate law of enforcement. This finding criticizes to the Berle and Means (1932) image of the modern corporation on the separation of ownership and control, where ownership is dispersed among minority investors and control is concentrated in the hands of the managers. Moreover, Bhattacharya and Ravikumar (2001) also showed the superiority of family businesses with its important role for the country economy, particularly in capital market. Similarly, Morck et al. (2005) highlighted the pervasiveness of family firms in most economies, paying special attention to the concentration of corporate control in the hands of very wealthy families and the rarity of ownership dispersion. Based on this argument, this study tries to insert the family ownership as one of independent variables to evaluate whether there are differences in the effect of diversification on firm value when diversification is done in countries whose ownership spread and in Indonesia where the ownership structure tends to be concentrated on the family members.

Considering above discussion, the motivation of this study is to examine firstly, the influence of corporate diversification on firm value, and secondly, the influence of family ownership and set of control variables (i.e, leverage, Tobin's q, earnings growth, company size, company age, business segment, and business sectors which consist of main sector, manufacturing sector, and service sector) on The findings of this study could firm value. contribute to the body of literature on the link between corporate diversification, family ownership, and firm value, particularly in emerging market context., i.e, Indonesia.

This paper consists of five sections with the introduction as the first section. Section 2 presents the literature review and hypotheses development and Section 3 provides details of research methodology. Section 4 explaines on the empirical findings and discussion. Finally, Section 5 makes conclusions.

#### **2. LITERATURE** REVIEW AND **HYPOTHESES** DEVELOPMENT

### 2.1. Literature Review

Corporate diversification is an expansion of active business into several different business segments (Pitt and Hopkins, 1982). Moreover, Bettis and Mahajan (1985) defined corporate diversification as a diversity of business into more business segments, either related or unrelated. While excess value of the firm (EXVAL) is a different between the performance of diversified company compared to single business segment which is measured by dividing market capitalization with imputed value,

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representing the company performance at individual level (Berger and Ofek, 1995).

Diversification is one of financial strategies to overcome company's financial performance. By diversifying the business into several business segments, it is expected that company can maximize all business potentials. Thus, it will maximize the profit creation for shareholders' welfare. However, the company decision to diversify its business can positively or negatively influence on firm value. In inefficient capital market, the corporate diversification will reduce firm value when managers only have limited expertise, so they are not able to manage diversified companies by exploiting the diversification costs (Lamont and Polk, 2002). This condition commonly occurs in emerging market like Indonesia, where the capital market structure is normally still not efficient. In other side, Lewellen (1971) argued that the corporate diversification will be able to increase firm value when the variations of cash flow from diversified company is able to optimize the larger benefits of tax through reducing the cash flow volatility and financial difficulties. Similarly, Hadlock (1999) argued that the diversification will affect positively on firm value when managers' private information at the segment level could be minimized at the firm level, so this condition can reduce the information asymmetry between managers and shareholders. Another argument is that diversity investment in opportunities is good when internal capital markets function better than external markets. Hubbard and Palia (1999) documented that gains are greatest when a financially unconstrained buyer acquires a constrained target. It means that diversity in financial constraints is good. Fulghieri and Hodrick (1997), Stein (1997), and Wulf (2000) also explained several possible benefits of diversification.

Based on above discussion, We can conlude that the value destruction or creation can occur in two ways, i.e., the value can change either because of changes in cash flows or changes in discount rates. Therefore, whether the diversification will create or destroy firm value, depending on how the managers can exploit diversification costs to increase the future cash flows as well as discount rates. Lamont and Polk (2001) explained that a substantial fraction of the cross-sectional variance of diversification discounts is due to variation in expected returns; firms with high expected returns have low values, and firms with low expected returns have high values.

