

**RELATION OF CHANGES IN MACRO AND MICRO ECONOMIC VARIABLE
CHANGES WITH THE NET INCOME IN THE MANUFACTURING SECTOR
COMPANIES LISTED IN THE INDONESIA STOCK EXCHANGE**

By

Irwan Roesli

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
for the degree of

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2012

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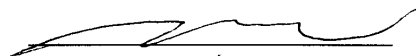
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ABSTRACT

RELATION OF CHANGES IN MACRO AND MICRO ECONOMIC VARIABLE CHANGES WITH THE NET INCOME IN THE MANUFACTURING SECTOR COMPANIES LISTED IN INDONESIA STOCK EXCHANGE

By

Irwan Roesli

The Net Income of a bussiness concern is the most valuable indocator where CEO's are rated. As going concerns it is imperative to find what some of the micro and macro economic influence to the Income of the manufacturing sector. The Author do a research about the relation of the manufacturing sector's *net income* againts the up and down of the *inflation* and the *exchange rate* of the US Dollar against the Indonesian Rupiah. These two variables are the macro economic. The micro economic variable are the *operating costs* and *receivables turn over rate*.

the regression analysis find that the four variables are all significant and positive

TABLE OF CONTENTS

| | |
|--|-----------|
| I. INTRODUCTION..... | 1 |
| II. STUDY REFERENCES | 9 |
| A. DEFINITIONS OF ECONOMICS | 9 |
| Microeconomics and Macroeconomics | 10 |
| Microeconomic Theory | 11 |
| Markets in Microeconomics | 12 |
| Macroeconomic Theory | 14 |
| Macroeconomic Analysis of The Origins of the Development | 15 |
| B. THE ROLE OF CORPORATE NET INCOME FOR CONTINUITY | 16 |
| C. MACRO FACTORS THAT AFFECT THE COMPANY'S NET | |
| INCOME INFLATION | 18 |
| D. Rupiah Exchange Rate | 20 |
| E. MICRO FACTORS THAT AFFECT THE COMPANY'S NET INCOME | 23 |
| Receivables Turnover Rate | 23 |
| Operating Costs..... | 23 |
| III. RESEARCH METHODOLOGY | 26 |
| A. STRATEGIES AND METHODS | 26 |
| Research Strategy | 26 |
| Research Methods | 26 |
| B. POPULATION AND SAMPLE | 27 |
| Population | 27 |
| Samples | 27 |
| C. RESEARCH ANALYSIS UNITS | 27 |
| D. DATA COLLECTION INSTRUMENTS | 27 |
| E. DATA ANALYSIS METHODS | 28 |
| Description of Statistics | 28 |
| Normality Test Data | 29 |
| Classical Linear Regression Testing Assumptions | 29 |
| Correlation Analysis | 32 |
| Regression Analysis | 34 |

| | |
|---|----|
| Correlation Test | 35 |
| Regression Testing | 37 |
| Coefficient of Determination | 39 |
| F. HYPOTHESIS TESTING | 39 |
| | |
| IV. ANALYSIS AND DISCUSSION | 42 |
| A. OVERVIEW OF SAMPLE | 42 |
| B. DESCRIPTION OF DATA | 50 |
| C. DESCRIPTIVE STATISTICS | 50 |
| D. NORMALITY TEST DATA | 52 |
| E. CLASSICAL REGRESSION TESTING ASSUMPTIONS | 53 |
| Zero Expected Values for Residuals | 53 |
| Regression normality | 53 |
| Linearity | 54 |
| F. TESTS OF HYPOTHESES | 57 |
| Correlation Test | 57 |
| Correlation Significance Test | 59 |
| Regression Testing | 65 |
| Parameter Regression Significance Test | 71 |
| Coefficient of Determination | 78 |
| G. DISCUSSION OF RESEARCH FINDINGS | 81 |
| | |
| V. CLOSING | 82 |
| A. CONCLUSION..... | 82 |
| B. LIMITATIONS OF RESEARCH..... | 83 |
| C. SUGGESTION | 83 |
| | |
| APPENDIX | 85 |
| A: Frequencies summary Tables | 85 |
| B: Correlations result Tables | 86 |
| C: Regression result Tables | 88 |
| | |
| BIBLIOGRAPHY | 98 |

