#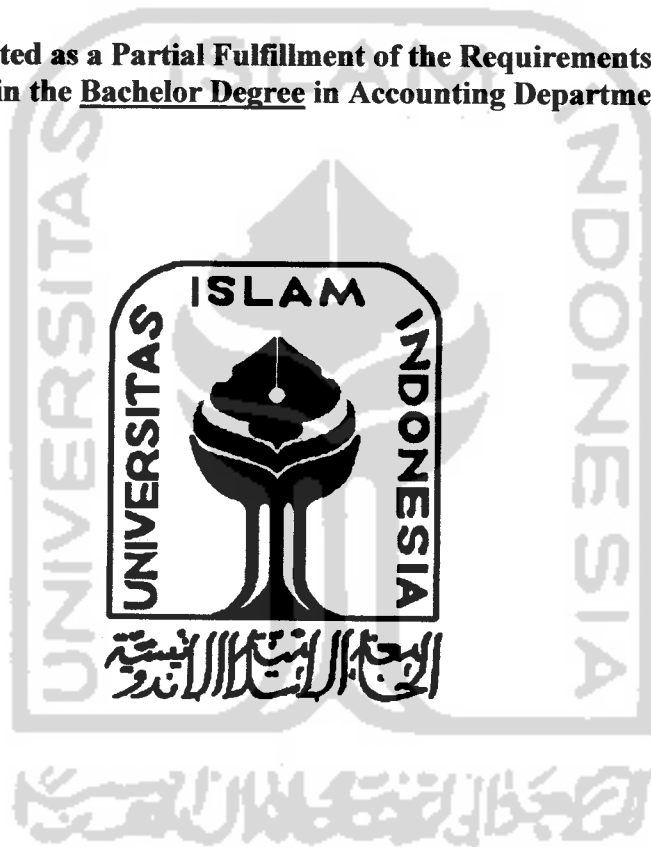 RELATIONSHIP AMONG INSIDER OWNERSHIP AND DEBT BASED ON THE AGENCY THEORY OF MANUFACTURING COMPANIES LISTED ON THE JAKARTA STOCK EXCHANGE (FOR THE PERIOD OF 1999-2001)

A THESIS

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

By
MARTHALIA DESY ARISIYANTI
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DEPARTMENT OF ACCOUNTING
INTERNATIONAL PROGRAM
FACULTY OF ECONOMICS
ISLAMIC UNIVERSITY OF INDONESIA
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2007

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**RELATIONSHIP AMONG INSIDER OWNERSHIP AND DEBT BASED ON
THE AGENCY THEORY OF MANUFACTURING COMPANIES
LISTED ON THE JAKARTA STOCK EXCHANGE
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RELATIONSHIP AMONG INSIDER OWNERSHIP AND DEBT BASED ON THE AGENCY THEORY OF MANUFACTURING COMPANIES LISTED ON THE JAKARTA STOCK EXCHANGE (FOR THE PERIOD OF 1999-2001)

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Defended before the Board of Examiners
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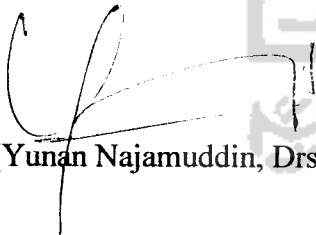**Board of Examiners**

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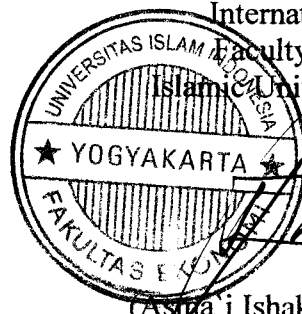(Yunan Najamuddin, Drs., H., MBA)   March 28, 2007

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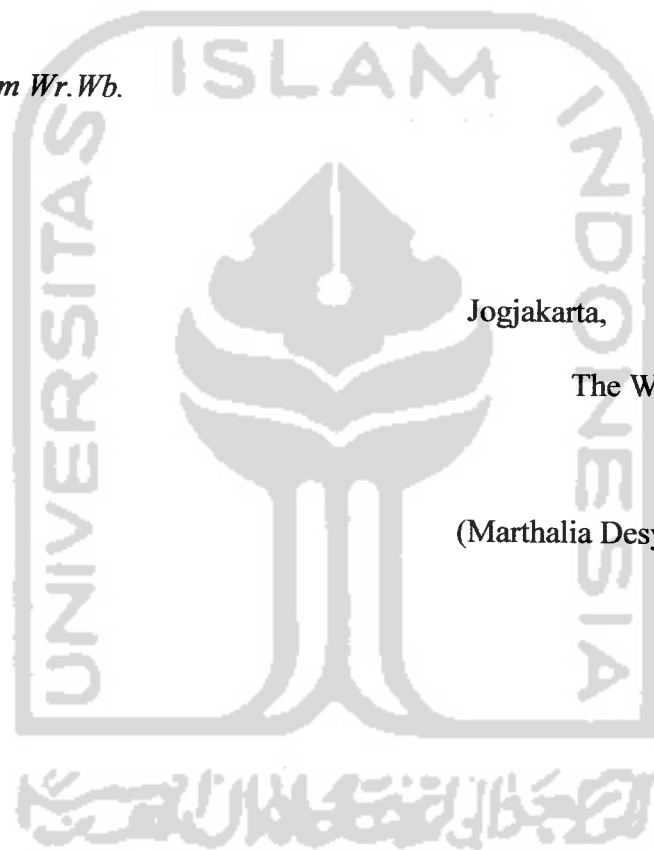
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The Writer

(Marthalia Desy Arisiyanti)

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ABSTRACT

Arisiyanti, Marthalia Desy. Relationship Among Insider Ownership and Debt Based on Agency Theory of Manufacturing Companies Listed on The Jakarta Stock Exchange (For the Period of 1999-2001).Department of Accounting, International Program, Faculty of Economics, Islamic University of Indonesia. Jogjakarta. 2007.

This research investigating relationship between insider ownership and debt and factors affecting insider ownership and debt in Indonesia based on agency theory. The samples used are 37 manufacturing companies for the year 1999, 37 manufacturing companies for the year 2000, and 37 manufacturing companies for the year 2001. Companies listed on Jakarta Stock Exchange (JSX) during 1999-2001. The hypotheses are tested using four models to support the agency theory. The first, debt is regressed on insider ownership. The second, debt is regressed on institutional ownership. The third, debt is regressed on profitability. The fourth, debt is regressed on fixed assets.

The results of this study's t-test show that among the insider ownership, institutional ownership, profitability, and fixed assets, only fixed assets that has a significant influence to debt ratio for the regression model. For the result on F-test shows that simultaneously insider ownership, institutional ownership, profitability, and fixed assets don't have a significant influence to debt.

Keyword: insider ownership, debt and agency theory.

ABSTRAK

Arisiyanti, Marthalia Desy. Hubungan antara Kepemilikan Orang Dalam dan Hutang Berdasarkan Teori Keagenen Perusahaan-perusahaan Manufaktur yang Terdaftar di Bursa Efek Jakarta (Dalam Periode 1999-2001). Jurusan Akuntansi, Program Internasional, Fakultas Ekonomi, Universitas Islam Indonesia. Jogjakarta. 2007.

Penelitian ini menyelidiki hubungan antara kepemilikan orang dalam dan hutang serta faktor-faktor yang mempengaruhi kepemilikan orang dalam dan hutang berdasarkan teori keagenan. Sampel yang digunakan adalah 37 perusahaan manufaktur untuk tahun 1999, 37 perusahaan manufaktur untuk tahun 2000, dan 37 perusahaan manufaktur untuk tahun 2001. Perusahaan-perusahaan tersebut adalah yang terdaftar di Bursa Efek Jakarta (BEJ) selama periode 1999-2001. Hipotesis diuji dengan menggunakan empat model untuk mendukung teori keagenan. Pertama, hutang diregresikan pada kepemilikan orang dalam. Kedua, hutang diregresikan pada kepemilikan institusi. Ketiga, hutang diregresikan pada profitabilitas. Keempat, hutang diregresiksn pada asset tetap.

Hasil uji t dalam penelitian ini menunjukkan bahwa diantara kepemilikan orang dalam, kepemilikan institusi, profitabilitas, dan asset tetap, hanya asset tetap yang memiliki pengaruh signifikan terhadap hutang untuk persamaan regresi. Untuk hasil uji F menunjukkan bahwa kepemilikan orang dalam, kepemilikan institusi, profitabilitas, dan asset tetap secara bersama-sama tidak mempunyai pengaruh yang signifikan terhadap hutang.

Kata kunci: kepemilikan orang dalam, hutang dan teori keagenan.

CHAPTER I

INTRODUCTION

1.1. Background of The Study

Basically, people make investment in order 'to make money'. Moreover, investment also can increase investor or shareholders' wealth (Tandelilin, 2001). Therefore shareholders give the company's management to the professionals, which are known as managers, and act as agent. They are asked by the investors or shareholders to do their best in maximizing company's value so that the investors or shareholders wealth can be reached.

In fact, agents act in contrary to shareholders' interests. Decisions were taken inclining to get their own favors such as using free cash flow improperly by spending excessive perquisites (executive fringe benefits like luxurious car, luxurious office, private jet, assistant, and etc.) and the fund which are shareholders' right were not used to make reinvestment or distributed to shareholders as dividend (Wahidahwati, 2002). This also can cause a problem that is known as agency conflict, a problem that occur between shareholders and agents (management), which arise because of different interest between them (Fauzan, 2002). Shareholders act as the funds supplier and facilitator for company's operation. While managers acted as the company's controller who gets salary and other kinds of compensation. Agency conflict also can caused by different occurrence where shareholders prefer high risk investment to expect

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getting higher return, while in contrary management prefers lower risk investment to protect their position (Crutchley and Hansen, 1989; Fama, 1980).

Shareholders can limit the interest diverge by distributing a proper level of incentives to agent and they are willing to spend monitoring cost to prevent the agency hazard, or known as agency cost. There are some ways to decrease the agency conflict between agent and shareholders. There are three alternatives to decrease the interest conflict and agency cost. First, is increasing the managerial ownership. This ownership will balance management and shareholders' interest (Jensen and Meckling, 1976). Second, increasing dividend payout ratio, so there will be little free cash flow available and management were pushed find external sources of fund to make investments. The external sources of funds will be used to make investment if the profit earned were distributed as dividend. The external cost will increase supervision by external party such as stock market controller, investment banker and investor (Crutchley and Hansen, 1989). The last alternative is increasing capital by debt. Increasing debt will decrease level of conflict between shareholders and management (Jensen and Meckling, 1976; Crutchley and Hansen, 1989; Jensen, 1986). If the company needs a credit, then they have to be ready to be evaluated and monitored by the external party. Besides, debt also can decrease excess cash flow in the company so that it can lower the possibility of management waste (Jensen, Solberg, and Zorn, 1992; Jensen, 1986).

