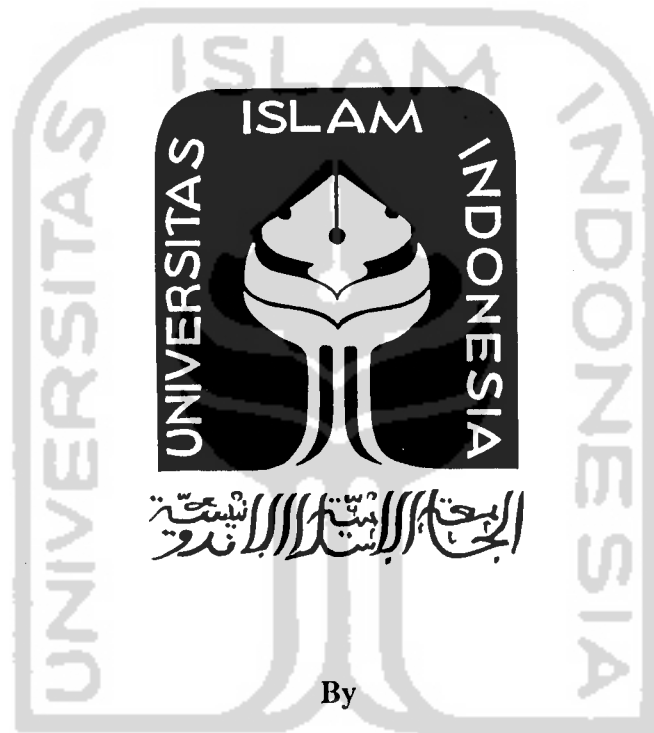


**THE RELATIONSHIP BETWEEN DIVIDEND PAYOUT  
AND OWNERSHIP STRUCTURE IN INDONESIA**

**A THESIS**

**Presented as a Partial Fulfillment of the Requirements  
to Obtain the Bachelor Degree in Accounting Department**



By

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FACULTY OF ECONOMICS  
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YOGYAKARTA  
2005**

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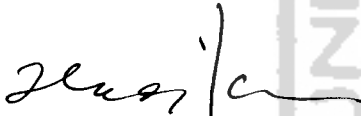
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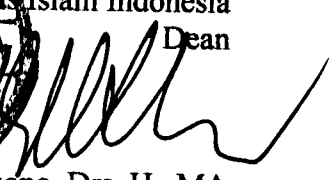
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## STATEMENT OF FREE PLAGIARISM

Herewith the writer declare that in this thesis, there is no opus that have been proposed for obtaining the bachelor degree in any other university, and as far as the writer knows, there is also no opus that have been written or published by other persons, except those written in the text of this thesis, and stated in the bibliography. If in the future that this statement is proven to be wrong, then the writer will make any correction regarding the error.

Yogyakarta, April 6<sup>th</sup>, 2005  
The Writer

Widho Alroza



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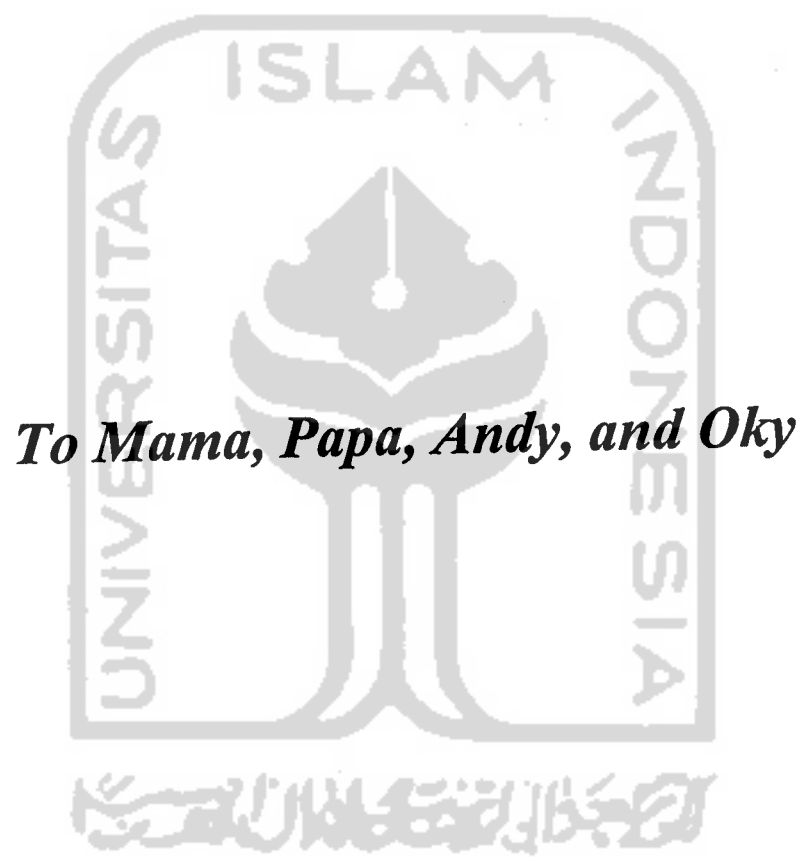
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Widho Alroza





*To Mama, Papa, Andy, and Oky*

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## ABSTRACT

Alroza, Widho (2005). The Relationship between Dividend Payout and Ownership Structure In Indonesia, Yogyakarta: Universitas Islam Indonesia.

This research examines the relationship between dividend payout and ownership structure in Indonesia as main subject of this research. Also, it examines the relationship between dividend payout with earnings trend, past investment opportunity, debt equity, and past dividend payout in Indonesia as additional subject of this research.

This research is based on data of the manufacturing companies listed on Jakarta Stock Exchange in the period of year 1999 up to year 2003. This research uses ownership structure, earnings intensity, lagged earnings intensity, debt equity, growth in sales intensity, and lagged dividend intensity as independent variables, and dividend intensity as dependent variable.

This research uses proposed model by Jayesh Kumar (2004). The regression results of the model show that in the year 2000 up to year 2003, there were no significant influences of ownership structure, past earnings, past investment opportunity, and debt equity toward dividend payout. In the other hand, there were significant influences of current earnings and past dividend payout toward dividend payout in the year 2000 up to year 2003, which current earnings positively influences dividend payout. Based on those results, investors who prefer to obtain profits from dividend payout rather than capital gain, can use current earnings and past dividend payout as objects for predicting the dividend payout.

Keywords: Dividend Payout, Ownership Structure.

## ABSTRAK

Alroza, Widho (2005). The Relationship between Dividend Payout and Ownership Structure In Indonesia, Yogyakarta: Universitas Islam Indonesia.

Penelitian ini memeriksa hubungan antara pembayaran dividen dan struktur kepemilikan di Indonesia sebagai pokok persoalan utama dari penelitian ini. Penelitian ini juga memeriksa hubungan antara pembayaran dividen dengan kecenderungan pendapatan, kesempatan investasi masa lalu, rasio hutang bagi modal, dan pembayaran dividen masa lalu di Indonesia sebagai pokok persoalan tambahan dari penelitian ini.

Penelitian ini didasarkan pada data perusahaan manufaktur yang terdaftar pada Bursa Efek Jakarta pada periode tahun 1999 sampai tahun 2003. Penelitian ini menggunakan struktur kepemilikan, intensitas pendapatan, intensitas pendapatan masa lalu, rasio hutang bagi modal, pertumbuhan intensitas penjualan, dan intensitas dividen masa lalu sebagai variabel bebas, dan intensitas dividen sebagai variabel bergantung.

Penelitian ini menggunakan proposed model oleh Jayesh Kumar (2004). Hasil regresi dari model tersebut menunjukkan bahwa pada tahun 2000 sampai tahun 2003, tidak ada pengaruh penting dari struktur kepemilikan, pendapatan masa lalu, kesempatan investasi masa lalu, dan rasio hutang bagi modal terhadap pembayaran dividen. Pada pihak lain, ada pengaruh penting dari pendapatan masa sekarang dan pembayaran dividen masa lalu terhadap pembayaran dividen pada tahun 2000 sampai tahun 2003, dimana pendapatan masa sekarang secara positif mempengaruhi pembayaran dividen. Didasarkan pada hasil tersebut, investor yang lebih suka mendapatkan keuntungan dari pembayaran dividen dari pada dari

keuntungan modal, dapat menggunakan pendapatan masa sekarang dan pembayaran dividen masa lalu sebagai obyek untuk meramalkan pembayaran dividen.

**Kata Kunci:** Pembayaran Dividen, Struktur Kepemilikan.



# CHAPTER I

## INTRODUCTION

### 1.1. Background of the Study

There are many companies which finance their activities' expenditures by the fund obtained from issuing stocks. The issuing stocks are bought by people called stockholders. By buying the stocks, the stockholders get the ownership of the companies. The ownership of the companies depends on the stocks that the stockholders have. The more the stockholders have stocks, the more the stockholders have the ownership of the companies. Furthermore, the ownership of the companies leads to the controlling of the companies' activities. The company's activities have to be carefully controlled, because the achievement of companies' goals depends on the performance of the company's activities. The performance of the companies' activities must be good so that the companies' goals can be achieved. One of the companies' activities that support the achievement of the companies' goals is the determination of the dividend payout policy.

Why does dividend payout policy support the achievement of the companies' goals? Gallagher and Andrew (2000) explained the necessary of good dividend payout policy for supporting the achievement of the companies' goals. Common dividends are the cash payment from the companies to the common stockholders because the common stockholders have supplied their fund to the companies for financing the activities' expenditure so that the companies can continue their efforts to achieve the goals. The common dividends can be paid if the companies have earnings available to the common stockholders that are calculated by deducting the net income by preferred dividends. The companies can choose whether they make

dividends payment or not for the dividend payout policy. If the companies choose to make the dividends payment, the common stockholders can directly enjoy the dividends payment at the current time. In the other hands, if the companies choose not to make the dividends payment, it means that the earnings available to the common stockholders are retained by the companies. The companies may use funds from the retained earnings instead of making debt for the investment opportunity, that if the investment opportunity generates profits, it will increase the ability of the companies to pay dividends in the future. The problem occurred when there are common stockholders that don't like uncertainty regarding the increasing on the ability of the companies to pay dividends in the future because the investment opportunity doesn't always generate profits. This uncertainty leads to decreasing of the stock price. The stockholders may sell their stocks because of their displeasure when they don't get what they expect. That's why the good dividend payout policy is needed to prevent the unpleasant of the uncertainty influencing the decreasing of the stock price.

In this paper, the writer tries to examine the relationship between dividend payout and ownership structure. After getting some evidences about the relationship, the writer expects that the uncertainty regarding the increasing on the ability of the companies to pay dividends in the future can be minimized, so that the stockholders can predict what will happened to the dividends payout in the future.

This paper is conducted based on Jayesh Kumar (2004) research. Jayesh Kumar used the ownership structure as a determinant of dividend payout. The ownership structure is the composition of certain groups of stockholders that have certain percentage of stocks in the company. Jayesh Kumar classified the stockholders into four groups in his research. The groups are director, corporate,

institutional investors, and foreign investors. Each group of stockholders may have more or less influence to the dividend payout compared to other groups. It depends on the percentage of ownership that each group has. The more the group has percentage of ownership, the more it can influence the dividend payout. Jayesh Kumar (2004) found that the relationship between dividend payout and ownership structure is different for different group of owners and at different levels. This suggests that the ownership structure doesn't influence dividend payout uniformly.

In Jayesh Kumar's (2004) proposed model, we also can provide additional evidences about the relationship between dividend payout with earnings trend, past investment opportunity, debt equity and past dividend payout. As we know, a company's earnings can be distributed to dividend and/or retained earnings. Therefore, if the company's earnings are high, there is a possibility to have high dividend and/or high retained earnings. But, investment opportunity is very influential to the distribution of earnings. If there are many investment opportunities, the company may choose to retain the earnings because those investment opportunities may need additional fund. Reversely, if there is lack of investment opportunity, there will be less or no need on additional fund so that the company can distribute more to dividend payment. The investment opportunity is conducted to obtain more earnings so that the company can increase the ability of the companies to pay dividends in the future. Therefore, the past investment opportunity may increase the current dividend payment because there is possibility of having earnings from it.

Apart from retained earnings, a company can have additional fund from making debt. One of the ratios to measure debt of a company is debt to equity. The company must carefully maintain the debt to equity ratio. If the debt to equity ratio is



too high, Schuster (2000) stated that the company may have a hard time to raise the cash and to delay the interest payments. Therefore, if there is high debt to equity ratio, the company may retain the earnings instead of making debt for additional funding. This condition will lead to the less or no dividend payment. In the other hand, if there is low debt to equity, the company may make debt instead of retaining the earnings for additional funding. This condition will lead to the high dividend payment.

Jayesh Kumar (2004) explained the relationship between current dividend payout and past dividend payout. Past dividend payout influences dividend policy and companies' managers are reluctant to change the current dividend payout from past dividend payout, unless they are unable to maintain it. If they change the dividend payout, they will try to remain at the new level.

In Indonesia, there were some researchers who conducted researches similar to Jayesh Kumar (2004) research. Ramli (1994) examined the relationship between dividend per share with earnings per share and debt equity ratio. He found that the amount of earnings per share positively influences the amount of dividend. In the other hand, the amount of debt negatively influences the amount of dividend. Those findings support Jayesh Kumar (2004) findings. Hatta (2002) examined the relationship between dividend payout ratio and percentage of director ownership. She found that there is no significant relationship between dividend payout ratio and percentage of director ownership. This finding doesn't support Jayesh Kumar (2004) finding stating that director ownership in level positively influences dividend payout. Comparing with previous researches in Indonesia, this research examined not only the relationship between dividend payout with earnings trend, debt equity, and director ownership, but also the relationship between dividend payout with past

investment opportunity, past dividend payout, corporate ownership, institutional ownership, and foreign ownership.

### **1.2. Problem Identification**

The general problem of this research is to provide new evidences about the relationship between dividend payout and ownership structure. Also, this research tries to provide new additional evidences about the relationship between dividend payout with earnings trend, past investment opportunity, debt equity and past dividend payout.

### **1.3. Problem Formulation**

This research tries to obtain the answers of the following questions:

1. How is the relationship between dividend payout and ownership structure?
2. How is the relationship between dividend payout and earnings trend?
3. How is the relationship between dividend payout and past investment opportunity?
4. How is the relationship between dividend payout and debt equity?
5. How is the relationship between current dividend payout and past dividend payout?

### **1.4. Research Objectives**

The research has some objectives. The objectives are:

1. To provide new evidences on how the relationship between dividend payout and ownership structure.

2. To provide new additional evidence on how the relationship between dividend payout and earnings trend.
3. To provide new additional evidence on how the relationship between dividend payout and past investment opportunity.
4. To provide new additional evidence on how the relationship between dividend payout and debt equity.
5. To provide new additional evidence on how the relationship between current dividend payout and past dividend payout.

### **1.5. Limitation of Research Area**

This research has some limitations in its scope and size. The limitations are:

1. The population of this research is all companies listed in Jakarta Stock Exchange (JSX). This research limits the population by using manufacturing companies listed from 1999 up to 2003.
2. Excluding public sector, financial and utilities companies.
3. Excluding companies which have missing data on dividends for at least two consecutive years.
4. Excluding companies with negative shareholders' equity.

### **1.6. Research Contributions**

This research has some contributions. The contributions are:

1. For investors, this research can provide information for decision making regarding stock investment.

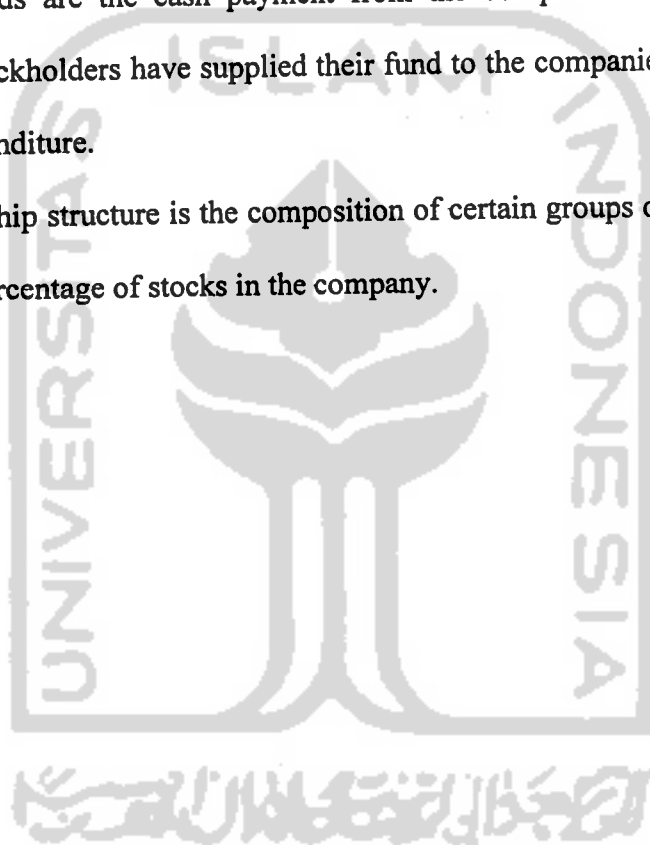
2. For the development of economics, this research can provide additional information for previous researches and can be used as reference for future researches regarding dividend payout and ownership structure.

### **1.7. Definition of Terms**

The keywords of this research are dividends and ownership structure.

Dividends are the cash payment from the companies to the stockholders because the stockholders have supplied their fund to the companies for financing the activities' expenditure.

Ownership structure is the composition of certain groups of stockholders that have certain percentage of stocks in the company.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

This chapter consists of several sub-chapters. The first sub-chapter contains explanation about dividend payout policy. The second sub-chapter contains explanation about ownership structure. The third sub-chapter contains previous researches that examined relationship between dividend payout and ownership structure. The fourth sub-chapter contains hypothesis formulations tested in this research.