LIST OF TABLES

| | | |
|-----------|--|-----------|
| 1 | Guidelines for Providing Interpretation Correlation Coefficient | 33 |
| 2 | The Statistic | 50 |
| 3 | One-Sample Kolmogorov-Smirnov Test | 52 |
| 4 | Residuals Statistics | 53 |
| 5 | Multicollinearity test : Coefficient Correlations | 55 |
| 6 | Multicollinearity test : Collinearity Diagnostics | 56 |
| 7 | Correlation of Inflation Rate (X1) Vs Net Income (Y) | 57 |
| 8 | Correlation of USD (X2) Vs Rupiah Exchange Rate (Y) | 58 |
| 9 | Correlation of Receivable Turnover (X3) Vs Net Income (Y) | 58 |
| 10 | Correlation of Operating Cost (X4) Vs Net Income (Y) | 59 |
| 11 | Correlation of All Vs Net Income (Y) | 59 |
| 12 | Regression X_1 and Y | 65 |
| 13 | Regression X_2 and Y | 66 |
| 14 | Regression X_3 and Y | 67 |
| 15 | Regression X_4 and Y | 68 |
| 16 | Regression $X_1X_2X_3X_4$ and Y | 69 |
| 17 | ANOVA^b : Testing Hypotheses Regression $X_1X_2X_3X_4$ and Y | 76 |
| 18 | Coefficient of Determination X_1 and Y | 78 |
| 19 | Coefficient of Determination X_2 and Y | 78 |
| 20 | Coefficient of Determination X_3 and Y | 79 |
| 21 | Coefficient of Determination X_4 and Y | 79 |
| 22 | Coefficient of Determination $X_1X_2X_3X_4$ and Y | 79 |

LIST OF FIGURES

| | | |
|----------|--|-----------|
| 1 | Relationship Between the Variables | 6 |
| 2 | Circulation Flow of Income and Expenditure in the Economy | 14 |
| 3 | Normal P-P Plot of Regression Standardized Residual | 54 |
| 4 | Regression Standardized Residual | 55 |
| 5 | Regression Standardized Predicted Value | 56 |

I. INTRODUCTION

Background Research

There is no denying that every company, whether engaged in services, trade or industry, expect a profit. As benchmarks for the progress of a company, profit is a source of expenditure for operations of the company. With the profits, the companies can recoup losses that may be experienced in the previous period or to determine other policies that support the advancement and company productivity.

Broadly based on its main activities, companies can be classified as service companies, trade and factory (manufacturer). The general objective of the establishment of companies is to obtain the maximum profit. Furthermore the profits, companies would grow and develop properly. Therefore the ability to effectively manage corporate assets is needed so that the continuity of business development and will be progressing well. Many factors are decisive in gaining profit. The attractiveness of the company and the competitive strategy adopted should reflect the maturity of the management rules of the competition so as to maximize the attractiveness of the company.

For companies that are engaged in manufacturing, the sale is the main revenue for the company, in addition to other miscellaneous income. Another factor in supporting the increase in profits is a symptom / economic phenomena that come from outside the company. In today's era of openness, external factors (macro) are very large influence on the company's every move.

The inflation rate fluctuate up and down, a change in foreign exchange rates such as the U.S. Dollar against the (Indonesian) Rupiah, and the number of competitors are macro factors that influence the size of the profits from the company. Macro factors are not controllable (uncontrollable) by the company management. Management firms only seek to

macro factors can be beneficial or detrimental to the company's operations. The rate of inflation that occurred over several months has not been stable, one of them due to economic circumstances are less stable and stability is not yet under control. The impact of this situation is the disruption of operations of the company, which did result in efficiency and effectiveness of company operations. Many companies review the policies that already exist in order to adapt and survive in the midst of changes that are happening.

Strengthening of the U.S. dollar against the Rupiah that reach above than Rp.10,000. - per U.S. dollar resulted in rise on the various components of operating costs, so that many companies implement a strategy to tighten its operational expenses. These conditions cannot be avoided by the company; the management company is only trying to contain, the condition of strengthening of the U.S. Dollar against the Rupiah, is not too detrimental to its own business efforts.

Given the types of businesses that are profitable and have bright prospects, the strength of competition from similar companies and enterprises "imitators" cannot take for granted. To be able to survive (survive) the company is required to perform a variety of management reform and perform a variety of innovations in the form of product diversification in order to anticipate customer demand.

Several factors are derived from micro-enterprise environment that resulted in the size of company profits is the number of customers, accounts receivable turnover and operating costs of the company.