Bathala et al. (1994) in his empirical study stated that institutional ownership is an important agent to monitor and also do a consistent role actively on protecting their investment interest in the company. This was referring to

McConnell and Servaes (1990) empirical result which stated that there is a positive monitoring role by institutional investor in fact. This study was supported by Chen and Steiner (1999) study which stated that the institutional investor's presences were expected to be able to lower the concentrating ownership by insider. Based on Coffee (1991) to increase the managerial accountability, institutional investor's monitoring mechanism is one of the important policy's choices. Preference of the institutional monitoring activity is always increasing, therefore it insists the insiders to act carefully. The increase of institutional investor's activity in doing the supervision occurs because of a fact that a significant number of institutional ownership already increases their ability to act collectively. Bathala et al. (1994) explained that the institutional ownership's presence has an important role as a monitoring agent that can decrease the agency conflict effectively, because they can manage the opportunistic behavior of manager and also to make the company enable to use the optimal debt level.

Fama and Jensen (1983) stated that the monitoring mechanism can be done by setting the expert council which is unfunded by the company so that they are not in the insider's supervision. The appearance of this monitoring mechanism is able to push the increasing of insider's responsibility. This opinion was supported by Bathala et al. (1994). Shleifer and Vishney (1986) on their argument about active monitoring hypotheses, stated that a great ownership of share have an ability to supervise and influence management to protect their business investment precisely. They stated that external block holdings and institutional

holdings are able to reduce the managerial opportunistic behavior, so that this can also decrease the agency conflict between shareholders and managers.

Sartono (2001) also did a research entitled "Kepemilikan Orang Dalam, Utang Dan Kebijakan Dividend: Pengujian Empirik Teori Keagenan". The result shows that insider ownership and debt individually have negative influence to the level of dividend payment.

Based on those study development, therefore the writer takes the title of: **"Relationship among Insider Ownership and Debt Based on the Agency Theory of Manufacturing Companies Listed on the Jakarta Stock Exchange (For the Period of 1999-2001)"**.

1.2. Problem Statement

There are three alternatives to decrease the interest conflict and agency cost. First, is increasing the management ownership. Second, increasing dividend payout ratio, so there will be little free cash flow available and management were pushed to find external sources of fund to make investments. The last alternative is increasing capital by debt. It will decrease level of conflict between shareholders and management. From the explanation above we can find there are relationship among insider ownership, debt, and dividend policy. One of a research based on the agency theory found the fact that there are several factors that simultaneously have significant influence toward managerial ownership, company's debt and dividend policy. From some research we can conclude that there is a close relationship among insider ownership, debt and dividend policy on decreasing the agency conflict.

1.3. Problem Formulation

Based on the problem above, a question that was identified specific problems of this research is:

- How is the relationship of factors that influence debt on decreasing the agency conflict for manufacturing companies in Indonesia?

1.4. Limitation of Research Area

In order to provide a clear description and reliable information, the writer indicates the following limitations:

1. The Companies are the Manufacturing firms which are listed at Jakarta Stock Exchange for the time period of three years from 1999 to 2001.

2. The writer analyzes the factors that influence debt (insider ownership, institutional ownership, profitability, fixed assets) based on agency theory.

3. The companies are not in the financial, insurance, or real estate industries.

1.5. Research Objectives

The overall objective of this research is to investigate the simultaneous determination of insider ownership and debt in Indonesia, which finally figure out the relationship among the insider ownership and debt, to agency theory, which can be implemented by company's manager in formulating a proper policy for the company. The specific objectives are:

1. To provide empirical evidence on the relationship between insider ownership and debt.

2. To test the relationship among factors affecting debt.

1.6. Research Benefits

The writer hopes that the results of this study will contribute benefits as follows:

1. The Manufacturing Companies listed on Jakarta Stock Exchange can use the result of this research for improving their performance. So, it is easier for them to attract investors to invest their money. Moreover, this thesis can provide inputs for the decision making in relation with company's policy, in order to fulfill the shareholder's interest.

2. The future Investors can use the result to provide information for analyzing possibilities in performing investment activities.

3. For other Researchers, this research can be used as a comparative study in order to face the same problem more deeply or it can be used as a basis for doing in depth ongoing research.

1.7. Definition of Terms

In this thesis, the writer uses some terms, which have important meanings. The definitions of these terms are intended to eliminate confusion for the reader. The definitions of these terms are:

1. Agency Theory: theory that identifies the relationship between entity and agents based on the contract that companies give the agent an authority to rule the company and have an obligation to run the company well as the entity ask for.

2. Business Risk: the chance that the company will face in determining the dividend decision for their company.

3. Insider ownership: the percentage of shares owned by managements and the commissioners.

4. Institutional ownership: The percentage of company's shares owned by the institutional investors such as government (BUMN), LSM, or even private.

5. Investment: the acquisition of physical assets by the firm. Such physical assets could. Include machinery, equipment, and plant.

6. Size: how big is the company (the size of the company), it can be shown by the total revenue that the company earned.

1.8. Research Report Systematic

Research Report Systematic will be as follows:

CHAPTER I. INTRODUCTION

This chapter will discuss the Study Background of the research, Problem Statement, Problem Formulation, Limitation of Research Area, Research Objectives, Research Benefit, Definition of Terms and Research Report Systematic.

CHAPTER II. REVIEW OF RELATED LITERATURE

This chapter provides some literature review and theoretical background supporting the research and also hypotheses formulation.

CHAPTER III. RESEARCH METHOD

This chapter presents the research method, research subject, research setting, and research variables, test of classical assumption of regression, hypothesis testing, linear multiple regression, research procedures and technique of data analysis.

CHAPTER IV. RESEARCH FINDINGS, DISCUSSIONS AND IMPLICATIONS

This chapter provides the research description, research findings, discussions and implications.

CHAPTER V. RESEARCH CONCLUSION AND RECOMMENDATION

This chapter presents the conclusion of the research and the recommendation based on the findings.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter explores the theoretical reviews of the related research problems to put the relevant theories into the proper theoretical framework. In the theoretical review section, the writer would explore the explanations of relevant theories of various topics that accumulate the discussion of this research from the related literatures. In the theoretical framework and hypothesis formulation section, the writer would summarize all analyses of the relevant theories and state the temporary solutions of the problem formulations.

2.1. Stock

Stock as a stock market instrument, is a sign of someone's ownership or participation of entity or limited liability companies. A stock form is a paper explaining that someone who owns this paper is an owner of the company which publishes this valuable letter. The ownership portion is based on how much money he or she invests on this company. There are two kinds of stock based on Gitman book (2000) which are common stock and preferred stock.

2.1.1. Common Stock

The true owners of business firms are the common stockholders. Common stockholders are sometimes referred as residual owners: in essence they have no guarantee of receiving any cash inflows, but receive what is left-the residual-after all other claims on the firm's income and assets have been satisfied. They are assured of only one thing; that they cannot lose any more than they have invested

in the firm. As a result of this uncertain position, common stockholders expect to be compensated with adequate dividends and, ultimately, capital gains. The followings are the characteristics of common stock:

a. Ownership

The common stock of a firm can be privately owned by a single individual, closely owned by a small group of investors (such as a family), or publicly owned by a broad group of unrelated individual or institutional investors. Typically, small corporations are privately or closely owned, and if their shares are traded, this occurs infrequently and in small amounts. Large corporations are publicly owned, and their shares are generally actively traded on major securities exchanges.

b. Par Value

Unlike bonds, which always have a par value, common stock may be sold with or without a par value. The par value of a common stock is a relatively useless value established in the firm's corporate charter. Firms often issue stock with no par value, in which case they may assign it a value or record it on the books at the price at which it is sold.

c. Preemptive Rights

The preemptive right allows common stockholders to maintain their proportionate ownership in the corporation when new shares are issued. The preemptive right allows existing shareholders to maintain voting control and protect against the dilution of their ownership. Dilution of ownership usually results in the dilution of earnings, because each present shareholder has a claim on

a smaller part of the firm's earnings than previously. In a rights offering, the firm grants rights to its shareholders. These financial instruments permit stockholders to purchase additional shares at a price below the market price, in direct proportion to their number of owned shares. Rights are primarily used by smaller corporations whose shares are either closely owned or publicly owned and not actively traded. In these situations, rights are an important financing tool without which shareholders would run the risk of losing their proportionate control of the corporation. From the firm's viewpoint, the use of rights offerings to raise new equity capital may be less costly and generate more interest than a public offering of stock.

d. Voting Rights

Most common stock comes with voting rights. That means each share gets an equal vote in the election of directors and on major issues. Voting issues are usually limited to changes in the company's charter, which broadly defines what it does, and questions about mergers. Stockholders vote on directors and other items at an annual stockholders' meeting that corporations are required to hold. Most shareholders do not attend, however, and vote by proxy if at all. Proxies give the authority to vote shares to a designated party. Generally, the current board members solicit shareholders by mail for their proxies. If the firm's performance has been reasonably good, the proxies are given and the board is reelected. A proxy fight occurs if parties with conflicting interests solicit proxies at the same time. This usually happens when a stockholder group is unhappy with management and tries to take over the board (Lasher book, 1997).

e. Claims on Income and Assets

Common stockholders have a residual claim on both income and assets. That means they are the last in line among all the claimants on the firm's resources. With respect to income, common stockholders own what's left after all operating costs and expenses are paid, after bondholders receive their interest and any principal due, and after preferred stockholders get their dividends. When business is bad, common stockholders are in the worst position of all, because the company's money is more likely to run out before they are paid than before other claimants are paid. When business is good, however, the residual after everyone else is paid can be enormous, and it all belongs to the common stockholders.

2.1.2. Preferred Stock

Preferred stock is a security that has some of the characteristics of common stock and some of those of bonds. It is often referred to as a hybrid of the two, that is, a cross between common stock and bonds. Preferred stock pays a constant dividend forever. When a share is initially issued, two things are specified, the initial selling price (in the primary market) and the dividend. The ratio between the two reflects the current return on investments of similar risk, the market interest rate. It is important to notice that preferred stock carries no provision for the return of capital to the investor. Some features of preferred stock are like those bonds while some are more like those of common stock. Some are in between. These are some considerations to compare preferred stock to common stock and bonds based on Lasher book (1997):

a. Payment to Investors

The fact that preferred dividends are constant and does not increase even if the company grows, make them similar to the constant interest payments of a bond. They are unlike the dividends on common stock, which are usually expected to grow with the firm.

b. Maturity and Return of Principal

A bond has a maturity date on which the principal is returned. Preferred stock has no maturity, and never returns principal. In this respect, its like common stock, because it never returns principal either.

c. Assurance of Payment

Interest must be paid or bondholders can force a company into bankruptcy. Common stock dividends can be passed indefinitely. Preferred dividends can be passed, but are subject to a cumulative feature. In this respect it is somewhere between bonds and common stock.

d. Priority in Bankruptcy

In terms of bankruptcy, bondholders have a claim on the company's assets to the extent of the unpaid principal of the bonds. Common stockholders are entitled only to what's left after all other claimants have been paid. The preferred stockholders are again in between. They have a claim in the amount of the original selling price of the stock, but it is subordinate to the claims of all bondholders.

e. Voting Rights

Common stockholders have voting rights, while preferred stockholders do not. In that respect preferred stock is like bonds.

f. Tax Deductibility of Payments to Investors

Interest is tax deductible to the paying company whereas dividends, common or preferred, are not. In this respect, preferred stock is very much equity. Preferred stock is legally equity, but it is clearly more like debt in many ways.