#### **2.1. Dividends Payout Policy**

Gallagher and Andrew (2000) explained the necessity of good dividend payout policy. Dividends payout policy refers to the decision made by the companies regarding whether the company makes dividends payment or not to their stockholders. The companies may distribute all the earnings available to the common stockholders to their stockholders. But, the companies must consider the companies' investment opportunity. This investment opportunity may need additional fund so that the investment opportunity can be conducted. One way that the additional fund can be obtained is by retaining the earnings available to the common stockholders besides making debt. The problem occurred when there are stockholders not assured with the investment opportunity will generate profits in the future. Based on the problem that may occur the companies must carefully make the dividend payout policy.

### **2.1.1. Factors Affecting Dividend Payout Policy**

There are some factors affecting dividend payout policy. The factors explained by Gallagher and Andrew (2000) are the company's need for funds, the company's future financial prospects, stockholders' expectations, and contractual restrictions with which the company may have to follow.

#### **2.1.1.1. Need for Funds**

Gallagher and Andrew (2000) explained how the company's need for fund affects dividend payout policy. The earnings available to the common stockholders can be paid to stockholders and/or can be invested in the company's investment opportunity. Based on that condition, the plenty of investment opportunity may affect the dividend payout policy. The company may pay little or no dividends to the stockholders. In the other hand, the lack of investment opportunity may also affect the dividend payout policy. The company may pay large dividends.

#### **2.1.1.2. Future Financial Prospects**

Gallagher and Andrew (2000) explained how the company's future financial prospects affect dividend payout policy. If a company's managers feel that the future is good, they may pay large dividends because there is no worry about future cash position. In the other hand, if managers feel that the future is bad, they may pay less or no dividends in order to make the company's cash reserves for safety.

#### **2.1.1.3. Stockholders' Preferences**

Gallagher and Andrew (2000) explained how stockholders' expectations affect dividend payout policy. If the company reinvested the earnings, it will lead to

the increasing of the stock price. This condition is caused by an opinion that there will be a higher dividends payment in the future if the earnings is reinvested for the profitable investment opportunity. The increasing of stock price itself can provide capital gains for the stockholders. Capital gains are profits obtained from the selling of the increased stock price. There are some stockholders that prefer to obtain capital gains instead of dividends.

In the other hand, there are some stockholders that are retired looking for current income from their stock investment. They may prefer a high dividend payout policy. So, the managers should consider the stockholders' preferences in the making of dividend payout policy. The managers must carefully determine the percentage of retained earnings and the percentage of dividends.

#### **2.1.1.4. Contractual Restrictions**

Gallagher and Andrew (2000) explained how contractual restrictions affect dividend payout policy. Dividend payment restriction may be included in the company's loan agreement. The loan agreement may decide that the company's current ratio can't fall below the certain level during the life of the loan. Because the current ratio is calculated by dividing current assets (include cash account) by current liabilities, the company must consider that the cash dividend payment can possibly decrease the current ratio. Therefore, the company may retain the earnings in order to keep the level of current ratio.

#### **2.1.2. Prominent Dividend Theories**

Gallagher and Andrew (2000) had investigated how companies consider many different factors regarding their dividend payout policy. Financial experts

attempt to combine these factors into theories about how dividend payout policy affects the value of the company. The following prominent dividend theories explain the relationship between the dividend payout policy and the value of the company if those theories are valid.

#### **2.1.2.1. The Residual Theory of Dividends**

Gallagher and Andrew (2000) explained how dividend payout policy affects the value of the company if the residual theory of dividend is valid. The residual theory is widely known in economics. This theory hypothesizes that the amount of retained earnings is the focus of the company. The amount of retained earnings depends on the funds needed for acceptable opportunity investment, and the needed optimal capital structure containing the percentage of debt and the percentage of equity. Then, retained earnings are calculated by multiplying the percentage of equity by the funds needed for acceptable opportunity investment. The calculated retained earnings here refer to the needed equity funds. Finally, the amount of dividends to be paid is calculated by deducting the earnings available by the calculated retained earnings. If the earnings available are less than the calculated retained earnings, there will be no dividends. Even, the company needs to raise additional equity funding by issuing new common stocks.

The residual dividend theory is based on the company's perspective, not from the stockholders' perspective. Therefore, it ignores to some groups of the stockholders who want the dividends payment regularity and certain amount of dividends payment. If a company follows the residual theory, when earnings available are large and the acceptable investment opportunity is small and few, dividends will be large. Conversely, when earnings available are small and the



acceptable investment opportunity is large, there may be no dividends if the residual theory is applied. The dividend payments will be unstable and the amount unpredictable.

#### **2.1.2.2. The Clientele Dividend Theory**

Gallagher and Andrew (2000) explained how dividend payout policy affects the value of the company if the clientele dividend theory is valid. Based on the clientele dividend theory, dividend payout policy as a part of company attracts investors. For example, young investors may want to obtain profits from capital gains rather than from dividends, so they seek companies that retain earnings for profitable investment opportunity instead of paying dividends. Stock prices incline to increase when there are retained earnings for profitable investment opportunity, and there will be no tax for capital gains until the stockholders sell the stock.

In the other hand, old investors may want to obtain profits from dividends rather than from capital gains. They will tend to seek companies that pay high dividends instead of retaining the earnings for profitable investment opportunity. According to the clientele dividend theory, each company has its own clientele of investors who hold the stock in part because of company's dividend policy.

If the clientele theory is real, then it won't much influence a company's dividend payout policy as long as the company has one clientele and maintain it. If the company changes its dividend payout policy, the clientele that preferred the old policy will probably sell their stock. Based on the company's new dividend payout policy, a new clientele will buy the stock. When managers plan a dividend payout policy change, they must ask whether the effect of the new clientele's buying will be more than the effect of the old clientele's selling. The new clientele can't be sure that

the company will repeat the most recent implemented dividend payout policy in the future.

### **2.1.2.3. The Signaling Dividend Theory**

Gallagher and Andrew (2000) explained how dividend payout policy affects the value of the company if the signaling dividend theory is valid. If the signaling dividend theory is valid, there is an opinion that the management of a company knows more about the future financial prospects of the company than the stockholders do. According to this theory, if a company declares a dividend larger than a dividend anticipated by the market, the market will interpret this as a signal that the future financial prospects of the company are better than the future financial prospects expected by the market. Investors assumed that management would have raised the dividend if management relatively sure to maintain this higher dividend. As a result of this signal of good times in the future, investors will buy more stock causing an increasing in the stock price.

Reversely, if a company reduces its dividends, the market takes this as a signal that management anticipates poor earnings and doesn't believe that management can maintain the current dividend. In other words, a dividend reduction signals bad times in the future for the business. The market price of stock decreases when the company announces a lower dividend because investors sell their stock in anticipation of future financial trouble for the company.

If a company's managers believe in the signaling theory, they will always be careful of their dividend payout policy's message to investors. Even, if the company has some profitable investment opportunities that should be financed with retained

earnings, management may choose to pay dividend rather than retain the earnings in order to prevent bad signal to the market.

#### **2.1.2.4. The Bird-in-the-Hand Theory**

Gallagher and Andrew (2000) explained how dividend payout policy affects the value of the company if the bird-in-the-hand theory is valid. The bird-in-the-hand theory hypothesizes that the stockholders prefer to receive dividends instead of having earnings reinvested in the company's profitable opportunity investment. Although there is expectation to receive profits in the form of higher future stock prices (capital gains) or in the form of higher next dividends payment, there are some stockholders that aren't sure with the investment opportunity using retained earnings will generate profits in the future. Those stockholders prefer to obtain dividends now rather than expecting the unsure capital gains and/or the unsure higher dividends payment. In other words, the stockholders will say "a bird in the hand is worth two in the bush."

If the bird-in-the-hand theory is correct, the stockholders prefer stock of companies that pay relatively high dividends than stocks of companies that reinvest their earnings. This condition will lead stockholders to buy relatively higher stock prices because high dividends influence stock price to increase.

#### **2.1.2.5. Modigliani and Miller's Dividend Theory**

Gallagher and Andrew (2000) explained how dividend payout policy affects the value of the company if the Modigliani and Miller's dividend theory is valid. Franco Modigliani and Merton Miller (1961), commonly referred to as M&M, hypothesized that dividend payout policy is irrelevant. Given some simplifying

assumptions, M&M showed how a company's income produced from its assets, not a company's dividend payout policy, determine the value of a company. According to the M&M dividend theory, the way a company distributes its income (in the form of future capital gains or current dividends) doesn't affect the overall value of the company. Stockholders aren't concern whether they receive their return on their stock investments from capital gains or dividends. So, dividends don't matter. There are critiques for M&M's arguments by financial theorists. Most of the critiques support that M&M's assumptions are unrealistic.

## 2.2. Ownership Structure

The ownership structure is the composition of certain groups of stockholders that have certain percentage of stocks in the company. Jayesh Kumar (2004) classified the stockholders into four groups in his research. The groups are:

1. Director ownership, it is equity held by directors of the company that includes the stocks held by the family members of the director.
2. Corporate ownership, it is equity held by corporate bodies as percentage total equity stocks. These include corporate bodies excluding those already covered by other groups.
3. Institutional ownership, it is stocks held by government companies as percentage of total equity stocks. These include insurance companies, mutual funds, financial institutions, banks, central and state government companies, state financial corporations and other government bodies.
4. Foreign ownership, it is equity held by foreigners as percentage of total equity stocks. These include foreign collaborators, foreign financial institutions, foreign nationals, and non-resident Indonesian.

### **2.3.1. Klaus Gugler, B. Burcin Yurtoglu (2002)**

In their research entitled “Corporate governance and dividend pay-out policy in Germany”, Klaus Gugler, B. Burcin Yurtoglu found evidence that dividends signal the presence of the conflict between the large, controlling owner and small, outside shareholders. Therefore, dividend change announcements provide new information about this conflict. They analyzed 736 dividend change announcements in Germany during 1992–1998. They used information on the ownership and control structure of the company to test the rent extraction hypothesis and distinguish it from the cash flow signaling explanation.

### **2.3.2. Jayesh Kumar (2004)**

In his research entitled “Corporate governance and dividend payout in India”, Jayesh Kumar examined the relationship between the corporate governance and the dividend payout policy. He analyzed 2575 Indian corporate companies during the period 1994-2000. He explained the differences in the dividend payout behavior of the companies’ financial structure, investments opportunities, dividend history, earnings trend, and the ownership structure. He found that ownership is one of the important variables that influence the dividend payout policy. However, the relationship is different for different group of owners and at different levels. This suggests that the ownership structure doesn’t influence dividend payout policy uniformly.

### **2.3.3. Grzegorz Trojanowski (2004)**

In his research entitled “Ownership structure and payout policy in the UK”, Grzegorz Trojanowski’s research complemented the existing literature by analyzing

the trends in both dividends and total payouts (including stock repurchases). He analyzed payout policies of 985 British companies listed on the London Stock Exchange during the 1990s. The major finding is that the payout policy in the UK is significantly related to ownership of the companies. The presence of strong block holders or block holder coalitions (in particular, executive directors, financial institutions, and other industrial companies) weakens the relationship between the corporate earnings and the payout dynamics. The results challenge some of the implications of the agency theories of payout, and favor a pecking-order explanation for the observed payout patterns.

#### **2.4. Hypothesis Formulation**

Jensen and Meckling (1976) stated that information asymmetry between insiders and outsiders may also lead to agency cost. One of the mechanisms suggested for reducing outsiders' expropriation is by reducing free cash flows available to managers for making payout. The cash flow hypothesis states that insiders have more information about companies' future cash flow than outsiders do, and they have incentive to signal that information to outsiders. Dividends can be an ideal instrument for limiting rent extraction of minority shareholders. Large shareholders may signal their unwillingness to exploit minority shareholders by giving dividends. However, dividend payout guarantees balanced payout for both insiders and outsiders.

Jayesh Kumar (2004) used the ownership structure as a determinant of dividend payout. The ownership structure is the composition of certain groups of stockholders that have certain percentage of stocks in the company. Jayesh Kumar (2004) classified the stockholders into four groups in his research. The groups are

director, corporate, institutional investors, and foreign investors. Jayesh Kumar (2004) found evidences about the relationship between dividend payout and ownership structure. The evidences are as follows: 1) director ownership in level positively influences dividend payout, 2) corporate ownership in level positively influences dividend payout, 3) corporate ownership in square negatively influences dividend payout, 4) institutional ownership in level negatively influences dividend payout, 5) institutional ownership in square positively influences dividend payout, and 6) foreign ownership doesn't influences dividend payout. Those findings show that the relationship between dividend payout and ownership structure is different for different group of owners and at different levels. This suggests that the ownership structure doesn't influence dividend payout uniformly. In the Jayesh Kumar (2004) research, we can find some related literature reviews. Short et al. (2002) found a positive association between dividends and institutional ownership, and a negative association between dividends and managerial ownership in the UK companies. Based on the previous research conducted by Jayesh Kumar (2004), the alternative hypotheses are as follows:

$H_{a1}$ : Director ownership in level positively influences dividend payout

$H_{a2}$ : Corporate ownership in level positively influences dividend payout

$H_{a3}$ : Corporate ownership in square negatively influences dividend payout

$H_{a4}$ : Institutional ownership in level negatively influences dividend payout

$H_{a5}$ : Institutional ownership in square positively influences dividend payout

$H_{a6}$ : Foreign ownership doesn't influences dividend payout

A company's earnings can be distributed to dividend and/or retained earnings. Therefore, if the company's earnings are high, there is a possibility to have high dividend and/or high retained earnings. But, investment opportunity is very

influential to the distribution of earnings. If there are many investment opportunities, the company may choose to retain the earnings because those investment opportunities may need additional fund. Reversely, if there is lack of investment opportunity, there will be less or no need on additional fund so that the company can distribute more to dividend payment. The investment opportunity is conducted to obtain more earnings so that the company can increase the ability of the companies to pay dividends in the future. Therefore, the past investment opportunity may increase the current dividend payment because there is possibility of having earnings from it. Jayesh Kumar (2004) found evidences about the relationship between dividend payout with earnings trends and past investment opportunity. The evidences are: 1) earnings trend positively influences dividend payout, and 2) past investment opportunity positively influences dividend payout. In the Jayesh Kumar research (2004), we can find some related literature reviews. Bhattacharya (1979: 1980), Linter (1956), Lintner (1962: 1970), and Miller and Rock (1985) suggested that corporate dividend policy is designed to reveal earnings prospects to investors. In Indian context, Bhat and Pandey (1994) on a basis on survey of managers perspective about dividend payout and retention, stated that dividend depends on current and expected earnings as well as the pattern of past dividends, dividends helps in signaling the future prospects of the firm, and dividends should be paid even if the firm have profitable investment opportunity. In Indonesia, Ramli (1994) found that the amount of earnings per share positively influences the amount of dividend. Based on the previous research conducted by Jayesh Kumar (2004), the alternative hypotheses are as follows:

H<sub>a7</sub>: Earnings trend positively influences dividend payout

H<sub>a8</sub>: Past investment opportunity positively influences dividend payout



### **2.2.1. The Relationship between Director and other Groups of Stockholders**

Van Horne and Wachowicz (1995) explained problems that may occur between director and other groups of stockholders. Director is the persons who represent all groups of stockholders for managing companies' activities. All groups of stockholders expect that the director's works will agree with all groups of stockholders' desires. But in reality, there may be conflicts between the director and some groups of stockholders. The director may have different goals with some groups of stockholders' goals.

Jensen and Meckling (1976) were the first to develop a comprehensive theory of the company under agency arrangements. They showed that the principals (some groups of stockholders) can assure themselves that the agents (director) will make optimal decisions only if appropriate incentives are given and only if the agents are monitored. The incentives are given based on how close director's decisions agree with the desires of the stockholders. Incentives include stock options, bonuses, and perquisites. In the other hand, monitoring can be conducted by systematically reviewing management perquisites, auditing financial statements, and limiting director's decisions.

### **2.3. Previous Research**

There were some previous researches that examined the relationship between dividend payout and ownership structure. Those researches had been conducted not only in one country but also in some countries. The following sub-chapters explain researches that had been conducted in Germany, India, and United Kingdom.

Apart from retained earnings, a company can have additional fund from making debt. One of the ratios to measure debt of a company is debt to equity. The company must carefully maintain the debt to equity ratio. If the debt to equity ratio is too high, Schuster (2000) stated that the company may have a hard time to raise the cash and to delay the interest payments. Therefore, if there is high debt to equity ratio, the company may retain the earnings instead of making debt for additional funding. This condition will lead to the less or no dividend payment. In the other hand, if there is low debt to equity, the company may make debt instead of retaining the earnings for additional funding. This condition will lead to the high dividend payment. Jayesh Kumar (2004) found evidence about the relationship between dividend payout and debt equity. The evidence is debt equity has negative relationship with dividend payout. Dutta, Collins, and Wansley (1994) found that companies with the lowest level of insider holdings have the highest debt ratio, while companies with five to twenty five percent insider holdings have a significantly lower level of debt. In Indonesia, Ramli (1994) found that the amount of debt negatively influences the amount of dividend. Based on the previous research conducted by Jayesh Kumar (2004), the alternative hypothesis is as follows:

$H_{a9}$ : Debt equity has negative relationship with dividend payout

Jayesh Kumar (2004) explained the relationship between current dividend payout and past dividend payout. Past dividend payout influences dividend policy and companies' managers are reluctant to change the current dividend payout from past dividend payout, unless they are unable to maintain it. If they change the dividend payout, they will try to remain at the new level. Jayesh Kumar (2004) found evidence about the relationship between past dividend payout and current dividend payout. The evidence is past dividend payout influences current dividend payout. In

the Jayesh Kumar (2004) research, we can find some related literature reviews. Fama and Babiak (1968) argued that the companies try to stick their previous target dividend level. Kevin (1992) showed that dividend stability is a primary determinant of payout while profitability is only secondary importance. Based on the previous research conducted by Jayesh Kumar (2004), the alternative hypothesis is as follows:

$H_{a10}$ : Past dividend payout influences current dividend payout



## CHAPTER III

### RESEARCH METHOD

This research is an empirical research method. An empirical research method contains hypothesis testing. This research tests the hypotheses obtained from the previous research. From the hypothesis testing, this research makes new evidences that can reject or can't reject the formulated hypotheses.