Customers are loyal and faithful to the asset to be owned by the company. Various attempts were made to solicit the company's new customers and maintaining old customers. Intense competition in a similar business (industry) is expected to spur companies to more actively seek new customers. The number of competitors at least effect on the number of

customers who owned the company. According to Keown and Scott¹ (2000:742), increasing the probability of failure caused the company must identify new customers who may be at risk adverse. This is done to determine whether the customer is given the proper credit or not.

By decreasing the customer's credit rating, leading to increased likelihood of unpaid bills on time. So the customer receives the less worthy of credit result in increased costs of failure (risk) as the cost of failure is directly related to the quality of the customer.

Accounts receivable is one asset that plays an important role and contributed to the activities of the company, because receivables are part of the working capital used in the operation of the company to earn income. In his efforts to earn income, corporate sales transactions are either in cash or credit. Credit sales by itself will lead to accounts receivable. In the unstable economic conditions, credit sales are expected to increase sales turnover because customers will choose this way than with cash sales. However, the sale of credit risk of accounts receivable billing congestion resulting in failure to achieve the desired profit company.

Operational costs incurred by the company to perform daily activities are also a factor affecting the micro-profit. The increasing variety of cost components, such as the increase in fuel (fuel oil), which also affects the cost of transportation, must be anticipated by the company. The Company is expected to perform the operational cost efficiencies so that the achievement of profit objectives can be achieved.

Based on the above description, the title of this research is: **"RELATION OF CHANGES IN MACRO AND MICRO ECONOMIC VARIABLE WITH THE NET INCOME IN THE MANUFACTURING SECTOR COMPANIES LISTED IN THE INDONESIA STOCK EXCHANGE"**.

¹ Keown, Arthur J. & Scott, David F., 2000, *Dasar-dasar Manajemen Keuangan*, translated by Chaerul D. Djakman & Dwi Sulistyorini, 1st Eds., 2nd Books, Salemba Empat, page 742.

Limitations

In this study, the variables are:

1. Changes in macroeconomic variables of inflation and exchange rate against the U.S. Dollar
2. Changes in micro-economic variables in the form of accounts receivable turnover and operating costs
3. Net income in the manufacturing sector companies listed on the Indonesia Stock Exchange

The terminologies used in this study are as follows:

1. Profit is the excess return on the investment. For trading companies, earnings also mean the difference between the selling prices of the purchase price. Net income used in this study is the operating profit after tax. (Earnings after tax / EAT).
2. The exchange rate is the price of a currency expressed in another currency. Buying rate (buying rate) or often known as the bid rate (the rate offered) is the rate at which banks buy foreign currency from customers to pay in local currency. Selling rate (selling rate) or offer rate (bid rate) is often called the asked rate (required rate) is the exchange rate "required" banks or currency traders to be paid by consumers in the domestic currency for foreign currency at bank selling and consumers buy. Opening of the exchange rate is the rate occurs at the beginning of the month, while the closing rate is the rate occurs at the end of the month. In this study, the exchange rate used is the middle rate, the average rate between the selling rate and buying rate at the closing exchange rate (selling rate plus the buying rate at the end of the month divided by two). An increase or decrease the U.S. dollar against the rupiah exchange rate is commonly referred to as the U.S. dollar exchange rate changes against the Rupiah, hereinafter referred to as "Dollar exchange rate".

3. Inflation is a process of rising prices prevailing in the economy. Inflation used in this study is based on the monthly inflation data released by the Central Bureau of Statistics.
4. Operational costs are those costs incurred by companies for day-to-day operations. These costs consist of cost of sales commissions, entertainment, transportation costs, freight expenses (fuel, tolls and parking), vehicle operation and maintenance expenses depreciation of operational vehicles.

Identification of Problems

Based on the background and limitations of the above problems, the research questions used to specify the research problem is as follows:

1. Is there a significant relationship between the inflation rate to net income of the company?
2. Is there a significant relationship between changes in U.S. dollar exchange rate against the rupiah in net profit?
3. Is there a significant relationship between the level of receivable turnover with a net profit of the company?
4. Is there a significant relationship between changes in operating expenses to net income of the company?
5. Is there a significant relationship between the rate of inflation, changes in the U.S. dollar against the rupiah exchange rate, turnover rate and changes in operating costs together with a net profit of the company?