2.1.2.1. Types of Preferred Stocks

There are three types of preferred stocks which are cumulative preferred stocks, non cumulative preferred stocks, and participating preferred stocks (Gitman book, 2000).

a. Cumulative Preferred Stocks

Preferred stock for which all passed (unpaid) dividends in arrears must be paid along with the current dividends prior to the payment of dividends to common stockholders.

b. Non Cumulative Preferred Stocks

Preferred stock for which passed (unpaid) dividends but do not accumulate.

c. Participating Preferred Stocks

The preferred stock of this kind of holder can achieve increasing dividends if the common stockholders receive increasing dividends.

2.2. Ownership Structures

Ownership structures are defined as the category of owner who owns the stock/ share of the company. In practice stock ownership can be categorized to Insider (Managerial) Ownership, Institutional Ownership, Foreign Ownership, and Corporate Ownership.

2.2.1. Insider (Managerial) Ownership

Insider (managerial) ownership is share owned by management which actively involved in the company's decision taking (directors and commissaries). So this managerial ownership is used as an important internal supervisor. Besides, managerial ownership is a bonding mechanism which is used to decrease agency conflict between management and shareholders (Megginson, 1997). Management private wealth which is related to the company's value was expected to make the management action in order to increase the company's value.

Benefits of insider ownership will be partially or wholly offset by costs of inducing managers to undiversify their wealth. Managerial risk aversion and constraints on managerial wealth limit the willingness or ability of managers to become owners and so limit the supply of insider ownership. Risk-averse managers are willing to take a larger position in any firm only at higher expected rates of return that compensate them for additional risk. Limits on managerial wealth make it more costly for managers to take control interests in large firms. Therefore, insider ownership should be inversely related to firm size (Jensen, Solberg, and Zorn, 1992).

2.2.2. Institutional Ownership

Institutional ownership is the percentage of share ownership by outside party. Therefore by the ownership concentration, shareholders like institutional investor can monitor the management team because it is more effective so it can increase the company's value if there is a take over action. The increase of institutional ownership can create a more effective supervision on controlling the opportunistic action of manager and reducing the agency cost.

2.2.3. Foreign Ownership

Share is mostly owned by foreign investors. In Indonesia, the proportion of foreign ownership is quite high. So the role of foreign party is important on the investment growth.

2.2.4. Corporate Ownership

Corporate ownerships are the people who have an access to the informational key before this information announced to public. Usually this term is appointed to directors, but this definition is already enlarged and seize to relatives and other people who's on a position to take the advantages from internal information.

2.3. Agency Theory

Based on Gitman book (2000) the goal of the financial manager should be to maximize the wealth of the owners of the firm. Thus, management can be viewed as agents of the owners who have hired them and given them the authority of decision-making to manage the firm for the sake of the owners. Technically,

any manager who owns less than 100 percent of the firm is an agent of the other owners.

In theory, most financial managers would agree with the goal of owner wealth maximization. In practice, however, managers are also concerned with their personal wealth, job security, lifestyle, and fringe benefits, such as posh offices, country club memberships, and limousines, all provided at company expense. Such concerns may make managers reluctant or unwilling to take more than moderate risk if they perceive too much risk it might result in a loss of job and damage to personal wealth. The result of such a satisficing approach (a compromise between satisfaction and maximization) is a less-than-maximum return and a potential loss of wealth for the owners.

Eisenhardt (1989) stated that on its development, agency theory is divided into:

a. Positives Theory, this theory focus on identifying the situation when shareholder and manager as an agent are in conflict and government mechanism limit self serving on agent side.

b. Principal agent research, focus on the optimal contract between the action and result, and generally it focus on the relationship between shareholder and agent. This is the development of agency theory because it also includes the conflict among working partner, subsidiary and top management.

Agency problem will be happened potentially when the managers' ownership proportion is under a 100% (Jensen and Meckling, 1976). This

condition is the consequences of company's management function and ownership function separation.

Different interest between managers and shareholders can occur easily. It happened because the decision taker will not be responsible for the risk as the consequences of error in decision making in business, and also for not being able to develop the company's value. In contrary, the owner is fully responsible for all the risks. Therefore, managers are not willing to maximize the decision making.

In general, there are 3 types of agent's action to increase their wealth namely:

- **Moral Hazard**: the managing profit that is acted by agent

- **Adverse Selection**: profit information reported not as the right facts

- **Free Raider**: agent put their name on a project but in fact they are not involved in the project.

From this conflict of owner and personal goals arises what has been called the agency problem-the likelihood that managers may place personal goals ahead of corporate goals. Two factors-market forces and agency costs- serve to prevent or minimize agency problems (Gitman book, 2000).

a. Market Forces

To ensure management competence and minimize potential agency problems, these institutional shareholders have actively used their votes to oust underperforming managers and replace them with more competent managers. Note that the formal mechanism through which these shareholders act is by voting their shares in the election of directors, who are empowered to hire and fire

operating management. In addition to their legal voting rights, large shareholders are able to communicate with and exert pressure on management to perform or be fired.

Another market forces that has in recent years threatened management to perform in best interest of shareholders is the possibility of a hostile takeover. A hostile takeover is the acquisition of the firm (the target) by another firm or group (the acquirer) that is not supported by management. Hostile takeovers typically occur when the acquirer feels that the target firm is being poorly managed and is undervalued in the marketplace. The acquirer believes that by acquiring the target at its current low price and restructuring its management, operations, and financing, it can enhance the firm's value-that is, its share price. Although techniques are available for defending against a hostile takeover, the constant of a takeover often motivates management to act in the best interest of the firm's owners.

b. Agency Costs

To respond to potential market forces by preventing or minimizing agency problems and contributing to the maximization of owners' wealth, stockholders incur agency costs, of which there are four types:

- *Monitoring expenditures* prevent satisficing (rather than share-price-maximizing) behavior by management. These outlays pay for audits and control procedures that are used to assess and limit managerial behavior to those actions that tend to be in the best interests of the owners.

- *Bonding expenditures* protect against the potential consequences of dishonest acts by managers. Typically, the owners pay a third-party bonding company to obtain a fidelity bond. This bond is a contract under which the bonding company agrees to reimburse the firm for up to a stated amount if a bonded manager's dishonest act results in financial loss to the firm.

- *Opportunity costs* result from the difficulties that large organizations typically have in responding to new opportunities. The firm's necessary organizational structure, decision hierarchy, and control mechanism may cause profitable opportunities to be forgone because of management's inability to seize upon them quickly.

- *Structuring expenditures* are the most popular, powerful, and expensive agency costs incurred by firms. They result from structuring managerial compensation to correspond with share price maximization. The objective is to give managers incentives to act in the best interests of owners and to compensate them for such actions. In addition, the resulting compensation packages allow firms to compete for and hire the best managers available. Compensation plans can be divided into two groups-incentive plans and performance plans.

Incentive plans tend to tie management compensation to share price. The most popular incentive plan is the granting of stock options to management. These options allow managers to purchase stock at the market price set at the time of the grant. If the market price rises, they will be rewarded by being able to resell the shares subsequently at the higher market price. Although in the theory these options should motivate, they are sometimes criticized because positive

management performance can be masked in a poor stock market in which share prices in general have declined due to economic and behavioral market forces outside of management's control.

The use of performance plans has grown in popularity in recent years due to their relative independence from market forces. These plans compensate managers on the basis of their proven performance measured by earning per share (EPS), growth in EPS, and other ratios of return. Performance shares, shares of stock given to management as a result of meeting the stated performance goals, are often used in these plans. Another form of performance-based compensation in cash bonuses, cash payments tied to the achievement of certain performance goals. Under performance plans, management understands in advance the formula used to determine the amount of performance share or cash bonus it can earn during the period. In addition, the minimum benefits and maximum benefit available under the plan are specified.

2.4. Debt

Debt is the liability that has to be fulfill by the company to transfer cash, goods or services in a relative amount, in the future with an exact period of time, as the compensation of utility or services that company already got in the past. Short term debt is a liability that company has to pay in less than one year period. While long term debt is a liability that company has to pay in more than one year period.

Debt is an important mechanism to control the manager action and decreasing company's agency conflict. With debt, the company should do the

payment periodically to the interest and principal loan and this can decrease the manager's control to the company's cash flows (Jensen, 1986). Debt also insists the manager to lowering their profit taking action and be more efficient to decrease the possibility of bankruptcy and losing control also reputation (Bathala et al, 1994).

In behalf of high debt can increase the company risk of bankruptcy and decrease the risk of this undiversified bankruptcy by manager. Another possibility of to high debt in behalf as the company's funding can create a more agency problem such as risk-shifting which is the shareholder's intention to have high risk investment just to get the higher return so they can settle their debt and they will get the benefit from this investment. If this investment is failed then the highest risk will be carried by creditor.

Debt policy can be affected by firm specific real characteristics that affect the supply curve of debt offered to the firm, or the firm's demand for debt. Generally, creditors are 'external' investors who face the same informational disadvantage as external stockholders. Therefore, features that increase the costs of monitoring the firm's activities should decrease the supply of debt to the firm. Myers and Majluf (1984) relate profitability to debt policy through a modified 'pecking order' hypotheses, which suggest that more profitable firms will decrease their demand for debt, since more internal funds will be available to finance investment. Profitable firms have more earnings available for retention or investment and, therefore, would tend to build their equity relative to their debt.

2.5. Theoretical Framework and Hypothesis Formulation

To reach the object that has been described on the research objectives, then some hypotheses about relationship among factors affecting debt are arranged.

Jensen and Meckling (1994) as cited by Noer Sasongko (2003) stated that managerial ownership investment is an important ascertain on company's capital structure. If insider (managerial) ownership in the company increases, then the increase of debt will be more attractive, because debt will increase stock price, and also can increase the shareholder's value. Research done by Agrawal and Mandelker (1987) stated that there is a positive relation between insider ownership and debt. Mehran (1992) also stated that companies with a lot of investment banker that act as board of directors have higher level of long term debt ratio. So it can be hypothesized that Insider ownership has a positive influence to debt.

H1: Insider Ownership has a positive influence to Debt

Bathala et al. (1994) explained that the institutional ownership's presence has an important role as a monitoring agent that can decrease the agency conflict effectively, because they can manage the opportunistic behavior of manager and also to make the company enable to use the optimal debt level. It can be hypothesized that Institutional ownership has a positive influence to debt.