An empirical research method contains:

1. The determination of population and sample.
2. Data sources and data collection.
3. Definition and measurement of research variables.
4. Empirical model and formulated hypothesis. Formulated hypothesis is arranged in the form of null hypothesis and alternative hypothesis.
5. Technique of data analysis.

#### 3.1. Population and Sample

The population of this research is all companies listed in Jakarta Stock Exchange (JSX). The sample is derived from the population by using manufacturing companies listed from 1999 up to 2003. Other ways to derive the sample are as follows:

1. Excluding public sector, financial and utilities companies.
2. Excluding companies that have missing data on dividends for at least two consecutive years.
3. Excluding companies with negative shareholders' equity.

5. The percentage of director ownership, institutional ownership, foreign ownership, and corporate ownership in level and in square.

### 3.4. Research Procedures

This research consists of procedures that have to be done in order to obtain the new evidences as a result of this research. The procedures are:

1. Collecting the samples from the population.
2. Calculating the needed numbers from the samples for obtaining research variables.
3. Identifying the problems of outlier, autocorrelation, and multicollinearity.
4. Using the statistical test for testing the hypotheses.
5. Analyzing and interpreting the new evidences obtained from the statistical test results.
6. Making conclusions of the research containing the non-rejected hypotheses.

### 3.5. Empirical Model

This research uses the Proposed Model (PM) for testing the formulated hypotheses in order to obtain new evidences about the relationship between dividend payout and ownership structure. Jayesh Kumar (2004) developed this proposed model. The empirical model for a company  $i$  at time  $t$ , is given by:

$$\begin{aligned}
 \text{Dividend Intensity}_{it} = & \alpha_i + \beta_1 \text{Earnings Intensity}_{it} \\
 & + \beta_2 \text{Earnings Intensity}_{i(t-1)} + \beta_3 \text{Debt Equity}_{it} \\
 & + \beta_4 \text{Growth in Sales Intensity}_{it} + \beta_5 \text{Foreign}_{it} \\
 & + \beta_6 \text{Institutional}_{it} + \beta_7 \text{Corporate}_{it} + \beta_8 \text{Director}_{it} \\
 & + \beta_9 \text{Foreign}^2_{it} + \beta_{10} \text{Institutional}^2_{it} + \beta_{11} \text{Corporate}^2_{it} \\
 & + \beta_{12} \text{Director}^2_{it} + \beta_{13} \text{Dividend Intensity}_{i(t-1)} + \varepsilon_{it} \quad (3-6)
 \end{aligned}$$

where: $\alpha_i$	= intercept
$\beta_1$	= coefficient of earnings intensity variable
$\beta_2$	= coefficient of lagged earnings intensity variable
$\beta_3$	= coefficient of debt equity variable
$\beta_4$	= coefficient of growth in sales intensity variable
$\beta_5$	= coefficient of foreign ownership in level variable
$\beta_6$	= coefficient of institutional ownership in level variable
$\beta_7$	= coefficient of corporate ownership in level variable
$\beta_8$	= coefficient of director ownership in level variable
$\beta_9$	= coefficient of foreign ownership in square variable
$\beta_{10}$	= coefficient of institutional ownership in square variable
$\beta_{11}$	= coefficient of corporate ownership in square variable
$\beta_{12}$	= coefficient of director ownership in square variable
$\beta_{13}$	= coefficient of lagged dividend intensity variable
$\varepsilon_{it}$	= error term.

### 3.6. Formulated Hypothesis and Requirement of Rejecting Null Hypothesis

Based on the previous research conducted by Jayesh Kumar (2004), the null hypotheses, the alternative hypotheses, and the requirements of rejecting null hypothesis are as follows:

1.  $H_{01}$ : Director ownership in level doesn't positively influence dividend payout

$H_{a1}$ : Director ownership in level positively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_8$  has positive sign and significant at 5% level of confidence, the  $H_{01}$  is rejected.

2.  $H_{02}$ : Corporate ownership in level doesn't positively influence dividend payout

$H_{a2}$ : Corporate ownership in level positively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_7$  has positive sign and significant at 5% level of confidence, the  $H_{02}$  is rejected.

3.  $H_{03}$ : Corporate ownership in square doesn't negatively influence dividend payout

$H_{a3}$ : Corporate ownership in square negatively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_{11}$  has negative sign and significant at 5% level of confidence, the  $H_{03}$  is rejected.

4.  $H_{04}$ : Institutional ownership in level doesn't negatively influence dividend payout

$H_{a4}$ : Institutional ownership in level negatively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_6$  has negative sign and significant at 5% level of confidence, the  $H_{04}$  is rejected.

5.  $H_{05}$ : Institutional ownership in square doesn't positively influence dividend payout

$H_{a5}$ : Institutional ownership in square positively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_{10}$  has positive sign and significant at 5% level of confidence, the  $H_{05}$  is rejected.

6.  $H_{06}$ : Foreign ownership influences dividend payout

$H_{a6}$ : Foreign ownership doesn't influence dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_5$  and the  $\beta_9$  aren't significant at 5% level of confidence, the  $H_{06}$  is rejected.

7.  $H_{07}$ : Earnings trend positively doesn't influence dividend payout

$H_{a7}$ : Earnings trend positively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_1$  and/or the  $\beta_2$  has positive sign and significant at 5% level of confidence, the  $H_{07}$  is rejected.

8.  $H_{08}$ : Past investment opportunity doesn't positively influence dividend payout

$H_{a8}$ : Past investment opportunity positively influences dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_4$  has positive sign and significant at 5% level of confidence, the  $H_{08}$  is rejected.

9.  $H_{09}$ : Debt equity has no negative relationship with dividend payout

$H_{a9}$ : Debt equity has negative relationship with dividend payout

We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_3$  has negative sign and significant at 5% level of confidence, the  $H_{09}$  is rejected.

10.  $H_{010}$ : Past dividend payout doesn't influence current dividend payout

$H_{a10}$ : Past dividend payout influences current dividend payout



We use proposed model for testing this hypothesis. If the regression result of that model shows that the  $\beta_{13}$  are significant at 5% level of confidence, the  $H_{010}$  is rejected.



## CHAPTER IV

### RESEARCH FINDINGS, DISCUSSION, AND IMPLICATIONS

This chapter explains the process of data collection, the measurement of research variables, the data analysis, and the interpretation of hypothesis testing. This chapter consists of three sub-chapters. They are research preparation, research findings, and research implications.

#### 4.1. Research Preparation

This research began by studying literatures in order to obtain relevant topic of the research. From the topic, we identify the problem and set the objectives of the research. Next, we determine the population and the sample of the research. The population of this research is companies listed in Jakarta Stock Exchange (JSX). The sample is derived from the population by using manufacturing companies listed from 1999 up to 2003. The other ways to derive the sample are as follows:

1. Excluding public sector, financial and utilities companies.
2. Excluding companies that have missing data on dividends for at least two consecutive years.
3. Excluding companies with negative shareholders' equity.

This research collects the data from Indonesian Capital Market Directory (ICMD) and from Pojok BEJ Universitas Islam Indonesia. Those data sources provide numbers needed for obtaining research variables. The numbers are cash dividends, total assets, profit after taxes, debt equity, net sales, and the percentage of director ownership, institutional ownership, foreign ownership and corporate ownership in level.

We calculate those numbers in order to obtain the research variables. The research variables are dividend intensity (DIVINT), lagged dividend intensity (LDIVINT), earnings intensity (EARINT), lagged earnings intensity (LEARINT), debt equity (DE), growth in sales intensity (GISI), the percentage of director ownership in level and in square (DOWN and DOWN2), the percentage of institutional ownership in level and in square (IOWN and IOWN2), the percentage of foreign ownership in level and in square (FOWN and FOWN2), and the percentage of corporate ownership in level and in square (COWN and COWN2). Finally, we use the empirical model that contains the research variables in order to obtain the regression result.

**Table 4.1.**  
**THE DESCRIPTIVE STATISTICS OF THE RESEARCH VARIABLES**  
**EQUATION 3-6**

	N	Minimum	Maximum	Mean	Std. Deviation
DIVINTS	125	.000127657599	.156543269039	.03328409331424	.032452292855078
EARINT	125	.002243828344	.330772759311	.10500947544958	.064908295899005
LEARINT	125	.008124094467	1.160766041144	.12393684329734	.118611126312190
DE	125	.12	6.04	1.1301	1.20384
GISI	125	-32.989313385516	68.121627190048	2.54639461331960	16.274745726273120
DOWN	125	0	7	.30	.870
IOWN	125	.0	91.0	8.941	21.6534
FOWN	125	0	93	28.84	31.302
COWN	125	0	87	33.57	29.495
DOWN2	125	0	45	.84	4.317
IOWN2	125	.00	8279.18	545.0672	1625.87496
FOWN2	125	0	8660	1803.81	2544.484
COWN2	125	0	7623	1989.77	2172.103
LDIVINT	125	.000127657599	.233609050615	.03768916407372	.040650935019192

## 4.2. Research Findings

### 4.2.1. Probability Approach for Testing the Significance Influence of the Independent Variables toward the Dependent Variable

The significance influence of the independent variables toward the dependent variable can be tested with the probability approach (p-value approach). The p-value

approach compares the p-value of each coefficient of independent variable t test statistic with the level of confidence ( $\alpha$ ). In this research, we use  $\alpha=5\%$ . If the p-value of each coefficient of independent variable t test statistic is equal to or lower than  $\alpha$ , the independent variable has significant influence toward the dependent variable. In the other hand, if the p-value of each coefficient of independent variable t test statistic is greater than  $\alpha$ , the independent variable has no significant influence toward the dependent variable.

#### 4.2.2. The Hypotheses Testing

The first step to test the hypotheses is the obtaining the regression result of the empirical model. The regression result of the empirical model is as follows:

**Table 4.2.**  
**THE REGRESSION RESULT OF THE EMPIRICAL MODEL**  
**EQUATION 3-6**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	1.440E-02	.013	1.070	.287
EARINT	.174	.049	3.522	.001
LEARINT	-1.830E-02	.022	-.847	.399
DE	-3.142E-03	.002	-1.361	.176
GISI	1.271E-04	.000	.884	.378
DOWN	-6.172E-04	.006	-.107	.915
IOWN	-3.008E-04	.000	-.679	.499
FOWN	-1.357E-04	.000	-.403	.688
COWN	2.833E-05	.000	.067	.947
DOWN2	-5.291E-04	.001	-.464	.644
IOWN2	2.651E-06	.000	.462	.645
FOWN2	5.645E-07	.000	.150	.881
COWN2	-1.033E-06	.000	-.209	.835
LDIVINT	.318	.074	4.311	.000

We obtain the hypotheses testing result by analyzing the regression result of the empirical model. The hypotheses testing results are as follows:

1. In the regression result of the empirical model, the coefficient of director ownership in level variable ( $\beta_8$ ) is -0.000617 and p-value of  $\beta_8$  t test statistic is

0.915. The sign of  $\beta_8$  is negative, and there is no significant influence of director ownership in level toward dividend intensity because p-value of  $\beta_8$  t test statistic (0.915) is greater than  $\alpha$  (5%). We fail to reject  $H_{01}$  because there is no positive  $\beta_8$  that significant at 5% level of confidence. The conclusion is director ownership in level doesn't positively influence dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that director ownership in level positively influences dividend payout.

2. In the regression result of the empirical model, the coefficient of corporate ownership in level variable ( $\beta_7$ ) is 0.00002833 and p-value of  $\beta_7$  t test statistic is 0.947. The sign of  $\beta_7$  is positive, and there is no significant influence of corporate ownership in level toward dividend intensity because p-value of  $\beta_7$  t test statistic (0.947) is greater than  $\alpha$  (5%). We fail to reject  $H_{02}$  because there is no positive  $\beta_7$  that significant at 5% level of confidence. The conclusion is corporate ownership in level doesn't positively influence dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that corporate ownership in level positively influences dividend payout.
3. In the regression result of the empirical model, the coefficient of corporate ownership in square variable ( $\beta_{11}$ ) is -0.00000103 and p-value of  $\beta_{11}$  t test statistic is 0.835. The sign of  $\beta_{11}$  is negative, and there is no significant influence of corporate ownership in square toward dividend intensity because p-value of  $\beta_{11}$  t test statistic (0.835) is greater than  $\alpha$  (5%). We fail to reject  $H_{03}$  because there is no negative  $\beta_{11}$  that significant at 5% level of confidence. The conclusion is corporate ownership in square doesn't negatively influence dividend payout. It

doesn't support Jayesh Kumar (2004) finding stating that corporate ownership in square negatively influences dividend payout.

4. In the regression result of the empirical model, the coefficient of institutional ownership in level variable ( $\beta_6$ ) is -0.000301 and p-value of  $\beta_6$  t test statistic is 0.499. The sign of  $\beta_6$  is negative, and there is no significant influence of institutional ownership in level toward dividend intensity because p-value of  $\beta_6$  t test statistic (0.499) is greater than  $\alpha$  (5%). We fail to reject  $H_{04}$  because there is no negative  $\beta_6$  that significant at 5% level of confidence. The conclusion is institutional ownership in level doesn't negatively influence dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that institutional ownership in level negatively influences dividend payout.
5. In the regression result of the empirical model, the coefficient of institutional ownership in square variable ( $\beta_{10}$ ) is 0.000002651 and p-value of  $\beta_{10}$  t test statistic is 0.645. The sign of  $\beta_{10}$  is positive, and there is no significant influence of institutional ownership in square toward dividend intensity because p-value of  $\beta_{10}$  t test statistic (0.645) is greater than  $\alpha$  (5%). We fail to reject  $H_{05}$  because there is no positive  $\beta_{10}$  that significant at 5% level of confidence. The conclusion is institutional ownership in square doesn't positively influence dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that institutional ownership in square positively influences dividend payout.
6. In the regression result of the empirical model, the coefficients of foreign ownership in level and in square variables ( $\beta_5$  and  $\beta_9$ ) are -0.000136 and 0.0000005645 respectively, and p-value of  $\beta_5$  and  $\beta_9$  t test statistic are 0.688 and 0.881 respectively. The signs of  $\beta_5$  and  $\beta_9$  are negative and positive respectively,

and there are no significant influences of foreign ownership in level and in square toward dividend intensity because p-values of  $\beta_5$  and  $\beta_9$  t test statistic (0.688 and 0.881) are greater than  $\alpha$  (5%). We reject  $H_{06}$  because there are no  $\beta_5$  and  $\beta_9$  that significant at 5% level of confidence. The conclusion is foreign ownership doesn't influence dividend payout. It supports Jayesh Kumar (2004) finding stating that foreign ownership doesn't influence dividend payout.

7. In the regression result of the empirical model, the coefficients of earnings intensity and lagged earnings intensity variables ( $\beta_1$  and  $\beta_2$ ) are 0.174 and -0.0183 respectively, and p-values of  $\beta_1$  and  $\beta_2$  t test statistic are 0.001 and 0.399 respectively. The signs of  $\beta_1$  and  $\beta_2$  are positive and negative respectively, and there is significant influence of earnings intensity toward dividend intensity because p-value of  $\beta_1$  t test statistic (0.001) is lower than  $\alpha$  (5%). In the other hand, there is no significant influence of lagged earnings intensity toward dividend intensity because p-value of  $\beta_2$  t test statistic (0.399) is greater than  $\alpha$  (5%). We reject  $H_{07}$  because there is positive  $\beta_1$  that significant at 5% level of confidence. The conclusion is earnings trend positively influences dividend payout. It supports Jayesh Kumar (2004) finding stating that earnings trend positively influences dividend payout.
8. In the regression result of the empirical model, the coefficient of growth in sales intensity variable ( $\beta_4$ ) is 0.0001271 and p-value of  $\beta_4$  t test statistic is 0.378. The sign of  $\beta_4$  is positive, and there is no significant influence of growth in sales intensity toward dividend intensity because p-value of  $\beta_4$  t test statistic (0.378) is greater than  $\alpha$  (5%). We fail to reject  $H_{08}$  because there is no positive  $\beta_4$  that significant at 5% level of confidence. The conclusion is past investment

opportunity doesn't positively influence dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that past investment opportunity positively influences dividend payout.

9. In the regression result of the empirical model, the coefficient of debt equity variable ( $\beta_3$ ) is -0.00314 and p-value of  $\beta_3$  t test statistic is 0.176. The sign of  $\beta_3$  is negative, and there is no significant influence of debt equity toward dividend intensity because p-value of  $\beta_3$  t test statistic (0.176) is greater than  $\alpha$  (5%). We fail to reject  $H_{09}$  because there is no negative  $\beta_3$  that significant at 5% level of confidence. The conclusion is debt equity has no negative relationship with dividend payout. It doesn't support Jayesh Kumar (2004) finding stating that debt equity has negative relationship with dividend payout.
10. In the regression result of the empirical model, the coefficient of lagged dividend intensity variable ( $\beta_{13}$ ) is 0.318 and p-value of  $\beta_{13}$  t test statistic is 0.000. The sign of  $\beta_{13}$  is positive, and there is significant influence of lagged dividend intensity toward dividend intensity because p-value of  $\beta_{13}$  t test statistic (0.000) is lower than  $\alpha$  (5%). We reject  $H_{010}$  because there is  $\beta_{13}$  that significant at 5% level of confidence. The conclusion is past dividend payout influences current dividend payout. It supports Jayesh Kumar (2004) finding stating that past dividend payout influences current dividend payout.

Based on the regression result of the empirical model, the general conclusion of this research is there were no significant influences of ownership structure, past earnings, past investment opportunity, and debt equity toward dividend payout. In the other hand, there were significant influences of current earnings and past



dividend payout toward dividend payout which current earnings positively influences dividend payout.