Problem Formulation

Based on the background (research issues) above, the main problem is formulated to be investigated are:

How big is the relationship of changes in macroeconomic variables inflation and exchange rate of US Dollar against the Rupiah, changes in micro-economic variables of the level of

receivable turnover and operating costs with income net in the manufacturing sector companies listed on the Indonesia Stock Exchange?

Theory Framework

Research variables used in this study are grouped into two categories, namely:

1. Independent variables (Independent Variable) denoted as X, consisting of:

X_1 = Inflation Rate

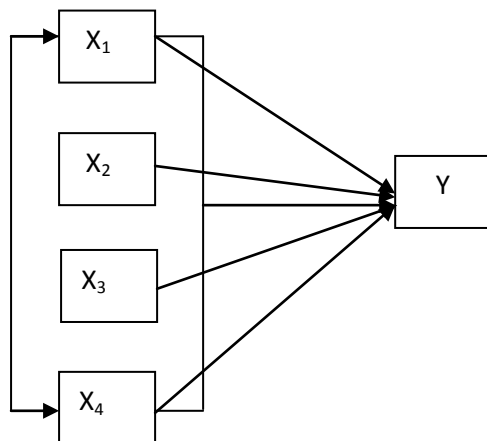
X_3 = Receivable turnover

X_2 = the U.S. dollar against the rupiah exchange rate

X_4 = Operating costs

2. Dependent variable (Dependent Variable) is denoted as net income Y.

In this study can be seen the pattern of the relationship between the inflation rate, exchange rate U.S. Dollar against the Indonesian Rupiah, the level of turnover and operating costs as the independent variable (independent variable) with the dependent variable (dependent variable) of this research is the net profit. Theoretical framework can be seen in the paradigm with 4 Dual Independent Variable as shown in the image below:



Description:

X_1 = Inflation Rate

X_3 = Receivable turnover

X_2 = the U.S. dollar against the rupiah exchange rate

X_4 = Operating costs

Y = Net income

Figure 1. Relationship Between the Variables

Hypothesis

Based on the formulation of the problem above, then the hypothesis in this study are:

1. H1 o : $\rho_1 = 0$ (There is no significant relationship between changes the inflation rate to net income of the company)
H1 a : $\rho_1 \neq 0$ (There is a significant relationship between changes in the inflation rate with the change in net earnings)
2. H2 o : $\rho_2 = 0$ (There is no significant relationship between changes exchange rate with a net profit of the company)
H2 a : $\rho_2 \neq 0$ (There is a significant relationship between changes in exchange rate with a net profit of the company)
3. H3 o : $\rho_5 = 0$ (no significant relationship exists between the level of turnaround with net profit of the company)
H3 a : $\rho_5 \neq 0$ (There is a significant relationship between the rate of turnover with a net profit of the company)
4. H4 o : $\rho_6 = 0$ (There is no significant relationship between changes operating expenses to net income of the company)
H4 a : $\rho_6 \neq 0$ (There is a significant relationship between changes in operating expenses to net income of the company)
5. H5 o : $\rho_7 = 0$ (There is no significant relationship between changes inflation rate, exchange rate changes, the level of turnover and operating costs with the change in net earnings)
H5 a : $\rho_7 \neq 0$ (There is a significant relationship between the inflation rate, exchange rate changes, turnover rates and changes in operating expenses to net income of the company).

Research Objectives

The purpose of this study was to determine the relationship between the rate of inflation, changes in the U.S. dollar against the Indonesian rupiah exchange rate, receivable turnover rate and changes in operating expenses to the net income of the company.

Usability Research

The results of this study is expected to use as follows:

1. For Researchers

To meet one of the requirements for Master graduation, as well as to broaden the operational knowledge about corporate matters.

2. For students and the community

- a. To provide information on how much influence these factors change the macro and micro of the company's net income
- b. As an input for further research materials and add to their repertoire of knowledge.

3. For the company

Through the results of this study are expected to provide useful input for the company in running its business activities.

4. For the development of disciplines

For comparative data and the disclosure of data sets that can be interpreted further

II. STUDY REFERENCES

A. Definition of Economics

The term economics comes from two Greek words, namely "oiku" and "nomos" which means the rules in the household. Basically explain the economic principles in the use of household income so as to create maximum satisfaction to the household.

P.A. Samuelson², an economist who received the Nobel Prize for economics in 1970 defines:

Economics is a study of how people and societies make choices with or without the use of money, using the resources are limited but can be used in various ways to produce various kinds of goods and services and distribute them for consumption now and in the comes to the variety of people and community groups. Economics analyze the costs and benefits and improve the pattern of use of resources.