H2: Institutional Ownership has a positive influence to Debt

Mehran (1992) stated that the company with a higher level of profit (profitability) prefer in allocating this profit to other policy than to funding the investment. For example the company prefers to use their profit to pay dividend to

the shareholders, so there will be little free cash flow available and management were pushed find external sources of fund to make investments. Or in other words managers are pushed to borrow money from bank to fund for investment. The external sources of funds will be used to make investment if the profit earned were distributed as dividend. The external cost will increase supervision by external party such as stock market controller, investment banker and investor (Crutchley and Hansen, 1989). Besides, with the debt from bank will increase the company's credibility. So the investors will be attracted to invest their money in that company. So it can be hypothesized that Profitability has a positive influence to debt.

H3: Profitability has a positive influence to Debt

Sartono (2001) stated that theoretically a company with higher proportion of fixed assets can use a high level of debt. This caused by a higher level of fixed assets will easier to be collateral on debt proposal. Besides a high level of fixed assets will also decreasing bankruptcy cost if assets sold. Moh'd et al. (1998) stated that the composition or the value of fixed assets will positively effect on debt policy. A higher value of fixed assets then it will be easier to get a loan from the creditor. Generally, company that has collateral to debt will be easier to get a debt than the company which does not have collateral for debt. So a company that has easy to sell fixed assets will use the higher level of debt.

H4: Fixed Assets has a positive influence to Debt

CHAPTER III

RESEARCH METHOD

3.1. Research Method

This thesis uses quantitative instead of qualitative analysis method. The quantitative analysis is a characteristic of statistical variables, where the value is in the numerical form. The focus of this research is on the influence of profitability, fixed asset, insider ownership and institutional ownership to debt. Here multiple regression analysis used. That is instead of using independent variable to explain the variation in Y. By using more than one independent variables, it should better explain the variation in Y and hence provide a more accurate prediction of the relationship between dependent variable and independent variables.

3.2. Research Subject

3.2.1. Population

A population is the set representing all measurements of interest to the sample collector (Mendenhall, 1990:4). The population of this research from which the samples are derived refers to all manufacturing companies and not include in the financial sector companies listed in Jakarta Stock Exchange (JSX) from the period of January 1999 to December 2001. The focus of this research is in the year 1999-2001, because in that year an economic condition is stable, where the market price does not change significantly. In stable condition, perhaps

level of debt can be evaluated without any significant influences and financial characteristics are easier to compare in explaining performance.

3.2.2. Sample

In this research, companies that chosen as populations are manufacturing companies. The samples are taken based on purposive sampling method in order to obtain representative samples according to the predetermined criteria as follows:

1. Continuously listed on the Jakarta Stock Exchange from January 1999 to December 2001

2. Available of all accounting data in this research data resource

3. Not included in the financial, insurance, or real estate industries. It is because there are significant differences of financing policy in those industries with other industries, in which the effect may influence this research.

4. The Financial Accounting period ended in December 31, in order to avoid the effect of partial time in measuring variable.

From these criteria and by using the pooling method there are 37 companies obtained as the research samples. Total observations in this research are 111 observations, but because there are some observations that do not have complete data then 19 observations were eliminated and finally only 92 observations that are valid. This amount is already fulfill the rule stated that for the business research the sample must be 30 to less than 500. The sample's companies based on its industry are:

Table 3.1

List of Companies based on its Industries

No	Industries	Amount	Companies
1.	Food and Beverages	6	PT Cahaya Kalbar Tbk PT Miwon Indonesia Tbk PT Prasidha Aneka Niaga Tbk PT Sekar Laut Tbk PT Siantar TOP Tbk PT Tunas Baru Lampung Tbk
2.	Tobacco Manufactures	2	PT Gudang Garam Tbk PT Hanjaya Mandala Sampoerna Tbk
3.	Textile Mile Products	3	PT Argo Pantes Tbk PT Panasia Indosyntec Tbk PT Sunson Textile Manufacturer Tbk
4.	Apparel and Other Textile Products	4	PT Hanson Industri Utama Tbk (PT Mayertex Indonesia Tbk) PT Karwell Indonesia Tbk PT Primarindo Asia Infrastructure Tbk PT Surya Intrindo Makmur Tbk
5.	Lumber and Wood Products	2	PT Barito Pasific Timber Tbk PT Daya Sakti Unggul Corporation Tbk
6.	Chemical and Allied Products	3	PT Budi Acid Jaya Tbk PT Eterindo Wahanatama Tbk PT Lautan Luas Tbk
7.	Adhesive	2	PT Tri Polyta Indonesia Tbk PT Duta Pertiwi Nusantara Tbk
8.	Plastics and Glass Products	5	PT Argha Karya Prima Industry Tbk PT Asiaplast Industries Tbk PT Berlina Co. Ltd. Tbk PT Dynaplast Tbk PT Langgeng Makmur Plastic Industry Ltd. Tbk
9.	Metal and Allied Products	1	PT Jakarta Kyoei Steel Works Ltd. Tbk
10.	Fabricated Metal Products	2	PT Itamaraya Gold Industri Tbk PT Kedaung Indah Can Tbk
11.	Stone, Clay, Glass and Concrete Products	1	PT Intikeramik Alamasri Industri Tbk

12.	Electric and Electronic Equipment	1	PT Metrodata Electronics Tbk
13.	Automotive and Allied Products	4	PT Branta Mulia Tbk PT Nipress Tbk PT Prima Alloy Steel Tbk PT Selamat Sempurna Tbk
14.	Photographic Equipment	1	PT Perdana Bangun Pusaka Tbk
	Total	37	

3.3. Research Setting

The research was conducted in Jakarta Stock Exchange corner in Islamic University of Indonesia.

3.4. Research Variables

3.4.1. Dependent Variable

In this thesis, the writer uses the Dependent Variable which are:

1. **Debt Ratio:** $\dfrac{\textbf{Long term debt}}{\textbf{Total Assets}}$

   Ratio of long term debt and book value total assets

3.4.2. Independent Variables

Therefore, the independent variables that are included are:

1. **Institutional ownership:** $\dfrac{\textbf{Total Major Institutional Ownership}}{\textbf{Total Shareholders}} \textbf{ x 100\%}$

The percentage of company's shares owned by the institutional investors such as government (BUMN), LSM, or even private (Bathala, Moon, and Rao, 1994; McConnell and Servaes, 1990).

2. **Insider ownership:** $\dfrac{\textbf{Total Major Individual ownership}}{\textbf{Total Shareholders}} \textbf{ x 100\%}$

Insider ownership reflects the percentage of share owned by board of director, management, commissaries or each party that directly involved in company's decision making.

3. Profitability: $\dfrac{\text{Operating Profit}}{\text{Total Assets}}$

Measure the company's Profitability.

4. Fixed Assets: $\dfrac{\text{Fixed Assets}}{\text{Total Assets}}$

Measure the company's fixed assets.

5. Firm Size: Total outstanding shares x stock price at year end

Measure the size of the company.

3.5. Test Of Classical Assumption Of Regression

Before the Linear Multiple Regression test done in the formula, firstly the formula must be tested in Multicolinearity, Heteroscedasticity, and also Autocorrelation. It is done in order to find the most accurate result about the effect of both variables, which are dependent variable and independent variables.

3.5.1. Multicolinearity test

This test aimed to identify any relationship among independent variables in the regression model. If some or all independent variables are strongly correlated, then there is multicolinearity on the regression model used. This can cause inaccuracy estimation so it can direct to reach a null hypothesis. This test is done by using VIF (Variance Inflation Factor), TOL (Tolerance) and Pearson Correlation Matrix.

Rule of thumb that is used to determine that the tolerance value (TOL) is not risky toward the multicolinearity symptoms is 0.10. The VIF value is under 10 for all independent variables to be free from multicolinearity symptom.

3.5.2. Autocorrelation

Autocorrelation test is done to find out if there is a correlation among the time series data observed or even cross sectional data, although it commonly appear on time series data (Gujarati, 1995). If on the regression model an autocorrelation happened, then the OLS estimator is still consistent but not efficient (Gujarati, 1995). In order to detect the autocorrelation symptom we use Durbin-Watson (d) statistic. As the rule of thumb, d value which shows the unharmed autocorrelation symptom that shows on the table below:

Table 3.2

Autocorrelation Symptom

Value of d based on the regression model	Conclusion
$0<d<dL$	There is a positive autocorrelation in regression model
$dL<d<dU$	No conclusion
$dU<d<4-dU$	No autocorrelation exist in regression model
$4-dU<d<4-dL$	No conclusion
$4-dL<d<0$	There is a negative autocorrelation in regression model

3.5.3. Heteroscedasticity test

Heteroscedasticity test means there is no differences in the standard value of deviation of dependent variable and each independent variable value. If heteroscedasticity happen on the regression model then the estimation of regression coefficient will be inefficient. We can use the graph method by doing a plot on regression to find out heteroscedasticity symptoms. If there is an exact pattern like dots that shaping an exact regular pattern (waved, wide then narrowed) then heteroscadasticity happen, if there is no exact pattern and dots are spread up and under the zero number on y axis then heteroscedasticity not happened (Singgih, 2000).

3.6. Hypotheses Testing

To test the hypotheses proposed about the significant of dependent and independent variables t-test and F-test can be used as the statistical analyses tool.

1. To test the regression hypothesis partially can be done by t-test, if t-statistic > t-table then H0 is rejected, and so in vice versa. To make the calculation be easier, we can use the SPSS as a helping tool. How close the relationship among each variables partially can be seen from its significant level, if the significant level < α ($\alpha = 0.05$), then partially those independent variables are able to explain the changes on dependent variable significantly, so in vice versa. This test can be done after the linear multiple regressions used is free from classical assumption test collision, so the test result can be interpreted.

2. To test the regression hypotheses simultaneously can be done by F-test, if the F-statistic > F-table then Ho hypotheses rejected. Independent variables

simultaneously can explain the dependent variables changes significantly, if the significant of independent variables is lower than α, and in vice versa.

3. To find out the model's strength in predicting, we can see it from the determination coefficient (R^2).

3.7. Linear Multiple Regression

The principal assumptions in multiple regression analysis are similar to the assumption in simple linear regression analysis;

1. The independent variables and the dependent variable have a linear relationship.

2. The dependent variable is a continuous random variable, whereas the independent variables are controlled and therefore are not random.

3. The variances of the conditional distributions of the dependent variable given various combinations of values of the independent variables are equal.

4. Successive observed values of the random variable are uncorrelated.

5. The conditional distributions of the dependent variable, given various combinations of values of the independent variables are all normal distributions.