#### 4.2.3. Autocorrelation

Berenson, Levine, and Krehbiel (2002) explained about autocorrelation. One of the basic assumptions of the regression model that has been considered is the independence of the errors. This assumption is often violated when data are collected over sequential periods of time, there is a residual at any one point in time may tend to be similar to residuals at adjacent points in time. Such a pattern in the residuals is called autocorrelation. When substantial autocorrelation is present in a set of data, the validity of a fitted regression model can be in serious doubt.

In this research, we use the Durbin-Watson statistic to measure the autocorrelation. If the Durbin-Watson statistic is close to 2, there will be no autocorrelation. The Durbin-Watson statistic in this research is 1.976. This number is close to 2. Therefore, we can conclude that there is no autocorrelation.

**Table 4.3.**  
**THE DURBIN-WATSON STATISTIC**  
**EQUATION 3-6**

##### Model Summary<sup>b</sup>

Model	Durbin-Watson
1	1.976 <sup>a</sup>

a. Predictors: (Constant), LDIVINT, DOWN2, IOWN, GISI, COWN2, DE, LEARINT, EARINT, FOWN2, DOWN, IOWN2, FOWN, COWN

b. Dependent Variable: DIVINT

#### 4.2.4. Multicollinearity

Berenson, Levine, and Krehbiel (2002) explained the multicollinearity. One important problem in the application of multiple regression analysis involves the

possible collinearity of the independent variable. This condition refers to situations in which some of the independent variables are highly correlated with each other.

In this research, we use the variance inflationary factor (VIF) to measure the multicollinearity for each independent variable. If the VIF is greater than 5, there are variables that are highly correlated. One solution to the problem is to delete the variable with the largest VIF value. In this research, the linear regression output shows that there are multicollinearity problems. The independent variables that are highly correlated are foreign ownership in level and in square, institutional ownership in level and in square, and corporate ownership in level and in square. This condition happens because there are independent variables that their values come from calculations containing other independent variables. For example, foreign ownership in square variable comes from quadratic of foreign ownership in level variable. Since this research has no purpose of constructing the regression model containing appropriate variables, we can ignore the multicollinearity.

**Table 4.4.**  
**THE VARIANCE INFLATIONARY FACTOR**  
**EQUATION 3-6**  
**Coefficients<sup>a</sup>**

Model		Collinearity Statistics	
		Tolerance	VIF
1	EARINT	.496	2.017
	LEARINT	.774	1.292
	DE	.658	1.520
	GISI	.929	1.077
	DOWN	.203	4.937
	IOWN	.055	18.112
	FOWN	.046	21.833
	COWN	.033	30.494
	DOWN2	.210	4.770
	IOWN2	.058	17.130
	FOWN2	.056	18.000
	COWN2	.044	22.729
	LDIVINT	.564	1.774

a. Dependent Variable: DIVINT

### 4.3. Research Implication

Based on the regression results, there are only two independent variables (earning intensity and lagged dividend intensity) from thirteen independent variables that have significant influence toward dividend intensity. The results imply that in Indonesia especially in the year 2000 up to year 2003, the dividend payout was influenced by current earnings and past dividend payout. Therefore, investors who prefer to obtain profits from dividend payout rather than capital gain can use current earnings and past dividend payout as objects for predicting the dividend payout. They can't use ownership structure, past earnings, past investment opportunity, and debt equity as objects for predicting the dividend payout.

Differing from the condition in India, Jayesh Kumar (2004) found that the dividend payout was influenced not only by current earnings and past dividend payout but also ownership structure (except director ownership in level and foreign ownership), past earnings, past investment opportunity, and debt equity. The difference between the condition in Indonesia and the condition in India imply that in each country may have different objects for predicting the dividend payout compared to other country. By conducting this research, we have given contribution to development of economics. We have provided the information that in each country may have different behavior of dividend payout. Also, we have provided a reference for future researches regarding dividend payout.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Conclusions

Based on the research objectives and the analyzed regression results, we derive some conclusions regarding the dividend payout in Indonesia. The conclusions are:

1. In the year 2000 up to year 2003, there were no significant influences of ownership structure, past earnings, past investment opportunity, and debt equity toward dividend payout.
2. In the year 2000 up to year 2003, there were significant influences of current earnings and past dividend payout toward dividend payout which current earnings positively influences dividend payout.
3. Based on two conclusions above, investors who prefer to obtain profits from dividend payout rather than capital gain can use current earnings and past dividend payout as objects for predicting the dividend payout. They can't use ownership structure, past earnings, past investment opportunity, and debt equity as objects for predicting the dividend payout.

#### 5.2. Recommendations

The recommendations for future research are:

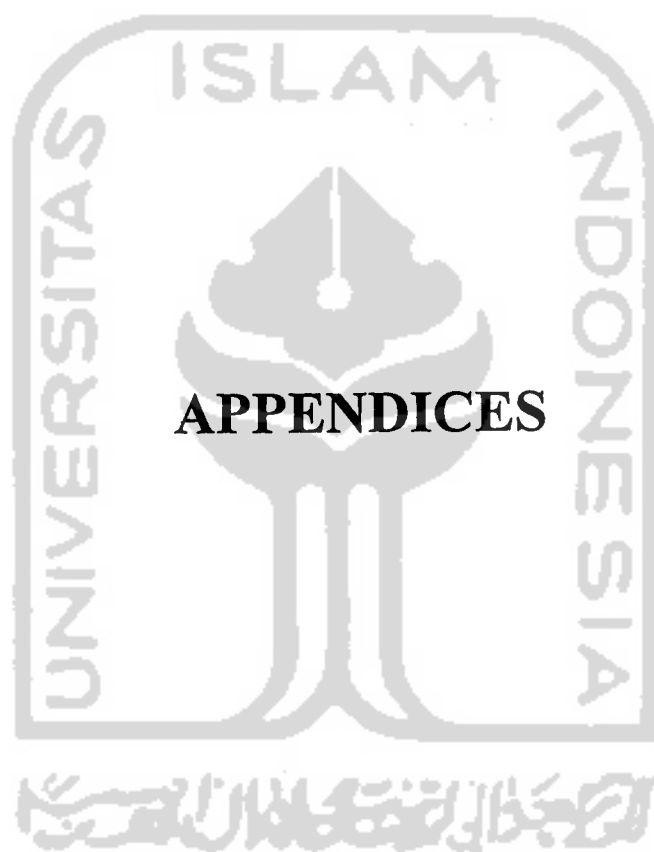
1. The period of the sample used must be different from this research. The future research may use the sample before year 1999 and/or after year 2003. It may lead to the obtaining of new evidences that differ from the evidences obtained from this research.

2. By using the same model in this research, the future research can use samples obtained from other countries besides India and Indonesia that have been used. It will be an interesting subject for comparing the condition that may be different in each country.



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29	Panasia Indosyntec	0	2222125	-101604	26.84	1077444	10.52	0	0	0	55
30	Roda Vivatex	0	319931	24659	0.3	244329	0	0	0	0	73.33
31	Sunson Textile Manufacturer	0	695256	39456	1.48	450568	5.02	57.37	0	0	0
32	Tejin Indonesia Fiber Corporation	966	1585574	-62	4.89	1241755	0	0	89.91	0	0
33	Textile Manufacturing Company Jaya	0	1312153	-186641	-44.27	878644	0	0	0	0	92
34	APAC Citra Centertex	0	2603638	2579	5.1	1553675	0	0	16.52	0	39.39
35	Daeyu Orchid Indonesia										
36	Ever Shine Textile Industry	14927	739454	102077	1.66	496912	0	0	0	0	70.78
37	Fortune Mate Indonesia	0	176495	12924	0.16	260997	0	23.81	55.56	0	0
38	Great River International	0	1254893	360	6.7	476749	0	0	38.38	0	51.11
39	Hanson Industri Utama	0	749113	-92501	6.33	351820	1.2	0	0	0	59.94
40	Indo-Rama Synthetics	0	4654444	16018	1.44	2291434	0	0	20.53	0	37.81
41	Karwell Indonesia	14625	576630	21365	2.01	781564	0	0.23	4.03	0	52.41
42	Kasogi International	0	270421	-188594	-1.77	139367	0	7.1	5.72	0	49.47
43	Pan Brothers Tex	2688	94502	14484	1.8	167697	0	0	0	0	21
44	Primarindo Asia Infrastructure	0	182023	16415	8.76	376473	3.93	0	7.27	0	52.5
45	Ricky Putra Globalindo	3456	278532	31037	1.89	252411	0	5.02	12.35	0	55.65
46	Ryane Adibusana										
47	Sarasa Nugraha	0	146414	517	-2.14	251424	0	0	9.51	0	42.55
48	Sepatu Bata	6143	151714	50397	0.45	286722	0	5	81	0	0
49	Surya Intrindo Makmur	0	118422	10361	0.37	136428	0	68.6	0	0	0
50	Barito Pacific Timber	0	5797318	-103364	3.11	1595016	7.97	13.75	0	0	55.16
51	Daya Sakti Unggul Corporation	12500	413225	32567	1.83	555586	0	0	0	0	59.39
52	Sumalindo Lestari Jaya	0	1851102	-1554	2.46	788106	0	0	0	0	87.53
53	Surya Dumai Industri	0	1898473	-53241	5.99	627104	0	0	0	0	63.93
54	Tirta Mahakam Plywood Industry	975	182178	7266	0.67	266143	0	0.44	29.04	0	38.47
55	Fajar Surya Wisesa	676	3266089	209880	3.15	1025098	0	0	0	0	77
56	Indah Kiat Pulp & Paper Corporation	0	48042324	32314	1.18	10482959	0	0	14.76	0	5.64
57	Pabrik Kertas Tjiwi Kimia										
58	Suparma	5568	943882	21127	0.88	407747	0	0	0	0	69.95
59	Surabaya Agung Industry Pulp & Kertas	0	2765302	-68665	10.63	622956	0	0	0	0	72.8
60	Aneka Kimia Raya	0	935727	73248	-4.07	1058868	0	0	0	0	70.6
61	Budi Acid Jaya	31500	875726	81119	2.36	734295	0.56	0	11.1	0	62.15

62	Colorpak Indonesia																				
63	Eterindo Wahanatama		0	2488843		1498		5.33		1108740		0.41		0		30.56					38.42
64	Lautan Luas	14040	596022			55705		0.77		636978		1.75		0		0					63.03
65	Polysindo Eka Perkasa	0	10443143			1959267		-8.49		2352934		0		64		0					0
66	Sorini Corporation	0	755191			-71293		-3.05		368404		0		0		0					65.13
67	Unggul Indah Cahaya	348	1722416			155678		2.48		1257997		0		0		7.01					56.15
68	Duta Pertiwi Nusantara	5248	108105			13365		0.15		64722		0		0		6.39					49.67
69	Ekadharmatape Industries	4472	54736			12396		0.31		92973		0		0		0					72.8
70	Intan Wijaya Internasional	5060	117833			19893		0.09		91722		0		0		0					68.73
71	Kurnia Kapuas Utama Gijve Industries	688	228918			13802		0.79		158596		0		0		17.87					11.01
72	Argha Karya Prima Industry	0	1552568			-13280		45.76		583363		0		0.72		10.68					50.99
73	Asahimas Flat Glass Co. Ltd.	4592	1681967			27415		2.8		786478		0		0.8		39.69					39.69
74	Asiaplast Industries	0	175151			10706		0.55		77292		7.69		0		0					61.54
75	Bertina	0	117907			21017		0.47		116377		0		0		0					51.4
76	Dynaplast	14986	300994			28976		0.5		196813		0		0		8.23					41.01
77	Fatrapolindo Nusa Industri																				
78	Igarjaya	8663	171039			28657		0.83		229194		0		0		0					51.1
79	Inti Indah Karya Plasindo																				
80	Langgeng Makmur Plastik Industry	0	427904			-29563		31.23		133224		0		0		0					69.42
81	Lapindo International																				
82	Plaspack Prima Industri																				
83	Siwani Makmur	0	63275			3592		0.08		37483		0		0		0					49
84	Summiplast Interbenua	0	136441			13018		1.07		130232		0		0		24.95					49.63
85	Trias Sentosa	17150	1463000			145660		4.22		417488		0		0		0					44.71
86	Wahana Jaya Perkasa	0	1595190			-112417		3.36		172499		0		0		33.89					63.37
87	Indocement Tunggal Perkasa	0	9851099			523423		7.75		1758966		0		25.73		0					62.02
88	Semen Cibinong	0	9745255			-1226072		-5.51		932170		0		0		48.6					41.45
89	Semen Gresik (Persero)	96233	7166301			240586		1.62		3091660		0		51.01		25.53					0
90	Alakasa Industrindo	0	96588			-767		-2.77		145716		0		22.8		0					53.1
91	Alumindo Light Metal Industry	30800	882609			87060		1.5		874628		0		80.132		7.433					0
92	Betonjaya Manunggal																				
93	Citra Tubindo	36080	562842			23534		0.12		160382		0		0.52		40.7					30.16
94	Indal Aluminium Industry	5544	228812			15096		1.02		209689		0		65.85		0					0

95	Jakarta Kyoei Steel Works Ltd.	0	407659	-43396	-3.37	51063	0	0	0	0	65.27
96	Jaya Pari Steel	0	120246	1221	1.37	87880	15.53	0	28.3	0	6.19
97	Lion Mesh Prima	0	34359	885	2.53	27873	25.58	0	37.31	0	0
98	Lion Metal Works	1456	93450	7512	0.28	41381	0	0	67.83	0	0
99	Pelangi Indah Canindo	0	331192	24748	-2.64	163300	0	0	0	0	55
100	Tembaga Mulia Semanan	236	413047	4752	5.2	519137	0	0	51.03	0	27.22
101	Tira Austenite	0	96181	3405	4.69	72810	0	15.43	0	0	69.31
102	Kedaung Indah Can	4515	172969	7014	0.61	121659	0	0	34.11	0	42.25
103	Kedawang Setia Industrial	0	356205	14125	1.23	239914	0	0	0	0	66.11
104	Anwana Citramulia										
105	Intikramik Alamasri Industri	0	1037450	-207648	-9.64	100650	7.06	0	0	0	63.53
106	Keramika Indonesia Assosiasi	0	1406838	-148316	-6.03	106010	0	0	9.99	0	67.8
107	Mulia Industrindo	0	4045615	-436099	110.14	1389092	0	0	0	0	67.25
108	Surya Toto Indonesia	409248	384297	3672	2.95	212048	0	0	33.8	0	51.8
109	Komatsu Indonesia										
110	Texmaco Perkasa Engineering	0	4569392	-674965	14.45	203030	0	62.33	15.78	0	0
111	GT Kabel Indonesia	0	796195	-104673	23	185041	0	0	0	0	62.85
112	Jembo Cable Company	0	205066	3431	1.45	147232	0	14.75	20	0	54.55
113	Kabelindo Murni	0	295362	-17907	4.21	40209	0	10	5.21	0	63.4
114	Sumi Indo Kabel	0	351380	1937	0.14	305245	0	0	93.06	0	1.18
115	Supreme Cable Manufacturing Corporation	0	556822	171077	-2.93	312833	0	0	11.81	0	40.26
116	Voksel Electric	0	444762	5891	-4.16	288176	6.78	0	22.8	0	11.48
117	Astra Graphia	131	1169903	50207	5.87	1340300	0	0	0	0	79.09
118	Metrodata Electronics	388	209131	1699	1.89	676724	6.49	0	16.21	0	5.33
119	Multi Agro Persada	0	121683	-10983	4.57	21236	0	0	0	0	51
120	Multipolar Corporation	0	1018956	1090	0.76	239885	0	22.58	14.71	0	0
121	Andhi Chandra Automotive Products										
122	Astra International	0	22203518	1487296	10.04	14315250	0	0	18.21	0	45.63
123	Astra Otoparts	0	1412107	159047	2.13	1560279	0	0	0	0	87.31
124	Branta Mulia	0	1411528	189869	2.91	747436	17.31	3.3	19.78	0	48.22
125	Gajah Tunggal	0	12256568	-485732	10.94	3969842	0	0.24	0	0	67.27
126	Goodyear Indonesia	4305	348003	88151	0.43	535114	0	0	85	0	0
127	GT Petrochem Industries	0	6536021	-698534	132.79	1992778	0	0	0	0	69.38

128	Hexindo Adiperkasa	0	368131	75533	3.41	349929	0	0	0	67.64	24.19
129	Indomobil Sukses Internasional	0	2904018	98651	-16.08	2008423	0	0	0	0	93.1
130	Indospring	24913	214651	6027	3.76	77356	0	0	0	0	87.68
131	Intraco Penta	0	399854	44236	2.96	258767	0	36.58	0	0	33.25
132	Multi Prima Sejahtera	229	162880	8306	2.15	86361	8.47	4.71	31.27	46.89	0
133	Nipress	0	88409	5708	3.87	76801	16.85	0	0	0	55.36
134	Prima Alloy Steel	0	290102	2039	11.64	154993	0	0	0	0	76.37
135	Selamat Sempurna	8052	303673	40361	0.36	359362	1.53	0	0	0	68.02
136	Sugi Samapersada										
137	Tunas Ridean	7812	365395	25636	0.73	699513	0	0	0	30	47.91
138	United Tractors	0	4429615	456686	5.81	3828048	0	0	0	14.7	49.95
139	Inter Delta	0	72796	8695	-4.74	117957	8.95	1	0	0	20.01
140	Modern Photo Film Company	2668	956639	11757	2.72	1520683	0	0.74	2.52	51.42	0
141	Perdana Bangun Pusaka	0	61487	-531	0.68	47506	0	6.99	0	64.16	0
142	Bayer Indonesia	5733	295669	41065	1.25	669380	0	0	86.32	3.95	0
143	Bristol-Myers Squibb Indonesia										
144	Dankos Laboratories	638	402164	50522	2.41	376030	0	0	0	0	71.46
145	Darya-Varia Laboratoria	0	347327	1809	0.81	355364	0	0	89.5	1.45	0
146	Indofarma										
147	Kalbe Farma	0	2005780	209163	7.75	1119238	0	0	0	0	52.3
148	Kimia Farma										
149	Merck	16632	97359	23059	0.33	125831	0	12.66	81.04	0	0
150	Pyridam Farma										
151	Schering-plough Indonesia	0	47694	-6484	1.61	81722	0	0	78.6	0	0
152	Tempo Scan Pasific	22500	1084454	88996	0.51	1331509	0	0	0	0	66.11
153	Mandom Indonesia	31200	246888	45221	0.68	372238	0	0	51.03	10.56	0
154	Mustika Ratu	7383	226434	21070	0.15	150957	0	81.9	0	0	0
155	Procter & Gamble Indonesia	0	182955	-32993	13.92	368387	0	0	0	70	0
156	Unilever Indonesia	190750	1815904	533005	1	4167393	0	0	85	0	0
157	Toba Pulp Lestari	0	5036257	-763820	7.91	801521	0	0	52.89	0	0
158	Tri Polyta Indonesia	0	2023532	-13331	15.08	1134115	0	0	7.08	31.22	0
159	Itamaraya Gold Industri										
160	Squibb Indonesia	0	82784	-4226	-5.83	116853	0	0	82.36	0	0