### 2.2. Hypotheses Development

# 2.2.1. Diversification and Firm Value

A company choose to diversify as a financial strategy to maximize all potentials and business activities. It is expected that the company will be able to maximize the profit creation, thus ultimately the diversification is expected to increase the firm value. However, the reality is often different from the expectations. This is because companies in developing countries are generally operating in the capital market which is inefficient. It often causes managers are not able to optimize the costs incurred in diversification. As a result, some segments experienced a lack of cash flows, particularly on the first stage of diversification which affects the

company as a whole. Therefore, when it is the case, the diversification reduces the firm value.

A lot of previous studies examine endogenous changes in diversity, in which many companies choose to diversify as one of their financial strategies to compete in very high competitive business environment. Some of those studies try to evaluate whether diversifying behavior of those companies create negative or positive link between diversification and firm value. It is done by giving more attention whether diversification tends to decrease firm value or because of firms have low performance and value before diversification (Lang and Stulz, 1994; Hyland, 2000; Campa and Kedia, 2002; and Graham et al., 1999). In other side, a variety of papers document that refocusing increases firm value (e.g., Comment and Jarrell, 1995; and John and Ofek, 1995). In similar vein, Daley et al. (1997) document that spun-off segments experience improved performance, particularly for those unrelated segments. Moreover, Gertner et al. (1999) found evidence that the changes of investment value in spun-off segments is consistent with the changes of inefficient internal capital markets hypothesis. Berger and Ofek (1996, 1999) had identified that several corporate actions such as takeovers, leveraged buy-outs, shareholder pressure, managerial turnover, and other largely external sources are the cause of much refocusing. These findings support the arguments that corporate diversification tends to destroy firm value, and that the market for corporate control helps eliminate value-destroying diversification (Schlingemann et al., 1999; Peyer and Shivdasani, 2000).

The most existing literature generally sthrengthen the argument that diversification will reduce the firm value, especially in emerging market in which the capital market structure is not efficient. It creates a condition where the managers are not able to exploit diversification costs to maximize the firm's value. Therefore, if the decision to diversify reflects value-destroying managerial waste, normally the endogenous increases in diversity tend to destroy firm value. Morck et al. (1990) and Maquiera et al. (1998) documented that the acquisition of diversified firms results a lose value for shareholders. Similarly, Schoar (1999) found that the acquisition of unrelated business segment decreases the total firm productivity, which ultimately decreases firm value. However, several previous studies found that endogenous changes in diversification are expected to have a positive influence, indicating firms are able to exploit diversification costs to rise the firm value (Maksimovic and Phillips, 1999; and Fluck and Lynch, 1999).

Based on above discussion with conflicting findings whether diversification decreases or increases the firm value, we can conclude that diversification will increase firm value when managers have excellent expertise and the market structure is efficient, so that they can exploit the diversification costs to improve firm value. Otherwise, the diversification will decrease firm value. Considering current phenomena in Indonesia where the capital market structure is still not efficient, the first hypothesis is developed as:

 $\mathbf{H}_{_{1}}$  = corporate diversification tends to decrease firm value

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# 2.2.2. Family Ownership and Firm Value

The presence of family controlled firms are something common in emerging market, including Indonesia. Almost developing countries experience with high portion of stock ownership by family members (La Porta et al., 1999). Surprisingly, variety of papers document that ownership concentration in the hand of family members tends to increase the firm value. It occurs because normally family members will be eager to monitor professional managers, reducing the agency problem between manager and owners such as reducing the free riding problem in the company in which can create an efficient monitoring system, so that ultimately improves firm value (Lee, 2006; Miller and Le Breton, 2006).