Economics is a branch of social science concerned with the problem how to utilize the limited amount of resources to satisfy human needs are diverse. Another on the definition of economics by Walter Nicholson³; science that studies how individuals or class of public use or allocate a limited amount of resources to achieve the ultimate goal of an alternative nature.

Definition of economics that are more specific according to Boediono⁴ : Science disciplines that study how each individual or class of society to act in the process of production, consumption and allocation of goods and services to satisfy needs that are unlimited and resources are limited it is.

² P.A. Samuelson, 1979, *Economics*, 10th Edition, New York, Mc Graw-Hill Kogakusha, page 3

³ Nicholson, 1985, *Teori Ekonomi Mikro, Prinsip Dasar dan Pengembangannya*, translated by Deliarnov, 2nd Eds, Jakarta, PT. Rajagrafindo Persada, page 1.

⁴ Boediono, 1982, *Ekonomi Mikro*, BPFE Yogyakarta, page 2.

There are two main things that can draw from the above definition is the first, the source of satisfying the needs of human existence is limited, because the requirement itself is relatively limited in number. Second, is how best to make a choice among various alternatives.

Economics is a science that has developed since a few centuries ago. Development as a science began since 1776, named after **Adam Smith** - a British banker and economist, published his book "**An Inquiry into the Nature and Causes of the Wealth of Nations**".

Economics has a very broad scope. Therefore economics has specialization in several fields, such as monetary economics, financial economics of government, labor economics, international economics, regional economics and economic development. Two main theories in economic analysis is Microeconomic Theory or often referred to as Theory of Price (Price Theory) and Macroeconomic Theory or often referred to as aggregative Economic Theory (Economics Aggregate Analysis).

Microeconomics and Macroeconomics

Analyzes the microeconomic theory generally includes the smallest parts of the overall economic activity. The analysis in microeconomic theory is more emphasis on the activities of a consumer, in this company. Microeconomics is focused to the analysis of the problem made the choice to realize efficiencies in the use of resources and achieve maximum satisfaction.

Analysis of the global macroeconomic theory is more comprehensive or more. Consumers pay more attention to macro-economic measures as a whole, the overall activities of employers (firms) and changes in overall economic activity. Macroeconomics is focused on the importance of demand-side analysis in determining the level of activity in the

economy and the importance of policy in government intervention to achieve the desired performance of economic activity.

Microeconomic Theory

Microeconomic Theory (Microeconomics Theory) or often called Theory of Price (Price Theory). "Micros" is derived from the Latin "Mikros" meaning small. But this does not mean Microeconomic theory is a theory that a small and unimportant. Microeconomic theory in some respects greater attention than Macroeconomic Theory.

Microeconomic Theory (Microeconomics Theory) or Theory of Price (Price Theory) paying attention to the flow of goods and services from the corporate sector to the household sector, the flow of production factors and the household sector to the corporate sector, the composition of these flows and how the creation of the price. In other words, this theory studied the allocation of a limited number of resources for purposes that are alternatives.

Microeconomic theory by definition Sadono Sukirno⁵, is that part of economics that analyzes the Courant-small portion of overall economic activity.

Microeconomic theory revolves around the principles that are used as the basis for a consumer's decision-making and the principles which serve as a firm basis for decision making (managerial decision making). Microeconomic theory also discusses what factors are the basis for the occurrence and the strength of consumer demand and producer supply for an item.

Microeconomics theory according to Ari Sudarman⁶, defined as follows:

Microeconomics Theory of fragmentation (disaggregation) of the macro economic variables such as consumption, investment and savings. Microeconomics explains the

⁵ Sadono Sukirno, 1996, *Pengantar Teori Mikroekonomi*, Jakarta, PT. Rajagrafindo Persada, page 24

⁶ Ari Sudarman, *Teori Ekonomi Mikro*, 1994, 1st Book, 3rd Edition, BPFE Yogyakarta, page 4

composition and allocation of total production, while explaining the macroeconomic level of total production.

Markets in Microeconomics

An economy is an amalgamation of various types of market goods. The market is a place where buyers and sellers meet to buy or sell goods and services and factors of production. In market parlance is generally defined as a location in the geographical sense.