29	Panasia Indosyntec	0	2365686	-234646	15.32	1264525	10.52	0	0	0	55
30	Roda Vivatex	4838	317093	24098	0.23	199322	0	0	0	0	75.99
31	Sunson Textile Manufacturer	0	763790	-41441	2.28	533298	5.09	57.37	0	0	0
32	Teijin Indonesia Fiber Corporation	0	1810239	-209664	3.1	1588786	0	0	0	92.88	0
33	Textile Manufacturing Company Jaya	0	1194266	-337835	-4.22	827528	0	0	0	0	92
34	APAC Citra Centertex	0	2845042	-226332	12.22	1967394	0	0	0	15.69	37.89
35	Daeyu Orchid Indonesia	0	27882	6557	0.43	58473	0	0	0	0	49.43
36	Ever Shine Textile Industry	0	802911	4103	1.22	535760	0	22.18	0	0	58.37
37	Fortune Mate Indonesia	6400	250405	21430	0.23	332605	0	23.81	0	55.56	0
38	Great River International	0	1674716	5204	3.75	623186	0	0	0	33.98	51.11
39	Hanson Industri Utama	0	744896	-208314	21.87	305964	0.53	0	0	0	12.42
40	Indo-Rama Syntetics	0	5541400	192984	1.24	3250959	0	0	0	61.62	37.82
41	Karwell Indonesia	0	725625	-25330	3.36	914367	0	0.23	0	3.52	51.53
42	Kasogi International	0	241826	-179454	-1.46	103544	0	7.07	0	5.72	49.38
43	Pan Brothers Tex	2688	115784	14978	1.53	241769	0	0	0	0	21
44	Primanindo Asia Infrastructure	0	204775	-33718	-14.58	455195	0	0	0	7.27	52.5
45	Ricky Putra Globalindo	0	339610	-35822	4.93	269217	0	0	0	11.75	34.44
46	Ryane Adibusana										
47	Sarasa Nugraha	0	175689	17122	1.19	338788	0.17	0	0	86.86	5.59
48	Sepatu Bata	46150	207844	63322	0.67	368042	0	4.7	0	80.6	0
49	Surya Intrindo Makmur	12000	208206	15750	0.6	153106	0	68.6	0	0	0
50	Barito Pacific Timber	0	6688783	-1024335	16.27	1410630	7.95	12.43	0	7.57	50.8
51	Daya Sakti Unggul Corporation	0	424158	-14275	2.59	546227	0.19	0	0	0	59.39
52	Sumalindo Lestari Jaya	0	1843759	-316114	7.45	838128	0	0	0	0	85.44
53	Surya Dumai Industri	0	1517199	532088	-6.83	556175	0	0.15	0	0	63.93
54	Tirta Mahakam Plywood Industry	3900	283534	12854	1.45	320457	0	0.44	0	29.04	36.1
55	Fajar Surya Wisesa	0	3166878	-130137	3.84	1262702	0	0	0	0	77.7
56	Indah Kiat Pulp & Paper Corporation	0	56635620	-1414572	1.24	14829332	0	0	0	8.67	52.62
57	Pabrik Kertas Tjiwi Kimia	0	20885811	-3242832	2.83	7954668	0	0	0	0	63.4
58	Suparma	0	976351	-168571	1.97	458326	0	0	0	0	67.1
59	Surabaya Agung Industry Pulp & Kertas	0	2864051	-902003	-5.31	634730	0	0	0	0	72.8
60	Aneka Kimia Raya	0	1045268	-470144	-2.38	1257015	0.38	0	0	0	70.6
61	Budi Acid Jaya	0	985467	-78779	5.56	690061	0.55	0	0	0	62.15



95	Jakarta Kyoel Steel Works Ltd.	0	310187	-209248	-1.8	17439	0	0	0	0	0	65.34
96	Jaya Pari Steel	0	66994	-8833	0.6	126722	15.53	0	0	28.3	0	0
97	Lion Mesh Prima	0	38160	-877	3.33	43220	25.78	0	0	32.22	0	0
98	Lion Metal Works	1977	104719	12275	0.25	59093	0.18	0	0	67.83	0	0
99	Pelangi Indah Canindo	271	315071	34071	-2.88	153027	0	0	0	0	0	78.87
100	Tembaga Mulia Semanan	269	509855	7093	6.04	763549	0	0	0	51.03	0	27.22
101	Tira Austenite	0	102049	-13676	0.9	83505	0	0	0	0	0	93.52
102	Kedaung Indah Can	6900	211192	17274	0.71	127806	0	0	0	34.11	0	42.25
103	Kedawang Setia Industrial	0	422696	-14593	1.92	432146	0	0	0	0	0	66.11
104	Arwana Citramulia	0	177419	4106	3.15	92243	6.16	0	0	0	0	58.95
105	Intikeramik Alamasri Industri	0	101051	3356	-9.52	144542	7.06	8.37	0	0	0	55.16
106	Keramika Indonesia Assosiasi	0	1285064	-726678	-2.28	147358	0	0.47	0	9.99	0	67.8
107	Mulia Industrindo	0	4391871	-960131	-5.75	1778483	0	0	0	0	0	67.25
108	Surya Toto Indonesia	0	393600	-55115	11.19	330990	0	0	0	33.8	0	51.8
109	Komatsu Indonesia	40098	586546	146920	0.09	862349	0	0	0	55.13	0	18.28
110	Texmaco Perkasa Engineering	0	4668986	-474319	-27.06	141329	0	62.14	0	15.78	0	0
111	GT Kabel Indonesia	0	970161	-334871	-4.2	222492	0	0	0	2.11	0	68.93
112	Jembo Cable Company	0	212029	-24218	2.57	161358	0	14.72	0	20	0	54.55
113	Kabelindo Murni	0	257207	-103266	-6.52	33910	0	10	0	0	0	63.39
114	Sumi Indo Kabel	1530	392160	4895	0.26	554466	0	0	0	93.06	0	0
115	Supreme Cable Manufacturing Corporation	16447	423006	491011	1.09	461666	0	0	0	11.81	0	45
116	Voksel Electric	0	494527	18452	-7.62	360570	6.78	0	0	22.8	0	11.48
117	Astra Graphia	0	848355	20160	2.94	634622	0	0	0	0	0	79.09
118	Metrodata Electronics	9959	399171	40816	0.8	867641	0	0	0	9.92	0	0
119	Multi Agro Persada	660	50641	14592	0.26	37315	0	0	0	51	0	0
120	Multipolar Corporation	0	1508904	126633	0.52	375884	0	0	0	50.13	0	0
121	Andhi Chandra Automotive Products	2680	126758	11631	0.16	115195	0	0	0	0	0	65
122	Astra International	0	27422744	-238707	15.08	28403770	0	0	0	62.5	0	5.3
123	Astra Otoparts	0	1767778	106332	2.13	2101172	0	0	0	0	0	87.31
124	Branta Mulia	0	1914397	21623	3.83	1215328	17.31	3.3	0	19.78	0	48.22
125	Gajah Tunggal	0	14893153	-1529808	-26.27	5078432	0	0.24	0	0	0	67.27
126	Goodyear Indonesia	615	406151	37224	0.62	515664	0	0	0	85	0	0
127	GT Petrochem Industries	0	7848169	-1571563	-6.12	3030328	0	0	0	0	0	69.21



128	Hexindo Adiperkasa	3360	400638	30795	2.51	388375	0	0	0	67.64	22.15
129	Indomobil Sukses Internasional	0	3531135	-302827	-8.13	5039562	0	0.03	0	0	94.85
130	Indospring	0	242964	-13650	6.97	145603	0	0	0	0	87.46
131	Intraco Penta	1740	518209	5609	4.19	318487	0	36.58	0	0	33.25
132	Multi Prima Sejahtera	0	76374	-27073	1.84	36232	4.7	4.71	43.35	0	0
133	Nipress	0	97847	-10594	12.31	87878	18.35	0	0	0	55.36
134	Prima Alloy Steel	0	365946	4139	13.65	175005	9.7	0.8	0	0	79.94
135	Selamat Sempurna	14805	529837	59034	0.82	502848	0	0	0	0	68.02
136	Sugi Samapersada										
137	Tunas Ridean	15345	800269	94933	1.83	2063187	0	0	0	30	47.9
138	United Tractors	0	5450044	6130	8.58	5193532	0	0	0	13.9	50
139	Inter Delta	0	75963	-31166	-2.48	105706	4.64	0.4	0	0	24.36
140	Modern Photo Film Company	0	987198	-56853	4	1733728	0	0.72	1.52	0	46.97
141	Perdana Bangun Pusaka	0	66625	-4058	1.07	53483	0	6.99	0	0	64.16
142	Bayer Indonesia	0	297004	52771	0.67	622851	0	0	0	87.08	3.95
143	Bristol-Myers Squibb Indonesia										
144	Dankos Laboratories	17861	481812	45553	2	531845	0	0	0	0	71.46
145	Darya-Varia Laboratoria	0	376278	-16122	1.21	430701	0	0	0	89.5	0
146	Indofarma (Persero)	0	538173	110291	0.84	493371	0	80.73	0	0	0
147	Kalbe Farma	0	1757841	-28359	8.33	1561839	0	0	0	0	52.3
148	Kimia Farma (Persero)	0	964463	169819	0.79	1517153	0	90.03	0	0	0
149	Merck	0	129685	49369	0.34	183810	0	0	0	74	0
150	Pyridam Farma										
151	Schering-plough Indonesia	0	51317	4418	2.7	89004	0	0	0	84.6	0
152	Tempo Scan Pasific	67500	1428314	347787	0.36	1451646	0	0	0	0	66.04
153	Mandom Indonesia	23400	333582	53025	0.38	465547	0	0	0	68.03	0
154	Mustika Ratu	16050	278215	31447	0.22	194280	0	70.93	9.45	0	0
155	Procter & Gamble Indonesia	0	174500	72023	1.07	457852	0	0	0	93.83	0
156	Unilever Indonesia	526470	2253637	813205	0.58	4870972	0	0	0	85	0
157	Toba Pulp Lestari	0	5402829	-3699247	-23	804761	0	1	50.5	4.7	0
158	Tri Polyta Indonesia	0	2268733	-625153	-5.49	1631802	10.62	0	0	7.08	31.22
159	Itamaraya Gold Industri	0	64211	-2033	2.35	39848	18.35	12.54	0	0	57.35
160	Squibb Indonesia	146	1428314	347787	0.36	1451646	0	0	0	70	0



29	Panasia Indosyntec	0	2300305	-41129	12.75	1309066	10.52	0	0	0	55
30	Roda Vivatex	0	303730	6921	0.16	215179	0	0	0	0	79.07
31	Sunson Textile Manufacturer	2510	817268	11085	2.13	588805	5.09	57.37	0	0	0
32	Teijin Indonesia Fiber Corporation	0	2635587	14137	1.5	1791527	0	0	0	96.74	0
33	Textile Manufacturing Company Jaya	0	1160862	-255464	-2.84	842957	0	0	0	0	92
34	APAC Citra Centertex	0	2680431	-240967	-111.76	2164638	0	0	0	0	57.58
35	Daeyu Orchid Indonesia	0	39630	2763	0.25	89631	0	35	0	0	47
36	Ever Shine Textile Industry	4030	741159	30087	0.89	529779	0	22.18	0	0	58.37
37	Fortune Mate Indonesia	0	231590	7355	0.13	386343	0	23.81	55.56	0	0
38	Great River International	0	1902456	10218	4.23	646610	0	0	33.98	51.11	0
39	Hanson Industri Utama	0	675815	-103020	-10.59	314677	0.55	0	0	0	11.79
40	Indo-Rama Syntetics	0	5694957	117218	1.46	3320356	0	0	20.52	37.82	0
41	Karwell International	0	500208	-66239	5.68	848306	0	0.23	3.52	53.23	0
42	Kasogi International	0	200856	-115314	-1.31	95064	0	7.07	5.72	49.38	0
43	Pan Brothers Tex	3840	158528	18095	1.59	287978	0	0	0	0	21
44	Primarindo Asia Infrastructure	0	181790	-31808	-4.88	357377	0	38.35	0	0	52.5
45	Ricky Putra Globalindo	0	293025	-42731	19.22	274098	0	0	10.71	34.44	0
46	Ryane Adibusana	1100	69946	5832	0.13	42719	2.54	19.03	0	0	67.64
47	Sarasa Nugraha	0	181301	14729	0.91	319974	0.15	0	77.28	5.59	0
48	Sepatu Bata	19500	222913	63468	0.57	407888	0	0	80.6	0	0
49	Surya Intrindo Makmur	0	258854	4702	1.11	215106	0	68.6	0	0	0
50	Barito Pacific Timber	0	6520276	-1508794	-6.81	1600691	7.95	12.38	1.85	50.8	0
51	Daya Sakti Unggul Corporation	0	388037	-36173	3.73	600323	0.2	0	0	59.39	0
52	Sumalindo Lestari Jaya	0	1607559	-352010	-13	887610	0	0	0	85.43	0
53	Surya Dumai Industri	0	1451989	-272813	-3.73	495363	0	0	0	63.93	0
54	Tirta Mahakam Plywood Industry	3900	336353	10490	1.82	383921	0	0.44	29.04	35.3	0
55	Fajar Surya Wisesa	0	2821062	182245	2.37	1180203	0	0	0	77.7	0
56	Indah Kiat Pulp & Paper Corporation	0	58275211	-1896867	1.55	11442373	0	0	12.69	52.46	0
57	Pabrik Kertas Tjiwi Kimia	0	22616305	-527088	3.38	7388342	0	0.1	0	63.3	0
58	Suparma	0	1036685	-60919	6.4	454780	0	0	0	67.1	0
59	Surabaya Agung Industry Pulp & Kertas	0	2689479	-700133	-2.97	634852	0	0	0	72.8	0
60	Aneka Kimia Raya	0	623789	1139879	0.63	1455125	0.38	0	0	70.6	0
61	Budi Acid Jaya	0	1002993	-16916	6.53	823660	0.56	0	11.1	62.15	0

62	Colorpak Indonesia	2925	48901	9754	0.25	58721	0	0	25.08	58.51
63	Eterindo Wahanatama	0	3261165	-293899	-11.25	1211278	0.41	0	30.56	38.42
64	Lautan Luas	12480	762821	48975	0.96	1039517	1.75	0	0	63.33
65	Polysindo Eka Perkasa	0	9559644	311707	-2.18	4012064	0	64.43	0	0
66	Sorini Corporation	0	606096	903359	1.71	538734	0	0	0	65.13
67	Unggul Indah Cahaya	11117	2211461	92149	1.75	1880269	0	0	10.11	63.27
68	Duta Pertiwi Nusantara	3149	131619	10792	0.19	79163	1.81	1	6.32	49.67
69	Ekadharna Tape Industries	4025	59710	5976	0.28	80344	0	0	0	72.8
70	Intan Wijaya Internasional	6325	162305	22132	0.16	100389	0	0	0	68.73
71	Kurnia Kapuas Utama Gilue Industries	0	280202	4709	0.97	185836	1.77	0	33.32	11.01
72	Argha Karya Prima Industry	0	1803651	-181538	-4.16	944731	0	0.72	10.68	55.91
73	Asahimas Flat Glass Co. Ltd.	19096	1645701	126294	2.05	1226821	0	0.8	43.49	39.69
74	Asiaplast Industries	0	233600	4961	0.48	156877	7.69	0	0	57.69
75	Berlina	0	211662	36265	0.88	211670	0	0	0	56.42
76	Dynaplast	14986	480699	33160	0.91	383641	0.33	0	10.58	34.34
77	Fatrapolindo Nusa Industri									
78	Igarjaya	2100	250481	8030	1.39	329410	0	0	0	51.13
79	Inti Indah Karya Plasindo									
80	Langgeng Makmur Plastik Industry	0	525919	-7000	6.42	212864	0.05	0	0	51.77
81	Lapindo International	774	32870	1136	0.45	21086	0.47	0	0	71.63
82	Plaspack Prima Industri	500	47640	2632	0.32	63017	0.08	0	0	15.12
83	Siwani Makmur	463	79144	3075	0.19	76730	0	9.83	11.89	35.96
84	Summiplast Interbenua	0	205862	8849	0.81	149466	0	0	24.95	49.9
85	Trias Sentosa	0	1534877	297563	2.84	764069	0	0	0	44.28
86	Wahana Jaya Perkasa	0	1848772	-204299	15.29	195012	0	0	16.2	63.37
87	Indocement Tunggal Perkasa	0	11930019	-63129	3.32	3453411	0	16.87	63.6	13.47
88	Semen Cibinong	0	5972061	1163525	1037.98	1804568	0	0	93.24	0
89	Semen Gresik (Persero)	0	8763075	317467	1.77	4659202	0	51.01	25.53	0
90	Alakasa Industrindo	0	138127	-44945	-1.86	423442	0	22.8	0	53.1
91	Alumindo Light Metal Industry	0	1049057	33566	1.91	1149580	0	80.72	10.8	0
92	Betonjaya Manunggal	450	32925	1235	0.66	18284	63.88	0	0	0
93	Citra Tubindo	17440	715014	16098	0.14	406726	0	0.52	40.7	30.16
94	Indal Aluminium Industry	0	267093	1355	1.72	348742	0	59.58	0	0