When the company is controlled by family members, they are more interested in firm survival and often focus on longer horizons than other categories of large shareholders in order to keep the existence of family business to pass on to their offspring (Lee, 2006). James (1999) and McVey and Draho (2005) argued that family members will maximize all efforts and company resources to increase the firm value. Therefore, in longer horizon it will be benefiting to all shareholders, including minority shareholders. Supporting this argument, Anderson and Reeb (2003) explained that the sustained presence of family owners in the company and their longer investment horizons relative to managers of widely held corporations are likely to reduce managerial myopia, thus leading to better firm performance. The presence of stock ownership by family members creates a more effective working environment with better monitoring system, so that all managers and staffs work in accordance with shareholders interest. Moreover, Anderson et al. (2003) documented that the survival concern and the lack of diversification of family owners may help to alleviate the agency costs between bondholders and shareholders as explained by Jensen and Meckling

(1976). Similarly, Wang (2006) and Martikainen et al. (2009) argued that the long-term presence of family members in the company may increase earnings quality and may facilitate superior knowledge of the firm technology improving firm productivity.

In other side, several previous studies found that a deep involvement by family members in the company is harmful when they tend to expropriate all company resources to fulfill their interest with the cost of other shareholders (Shleifer and Vishny, 1997; Pervan et al., 2012). This condition will create entrenchment problem on a group of block holders, lowering the firm performance and value.

Based on above argument and considering the high presence of family ownership in Indonesian listed companies, the next hypothesis is developed as follow:

 $H_{a}$  = family ownersip influences on firm value.

#### **3. RESEARCH METHODOLOGY**

#### 3.1. Sample of The Study

Sampling was done by using purposive sampling method with several criterias, i.e, (1) all annual reports of listed companies in the Indonesian Stock Exchange during 2011-2015 periods which are accessible through <u>www.idx.co.id</u>., (2) those companies were not delisted during observation periods, (3) Those anual reports provide complete consolidated financial statements as well as segmental financial statements during observation periods. Moreover, listed companies in the Indonesian Stock Exchange consist of three sectors, i.e, main sector, manufacturing sector, and service sector with manufacturing as the most dominant sector, so this study clasifies this variable into tree sub-variables. Table 1 below provide the sampling steps on this study.

Table 1. Sample of the study

| Criteria  | Number |
|---|--------|
| 1. Listed companies during 2011-2015 periods                        | 543    |
| 2. Those above listed company which were delisted during 2011-2015  | (0)    |
| 3. Listed companies with uncomplete data in the annual report       | (288)  |
| Total companies as sample on this study                             | 255    |
| Total companies-years during 2011-2015 periods (i.e, 255 x 5 years) | 1,275  |

#### 3.2. Measurement of Variables

#### 3.2.1. Corporate diversification

The measurement of corporate diversification as independent variable is by using Herfindahl index as explained by Berger and Ofek (1995):

$$H = \sum_{i=1}^{n} (\text{sales segment}^2) / [\sum_{i=1}^{n} \text{sales }]^2$$
(1)

Where :

H : segsales sales

Segsales : sales by each business segment. Sales : total sales.

Criteria: the closer Herfindahl index to 1, it means that company sales more concentrated into certain business segment. In other side, the closer Herfindahl index to 0, it means that company sales more diversified into several business segments. Moreover, the company with single business segment has the value of Herfindahl index 1.

# 3.2.2. Family Ownership

Family ownership is measured by share percentage owned by family members (Farooque et al., 2014).

#### 3.2.3. Leverage

Leverage is a ratio of total debts to total assets with the formula as follow (Farooque et al., 2014)

$$Lev = \frac{Total \ Liabilities}{Total \ Assets} \tag{2}$$

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#### 3.2.4. Tobin's q

Tobin's q shows the investment opportunity for the company which is measured as follow (Lung and Stulz, 1994):

$$Q = \frac{(MVS + D)}{TA} \tag{3}$$

Where:

*MVS* : market value of share *D* : book value of total debts TA : book value of total assets

#### 3.2.5. Earnings Growth

Earnings growth indicates the growth of company profit which is measured as follow (Harto, 2007; Setionoputri et al., 2009):

$$\Delta eps = \frac{(eps - eps_{t-1})}{eps_{t-1}} \tag{4}$$

Where:

 $\Delta eps$ : earning growth epst: growth of earning per share on year t epst-1: growth of earning per share on year t-1

#### 3.2.6. Firm Size

Firm size is measured by natural logaritm of total assets (Anderson and Reeb, 2003).

$$Size = Ln Total Assets$$
 (5)

### 3.2.7. Firm Age

Firm age is number of age of the firm on the day of observation (Harto, 2007).