3.8. Research Procedure

To find effect and relationship between dependent variable and independent variables in the formula, several procedures must be followed:

1. Data is taken from the financial statements issued by the companies in Indonesian Capital Market Directory in the year 1999-2001, and also Jakarta Stock Exchange

2. Data for the research is tested first by using classical assumption test, which consist of Multicolinearity test, Autocorrelation test, and Heteroscedasticity test. There are several steps of test that must be followed, if the result of these three tests is high. If not, vice versa, the calculation process can be done directly

3. Tested by using Linear Multiple Regression

4. Analyze t-test result

5. Analyze F-test result

3.9. Technique of Data Analysis

The technique of data analysis is Independent T-test, F-test and Linear Multiple Regression. Based on the hypothesis formulation, the hypothesis can be drawn as follows:

1. To test Hypothesis no.1, 2, 3, and 4

The following regression model is designed to regress debt on independent variables of manufacturing firms:

DEBT = a0 + a1 INSIDER + a2 INSTITUTION + a3 PROFIT + a4 FIXED

+ e...3.1

Where:

a0	: constant coefficient
a1, a2, a3, a4	: regression coefficient of each independent variable
DEBT	: Debt Ratio
INSIDER	: Insider Ownership
INSTITUTION	: Institutional Ownership

PROFIT   : Profitability

FIXED   : Fixed Assets

e   : error term

Statistical hypothesis for hypothesis no.1 :

$H0$: a1 $\leq$ 0

HA: a1 > 0

H01: Insider Ownership has no positive relationship with Debt Ratio.

HA1: Insider Ownership has positive relationship with Debt Ratio.

Statistical hypothesis for hypothesis no.2 :

$H0$: a2 $\leq$ 0

HA: a2 > 0

H02: Institutional Ownership has no positive relationship with Debt Ratio

HA2: Institutional Ownership has positive relationship with Debt Ratio.

Statistical hypothesis for hypothesis no.3 :

H03 : a3 $\leq$ 0

HA3: a3 > 0

H03: Profitability has no positive relationship with Debt Ratio.

HA3: Profitability has positive relationship with Debt Ratio.

Statistical hypothesis for hypothesis no.4 :

H04 : a4 $\leq$ 0

HA4: a4 > 0

H04: Fixed Assets has no positive relationship with Debt Ratio.

HA4: Fixed Assets has positive relationship with Debt Ratio.

CHAPTER IV

RESEARCH FINDINGS, DISCUSSIONS

AND IMPLICATIONS

This chapter will explain about the early process of gathering the data, measurement of variables used in this research, the data analysis and the interpretation of hypothesis testing which contain of the explanations about research findings, discussions and implications.

4.1. Research Description

4.1.1. Preliminary Research Preparation

This research began by studying the literatures, journals, library references, and websites to get the relevant topic. The research given a reference in accounting field and suppose applicable in relation with accessible data. The data that needed for this research were gathered from financial statement summaries that were included in the *Indonesian Capital Market Directory* (ICMD) for the year 1999-2001, from the Capital Market Data Base of Jakarta Stock Exchange Corner at FE UII Jogjakarta, and other relevant source with data criterion:

   a. Companies Selected as samples of this research consist of 111 companies which are manufacturing companies. The numbers of samples have been shorten in order to fulfill the requirements in this research with the completeness of data based on the research variable. The companies were listed in Jakarta Stock Exchange at the period of 1999-2001 with

appropriate data and the completeness of data for the research requirements.

b. The data that are used in this research include the long term debt, total assets, operating profit, fixed assets, insider ownership, and institutional ownership of the companies (111 companies), at the period of 1999-2001.

c. Calculating the raw data to get fixed variables that is used in this research which are debt, profitability, fixed asset, insider ownership and institutional ownership.

4.1.2. Research Process

The data used in this research is quantitative data. Firstly, a sample must be chosen to obtain the data that is used as the variables for this research. The sample that is used in this research is not from financial, insurance, or real estate companies listed in Jakarta Stock Exchange at the year 1999, 2000, and 2001. The companies of this research are manufacturing companies which can be described as 37 companies for the year 1999, 37 companies for the year 2000 and 37 companies for the year 2001 listed on the JSX. The number is equal each year because from the research requirements stated that the companies which are selected to be the research samples should be continuously listed in Jakarta Stock Exchange at the year 1999-2001. The companies should have the information for dependent variable; debt. For the independent variables; the companies should have the information about insider ownership, institutional ownership, profitability, and fixed asset. They were selected because they fulfilled the

requirements of this research. There are several steps in this research process, which are:

1. Finding long term debt divided to total asset to find the debt ratio as dependent variable for 1st, 2nd, 3rd, and 4th hypothesis.

2. Finding the other independent variables; insider ownership, institutional variable in percentage, fixed asset, and operating profit.

3. Integrate all of the variables into the formula.

The hypothesis testing is done by statistical testing method, for the measurement of variable. Microsoft Excel was used and the data were then processed using SPSS 12 for the statistical calculation.

4.2. Research Findings and Discussion

4.2.1. Test of Classical Assumption of Regression

The results of the classical assumption below will describe the validity of data used for this research.

a. Multicollinearity test

This test aimed to identify any relationship among independent variables in the regression model. If some or all independent variables are strongly correlated, then there is multicolinearity on the regression model used. This can cause inaccuracy estimation so it can direct to reach a null hypothesis. This test is done by using VIF (Variance Inflation Factor), TOL (Tolerance) and Pearson Correlation Matrix.

Table 4.1

Analysis Results of Multicollinearity for Model 1

DEBT = a0 + a1 INSIDER + a2 INSTITUTION + a3 PROFIT+ a4 FIXED + e

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	INSIDER	0.999031936	1.000969002
	INSTITUT	0.988380841	1.011755751
	PROFIT	0.882124801	1.133626442
	FIXED	0.887024401	1.127364703

Source : Appendix 3

Based on tolerance value (TOL) for all independent variables of this research is higher than 0.10. The rule of thumb used to determine that the tolerance value is not risky toward the multicollinearity symptom is 0.10. For all independent variables in this research the VIF value is less than 10. Based on Gujarati (1995), the higher VIF value means the higher collinearity among independent variables.

b. Autocorrelation test

Autocorrelation test is done to find out if there is a correlation among the time series data observed or even cross sectional data, although it commonly appear on time series data (Gujarati, 1995). If on the regression model an autocorrelation happened, then the OLS estimator is still consistent but not efficient (Gujarati, 1995). T-test and F-test will be invalid and the conclusion which is taken based on the statistical significance test will be bias. In order to detect the autocorrelation symptom we use Durbin-Watson (d) statistic.

The Durbin-Watson value for the regression model in this research is 1.859. Based on Durbin-Watson table by using N = 92 and k = 4 then dU = 1.75

and dL = 1.57. So the value of dU<d<4-dU for the regression model is 1.75< 1.859< 2.250. This fact shows that from the regression model is free from autocorrelation.

c. Heterocedasticity test

If heteroscedasticity happen on the regression model then the estimation of regression coefficient will be inefficient. We can use the graph method by doing a plot on regression to find out heteroscedasticity symptoms. If there is an exact pattern like dots that shaping an exact regular pattern (waved, wide then narrowed) then heteroscadasticity happen, if there is no exact pattern and dots are spread up and under the zero number on y axis then heteroscedasticity not happened (Singgih, 2000).

Based on the scatter plot graph on the regressions result by using SPSS 12 shown that the dots are spread up randomly, not shaping an exact pattern and it spread up and under the zero number on y axis. This shows that there are no heteroscedasticity symptoms happened on the regression model.

Based on the result of test of classical assumption of regression, then the regression models used in this research is already exempted from the classical assumption collision that are multicollinearity, autocorrelation, and heteroscedasticity. So we can continue to do the hypothesis testing.

4.2.2. The Result of Linear Multiple Regression Test Statistically

Linear Multiple Regression model is the model that is used to estimate the value of Debt as dependent variable by using more than one independent variables (insider ownership, institutional ownership, profitability, and fixed assets). The

statistic results are the result of calculation done by SPSS 12 for the Regression

model is shown on the table below:

Table 4.2

Coefficients 1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.066	0.121		-0.546	0.587
	INSIDER	0.205	0.402	0.052	0.509	0.612
	INSTITUT	0.083	0.150	0.057	0.557	0.579
	PROFIT	0.180	0.268	0.072	0.672	0.503
	FIXED	0.394	0.124	0.340	3.168	0.002

Source : Appendix 3

From the table above the regression model can be written as:

DEBT = -0.066 + 0.205 INSIDER + 0.083 INSTITUTION + 0.180 PROFIT +

0.394 FIXED ....(4.2.2.1)

Sig   = (0.587) (0.612) (0.579) (0.503) (0.002)

t   = (-0.546) (0.509) (0.557) (0.672) (3.168)

4.2.3. Partial Influence (t-test)

To test the regression hypothesis partially can be done by t-test, if t-statistic > t-table then H0 is rejected, and so in vice versa. How close the relationship among each variables partially can be seen from its significant level, if the significant level < α (α = 0.05), then partially those independent variables are able to explain the changes on dependent variable significantly, so in vice versa.

- **H1: Insider Ownership has a positive influence to Debt**

For the first hypothesis (HA1) proposed in this research is insider ownership has a positive influence to debt. Based on the calculation on the Appendix 3, t-statistic is 0.509 and the significant level is 0.612 while t-table is 1.671. From the t-statistic which is less than t-table (t-statistic = 0.509 < t-table = 1.671) and the significant level is higher than 0.05 (α = 0.05) then it means insider ownership level has no influence to the debt ratio in the company, and partially the first hypothesis (HA1) is rejected or in other words H01 has failed to reject.

Based on the regression coefficient of insider ownership on Appendix 3, which is 0.205, means that insider ownership has a straight relation to the debt ratio. This fact is in conformity with the research done by Jensen and Meckling (1994) as cited by Noer Sasongko (2003) stated that managerial ownership investment is an important ascertain on company's capital structure. If insider (managerial) ownership in the company increases, then the increase of debt will be more attractive, because debt will increase stock price, and also can increase the shareholder's value. Research done by Agrawal and Mandelker (1987) stated that there is a positive relation between insider ownership and debt. Mehran (1992) also stated that companies with a lot of investment banker that act as board of directors have higher level of long term debt ratio.

From the research result shows the level of significance is 0.612 or higher than 0.05 (α = 0.05) so this research result is different from the research done by Agrawal and Mandelker (1987) but has a consistent positive relation between insider ownership and debt.

- **H2: Institutional Ownership has a positive influence to Debt**

The second hypothesis (HA2) is institutional ownership has a positive influence to debt. Based on the calculation on the Appendix 3, t-statistic is 0.557 and the significant level is 0.579 while t-table is 1.671. From the t-statistic which is less than t-table (t-statistic = 0.557 < t-table = 1.671) and the significant level is higher than 0.05 (α = 0.05) then it means institutional ownership level has no influence to the debt ratio in the company, and partially the second hypothesis (HA2) is rejected or in other words H02 has failed to reject.

Based on the regression coefficient of institutional ownership on Appendix 3, which is 0.083, means that institutional ownership has a straight relation to the debt ratio. This fact is in conformity with the research done by Bathala et al. (1994) explained that the institutional ownership's presence has an important role as a monitoring agent that can decrease the agency conflict effectively, because they can manage the opportunistic behavior of manager and also to make the company enable to use the optimal debt level.