95	Jakarta Kyoel Steel Works Ltd.	0	383165	-80038	-1.82	30476	0	0	0	0	65.34
96	Jaya Pari Steel	0	93979	9946	0.82	94887	15.53	0	0	29.76	0
97	Lion Mesh Prima	0	39262	959	3.02	50627	11.52	0	0	32.24	0
98	Lion Metal Works	3121	100099	11729	0.17	66834	0.18	0	0	57.7	0
99	Pelangi Indah Canindo	0	285868	1279	-2.56	151454	0	0	0	0	78.83
100	Tembaga Mulia Semanan	1837	619900	19400	5.92	1039916	0	0	0	51.03	32.67
101	Tira Aupstenite	0	107219	6693	0.79	103700	0	3.86	0	0	93.42
102	Kedaung Indah Can	0	216942	8693	0.63	117678	0	0	0	34.1	42.25
103	Kedawung Setia Industrial	0	410650	-17708	2.23	436461	0	0	0	0	66.11
104	Arwana Citramulia	2744	221095	11197	2.3	115439	6.16	0	0	0	58.95
105	Intikeramik Alamasri Industri	0	923679	-34279	-7.04	183861	7.06	8.37	0	0	55.16
106	Keramika Indonesia Assosiasi	0	1229901	-274611	-1.96	198370	0	0.5	9.99	0	67.8
107	Mulia Industrindo	0	4562684	-446017	-4.33	2154037	0	0	0	0	67.25
108	Surya Toto Indonesia	0	525603	15440	12.62	417620	0	0	0	38.8	51.8
109	Komatsu Indonesia	15422	619645	56614	0.12	615893	0	0	0	62.21	18.28
110	Texmaco Perkasa Engineering	0	4428689	-851854	-5.3	113601	0	62.14	15.78	0	0
111	GT Kabel Indonesia	0	943494	-256465	-2.21	333100	0	0	2.11	0	68.93
112	Jembo Cable Company	0	300834	1015	3.95	291407	0	15.8	20	0	52.57
113	Kabelindo Murni	0	268875	-71925	0.2	63058	0	10	0	0	63.39
114	Sumi Indo Kabel	3366	393043	15925	0.2	701060	0	0	93.06	0	0
115	Supreme Cable Manufacturing Corporation	6168	479708	13480	1.41	648628	0	0	11.81	0	45.72
116	Voksel Electric	0	448647	-19227	-5.73	432771	6.78	0	22.14	0	12.12
117	Astra Graphia	0	837637	26673	2.43	713680	0	0	0	0	78.79
118	Metrodاتا Electronics	21910	537519	106445	0.73	1139133	0.41	0	13.26	0	0
119	Muti Agro Persada	0	117292	12316	0.48	272472	0	0	25.5	0	50
120	Multipolar Corporation	0	1648120	157935	0.6	631639	0	49.24	50.13	0	0
121	Andhi Chandra Automotive Products	14472	137165	15603	0.13	153595	0	0	0	0	64.92
122	Astra International	0	26573546	844511	9.35	30122723	0.02	0	50.35	0	0
123	Astra Otoparts	48745	1767868	255672	1.13	2097454	0	0	0	0	87.31
124	Branta Mulia	0	1809573	71189	2.8	1334884	17.31	1	24.41	0	45.89
125	Gajah Tunggal	0	15130837	-1234185	-5.46	5742120	0	0.23	0	0	63.7
126	Goodyear Indonesia	4920	390074	11726	0.51	593046	0	0	85	0	0
127	GT Petrochem Industries	0	7457946	-910435	-3.29	3370837	0	0	0	0	69.21





29	Panasia Indosyntec	0	2010353	101837	6.18	1164127	10.52	0	0	0	55
30	Roda Vivatex	0	301737	-9116	0.19	196859	0	0	0	0	79.07
31	Sunson Textile Manufacturer	0	811519	22675	1.89	507144	8.75	57.37	0	0	0
32	Teijin Indonesia Fiber Corporation	0	2290905	-47638	1.67	1578767	0	0.3	0	0	96.6
33	Textile Manufacturing Company Jaya	0	1077940	-168141	-2.36	684701	0	0	0	0	92
34	APAC Citra Centertex	0	2687344	-104714	-21.82	1955031	0	0	0	0	57.57
35	Daeyu Orchid Indonesia	0	40856	-1050	0.57	71816	0	0	0	0	49.43
36	Ever Shine Textile Industry	4030	664935	1492	0.71	417869	0	14.27	0	0	58.32
37	Fortune Mate Indonesia	0	220794	-10558	0.14	368609	0	23.81	55.56	0	0
38	Great River International	0	987026	925226	1.32	423775	0	0	33.98	51.11	0
39	Hanson Industri Utama	0	656323	-77840	0.88	247004	0.55	0	0	0	10.76
40	Indo-Rama Syntetics	0	4837748	33376	1.4	2834827	0	0	53.52	37.82	0
41	Karweil Indonesia	0	491824	-2056	5.76	540637	0	0.23	3.52	53.23	0
42	Kasogi International	0	158941	-12462	-1.24	87742	0	4.79	5.95	30.74	0
43	Pan Brothers Tex	1152	140844	16136	0.92	300118	0	26.25	0	21	0
44	Primarindo Asia Infrastructure	0	98265	-78985	-1.78	141851	0	0	0	0	52.5
45	Ricky Putra Globalindo	0	260766	-4781	25.85	234902	0	0	10.61	34.44	0
46	Ryane Aibusana	0	76065	1474	0.22	40276	0.87	18.18	34.29	20.58	0
47	Sarasa Nugraha	0	165740	-16495	1.12	268952	0	0	77.28	5.59	0
48	Sepatu Bata	14950	210082	48362	0.41	411028	0	0	80.6	0	0
49	Surya Intrindo Makmur	0	231274	-7256	1.01	136540	0	68.6	0	0	0
50	Barito Pacific Timber	0	6069088	244469	3.5	1840235	2.78	4.49	34.21	21.87	0
51	Daya Sakti Unggul Corporation	0	392037	28046	2.56	542943	0.2	0	0	59.39	0
52	Sumalindo Lestari Jaya	0	1441918	-143367	-6.2	802991	0	0.52	0	84.61	0
53	Surya Dumai Industri	0	1379331	-328398	-2.82	586961	0	0	0	63.93	0
54	Tirta Mahakam Plywood Industry	3120	403386	11507	2.18	380047	0	0.44	29.04	35.3	0
55	Fajar Surya Wisesa	0	2720954	177490	1.68	1174066	0	0	0	77.7	0
56	Indah Kiat Pulp & Paper Corporation	0	49310681	-2371469	1.87	10665622	0	0	12.69	52.46	0
57	Pabrik Kertas Tjiwi Kimia	0	18994899	-424517	3.73	6967555	0	0.1	0	63.3	0
58	Suparma	0	1043263	-57425	3.95	409351	0	0	0	67.1	0
59	Surabaya Agung Industry Pulp & Kertas	0	2481192	25035	-2.85	499491	0	0	0	72.8	0
60	Aneka Kimia Raya	0	614832	47551	0.45	1288511	0.38	0	0	73.25	0
61	Budi Acid Jaya	0	931900	5977	5.69	771989	0.56	0	11.1	62.15	0



62	Colorpak Indonesia	2450	53751	8589	0.19	50456	0	25.08	58.51
63	Eterindo Wahanatama	0	2928341	-26485	-9.62	1324213	0.41	21.83	38.42
64	Lautan Luas	3900	902286	19451	1.27	1113638	1.75	0	63.03
65	Polysindo Eka Perkasa	0	8459075	477401	-2.11	3795935	0	59.81	0
66	Sorini Corporation	0	563840	26170	1.07	533432	0	0	65.13
67	Unggul Indah Cahaya	103116	1855530	80676	1.36	1540879	0	0	63.74
68	Duta Pertiwi Nusantara	1259	125604	2651	0.14	58302	1.81	6.32	49.67
69	Ekacharma Tape Industries	3354	58491	6247	0.2	76514	0	0	72.82
70	Intan Wijaya Internasional	1687	164060	4958	0.18	84970	0	27.24	68.73
71	Kurnia Kapuas Utama Glue Industries	0	270115	-1783	0.93	172152	8.27	12.56	11.01
72	Argha Karya Prima Industry	0	1571672	403193	-8.94	918538	0	0.72	10.68
73	Asahimas Flat Glass Co. Ltd.	30380	1504685	206684	1.07	1294284	0	0.8	43.71
74	Asiapiplast Industries	0	282217	-11729	0.93	177912	7.69	0	46.16
75	Berlina	0	259311	29934	0.82	225911	0	0	51.42
76	Dynapiplast	18156	526788	46883	0.65	446215	0.5	32.33	30.29
77	Fatrapolindo Nusa Industri	10255	240295	28844	0.38	216291	31.82	17.27	32.6
78	Igarjaya	3150	237577	18156	0.95	390586	0	0	51.13
79	Inti Indah Karya Plasindo	0	59670	1119	0.31	28961	0.13	0	62.37
80	Langgeng Makmur Plastik Industry	0	504312	-66725	8.54	223731	0.04	13.05	40.41
81	Lapindo International	0	35313	1864	0.45	24550	0.45	18.75	62.41
82	Plaspack Prima Industri	0	82974	1524	1.23	72991	0	7	31
83	Siwani Makmur	0	79831	1064	0.19	69223	0	8.58	35.96
84	Summiplast Interbenua	0	164164	-2703	0.47	123085	1.89	17.17	24.95
85	Trias Sentosa	0	1522356	220159	1.46	781636	0	0	43.01
86	Wahana Jaya Perkasa	0	1482306	-90138	1.63	191691	0	0	61.82
87	Indocement Tunggal Perkasa	0	11464805	1041047	2.01	3948283	0	16.87	13.47
88	Semen Cibinong	0	7713791	502455	2.08	1978932	0	0	90.03
89	Semen Gresik (Persero)	0	6939238	268767	11.21	5177273	0	51.01	25.53
90	Alakasa Industrindo	0	33401	83602	0.67	238774	0	4.81	11.23
91	Alumindo Light Metal Industry	0	976142	-14524	1.82	963364	1.49	80.72	8.31
92	Betonjaya Manunggal	0	25123	2374	0.15	20443	9.58	0	5.64
93	Citra Tubindo	21480	663952	12619	0.25	373834	0	0.42	35.7
94	Indal Aluminium Industry	0	300555	377	2.05	287290	0	65.85	0

95	Jakarta Kyoel Steel Works Ltd.	0	535016	19948	-2.46	189413	0	0	0	0	65.34
96	Jaya Pari Steel	0	127431	15863	0.88	253037	2.2	0	0	30.78	0
97	Lion Mesh Prima	240	34853	1479	2.1	57462	11.52	0	0	32.22	0
98	Lion Metal Works	3641	108263	11876	0.15	83535	0.18	0	0	57.7	0
99	Pelangi Indah Canindo	0	272493	27425	-2.75	158595	0	9.23	0	0	75.55
100	Tembaga Mulia Semanan	1837	569271	21069	4.23	953103	0	0	0	51.03	33.81
101	Tira Austenite	0	199563	3554	2.14	96956	0	3.86	0	0	93.42
102	Kedaung Indah Can	0	202955	-3142	0.6	105784	0	0	0	34.08	42.25
103	Kedawang Setia Industrial	0	410776	-3255	2.31	513094	0	0	0	0	66.11
104	Arwana Citramulia	4528	246532	15002	1.2	165082	3.73	0	0	24.63	41.06
105	Intikramik Alamasri Industri	0	812188	29221	5.16	189071	5.33	30.76	0	0	41.68
106	Keramika Indonesia Assosiasi	0	1065735	-22306	-1.82	211247	0	18.33	9.99	0	67.8
107	Mulia Industrindo	0	4287247	311545	-5.05	2181700	0	0	0	0	67.25
108	Surya Toto Indonesia	9907	551573	68874	4.13	414704	0	0	0	38.8	51.8
109	Komatsu Indonesia	0	669205	53848	0.13	872145	0	0	0	65.65	18.28
110	Texmaco Perkasa Engineering	0	2645402	-186038	4.51	59901	0	56.83	15.78	0	0
111	GT Kabel Indonesia	0	454800	437749	3	360956	0	5.35	76.43	20	12.55
112	Jembo Cable Company	0	304258	4956	3.68	258271	0	15.82	0	0	52.57
113	Kabelindo Murni	0	223286	-42833	0.23	86602	0	99.38	0	0	0
114	Sumi Indo Kabel	0	404556	-4452	0.27	560318	0.09	0	0	93.06	0
115	Supreme Cable Manufacturing Corporation	10279	435378	61334	0.71	543557	0	0	0	11.81	45.72
116	Voksel Electric	0	397499	10867	-5.77	516063	6.78	0	0	14.01	0
117	Astra Graphia	14475	722881	71738	1.27	829488	0	0	0	0	78.79
118	Metrodata Electronics	0	452479	-37935	1.09	994803	0.41	0	0	13.07	1.49
119	Multi Agro Persada	2805	144680	12086	0.58	281614	0	0	0	7.28	86.59
120	Multipolar Corporation	0	1772387	20085	0.69	501441	0	49.24	50.13	0	0
121	Andhi Chandra Automotive Products	10452	138463	11605	0.16	128412	0	0	0	0	64.93
122	Astra International	0	26185605	3636608	3.03	30685033	0	0	0	51.86	0
123	Astra Otoparts	63744	1831509	257379	0.75	2063493	0	0	0	0	87.31
124	Branta Mulia	0	1641446	109640	1.91	1304368	17.31	0	0	24.41	47.67
125	Gajah Tunggal	0	12444164	3808287	26.15	5560902	0	0.23	0	0	63.7
126	Goodyear Indonesia	6150	385548	16455	0.43	563247	0	0	0	85	0
127	GT Petrochem Industries	0	6637499	2079920	-6.72	2935694	0	0	0	0	69.21

128	Hexindo Adiperkasa	13440	638784	38983	2.59	507874	0.21	0	76.21	7.79
129	Indomobil Sukses Internasional	0	2302687	970916	6.67	9194778	0	0.03	0	94.85
130	Indospring	937.5	282378	30894	3.13	213598	0	0	0	87.46
131	Intraco Penta	n/a	670556	15724	4.25	499447	3.3	36.58	0	29.92
132	Multi Prima Sejahtera	0	124360	20083	0.59	34706	0	56.56	25	0
133	Nipress	0	105088	7972	7.68	123097	16.85	0	0	37.11
134	Prima Alloy Steel	0	303102	22883	5.04	182471	0	0.8	0	79.76
135	Selamat Sempurna	38960	583627	40222	0.68	603355	1.53	0	0	68.02
136	Sugi Samapersada	0	58010	1107	0.33	64944	0	0	0	75
137	Tunas Ridean	22320	1111266	73515	1.64	2444867	0	0.7	33.7	47.47
138	United Tractors	0	6096434	300616	4.55	6881887	0	3.46	3.9	50
139	Inter Delta	0	40716	-19093	-1.62	71685	4.64	56.86	0	0
140	Modern Photo Film Company	0	1017904	22966	3.59	1856934	0	0	0	46.93
141	Perdana Bangun Pusaka	0	63438	-6181	1.42	53758	0	8.19	0	64.16
142	Bayer Indonesia	3114	649833	152436	0.93	1089902	0	0	87.08	3.95
143	Bristol-Myers Squibb Indonesia	141	133011	19905	0.5	205623	0	0	90	0
144	Dankos Laboratories	17861	660949	93174	1.38	1065422	0	0	5.32	71.46
145	Daya-Yana Laboratoria	0	322922	63531	0.42	549020	0	0	89.5	0
146	Indofarma (Persero)	0	810028	-59826	1.07	687984	0	80.66	0	0
147	Kalbe Farma	0	2015538	266933	3.11	2561802	0	6.1	0	52.3
148	Kimia Farma (Persero)	106248	1038545	35408	0.53	1538712	0	90.03	0	0
149	Merck	22	172336	37429	0.15	220918	0	1.84	79.55	0
150	Pyridam Farma	0	82974	1524	1.23	72991	11.54	0	0	53.85
151	Schering-plough Indonesia	0	61256	-1048	18.22	109925	0	0	89.2	0
152	Tempo Scan Pasific	180000	1816536	316307	0.28	1959435	0	0	14.84	66.13
153	Mandom Indonesia	23400	356007	58109	0.17	582748	0	0	60.12	17.5
154	Mustika Ratu	3852	291549	20452	0.21	252977	0	70.93	9.45	0
155	Procter & Gamble Indonesia	0	138501	7009	0.84	429762	0	0	90.17	0
156	Unilever Indonesia	381500	3091853	978249	0.53	7015181	0	0	85	0
157	Toba Pulp Lestari									
158	Tri Polyta Indonesia									
159	Itamaraya Gold Industri									
160	Squibb Indonesia									