#### 3.2.8. Business segment

Business segment is measured by using dummy variable, where DUMSEG = 1 if the company has more than 1 business segment, and DUMSEG = 0 for company with single business segment (Berger and Ofek, 1995; Harto, 2007).

#### 3.2.9. Business sector diversification

Business sector diversification also uses dummy variable based on 3 business sectors which are

available in the Indonesian Stock Exchange, i.e, main sector, manufacturing sector, and service sector. Then, the measurement is as follow (Harto, 2007):

DUMSEC1 = 1, if the company is in main sector and 0 otherwise.

DUMSEC2 = 1, if the company is in manufacturing sector and 0 otherwise.

DUMSEC $\hat{3} = 1$ , if the company is in service sector and 0 otherwise.

# 3.2.10. Firm Value

Firm value on this study uses excess value of the firm (EXVAL) as in Berger and Ofek (1995):

$$EXVAL = \ln\left(\frac{MC}{IV}\right) \tag{6}$$

$$IV_{i,t} = \sum_{i=1}^{n} segsales * Ind\left(\frac{MC}{sales}\right)$$
(7)

Where:

*MC* = market value of share added with book value of total debt

 $IV_{it}$  = Imputed Value

*segsales* = Sales on each business segment

 $Ind\left(\frac{MC}{sales}\right) =$  median ratio of V to sales of individual business segment in one business

#### 4. FINDINGS AND DISCUSSION

# 4.1. Descriptive Statistics and Classical Assumptions of Regression

Table 2 below presents information with regard to the characteristics of the variables in this study. Descriptive statistics shows high corporate diversification (DIVER), leverage (LEV) and Tobin's q (TOBIN) in Indonesian listed companies with mean values, respectively, 80%, 118%, and 180%, and earnings growth (GROWTH) with average value 9%. The average values of company size (SIZE) and company age are 29 and 33 respectively, and the average value of family ownership is relatively high, i.e, 42%. Moreover, the average values of dummy segment (DUMSEG), dummy main sector (DUMSEC1), dummy manufacturing sector (DUMSEC2), and dummy service sector (DUMSEC3) are 49%, 14%, 16%, and 70% respectively, while the average value of firm value (EXVAL) is 16%.

| Table 2. I | Descriptive | Statistics |
|------------|-------------|------------|
|------------|-------------|------------|

|                    | Ν    | Minimum | Maximum  | Mean      | Std. Deviation |
|--------------------|------|---------|----------|-----------|----------------|
| DIVER              | 1275 | 0.1370  | 2.3696   | 0.799791  | 0.3202236      |
| LEV                | 1275 | 0.0007  | 48.1789  | 1.182060  | 4.8513255      |
| TOBINS             | 1275 | 0.0390  | 83.0124  | 1.805130  | 7.5558439      |
| GROWTH             | 1275 | -0.9999 | 9.1387   | 0.089832  | 1.0619259      |
| SIZE               | 1275 | 20.6019 | 36.6277  | 28.868439 | 2.6265954      |
| AGE                | 1275 | 0.0000  | 116.0000 | 33.439216 | 15.9594767     |
| FAM                | 1275 | 0.0000  | 0.8099   | 0.418709  | 0.0729979      |
| DUMSEG             | 1275 | 0.0000  | 1.0000   | 0.486275  | 0.5000077      |
| DUMSEC1            | 1275 | 0.0000  | 1.0000   | 0.141176  | 0.3483401      |
| DUMSEC2            | 1275 | 0.0000  | 1.0000   | 0.160784  | 0.3674760      |
| DUMSEC3            | 1275 | 0.0000  | 1.0000   | 0.698039  | 0.4592885      |
| EXVAL              | 1275 | -6.0262 | 4.6445   | 0.162585  | 1.2759361      |
| Valid N (listwise) | 1275 |         |          |           |                |