From the research result shows the level of significance is 0.579 or higher than 0.05 (α = 0.05) so this research result is different from the research done by Bathala et al. (1994) but has a consistent positive relation between institutional ownership and debt.

- **H3: Profitability has a positive influence to Debt**

The third hypothesis (HA3) is profitability has a positive influence to debt. Based on the calculation on the Appendix 3, t-statistic is 0.672 and the significant level is 0.503 while t-table is 1.671. From the t-statistic which is less than t-table

(t-statistic = 0.672 < t-table = 1.671) and the significant level is higher than 0.05 (α = 0.05) then it means profitability has no influence to the debt ratio in the company, and partially the third hypothesis (HA3) is rejected or in other word H03 has failed to reject.

Based on the regression coefficient of profitability on Appendix 3, which is 0.180, means that profitability has a straight relation to the debt ratio. This fact is in conformity with the research done by Mehran (1992) stated that the company with a higher level of profit (profitability) prefer in allocating this profit to other policy than to funding the investment. For example the company prefers to use their profit to pay dividend to the shareholders, so there will be little free cash flow available and management were pushed find external sources of fund to make investments. Or in other words managers are pushed to borrow money from bank to fund for investment. The external sources of funds will be used to make investment if the profit earned were distributed as dividend. The external cost will increase supervision by external party such as stock market controller, investment banker and investor (Crutchley and Hansen, 1989). Besides, with the debt from bank will increase the company's credibility. So the investors will be attracted to invest their money in that company.

From the research result shows the level of significance is 0.503 or higher than 0.05 (α = 0.05) so this research result is different from the research done by Mehran (1992) and Crutchley and Hansen (1989) but has a consistent positive relation between profitability and debt.

- **H4: Fixed Assets has a positive influence to Debt**

The fourth hypothesis (HA4) is fixed assets has a positive influence to debt. Based on the calculation on the Appendix 3, t-statistic is 3.168 and the significant level is 0.002 while t-table is 1.671. From the t-statistic which is higher than t-table (t-statistic = 3.120 > t-table = 1.671) and the significant level is less than 0.05 (α = 0.05) then it means fixed assets has a significant positive influence to the debt ratio in the company, and partially the fourth hypothesis (HA4) is accepted or in other words H04 is rejected.

Based on the regression coefficient of fixed assets on Appendix 3, which is 0.394, means that fixed assets has a straight relation to the debt ratio. This fact is in conformity with the research done by Sartono (2001) stated that theoretically a company with higher proportion of fixed assets can use a high level of debt. This caused by a higher level of fixed assets will easier to be collateral on debt proposal. Besides a high level of fixed assets will also decreasing bankruptcy cost if assets sold. Moh'd et al. (1998) stated that the composition or the value of fixed assets will positively effect on debt policy. A higher value of fixed assets then it will be easier to get a loan from the creditor. Generally, company that has collateral to debt will be easier to get a debt than the company which does not have collateral for debt. So a company that has easy to sell fixed assets will use the higher level of debt.

From the research result shows the theory stated that the fixed assets influence debt ratio is ready to be generalized on companies in Indonesia especially on manufacturing companies as the samples in this research because the

level of significance is 0.002 or less than 0.05 (α = 0.05). The fact proves that higher level of fixed assets will influence the increase of debt ratio.

4.2.4. Simultaneous Test (F-test)

To test the regression hypotheses simultaneously can be done by F-test. This test is done to find out whether independent variables used on the regression model simultaneously can explain the dependent variable's volatility. In this research F-test is done to find out whether insider ownership, institutional ownership, profitability, and fixed assets simultaneously can explain debt's volatility.

The value of F-statistic of the regression model can be seen from the table below:

Table 4.3

ANOVA 1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.514	4	0.129	2.665	0.038
	Residual	4.199	87	0.048		
	Total	4.713	91			

Source : Appendix 3

From the table above F-statistic is 2.665 and F-table is 5.69. Then F-statistic = 2.665 < F-table = 5.69 with the significance value 0.038 < the significance value of α = 0.05. It means simultaneously all of independent variables do not have a significant influence to dependent variable.

Also it can be seen that the determination coefficient value of the regression model in the table below is 0.109 (R^2 = 0.109). This value shows that every 10.9% changes on dependent variable can be explained by independent

variables. In this research means that 10.9% changes on Debt ratio can be explained by insider ownership, institutional ownership, profitability, and fixed assets. For the rest of 89.1% explained by other factors which is not included in the regression model. This fact shows that there are still many factors outside the factors used in this research that also influence debt.

Table 4.4

Model Summary 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.330	0.109	0.068	0.21967956

Source : Appendix 3

4.3. Research Implications

From the statistical result for the period of 1999-2001 shows that insider ownership has a positive influence to debt. So from this research we can find that with a higher level of insider ownership, manager is using a high level of debt. The managers use debt to fulfill the company's financing. Managerial ownership investment is an important ascertain on company's capital structure. If insider (managerial) ownership in the company increases, then the increase of debt will be more attractive, because debt will increase stock price, and also can increase the shareholder's value. So the shareholder's interest will be fulfilled. Then the increase of insider ownership can decrease the agency conflict level in the sample's companies, because the agent can satisfy the shareholder's interest.

Besides, the increase of institutional ownership who acted as a monitoring agent is already effective from the research result. Institutional ownership ought to monitors the agent (manager) in running the companies even in making decision

for the benefit of shareholders. The institutional ownership's presence has an important role as a monitoring agent that can decrease the agency conflict effectively, because they can manage the opportunistic behavior of manager and also to make the company enable to use the optimal debt level. In the sample's companies, the institutional ownership roles of monitoring managers are really effective because managers can apply in using the optimal level of debt for the sake of shareholders. Here means that the increase of institutional ownership can decrease the agency conflict level in the sample's companies.

Company with a higher level of profit (profitability) prefer in allocating this profit to other policy than to funding the investment. For example the company prefers to use their profit to pay dividend to the shareholders, so there will be little free cash flow available and management were pushed find external sources of fund to make investments. Or in other words managers are pushed to borrow money from bank to fund for investment. The external sources of funds will be used to make investment if the profit earned were distributed as dividend. The external cost will increase supervision by external party such as stock market controller, investment banker and investor. Besides, with the debt from bank will increase the company's credibility. So the investors will be attracted to invest their money in that company. So by the high profitability then the agency conflict between managers and shareholders are decrease because the managers can increase the company's value so the investors are attracted to invest their money in that company.

From the research result, the companies with a high level of fixed assets use a high level of debt is appeared to be true. It means that the company uses their fixed assets as collateral to get debt from the creditor. A higher value of fixed assets then it will be easier to get a loan from the creditor. Generally, company that has collateral to debt will be easier to get a debt than the company which does not have collateral for debt. So a company that has easy to sell fixed assets will use the higher level of debt. Besides a high level of fixed assets will also decreasing bankruptcy cost if assets sold. The higher level of fixed asset also can decrease the agency conflict level because it can be used to get a high level of debt that can be used to increase the company's profit.

The research result is different with the previous research result except for the fixed assets but have equal direction on each independent variable to dependent variable. Probably it is because the writer only uses the manufacturing companies as the samples in this research. Besides with the shorter period (1999-2001) than previous research then the research has different results.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter contains research conclusions and research recommendations based on the overall result of analysis. Further, there is recommendation for future study in the same field.

5.1. Research Conclusions

Based on the regression testing data, the hypothesis and the purpose that has been described in the earlier chapter, some conclusions are drawn as follows:

1. This research is made in order to know the relationship of factors that influence debt on decreasing the agency conflict for manufacturing companies in Indonesia in the period of 1999-2001. The object companies on this research are 37 manufacturing companies for 1999, 37 manufacturing companies for 2000, and 37 manufacturing companies for 2001 that are listed on the Jakarta Stock Exchange.

2. From the research found that insider ownership, institutional ownership, profitability, and fixed assets are tend to decrease the agency conflict in manufacturing companies for the period of 1999-2001. Maybe other factors that are not included in this research can significantly decrease the agency conflict in Indonesia. Because this research only uses manufacturing companies for the samples then the result cannot be generalized to all of companies listed on JSX.

5.2. Recommendations

The researcher offers the following recommendation for future research:

1. To increase the samples in order to strengthen the power of test. Future research should use a broader sample of research. For future research hopefully the sample consist of all companies listed in JSX.

2. For future research, other variables to test the hypothesis can be used or add as a proxy to evaluate factor on how the debt can decrease the agency conflict in the company. Moreover, based on the analysis results, the small-adjusted R squared values indicate that there are still other variables affecting debt.

3. Hopefully future researcher can add the analysis period to be longer so the result will be more effective.
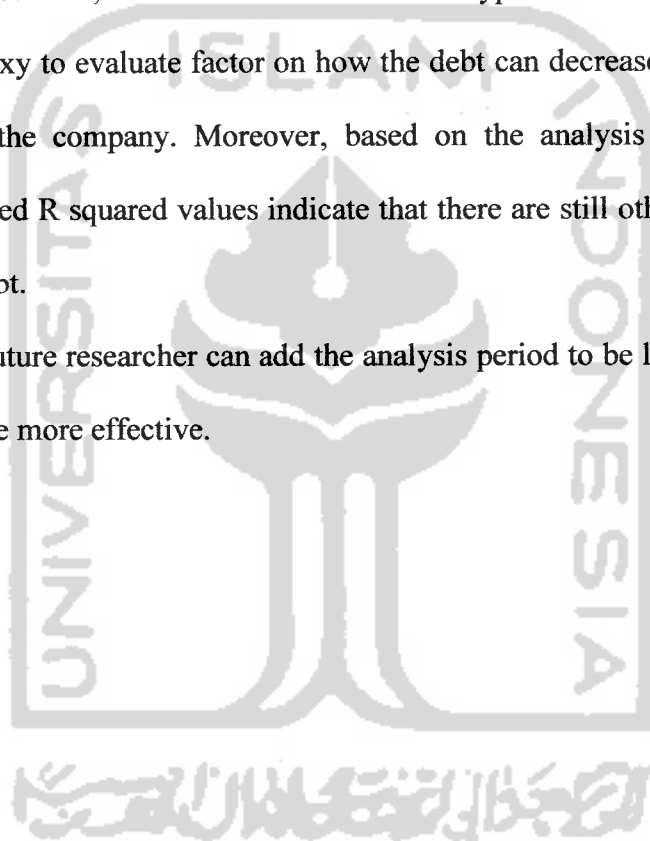
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APPENDICES