29	Panasia Indosyntec	0	1863039	-29276	6.54	978309	10.52	0	0	0	55
30	Roda Vivatex	0	309646	6679	0.2	178586	0	0	0	0	76.96
31	Sunson Textile Manufacturer	0	913734	8618	1.69	526184	8.72	57.37	0	0	0
32	Teijin Indonesia Fiber Corporation	0	2123547	72654	1.88	1946954	0	0	0	96.6	0
33	Textile Manufacturing Company Jaya	0	957626	-177684	-1.98	424275	0	0	0	0	92
34	APAC Citra Centertex	0	2592556	-110755	6.89	1912468	0	0	0	63.54	20.99
35	Daeyu Orchid Indonesia	0	40096	-1036	0.53	81189	0	0	0	0	0
36	Ever Shine Textile Industry	0	574093	-29684	0.6	376682	0	6.91	13.61	52.06	0
37	Fortune Mate Indonesia	0	185443	-36945	0.18	297790	0	32.22	55.56	0	0
38	Great River International	0	1122618	16113	1.54	509362	0	0	0	23.41	51.11
39	Hanson Industri Utama	0	678357	-17873	1.05	298008	0.55	0	0	0	10.76
40	Indo-Rama Synthetics	0	4530168	40875	1.33	3008771	0	0	47.73	37.82	0
41	Karwell Indonesia	0	412820	-24135	7.48	525007	0	0.23	3.52	53.23	0
42	Kasogi International	0	96529	-92157	-1.13	65899	0	5.66	0	30.71	0
43	Pan Brothers Tex	1920	112292	5822	0.53	264225	0	13.63	0	0	21
44	Primarindo Asia Infrastructure	0	83086	-39435	-1.5	18612	0	21.7	0	0	46.7
45	Ricky Putra Globalindo	0	263827	3612	18.8	207634	0	0	10.61	34.44	0
46	Ryane Adibusana	0	54539	-20160	0.3	26678	0	18.18	34.29	16.58	0
47	Sarasa Nugraha	0	138864	-40860	1.38	221057	0	0	65.49	5.59	0
48	Sepatu Bata	7800	232263	35931	0.47	407805	0	0	84.2	0	0
49	Surya Intrindo Makmur	0	174511	-35822	1.2	107831	0	68.6	0	0	0
50	Barito Pacific Timber	0	331768	229581	-8.71	1871209	2.74	4.41	33.7	21.55	0
51	Daya Sakti Unggul Corporation	0	413365	-25411	3.89	506117	0	0	0	59.39	0
52	Sumalindo Lestari Jaya	0	1290967	155868	-3.98	689608	0	0.52	0	84.61	0
53	Surya Dumai Industri	0	884858	185332	-4.27	338222	0	0	21.05	50.47	0
54	Tirta Mahakam Plywood Industry	0	529009	6295	2.51	407594	0	23.08	42.49	30.04	0
55	Fajar Surya Wisesa	0	2627238	52902	1.46	1207859	0	0	0	77.7	0
56	Indah Kiat Pulp & Paper Corporation	0	46070154	-2421170	2.32	11368242	0	0	8.49	52.46	0
57	Pabrik Kertas Tjiwi Kimia	0	17892932	-255694	4.06	7350096	0	0	0	63.35	0
58	Suparna	0	1031827	11226	3.65	470197	0	0	0	67.1	0
59	Surabaya Agung Industry Pulp & Kertas	0	2324153	-54016	-2.67	355860	0	0	0	72.8	0
60	Aneka Kimia Raya	10400	692237	53853	0.47	1382082	0.39	0	0	73.35	0
61	Budi Acid Jaya	0	927249	4066	5.47	634118	0.56	0	11.1	62.15	0

62	Colorpak Indonesia	0	59004	4543	0.25	55878	0	0	0	25	58
63	Eterindo Wahanatama	0	439997	-31086	0.12	545485	0.41	0	0	63.86	9.92
64	Lautan Luas	1560	1228714	7647	2.08	1258443	1.75	0	0	0	63.03
65	Polysindo Eka Perkasa	0	7213178	-1145957	-1.82	1905929	0	59.81	0	0	0
66	Sorini Corporation	4500	530999	33064	0.88	491078	0	0	0	0	64.62
67	Unggul Indah Cahaya	18783	2256579	62715	1.68	2119267	0	0	0	10.11	63.27
68	Duta Pertiwi Nusantara	0	136840	-1659	0.28	69775	1.81	1	0	5.68	49.67
69	Ekadharna Tape Industries	447	60825	4342	0.22	81874	0	0	0	5.05	72.82
70	Intan Wijaya Internasional	3373	169119	8007	0.17	147258	0	27.42	0	0	68.73
71	Kurnia Kapuas Utama Glue Industries	0	226222	-1233	0.63	153406	8.27	16.28	0	12.56	11.01
72	Argha Karya Prima Industry	0	1355389	412943	1.4	844712	0	0.37	0	53.76	28.95
73	Asahimas Flat Glass Co. Ltd.	34720	1198552	163299	0.73	1357378	0	0.8	0	43.71	40.08
74	Asiaplast Industries	0	293099	274	1	169063	7.69	0	0	0	46.15
75	Berlina	0	266556	8915	0.93	214496	0	0	0	0	51.42
76	Dynaplast	0	766930	54560	1.11	589328	0.4	0	0	44.9	26.17
77	Fatrapolindo Nusa Industri	0	360226	-3497	1.25	150573	31.82	0	0	17.27	32.6
78	Igarjaya	0	236244	16107	0.72	365639	0	0	0	0	63.1
79	Inti Indah Karya Plasindo	0	59882	524	0.3	18402	0	0	0	0	62
80	Langgeng Makmur Plastik Industry	0	501284	-40153	38.52	244432	0.04	13.05	15	0	40.41
81	Lapindo International	0	38926	415	0.57	58574	0.45	18.75	0	0	62.41
82	Plaspak Prima Industri	0	82108	-1560	1.3	53569	0	75	0	0	0
83	Siwani Makmur	0	53343	-29444	0.42	66890	0	0	0	11.89	35.96
84	Summiplast Interbenua	0	187320	1474	0.67	155413	0.6	16.98	24.95	0	49.9
85	Trias Sentosa	21600	1695870	169994	0.78	793395	0	0	0	0	42.24
86	Wahana Jaya Perkasa	0	1463377	-29527	1.74	90781	0	0	0	33.17	63.37
87	Indocement Tunggul Perkasa	0	10145066	670290	1.24	4157683	0	0	0	65.14	13.03
88	Semen Cibinong	0	7647642	174117	1.88	2240296	0	0	0	90.36	0
89	Semen Gresik (Persero)	0	6649970	399007	0.89	5445330	0	51.01	25.53	0	0
90	Alakasa Industrindo	0	67346	2777	38.57	337003	0	4.81	78.87	11.23	0
91	Alumindo Light Metal Industry	0	993642	-36389	2.2	1065729	1.61	80.72	7.41	0	0
92	Betonjaya Manunggal	900	23346	107	0.07	18543	9.58	0	0	0	0
93	Citra Tubindo	0	655324	14830	0.31	616000	0	0.21	35.7	27.66	0
94	Indal Aluminium Industry	0	316919	-39690	4.38	313861	0	65.85	0	0	0

95	Jakarta Kyoel Steel Works Ltd.	0	376676	38219	-2.16	105893	0	0	0	0	65.34
96	Jaya Pari Steel	0	114749	11422	0.45	247886	2.2	0	0	32.18	0
97	Lion Mesh Prima	240	34163	1709	1.69	65106	11.52	0	0	32.22	0
98	Lion Metal Works	4681	119865	12550	0.16	87997	0.18	0	0	57.7	0
99	Pelangi Indah Canindo	0	258349	-2229	5.37	159354	0	0	0	74.52	19.24
100	Tembaga Mulia Semanan	1837	558372	7960	3.83	1020375	0	0	0	51.03	33.81
101	Tira Austenite	0	284579	2695	3.29	224717	0	3.86	0	0	91.53
102	Kedaung Indah Can	2760	177457	-13198	0.59	84274	0	0	0	34.08	42.25
103	Kedawang Setia Industrial	0	372076	-19156	2.55	498553	0	0	0	0	66.11
104	Anwana Citramulia	7245	248100	20605	0.94	193249	0	0	0	37.95	41.06
105	Intikeramik Alamasri Industri	0	741492	-39454	7.02	187813	5.33	0	6.32	24.44	41.68
106	Keramika Indonesia Assosiasi	0	875792	-208372	-1.58	184470	0	18.33	0	9.98	67.8
107	Mulia Industrindo	0	4151232	-167534	-4.39	2156267	0	0	0	0	67.25
108	Surya Toto Indonesia	9907	554920	31684	3.29	469829	0	0	0	38.8	51.8
109	Komatsu Indonesia	0	700780	42162	0.14	558296	0	0	0	71.98	18.28
110	Texmaco Perkasa Engineering	0	2586913	-17920	4.6	26560	0	56.83	0	12.85	0
111	GT Kabel Indonesia	0	416984	-28688	3.86	339367	0	0	0	81.23	12.55
112	Jembo Cable Company	0	277188	343	3.23	282031	0	17.58	0	20	52.57
113	Kabelindo Murni	0	206358	-45630	0.51	91970	0	18.78	0	15.33	0
114	Sumi Indo Kabel	0	369799	-9691	0.2	582244	0.09	0	0	93.06	0
115	Supreme Cable Manufacturing Corporation	7195	559763	15168	1.16	647473	0	0	0	11.81	45.72
116	Voksel Electric	0	370686	-15357	-4.75	426897	6.78	0	0	14.01	12.12
117	Astra Graphia	15977	704664	21414	1.12	802169	0	0	0	0	70
118	Metrodata Electronics	0	451856	839	1.07	944300	0.4	0	0	13.07	0.53
119	Multi Agro Persada	2805	231751	15450	1.31	528783	0	0	0	7.28	77.59
120	Multipolar Corporation	0	1736625	30768	0.62	594388	0	0	0	50.13	0
121	Andhi Chandra Automotive Products	20100	147905	14008	0.2	142698	0	0	0	0	64.93
122	Astra International	685863	27404308	4421583	1.19	31512954	0	0	0	41.94	0
123	Astra Otoparts	37574	1957303	206398	0.64	2151505	0	0	0	0	86.68
124	Branta Mulia	0	1543441	73977	1.43	1235382	17.31	1	0	24.4	45.9
125	Gajah Tunggal	0	12173255	844285	8.17	5729506	0	0.23	0	0	61.02
126	Goodyear Indonesia	6150	388062	14885	0.4	588779	0	0	0	85	6.26
127	GT Petrochem Industries	0	6239216	798315	-18.24	3059049	0	0	0	0	69.21

128	Hexindo Adiperkasa	0	584512	42514	1.83	661909	0	5.07	76.21	0
129	Indomobil Sukses Internasional	0	2812488	62756	11.81	2708751	0	0.03	0	94.85
130	Indospring	0	273677	4474	2.8	216172	0	0	0	87.46
131	Intraco Penta	0	651719	2648	4	471862	3.3	36.58	0	29.93
132	Multi Prima Sejahtera	0	123286	-595	0.59	28865	0	4.71	25	0
133	Nipress	0	171173	2385	1.06	121839	16.85	0	0	37.11
134	Prima Alloy Steel	1176	368825	11936	2.23	391433	0	0.52	35.37	51.54
135	Selamat Sempurna	9091	632610	47898	0.77	637589	1.52	0	0	68.02
136	Sugi Samapersada	402	65025	1297	0.43	67029	0	0	0	74
137	Tunas Ridean	16740	1487299	82142	2.16	2700370	0	0.7	33.7	47.47
138	United Tractors	0	6056439	342610	3.07	6872808	0	0	0	53.02
139	Inter Delta	0	35136	32958	-2.06	72258	4.64	58.06	0	0
140	Modern Photo Film Company	0	1038402	11053	3.46	1694243	0	0	0	46.93
141	Perdana Bangun Pusaka	0	60786	-961	1.41	57632	0	0	0	64.16
142	Bayer Indonesia									
143	Bristol-Myers Squibb Indonesia	0	164451	28169	0.42	197493	0	0	90	0
144	Dankos Laboratories	8930	826778	125547	1.1	1191273	0	0	8.63	71.46
145	Darya-Varia Laboratoria	0	373559	46394	0.37	390346	0	0	89.5	0
146	Indofarma (Persero)	0	635960	-129570	1.44	498206	0	80.66	0	0
147	Kalbe Farma	0	2448390	322885	1.95	2889209	0	5.3	0	52.6
148	Kimia Farma (Persero)	16662	1366766	42929	0.81	1816384	0	90.03	0	0
149	Merck	31360	200328	50580	0.26	296320	0	0	78.34	0
150	Pyridam Farma	0	68267	619	0.12	27256	11.54	0	0	53.85
151	Schering-plough Indonesia	0	57753	2393	9.35	117435	0	0	89.2	0
152	Tempo Scan Pasific	38250	1943351	322698	0.25	2124162	0	0	14.84	66.13
153	Mandom Indonesia	25740	386344	62496	0.13	637156	0	0	60.12	0
154	Mustika Ratu	0	274634	10766	0.17	229779	0	71.26	9.45	0
155	Procter & Gamble Indonesia									
156	Unilever Indonesia	61040	3416262	1296711	0.63	8123625	0	0	85	0
157	Toba Pulp Lestari									
158	Tri Polyta Indonesia									
159	Itamaraya Gold Industri									
160	Squibb Indonesia									



Appendix 6: Research Variables

Year	No.	Company	Divint	Earint	Learint	De	Gisi	Down	Down2	lown	Fown	Cown	Down2	lown2	Fown2	Cown2	Ldivint
2000	2	Aqua	0.019298102	0.112794633	0.095746205	1.76	-17.676401	0	0	75.3	0	0	0	5670.09	0	0	0.025136064
	6	Delta	0.012443565	0.089094267	0.186568507	0.78	-3.09041901	0	0	26	56	0	0	676	3136	0	0.003366871
	7	Fast	0.026283102	0.139890991	0.090791113	1.25	-12.6680338	0	0	8	10	79	0	64	100	6241	0.036403951
	11	Multi	0.006637347	0.216147341	0.151737017	1.02	18.20891214	0	0	0	83.37	0	0	0	6950.5569	0	0.020270073
	23	Gudang	0.088723296	0.206877678	0.281868971	0.77	-12.1915388	2.65	7.0225	58.8	0	5.32	0	4733.44	0	28.3024	0.119110314
	24	Hanjaya	0.040212016	0.11893478	0.217577012	1.23	3.056901364	0	0	0	7.72	31.09	0	0	59.5984	966.5881	0.071465041
	43	Pan	0.023215643	0.12936157	0.153266598	1.53	17.67054678	0	0	0	0	21	0	0	0	441	0.028443842
	54	Tirta	0.013754964	0.045334951	0.039884069	1.45	-22.6348272	0	0	0.44	29.04	36.1	0	0.1936	843.3216	1303.21	0.005351909
	64	Lautan	0.0077952	0.079529604	0.093461315	1.02	9.650973514	1.75	3.0625	0	0	63.03	0	0	0	3972.7809	0.023556177
	68	Duta	0.045898032	0.126713252	0.123629804	0.3	-22.352017	0.47	0.2209	1	6.7	49.67	0	1	44.89	2467.1089	0.048545396
	69	Ekadharna	0.05743249	0.104368225	0.226468869	0.33	-17.2941074	0	0	0	0	72.8	0	0	0	5299.84	0.081701257
	70	Inian	0.033330918	0.132236794	0.168823674	0.23	-32.9893134	0	0	0	0	68.73	0	0	0	4723.8129	0.04294213
	78	Igarjaya	0.036738175	0.092016007	0.168715907	1.21	-5.55136047	0	0	0	0	51.13	0	0	0	2614.2769	0.050649267
	98	Lion	0.018879095	0.117218461	0.080385233	0.25	27.43504495	0.18	0.0324	0	67.83	0	0	0	4600.9089	0	0.015580524
	100	Tembaga	0.000527601	0.013911798	0.011504744	6.04	19.15375114	0	0	0	51.03	27.22	0	0	2604.0609	740.9284	0.000571364
	102	Kedaung	0.032671692	0.081792871	0.040550619	0.71	-13.9605131	0	0	0	34.11	42.25	0	0	1163.4921	1785.0625	0.026102943
	118	Metrodata	0.024949207	0.102251917	0.008124094	0.8	-32.8280557	0	0	0	9.92	0	0	0	98.4064	0	0.001855296
	126	Goodyear	0.001514215	0.091650642	0.253305288	0.62	-17.4312023	0	0	0	85	0	0	0	7225	0	0.012370583
	135	Selamat	0.027942556	0.111419172	0.132909412	0.82	-19.8010888	0	0	0	0	68.02	0	0	0	4626.7204	0.026515364
	137	Tunas	0.019174802	0.118626362	0.07015969	1.83	34.66955002	0	0	0	30	47.9	0	0	900	2294.41	0.021379603
	144	Dankos	0.037070476	0.094545175	0.125625367	2	18.05602751	0	0	0	0	71.46	0	0	0	5106.5316	0.001586417
	152	Tempo	0.047258516	0.243494778	0.08206526	0.36	-17.2240722	0	0	0	0	66.04	0	0	0	4361.2816	0.020747768
	153	Mandom	0.07014767	0.158956419	0.183164026	0.38	-7.43640795	0	0	0	68.03	0	0	0	4628.0809	0	0.126373092
	154	Mustika	0.057689197	0.113031289	0.093051397	0.22	4.745635396	0	0	70.93	9.45	0	0	5031.0649	89.3025	0	0.032605527
2001	2	Aqua	0.016018396	0.093485749	0.112794633	2.11	-4.28911034	0	0	75.35	15.64	0	0	5677.6225	244.6096	0	0.019298102
	6	Delta	0.018463428	0.128552156	0.089094267	0.35	31.48850021	0	0	26.3	58.3	0	0	691.69	3398.89	0	0.012443565
	7	Fast	0.023347173	0.12316597	0.139890991	1.02	24.80838157	0	0	1	0	79	0	1	0	6241	0.026283102
	8	Indofood	0.017475382	0.056978602	0.051468821	2.64	10.50501346	0	0	0	48	0	0	0	2304	0	0.013127269
	22	BAT	0.072241088	0.155181519	0.070727883	0.81	-9.21095392	0	0	6	83	0	0	36	6889	0	0.028431959