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# 4.2. Classical Assumptions of Regression Analysis

Then, this study runs the classical assumptions of regression which consist of normality, multicollinearity, heteroscedasticity, and autocorrelation. Table 3 below provides information with regard to the normality test by using onesample Kolmogorov-Smirnov. The result shows that the value of asymp. sig is 0.128 which is higher than 0.05. It means that all data under this study are normal.

#### Table 3. One-Sample Kolmogorov-Smirnov Test

| Ν                        |                | Standardized Residual |  |
|--------------------------|----------------|-----------------------|--|
|                          |                | 1275                  |  |
| Normal Parametersa,,b    | Mean           | .0000000              |  |
|                          | Std. Deviation | .99606762             |  |
| Most Extreme Differences | Absolute       | .167                  |  |
|                          | Positive       | .147                  |  |
|                          | Negative       | 167                   |  |
| Kolmogorov-Smirnov Z     |                | 5.967                 |  |
| Asymp. Sig. (2-tailed)   |                | .128                  |  |

Table 4 below presents information related to multicollinearity test. The result shows that all variables under this study have VIF value less than 10, indicating that there is no multicollinearity problem for all data under this study.

## Table 4. Multocollinearity Test

| Madal   | Collinearity Statistics |       | Evaloreation         |  |
|---------|-------------------------|-------|----------------------|--|
| Model   | Tolerance               | VIF   | Explanation          |  |
| DIVER   | 0.580                   | 1.725 | No multicollinearity |  |
| LEV     | 0.106                   | 1.496 | No multicollinearity |  |
| TOBINS  | 0.106                   | 1.412 | No multicollinearity |  |
| GROWTH  | 0.989                   | 1.011 | No multicollinearity |  |
| SIZE    | 0.814                   | 1.229 | No multicollinearity |  |
| AGE     | 0.964                   | 1.037 | No multicollinearity |  |
| FAM     | 0.974                   | 1.026 | No multicollinearity |  |
| DUMSEG  | 0.580                   | 1.725 | No multicollinearity |  |
| DUMSEC1 | 0.597                   | 1.676 | No multicollinearity |  |
| DUMSEC3 | 0.612                   | 1.634 | No multicollinearity |  |

Table 5 below presents information related to heteroscedasticity test. The result shows that all variables under this study have significant value

(sig.) more than 0.05. It means that there is no heteroscedasticity problem for all data under this study.

| Model      | Unstandardized Coefficients |            | Standardized<br>Coefficients | t      | Sig.  | Explanation     |  |
|------------|-----------------------------|------------|------------------------------|--------|-------|-----------------|--|
|            | В                           | Std. Error | Beta                         |        | _     |                 |  |
| (Constant) | -3.454                      | 0.843      |                              | -4.096 | 0.000 |                 |  |
| DIVER      | 0.378                       | 0.270      | 0.040                        | 1.400  | 0.162 | Homocedasticity |  |
| LEV        | -0.324                      | 0.180      | -0.522                       | -1.799 | 0.072 | Homocedasticity |  |
| TOBINS     | 0.265                       | 0.116      | 0.664                        | 2.286  | 0.122 | Homocedasticity |  |
| GROWTH     | -0.002                      | 0.062      | 0.000                        | -0.028 | 0.978 | Homocedasticity |  |
| SIZE       | -0.054                      | 0.028      | -0.047                       | -1.958 | 0.051 | Homocedasticity |  |
| AGE        | 0.007                       | 0.004      | 0.039                        | 1.738  | 0.083 | Homocedasticity |  |
| FAM        | 1.702                       | 0.913      | 0.041                        | 1.863  | 0.063 | Homocedasticity |  |
| DUMSEG     | 3.780                       | 0.173      | 0.627                        | 21.858 | 0.078 | Homocedasticity |  |
| DUMSEC1    | 0.505                       | 0.245      | 0.058                        | 2.066  | 0.089 | Homocedasticity |  |
| DUMSEC3    | 0.098                       | 0.183      | 0.015                        | 0.534  | 0.594 | Homocedasticity |  |