Appendix 1
Company's raw Data

No	Companies	Year	Long term Debt	Total Assets	Operating Profit	Fixed Assets	Insider Ownership (%)	Institutional Ownership (%)
				in million Rupiah				
1	PT Cahaya Kalbar Tbk	1999	54553	288811	9014	228227	0.75	86.17
		2000	4726	286257	2432	171366	10.8	64.8
		2001	4246	304291	5971	177091	10.8	64.8
2	PT Miwon Indonesia Tbk	1999	28994	397362	91442	176793	0.71	13.41
		2000	2543	555170	77674	172090	0.71	13.41
		2001	34838	573166	60588	201691	0.71	13.41
3	PT Prasidha Aneka Niaga Tbk	1999	557348	672575	-45634	236757	0	69.59
		2000	147200	533372	-157398	192856	0	69.59
		2001	141305	474494	11932	146088	1.17	69.59
4	PT Sekar Laut Tbk	1999	4160	175511	-4831	61404	1.5	64.3
		2000	14682	141074	-3893	54652	1.5	64.3
		2001	15488	127503	-9606	47198	1.5	64.3
5	PT Siantar TOP Tbk	1999	16422	230839	30648	116521	2.12	69.8
		2000	23915	340257	47826	172995	0	69.47
		2001	27225	404060	40625	235587	2.12	69.5
6	PT Tunas Baru Lampung Tbk	1999	432241	729667	83430	513241	0.08	63.42
		2000	437029	935029	90524	602189	0.08	63.42
		2001	374519	936637	45707	691224	0.1	58.42
7	PT Gudang Garam Tbk	1999	139576	8076916	3012395	1379508	4.33	79.98
		2000	169737	10843195	3254663	1626388	3.63	78.14
		2001	191400	13448124	3389977	2191965	1.75	78.17
8	PT Hanjaya Mandala Sampoerna Tbk	1999	1681910	6492685	1958319	1706883	0	42.42
		2000	2483207	8524815	2052380	1948528	0	31.09
		2001	2406780	9470540	2652818	1942925	6.78	32.06
9	PT Argo Pantes Tbk	1999	42389	2430372	72288	1674905	2.36	55.65
		2000	569988	2640790	203281	1580872	2.36	53.09
		2001	582841	2711531	94716	1488187	2.36	47.99
10	PT Panasia Indosyntec Tbk	1999	273388	2219808	92623	1363936	8.42	55
		2000	1185546	2365686	106657	1567217	8.42	55
		2001	978299	2300305	73703	1544786	9.47	55

No	Companies	Year	Long term Debt	Total Assets	Operating Profit	Fixed Assets	Insider Ownership (%)	Institutional Ownership (%)
				in million Rupiah				
11	PT Sunson Textile Manufacturer Tbk	1999	257831	693130	69856	411326	5	58
		2000	306722	787577	89602	485563	5.02	57.37
		2001	317289	817268	65706	478887	6.77	57.37
12	PT Hanson Industri Utama Tbk	1999	72083	749124	-52177	565178	1.26	86.01
		2000	47899	744896	-48343	527849	1.23	59.94
		2001	55854	675815	-67670	478330	0.55	12.42
13	PT Karwell Indonesia Tbk	1999	26086	576630	70277	131583	0.2	54.52
		2000	56727	725625	74934	136187	0.2	52.64
		2001	10054	500208	2231	116818	0.2	51.76
14	PT Primarindo Asia Infrastructure Tbk	1999	17573	182023	28066	71042	2.5	52.5
		2000	49939	204775	18744	76901	3.93	59.77
		2001	38801	181790	16715	73901	0	59.77
15	PT Surya Intrindo Makmur Tbk	1999	28	118164	18380	40291	1.4	68.6
		2000	4764	208206	17763	74124	1.4	68.6
		2001	17299	258854	4343	87647	1.4	68.6
16	PT Barito Pasific Timber Tbk	1999	61905	5790663	142911	529365	7.98	78.22
		2000	39812	6688783	-100837	497627	7.97	68.91
		2001	136383	6520276	-146380	462804	7.95	70.8
17	PT Daya Sakti Unggul Corporation Tbk	1999	51201	411384	50761	189785	0	75.21
		2000	108156	424158	70447	180834	0	59.39
		2001	90411	388037	14396	163643	0.24	59.39
18	PT Budi Acid Jaya Tbk	1999	426639	875726	142537	443016	0.6	67.8
		2000	663736	985467	59527	515372	1.12	62.15
		2001	526823	1002993	93285	552646	1.1	62.15
19	PT Eterindo Wahanatama Tbk	1999	741647	2480816	102253	1690876	0.58	54.05
		2000	196151	2853652	-20714	1918629	0.41	68.98
		2001	228854	3261165	-42116	2279817	0.33	68.98
20	PT Lautan Luas Tbk	1999	2931	596022	60340	126455	3.64	63.03
		2000	196642	700431	78210	144311	3.64	63.03
		2001	196612	762821	72078	182757	3.64	63.03
21	PT Tri Polyta Indonesia Tbk	1999	89438	2015198	60463	1313342	13.82	31.22
		2000	145499	2268733	-7816	1257062	13.82	31.22
		2001	96955	2266097	-42915	1055714	15.24	31.22

No	Companies	Year	Long term Debt	Total Assets	Operating Profit	Fixed Assets	Insider Ownership (%)	Institutional Ownership (%)
				in million Rupiah				
22	PT Duta Pertiwi Nusantara Tbk	1999	247	108105	18889	11733	1.8	0
		2000	151	137239	13112	11234	0	49.67
		2001	6167	131619	9846	10415	0.47	50.67
23	PT Argha Karya Prima Industry Tbk	1999	84115	1551397	96943	1137872	5	61.73
		2000	247426	1792002	143006	1145735	0	51.71
		2001	284446	1803651	230309	1062057	0	51.1
24	PT Asiaplast Industries Tbk	1999	32956	175151	13200	148037	15.37	61.54
		2000	37816	220377	18522	176350	15.37	61.54
		2001	34284	233600	5076	179734	15.37	61.54
25	PT Berlina Co. Ltd. Tbk	1999	4853	117907	36965	40912	9.9	51.4
		2000	11039	164391	41777	45453	9.9	51.4
		2001	19039	211662	58850	71146	10.48	51.4
26	PT Dynaplast Tbk	1999	25721	303730	34890	147871	0	32.25
		2000	57096	402782	58315	186721	0	41.01
		2001	40163	480699	70297	266998	0.43	47.6
27	PT Langgeng Makmur Plastic Industry Ltd. Tbk	1999	12338	427904	5198	285602	0.06	69.43
		2000	405041	504421	26112	279618	0	69.42
		2001	759	525919	11679	263760	0.06	69.43
28	PT Jakarta Kyoei Steel Works Ltd. Tbk	1999	31158	377953	-1422	200249	1.33	65.34
		2000	6944	310187	-23366	97309	0	65.27
		2001	44329	383165	-7090	99246	1.33	65.34
29	PT Itamaraya Gold Industri Tbk	1999	2668	67158	1877	24145	18.35	69.89
		2000	220	64211	420	23888	18.35	69.89
		2001	229	56961	-2625	21534	18.35	69.89
30	PT Kedaung Indah Can Tbk	1999	31217	172969	16942	63812	4.6	75.64
		2000	60536	211192	23784	72697	4.6	76.36
		2001	52855	216942	13759	70431	4.6	76.36
31	PT Intikeramik Alamasri Industri Tbk	1999	986581	1035524	-19046	659593	7.06	63.53
		2000	895197	1010551	-4543	646225	7.06	63.53
		2001	933267	923679	-9448	605640	7.06	63.53
32	PT Metrodata Electronics Tbk	1999	78455	206764	68491	32336	17.77	0
		2000	65159	399171	60784	51421	16.61	21.54
		2001	36559	537519	51252	71588	0	9.92

Appendix 2
Company's fixed Data

No	Companies	Year	Debt LT Debt / TA	Profitability Operating Profit / TA	Fixed Assets FA/TA	Insider Ownership	Institutional Ownership
1	PT Cahaya Kalbar Tbk	1999	0.188888235	0.031210723	0.790229597	0.0075	0.8617
		2000	0.01650964	0.008495862	0.598643876	0.108	0.648
		2001	0.013953748	0.019622664	0.581979092	0.108	0.648
2	PT Miwon Indonesia Tbk	1999	0.072966212	0.230122659	0.444916726	0.0071	0.1341
		2000	0.004580579	0.139910298	0.309977124	0.0071	0.1341
		2001	0.06081693	0.105707596	0.35188933	0.0071	0.1341
3	PT Prasidha Aneka Niaga Tbk	1999	0.828677843	-0.067849682	0.35201576	0	0.6959
		2000	0.275979991	-0.295099855	0.361578786	0	0.6959
		2001	0.297801447	0.025146788	0.307881659	0.0117	0.6959
4	PT Sekar Laut Tbk	1999	0.023435167	-0.027215215	0.345916591	0.015	0.643
		2000	0.10407304	-0.027595446	0.387399521	0.015	0.643
		2001	0.121471652	-0.075339404	0.370171682	0.015	0.643
5	PT Siantar TOP Tbk	1999	0.071140492	0.13276786	0.504771724	0.0212	0.698
		2000	0.070285108	0.14055846	0.508424514	0	0.6947
		2001	0.067378607	0.100541999	0.583049547	0.0212	0.695
6	PT Tunas Baru Lampung Tbk	1999	0.592381182	0.114339829	0.703390725	0.0008	0.6342
		2000	0.467396198	0.09681411	0.644032431	0.0008	0.6342
		2001	0.399855013	0.048799054	0.73798494	0.001	0.5842
7	PT Gudang Garam Tbk	1999	0.017280853	0.372963517	0.170796378	0.0433	0.7998
		2000	0.015653781	0.300157195	0.149991585	0.0363	0.7814
		2001	0.014232468	0.252078059	0.16299411	0.0175	0.7817
8	PT Hanjaya Mandala Sampoerna Tbk	1999	0.259046912	0.301619284	0.262893241	0	0.4242
		2000	0.2912916	0.240753612	0.228571295	0	0.3109
		2001	0.254133344	0.280112644	0.205154616	0.0678	0.3206
9	PT Argo Pantes Tbk	1999	0.017441363	0.029743595	0.689155816	0.0236	0.5565
		2000	0.215839957	0.076977344	0.598636014	0.0236	0.5309
		2001	0.214949045	0.03493082	0.548836432	0.0236	0.4799
10	PT Panasia Indosyntec Tbk	1999	0.123158399	0.041725681	0.614438726	0.0842	0.55
		2000	0.501142586	0.04508502	0.662478875	0.0842	0.55
		2001	0.425290994	0.032040534	0.671557033	0.0947	0.55