23	Gudang	0.042922418	0.155215776	0.206877678	0.64	-3.17505583	0.81	66.8	0	5.32	0.6561	4462.24	0	28.3024	0.088723296
24	Hanjaya	0.011878942	0.100882632	0.11933478	1.28	26.24719515	6.7	0	0	32.06	44.89	0	0	1027.8436	0.040212016
27	Eratex	0.003211448	0.014320792	0.010334507	5.57	24.45679396	0	0	50	24.41	0	0	2500	595.8481	0.004770071
43	Pan	0.02422285	0.114143874	0.12936157	1.59	-13.0036032	0	0	0	21	0	0	0	441	0.023215643
48	Sepatu	0.087478074	0.284720945	0.304661188	0.57	3.334571223	0	0	80.6	0	0	0	6496.36	0	0.222041531
54	Tirta	0.011594961	0.031187473	0.045334951	1.82	0.99083074	0	0.44	29.04	35.3	0	0.1936	843.3216	1246.09	0.013754964
64	Lautan	0.016360326	0.06420248	0.079529604	0.96	16.28784472	1.75	0	0	63.33	3.0625	0	0	4010.6889	0.0077952
68	Duta	0.023925117	0.081994241	0.126713252	0.19	29.38005475	1.81	1	6.32	49.67	3.2761	1	39.9424	2467.1089	0.045898032
69	Ekadharna	0.067409144	0.100083738	0.104368225	0.28	-4.21750683	0	0	0	72.8	0	0	0	5299.84	0.05743249
70	Intan	0.038969841	0.136360556	0.132236794	0.16	18.57785232	0	0	0	68.73	0	0	0	4723.8129	0.033330918
78	Igarjaya	0.008383869	0.03205832	0.092016007	1.39	3.910201868	0	0	0	51.13	0	0	0	2614.2769	0.036738175
98	Lion	0.031179133	0.117173998	0.117218461	0.17	18.31972817	0.18	0	57.7	0	0.0324	0	3329.29	0	0.018879095
100	Tembaga	0.002963381	0.03129537	0.013911798	5.92	12.0176336	0	0	51.03	32.67	0	0	2604.0609	1067.3289	0.000527601
109	Komatsu	0.024888444	0.091365217	0.250483338	0.12	-32.3946086	0	0	62.21	18.28	0	0	3870.0841	334.1584	0.068362925
114	Sumi	0.008563948	0.040517195	0.01248215	0.2	26.15471772	0	0	93.06	0	0	0	8660.1636	0	0.003901469
115	Supreme	0.012857822	0.028100428	1.160766041	1.41	23.89031786	0	0	11.81	45.72	0	0	139.4761	2090.3184	0.038881245
118	Metrodata	0.04076135	0.198030209	0.102251917	0.73	-2.50114197	0.41	0	13.26	0	0.1681	0	175.8276	0	0.024949207
121	Andhi	0.105507965	0.113753509	0.091757522	0.13	23.21838707	0	0	0	64.92	0	0	0	4214.6064	0.02114265
126	Goodyear	0.012612991	0.030060963	0.091650642	0.51	19.74629663	0	0	85	0	0	0	7225	0	0.001514215
128	Hexindo	0.026554174	0.07590595	0.0768649	2.7	-11.385578	0.14	0	77.19	8.15	0.0196	0	5958.2961	66.4225	0.008386623
131	Intraco	0.001950809	0.021342583	0.010823818	5.29	24.6400641	0	36.58	0	33.2	0	1338.0964	0	1102.24	0.003357719
135	Selamat	0.041224387	0.096368353	0.111419172	0.71	5.004324226	1.53	0	0	68.02	2.3409	0	0	4626.7204	0.027942556
137	Tunas	0.013786975	0.071345463	0.118626362	2.07	-18.0773988	0	11.03	30	47.9	0	121.6609	900	2294.41	0.019174802
144	Dankos	0.031417158	0.103825608	0.094545175	1.82	21.68393036	0	0	0	71.46	0	0	0	5106.5316	0.037070476
152	Tempo	0.10817953	0.190469522	0.243494778	0.31	5.565838287	0	0	8.34	66.06	0	0	69.5556	4363.9236	0.047258516
154	Mustika	0.092119133	0.123254844	0.113031289	0.18	10.77708016	0	70.93	9.45	0	0	5031.0649	89.3025	0	0.057689197
156	Unilever	0.099592382	0.330772759	0.360841165	0.55	3.744474265	0	0	85	0	0	0	7225	0	0.233609051
2002	Aqua	0.020755637	0.121215122	0.093485749	1.47	21.25229894	0	90.99	0	0	0	8279.1801	0	0	0.016018396
6	Delta	0.016875825	0.118141314	0.128552156	0.29	-17.0903645	0	26.3	58.3	0	0	691.69	3398.89	0	0.018463428
7	Fast	0.029216674	0.154062714	0.12316597	0.79	3.614553569	0	1	0	79	0	1	0	6241	0.023347173
8	Indofood	0.017229566	0.052626441	0.056978602	3.16	-3.43399393	0	0	51.89	0	0	0	2692.5721	0	0.017475382
11	Multi	0.137365564	0.179037932	0.219856115	0.68	3.731827268	0	8.9	83.37	0	0	79.21	6950.5569	0	0.181613635
22	BAT	0.018953535	0.169691574	0.155181519	0.72	1.22167757	0	0	86	0	0	0	7396	0	0.072241088

23	Gudang	0.037354371	0.135050353	0.155215776	0.59	1.404207207	0.8	66.8	0	5.32	0.64	4462.24	0	28.3024	0.042922418
24	Hanjaya	0.022919253	0.170222207	0.10082632	0.89	3.754452235	2.67	0	37.33	5.2	7.1289	0	1393.5289	27.04	0.011878942
27	Eratex	0.002345478	0.010241761	0.014320792	4.73	-20.345335	0	0	50	19.61	0	0	2500	384.5521	0.003211448
36	Ever	0.006060743	0.002243828	0.040594528	0.71	-12.0820389	0	14.27	0	58.32	0	203.6329	0	3401.2224	0.00543743
43	Pan	0.008179262	0.114566471	0.114143874	0.92	17.30063478	0	26.25	0	21	0	689.0625	0	441	0.02422285
48	Sepatu	0.071162689	0.230205348	0.284720945	0.41	6.92445188	0	0	80.6	0	0	0	6496.36	0	0.087478074
54	Tirta	0.007734527	0.028526027	0.031187473	2.18	-17.4589623	0	0.44	29.04	35.3	0	0.1936	843.3216	1246.09	0.011594961
62	Colorpak	0.045580547	0.159792376	0.199464224	0.19	-21.8281181	0	0	25.08	58.51	0	0	629.0064	3423.4201	0.059814728
64	Lautan	0.004322355	0.021557466	0.06420248	1.27	-9.42864456	1.75	0	0	63.03	3.0625	0	0	3972.7809	0.016360326
67	Unggul	0.055572262	0.043478683	0.041668833	1.36	-2.33029973	0	0	0	63.74	0	0	0	4062.7876	0.005026993
68	Duta	0.010023566	0.021106016	0.081994241	0.14	-22.8250555	1.81	1	6.32	49.67	3.2761	1	39.9424	2467.1089	0.023925117
69	Ekadharna	0.057342155	0.106802756	0.100083738	0.2	-2.78226878	0	6.26	0	72.82	0	39.1876	0	5302.7524	0.067409144
70	Intan	0.010282823	0.030220651	0.136360556	0.18	-16.2646805	0	27.24	0	68.73	0	742.0176	0	4723.8129	0.038969841
73	Asahimas	0.020190272	0.137360311	0.076741765	1.07	15.38616055	0	0.8	43.71	39.69	0	0.64	1910.5641	1575.2961	0.011603566
76	Dynaplast	0.034465478	0.08897851	0.068982877	0.65	6.134479993	0.5	0	32.33	30.29	0.25	0	1045.2289	917.4841	0.031175434
78	Igarjaya	0.013258859	0.076421539	0.03205832	0.95	25.01159261	0	0	0	51.13	0	0	0	2614.2769	0.008383869
93	Citra	0.032351736	0.019005892	0.022514244	0.25	-1.01834205	0	0.42	35.7	27.66	0	0.1764	1274.49	765.0756	0.024391131
98	Lion	0.033631065	0.109695833	0.117173998	0.15	15.56350467	0.18	0	57.7	0	0.0324	0	3329.29	0	0.031179133
100	Tembaga	0.003226934	0.037010492	0.03129537	4.23	-0.19687218	0	0	51.03	33.81	0	0	2604.0609	1143.1161	0.002963381
104	Arwana	0.018366784	0.060852141	0.050643389	1.2	28.24864582	3.73	0	24.63	41.06	13.9129	0	606.6369	1685.9236	0.012410955
115	Supreme	0.023609369	0.140875285	0.028100428	0.71	-7.66637594	0	0	11.81	45.72	0	0	139.4761	2090.3184	0.012857822
121	Andhi	0.07548587	0.083813004	0.113753509	0.16	-17.1794514	0	0	0	64.93	0	0	0	4215.9049	0.105507965
123	Astra	0.034804088	0.140528384	0.144621657	0.75	-5.0376764	0	0	0	87.31	0	0	0	7623.0361	0.02757276
126	Goodyear	0.015951321	0.042679511	0.030060963	0.43	-3.90980927	0	0	85	0	0	0	7225	0	0.012612991
128	Hexindo	0.021039976	0.061026889	0.07590595	2.59	-7.44531346	0.21	0	76.21	7.79	0.0441	0	5807.9641	60.6841	0.026554174
135	Selamat	0.066754965	0.068917305	0.096368353	0.68	3.737532218	1.53	0	0	68.02	2.3409	0	0	4626.7204	0.041224387
137	Tunas	0.0200852	0.066154278	0.071345463	1.64	4.167173379	0	0.7	33.7	47.47	0	0.49	1135.69	2253.4009	0.013786975
142	Bayer	0.004792	0.234577191	0.063438498	0.93	-8.03725953	0	0	87.08	3.95	0	0	7582.9264	15.6025	0.0012737
144	Dankos	0.027023265	0.140970029	0.103825608	1.38	20.0087792	0	0	5.32	71.46	0	0	28.3024	5106.5316	0.031417158
149	Merck	0.000127658	0.217186194	0.346595379	0.15	-6.90967148	0	1.84	79.55	0	0	3.3856	6328.2025	0	0.110127827
152	Tempo	0.099089696	0.174126469	0.190469522	0.28	0.537115959	0	0	14.84	66.13	0	0	220.2256	4373.1769	0.108177953
154	Mustika	0.013212187	0.070149443	0.123254844	0.21	12.16878471	0	70.93	9.45	0	0	5031.0649	89.3025	0	0.092119133
156	Unilever	0.12338879	0.316395702	0.330772759	0.53	1.186692485	0	0	85	0	0	0	7225	0	0.099592382

2003	2	Aqua	0.020122224	0.118614108	0.121215122	0.93	9.863948006	0	90.99	0	0	0	8279.1801	0	0	0.020755637
	6	Delta	0.014074074	0.095791588	0.118141314	0.22	3.885738469	0	26.3	58.3	0	691.69	3398.89	0	0	0.016875825
	7	Fast	0.025448104	0.129307733	0.154062714	0.69	-3.1489225	0	1	0	79	1	0	6241	0	0.029216674
	8	Indofood	0.017271635	0.03942039	0.052626441	2.74	8.126933975	0	0	51.53	0	0	2655.3409	0	0	0.017229566
	11	Mulji	0.145787613	0.186793484	0.179037932	0.8	2.060543227	0	0	83.37	0	0	6950.5569	0	0	0.137365564
	23	Gudang	0.03329081	0.106043238	0.135050353	0.58	-1.5219669	0.8	66.8	0	5.32	4462.24	0	28.3024	0	0.037354371
	24	Hanjaya	0.052952764	0.13795607	0.170222207	0.77	-6.6190756	1.95	0	39.58	5.2	3.8025	1566.5764	27.04	0	0.022919253
	43	Pan	0.017098279	0.05184697	0.114566471	0.53	10.42601417	0	13.63	0	21	0	185.7769	0	0	0.008179262
	48	Sepatu	0.03358262	0.154699629	0.230205348	0.47	-10.2591972	0	0	84.2	0	0	7089.64	0	0	0.071162689
	64	Lautan	0.00126962	0.00622358	0.021557466	2.08	17.0181869	1.75	0	0	63.03	3.0625	0	3972.7809	0	0.004322355
	67	Unggul	0.008323662	0.027792069	0.043478683	1.68	13.09270123	0	0	10.11	63.27	0	102.2121	4003.0929	0	0.055572262
	69	Ekadharna	0.007348952	0.071385121	0.106802756	0.22	2.899207698	0	0	5.05	72.82	0	25.5025	5302.7524	0	0.057342155
	70	Intan	0.019944536	0.04734536	0.030220651	0.17	68.12162719	0	27.42	0	68.73	0	751.8564	0	4723.8129	0.010282823
	73	Asahimas	0.028968288	0.136246905	0.137360311	0.73	31.66184425	0	0.8	43.71	40.08	0	1910.5641	1606.4064	0	0.020190272
	98	Lion	0.039052267	0.104701122	0.109695833	0.16	-4.85476194	0.18	0	57.7	0	0.0324	3329.29	0	0	0.033631065
	100	Tembaga	0.003289921	0.014255729	0.037010492	3.83	9.147904251	0	0	51.03	33.81	0	2604.0609	1143.1161	0	0.003226934
	104	Arwana	0.029201935	0.083051189	0.060852141	0.94	16.32259125	0	0	37.95	41.06	0	1440.2025	1685.9236	0	0.018366784
	108	Surya	0.017853024	0.057096518	0.124868331	3.29	12.60928912	0	0	38.8	51.8	0	1505.44	2683.24	0	0.017961358
	115	Supreme	0.012853654	0.027097182	0.140875285	1.16	-7.35139996	0	0	11.81	45.72	0	139.4761	2090.3184	0	0.023609369
	117	Astra	0.022673217	0.030388951	0.099239017	1.12	-0.7934168	0	0	0	70	0	0	4900	0	0.020024043
	119	Multi	0.012103508	0.066666379	0.08353608	1.31	17.2222698	0	0	7.28	77.59	0	52.9984	6020.2081	0	0.019387614
	121	Andhi	0.135898043	0.094709442	0.083813004	0.2	4.031092029	0	0	0	64.93	0	0	4215.9049	0	0.07548587
	123	Astra	0.019196823	0.105450204	0.140528384	0.64	-2.43582981	0	0	0	86.68	0	0	7513.4224	0	0.034804088
	126	Goodyear	0.015847983	0.038357273	0.042679511	0.4	3.855801412	0	0	85	6.26	0	7225	39.1876	0	0.015951321
	135	Selamat	0.014370623	0.075714895	0.068917305	0.77	-2.50839457	1.52	0	0	68.02	2.3104	0	4626.7204	0	0.066754965
	137	Tunas	0.011255302	0.055228975	0.066154278	2.16	-17.4745736	0	0.7	33.7	47.47	0	1135.69	2253.4009	0	0.0200852
	144	Dankos	0.010800965	0.15185092	0.140970029	1.1	-10.6141702	0	0	8.63	71.46	0	74.4769	5106.5316	0	0.027023265
	149	Merck	0.156543269	0.252485923	0.217186194	0.26	15.38894842	0	0	78.34	0	0	6137.1556	0	0	0.000127658
	152	Tempo	0.019682497	0.16605235	0.174126469	0.25	1.332681436	0	0	14.84	66.13	0	220.2256	4373.1769	0	0.099089696
	153	Mandom	0.066624563	0.161762574	0.163224319	0.13	0.750996632	0	0	60.12	0	0	3614.4144	0	0	0.065729045

### Appendix 7: The Descriptives Statistics of the Research Variables Equation 3-6

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DIVINT	125	.000127657599	.156543269039	.03328409331424	.032452292855078
EARINT	125	.002243828344	.330772759311	.10500947544958	.064908295899005
LEARINT	125	.008124094467	1.160766041144	.12393684329734	.11861126312190
DE	125	.12	6.04	1.1301	1.20384
GISI	125	-32.989313385516	68.121627190048	2.54639461331960	16.274745726273120
DOWN	125	0	7	.30	.870
IOWN	125	0	91.0	8.941	21.6534
FOWN	125	0	93	28.84	31.302
COWN	125	0	87	33.57	29.495
DOWN2	125	0	45	.84	4.317
IOWN2	125	.00	8279.18	545.0672	1625.87496
FOWN2	125	0	8660	1803.81	2544.484
COWN2	125	0	7623	1989.77	2172.103
LDIVINT	125	.000127657599	.233609050615	.03768916407372	.040650935019192
Valid N (listwise)	125				

**Appendix 8: Linear Regression Output Equation 3-6**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.681 <sup>a</sup>	.464	.401	.025108016634963	1.976

a. Predictors: (Constant), LDIVINT, DOWN2, IOWN, GISI, COWN2, DE, LEARINT, FOWN2, FOWN, COWN

b. Dependent Variable: DIVINT

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1	.061	13	.005	7.396	.000 <sup>a</sup>
Regression	.070	111	.001		
Residual	.131	124			
Total					

a. Predictors: (Constant), LDIVINT, DOWN2, IOWN, GISI, COWN2, DE, LEARINT, FOWN2, FOWN, COWN

b. Dependent Variable: DIVINT

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Std. Error	Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B			Beta				Tolerance	VIF
1									
	(Constant)	1.440E-02	.013			1.070	.287		
	EARINT	.174	.049	.348		3.522	.001	.496	2.017
	LEARINT	-1.830E-02	.022	-.067		-.847	.399	.774	1.292
	DE	-3.142E-03	.002	-.117		-1.361	.176	.658	1.520
	GISI	1.271E-04	.000	.064		.884	.378	.929	1.077
	DOWN	-6.172E-04	.006	-.017		-.107	.915	.203	4.937
	IOWN	-3.008E-04	.000	-.201		-.679	.499	.055	18.112
	FOWN	-1.357E-04	.000	-.131		-.403	.688	.046	21.833
	COWN	2.833E-05	.000	.026		.067	.947	.033	30.494
	DOWN2	-5.291E-04	.001	-.070		-.464	.644	.210	4.770
	IOWN2	2.651E-06	.000	.133		.462	.645	.058	17.130
	FOWN2	5.645E-07	.000	.044		.150	.881	.056	18.000
	COWN2	-1.033E-06	.000	-.069		-.209	.835	.044	22.729
	LDIVINT	.318	.074	.399		4.311	.000	.564	1.774

a. Dependent Variable: DIVINT