Table 5. Heteroscedasticity Test

Table 6 below presents information related to autocorrelation test. The result shows that the value of Durbin-Watson is 1.972. While dL and dU for K = 10 and n = 1,275 is 1.665 and 1.874 respectively, means that the value of Durbin-Watson 1.972 is in the criteria of free from correlation (between dU to 4-dU, i.e, between 1.874 and 2.126). It means that there is no autocorrelation problem for all data under this study.

#### Table 6. Autocorrelation Test

| Model | Durbin-Watson |
|-------|---------------|
| 1     | 1.972         |

4.3. Results of Regression Analysis

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| Coefficients        |            |                 |                              |        |        |       |  |
|---------------------|------------|-----------------|------------------------------|--------|--------|-------|--|
| Model Unstandardize |            | ed Coefficients | Standardized<br>Coefficients | t      | Sig.   |       |  |
|                     |            | В               | Std. Error                   | Beta   |        |       |  |
| 1                   | (Constant) | 142             | .439                         |        | 323    | .747  |  |
|                     | DIVER      | 481             | .141                         | 121    | -3.416 | .001  |  |
|                     | LEV        | .629            | .094                         | 2.393  | 6.702  | .000  |  |
|                     | TOBINS     | 411             | .060                         | -2.432 | -811   | .060  |  |
|                     | GROWTH     | .032            | .032                         | .027   | .997   | .319  |  |
|                     | SIZE       | .013            | .014                         | .027   | 3.894  | .031  |  |
|                     | AGE        | .007            | .002                         | .089   | .255   | .051  |  |
|                     | FAM        | .300            | .476                         | .017   | .631   | .0528 |  |
|                     | DUMSEG     | .160            | .090                         | .063   | 1.772  | .077  |  |
|                     | DUMSEC1    | 131             | .127                         | 036    | -1.032 | .302  |  |
|                     | DUMSEC2    | .019            | .110                         | .007   | .122   | .132  |  |
|                     | DUMSEC3    | .012            | .095                         | .004   | .121   | .904  |  |

#### **Table 7.** Results of regression analysis

a. Dependent Variable: EXVAL

Table 7 above documents the regression output explaining the relationship between firm value which is measured by excess value of the firm (EXVAL) as the dependent variable and the independent variables, i.e, corporate diversification (DIVER), family ownership (FAM), and several control variables, i.e, leverage (LEV), tobins'q (TOBINS), earnings growth (GROWTH), company size (SIZE), company age (AGE), dummy segment (DUMSEG), dummy main sector (DUMSEC1), dummy manufacturing sector (DUMSEC2), and dummy service sector (DUMSEC3). The findings show that DIVER negatively influences on EXVAL, while FAM does not have a significant influence on EXVAL. Moreover, from the control variables, findings document that LEV and SIZE positively influence on EXVAL, while the rest of control variables do not have a significant influence on EXVAL. Therefore, H1 is supported and H2 is not supported with the regression equation as follow:

EXVAL = -0.142 - 0.481DIVER + 0.629LEV - 0.411TOBINS + 0.032GROWTH + 0.013SIZE + 0.007AGE + 0.300FAM + 0.160DUMSEG - 0.131DUMSEC1 + 0.019DUMSEC2 + 0.012DUMSEC3 + e(8)

### 4.4. Discussion

The first hypothesis examines the effect of corporate diversification on firm value. The finding concludes that first hypothesis is supported where it shows that corporate diversification in Indonesian listed companies affects negatively on firm value. This finding signifies evidence in emerging market context (i.e, Indonesia) where the capital market is inefficient. Therefore, when managers only have limited expertise, so they are not able to manage diversified companies. As a result, corporate diversification destroys firm value. Moreover, this finding provides strong evidence in emerging market context that the managers of diversified companies are still not able to exploit the benefit from diversification costs, thus corporate diversification can not increase firm value. It is indicating that the managers are still not able to get a benefit from the reduction of taxes with the rise of all diversification costs as well as not able to exploit the broader scale of economic benefit from diversification. Therefore, the diversification fails to increase firm value.