No	Companies	Year	Debt LT Debt / TA	Profitability Operating Profit/ TA	Fixed Assets FA/TA	Insider Ownership	Institutional Ownership
11	PT Sunson Textile Manufacturer Tbk	1999	0.371980725	0.100783403	0.593432689	0.05	0.58
		2000	0.389450174	0.113769193	0.616527654	0.0502	0.5737
		2001	0.388231278	0.080397128	0.585960786	0.0677	0.5737
12	PT Hanson Industri Utama Tbk	1999	0.096223055	-0.069650685	0.754451866	0.0126	0.8601
		2000	0.064302936	-0.064898993	0.708621069	0.0123	0.5994
		2001	0.082646878	-0.100130953	0.707782455	0.0055	0.1242
13	PT Karwell Indonesia Tbk	1999	0.045238715	0.121875379	0.228193122	0.002	0.5452
		2000	0.078176744	0.103268217	0.187682343	0.002	0.5264
		2001	0.020099639	0.004460145	0.233538848	0.002	0.5176
14	PT Primarindo Asia Infrastructure Tbk	1999	0.096542745	0.154189306	0.390291337	0.025	0.525
		2000	0.243872543	0.091534611	0.375539006	0.0393	0.5977
		2001	0.213438583	0.091946752	0.40651851	0	0.5977
15	PT Surya Intrindo Makmur Tbk	1999	0.000236959	0.155546529	0.340975255	0.014	0.686
		2000	0.022881185	0.085314544	0.356012795	0.014	0.686
		2001	0.066829178	0.016777798	0.338596274	0.014	0.686
16	PT Barito Pasific Timber Tbk	1999	0.010690486	0.024679557	0.091416993	0.0798	0.7822
		2000	0.005952054	-0.015075538	0.074397241	0.0797	0.6891
		2001	0.020916753	-0.02244997	0.070979204	0.0795	0.708
17	PT Daya Sakti Unggul Corporation Tbk	1999	0.124460358	0.123390798	0.461332964	0	0.7521
		2000	0.254989886	0.166086694	0.426336412	0	0.5939
		2001	0.232995823	0.037099555	0.421720094	0.0024	0.5939
18	PT Budi Acid Jaya Tbk	1999	0.487183206	0.162764381	0.505884261	0.006	0.678
		2000	0.673524329	0.060404864	0.522972357	0.0112	0.6215
		2001	0.525250924	0.093006631	0.550996866	0.011	0.6215
19	PT Eterindo Wahanatama Tbk	1999	0.298952845	0.041217487	0.681580577	0.0058	0.5405
		2000	0.068736833	-0.007258769	0.672341617	0.0041	0.6898
		2001	0.070175535	-0.012914403	0.699080543	0.0033	0.6898
20	PT Lautan Luas Tbk	1999	0.0049917604	0.101237874	0.212164987	0.0364	0.6303
		2000	0.280744285	0.111659821	0.206031715	0.0364	0.6303
		2001	0.257743298	0.09488746	0.239580452	0.0364	0.6303
21	PT Tri Polyta Indonesia Tbk	1999	0.044381743	0.030003503	0.65171859	0.1382	0.3122
		2000	0.064132271	-0.003445095	0.554081066	0.1382	0.3122
		2001	0.042785018	-0.018937848	0.465873261	0.1524	0.3122

No	Companies	Year	Debt LT Debt / TA	Profitability Operating Profit/ TA	Fixed Assets FA/TA	Insider Ownership	Instituttional Ownership
22	PT Duta Pertiwi Nusantara Tbk	1999	0.002284816	0.174728273	0.10853337	0.018	0
		2000	0.00110027	0.095541355	0.081857198	0	0.4967
		2001	0.046854937	0.074806829	0.079129913	0.0047	0.5067
23	PT Argha Karya Prima Industry Tbk	1999	0.054218875	0.062487552	0.733449916	0.05	0.6173
		2000	0.138072391	0.079802366	0.639360336	0	0.5171
		2001	0.157705676	0.127690446	0.588837308	0	0.511
24	PT Asiaplast Industries Tbk	1999	0.188157647	0.075363543	0.845196431	0.1537	0.6154
		2000	0.171596854	0.084046883	0.800219624	0.1537	0.6154
		2001	0.146763699	0.021729452	0.769409247	0.1537	0.6154
25	PT Berlina Co. Ltd. Tbk	1999	0.041159558	0.3135098	0.346985336	0.099	0.514
		2000	0.067150878	0.254131917	0.276493239	0.099	0.514
		2001	0.089950015	0.278037626	0.336130245	0.1048	0.514
26	PT Dynaplast Tbk	1999	0.084683765	0.114871761	0.486850163	0	0.3225
		2000	0.1417541	0.144780551	0.463578313	0	0.4101
		2001	0.083551245	0.146239123	0.555436978	0.0043	0.476
27	PT Langgeng Makmur Plastic Industry Ltd. Tbk	1999	0.02883357	0.012147585	0.6674441	0.0006	0.6943
		2000	0.802982033	0.051766283	0.554334574	0	0.6942
		2001	0.001443188	0.022206842	0.501522098	0.0006	0.6943
28	PT Jakarta Kyoei Steel Works Ltd. Tbk	1999	0.082438822	-0.003762373	0.529825137	0.0133	0.6534
		2000	0.022386496	-0.075328753	0.313710762	0	0.6527
		2001	0.115691673	-0.018503778	0.259016351	0.0133	0.6534
29	PT Itamaraya Gold Industri Tbk	1999	0.03972721	0.027949016	0.359525299	0.1835	0.6989
		2000	0.003426204	0.006540935	0.3720023485	0.1835	0.6989
		2001	0.004020295	-0.04084163	0.378048138	0.1835	0.6989
30	PT Kedaung Indah Can Tbk	1999	0.180477427	0.097948187	0.368921599	0.046	0.7564
		2000	0.286639645	0.112617902	0.344222319	0.046	0.7636
		2001	0.243636548	0.063422482	0.324653594	0.046	0.7636
31	PT Intikeramik Alamasri Industri Tbk	1999	0.952736006	-0.018392621	0.63696544	0.0706	0.6353
		2000	0.885850393	-0.004495567	0.639477869	0.0706	0.6353
		2001	1.010380229	-0.010228662	0.655682331	0.0706	0.6353
32	PT Metrodata Electronics Tbk	1999	0.379442263	0.331252055	0.156390861	0.1777	0
		2000	0.163235806	0.152275591	0.128819478	0.1661	0.2154
		2001	0.06801434	0.095349188	0.133182269	0	0.0992

No	Companies	Year	Debt LT Debt / TA	Profitability Operating Profit/ TA	Fixed Assets FA/TA	Insider Ownership	Institutional Ownership
33	PT Branta Mulia Tbk	1999	0.057643915	0.108883423	0.531459525	0.187	0.713
		2000	0.553697587	0.16095721	0.541765893	0.187	0.713
		2001	0.545239125	0.14292322	0.552046809	0.187	0.713
34	PT Nipress Tbk	1999	0.005418	0.145460304	0.417400943	0.1685	0.5536
		2000	0.659161753	0.082506362	0.385162255	0.124	0.5536
		2001	0.675444575	0.101600196	0.447455224	0.124	0.5536
35	PT Prima Alloy Steel Tbk	1999	0.01091685	0.067145349	0.21348698	0.097	0.8077
		2000	0.079616002	0.079996891	0.15637923	0.097	0.7637
		2001	0.306850373	0.041871273	0.21181827	0.097	0.8074
36	PT Selamat Sempurna Tbk	1999	0.042852015	0.264827627	0.456253931	0.0191	0.6802
		2000	0.210360922	0.171541436	0.472352818	0.0191	0.6802
		2001	0.203192703	0.190271285	0.505555778	0	0.6802
37	PT Perdana Bangun Pusaka Tbk	1999	0.014002448	-0.024904121	0.548021216	0.0558	0.7093
		2000	0.013613508	0.064570356	0.493763602	0.0558	0.7115
		2001	0.013062668	0.040243123	0.471132841	0.0558	0.7115

Appendix 3

Linear Multiple Regression

Descriptive Statistics

	Mean	Std. Deviation	N
DEBT	.1894930	.22757563	92
INSIDER	.058347	.0573281	92
INSTITUT	.605550	.1546589	92
PROFIT	.0762021	.09157013	92
FIXED	.4563239	.19684064	92

Correlations

		DEBT	INSIDER	INSTITUT	PROFIT	FIXED
Pearson Correlation	DEBT	1.000	.057	.037	-.043	.315
	INSIDER	.057	1.000	-.007	.022	.013
	INSTITUT	.037	-.007	1.000	-.082	-.039
	PROFIT	-.043	.022	-.082	1.000	-.329
	FIXED	.315	.013	-.039	-.329	1.000
Sig. (1-tailed)	DEBT	.	.294	.363	.342	.001
	INSIDER	.294	.	.474	.416	.452
	INSTITUT	.363	.474	.	.219	.356
	PROFIT	.342	.416	.219	.	.001
	FIXED	.001	.452	.356	.001	.
N	DEBT	92	92	92	92	92
	INSIDER	92	92	92	92	92
	INSTITUT	92	92	92	92	92
	PROFIT	92	92	92	92	92
	FIXED	92	92	92	92	92

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	FIXED, INSIDER, INSTITUT, PROFIT(a)	.	Enter

a All requested variables entered.
b Dependent Variable: DEBT

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.330(a)	.109	.068	.21967956	1.859

a Predictors: (Constant), FIXED, INSIDER, INSTITUT, PROFIT
b Dependent Variable: DEBT

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.514	4	.129	2.665	.038(a)
	Residual	4.199	87	.048		
	Total	4.713	91			

a Predictors: (Constant), FIXED, INSIDER, INSTITUT, PROFIT
b Dependent Variable: DEBT

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.066	.121		-.546	.587		
	INSIDER	.205	.402	.052	.509	.612	.999	1.001
	INSTITUT	.083	.150	.057	.557	.579	.988	1.012
	PROFIT	.180	.268	.072	.672	.503	.882	1.134
	FIXED	.394	.124	.340	3.168	.002	.887	1.127

a Dependent Variable: DEBT

Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	INSIDER	INSTITUT	PROFIT	FIXED
1	1	3.866	1.000	.00	.02	.00	.02	.01
	2	.588	2.564	.00	.04	.00	.74	.02
	3	.415	3.052	.00	.92	.01	.00	.04
	4	.107	6.019	.02	.00	.22	.13	.70
	5	.024	12.782	.98	.02	.77	.11	.24

a Dependent Variable: DEBT

Casewise Diagnostics(a)

Case Number	Std. Residual	DEBT
26	3.206	.95274
87	3.428	1.0104

a Dependent Variable: DEBT

Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.0215835	.3627106	.1894930	.07518537	92
Std. Predicted Value	-2.233	2.304	.000	1.000	92
Standard Error of Predicted Value	.026	.094	.049	.015	92
Adjusted Predicted Value	.0196238	.3795882	.1916162	.07661983	92
Residual	-.24411665	.75301623	.00000000	.21479718	92
Std. Residual	-1.111	3.428	.000	.978	92
Stud. Residual	-1.129	3.476	-.005	.998	92
Deleted Residual	-.25206175	.77436876	-.00212319	.22375018	92
Stud. Deleted Residual	-1.131	3.724	.004	1.023	92
Mahal. Distance	.282	15.498	3.957	3.236	92
Cook's Distance	.000	.069	.008	.012	92
Centered Leverage Value	.003	.170	.043	.036	92

a Dependent Variable: DEBT

Charts

Scatterplot

Dependent Variable: DEBT

Figure 1