This finding confirms several previous studies document that diversified corporations with more business segments have less firm value compared to those companies which focus in single segment (e.g., Berger and Ofek, 1995; Lang and Stulz, 1994; Servaes, 1996; Harto, 2007; Setionoputri et al., 2009; Williamson, 1975; Stein, 1997; Lewellen, 1971; and Teece, 1980). In other side, this finding is not in-line with several previous studies which document that corporate diversification positively related with firm value (e.g, Villalonga, 2004; Santalo and Becerra, 2008, Hyland, 1999; Campa and Kedia, 2002) due to managers are not able to exploit all diversification costs.

The second hypothesis examines the effect of family ownership on firm value. The finding concludes that second hypothesis is not supported where it shows that family ownership in Indonesian listed companies does not have a significant influence on firm value. Its means that existing arguments in which concentrated ownership in family members will be benefiting the company, is not supported when firm value is measured by using excess value of the firm (EXVAL). This finding is inline with several previous studies which did not confirm a positive link between ownership concentration and firm performance which is measured with other proxies, such as return on assets, economic value added, etc (e.g., Demsetz & Lehn 1985; Demsetz & Villalonga 2001; Onder 2003; Chen et al. 2005; and Latif et al. 2014). However, this finding does not support previous studies linking the family ownership with corporate performance, such as Anderson and Reeb (2003), Ward (1988), Chen et al. (2005), Martinez et al. (2007), Andres (2008), Ibrahim and Samad (2011) and Chu (2011) who found a positive relationship familv between ownership and corporate In other side, this finding indicates performance. the expropriation hypothesis that may happen in Indonesian listed companies, in which the presence of family members tends to expropriate all company resources to fulfil their interest in the expense of other shareholders such as explained by Shleifer and Vishny (1997) and Pervan et al. (2012). Therefore, if managers are not able to address this issue, the presence of family ownership will not improve firm value.



# **5. CONCLUSIONS**

This study examines the influence of corporate diversification, family ownership and several control variables, i.e, leverage, Tobin's q, earnings growth, company size, company age, business segment, and business sectors diversification (i.e, main sector, manufacturing sector, and service sector) on firm value in the Indonesian listed companies. This study ended-up with 255 companies from the population of 543 listed companies for 2011-2015 periods (i.e. 1,275 firm-years).

Our OLS regression analysis findings document that corporate diversification negatively influences on firm value, while family ownership does not have a significant influence on firm value. Moreover, from the control variables, findings document that leverage and company size positively influence on firm value, while the rest of control variables do not have a significant influence on firm value.

This study has limitations particularly with the limited availability of data, thus 255 companies were selected from total population of 534 companies listed in The Indonesian Stock Exchange during 2011-2015 periods. However, this study contributes to the literature in the Indonesian context in evaluating whether corporate diversification in Indonesia tends to destroy or improve firm value. Finding concludes that corporate diversification in Indonesian listed firms tends to destroy firm value rather that improve firm value. It indicates that Indonesian diversified corporations can not expoit the diversification costs, so that the corporate diversification does not increase firm value as happened in almost emerging market where the market structure is not efficient. Therefore, it is very important for managers that they should understand perfectly several factors that enable the diversification to improve firm value, such as how to exploit the benefit from diversification costs. For example, they should be able to maximize the benefit from tax saving due to the rise of diversification costs, so the company will be benefiting from the diversification.

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