Understanding the market according to Sadono Sukirno⁷, an institution, which is generally not a physical manifestation, which bring together sellers and buyers of something. Ari Sudarman⁸ defines the market as a meeting between the buyer and seller in which between them do not see each other.

The market itself has 5 (five) main function, which suggests the questions to be answered by every economic system. These five primary functions according to Ari Sudarman⁹ are:

1. The market sets the value (Value Sets)

In a market economy, price is a measure of value. This function solves the problem of determining what should be produced by an economy. Goods are relatively more people want to have the relatively higher price compared with the unwanted goods. Manufacturers that produce goods more desirable community will gain a greater advantage. Motion the forces of demand and supply in the market that determines the price level of goods.

2. Organize production market.

⁷ Sadono Sukirno, *op cit*, page 24

⁸ Ari Sudarman, *op cit*, page 7

⁹ Ari Sudarman, *ibid*, page 7

This second function of the market is to solve the problem of how to produce goods. With the prices of production factors in the market, it will encourage manufacturers to choose the most efficient production methods; due to factors of production always has the possibility of substitution. When the price of a factor of production has increased in the market, then manufacturers will try to make savings of factors of production and try to replace the factors of production other substitute relatively cheaper.

3. Distribute goods market.

The third function of the market is a matter for which the goods produced. A person's ability to buy goods is depending on their income. A person's income, in addition, depend on how many units the number of factors of production are owned also the level of prices of production factors in the market. The pattern of income distribution along with the price level of goods in the market will determine the pattern of distribution of goods within a society.

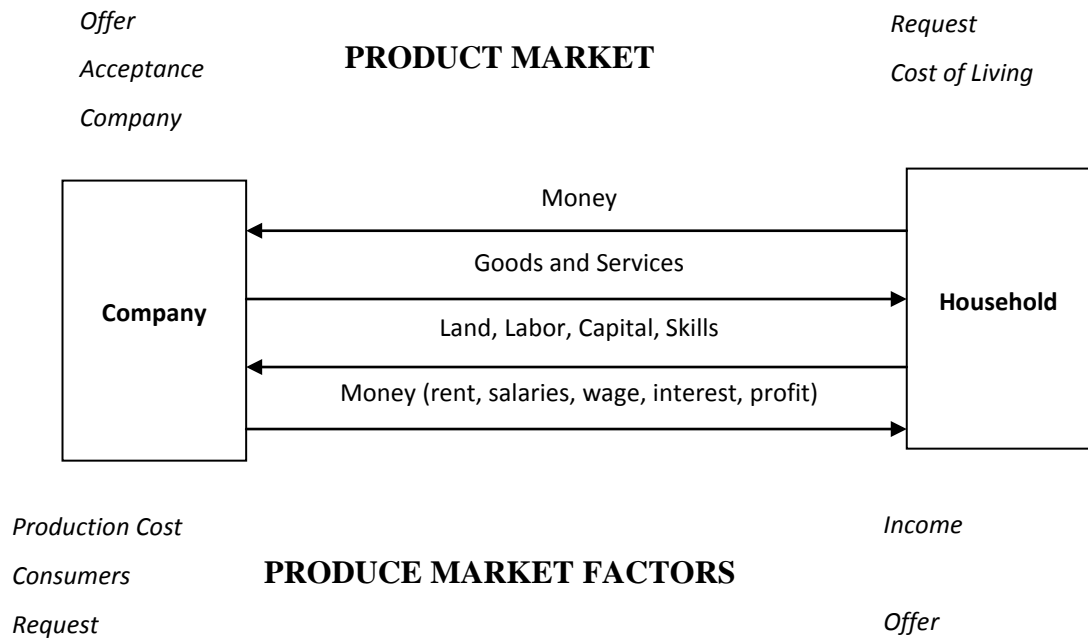
4. Organizing work market rationing (rationing).

Rationing is the essence of the price. Production quantities are available in the community for a limited period of time the amount, the sum must be divided so as to "sufficient" for a certain period. Goods is relatively small in an economy, the price level of goods in the market is high. The high level of prices of goods that would limit the level of current consumption.

5. Maintain and prepare for the market in the future. Savings and investment are all happening in the market, and both are efforts to maintain and achieve economic progress.

Operation of market mechanisms in response to the five functions can be seen in the following figure:

Figure 2. Circulation Flow of Income and Expenditure in the Economy



Sources: Sadono Sukirno, (1996), *Microeconomic Theory*, Jakarta, PT. Rajagrafindo Persada.

The household sector buy goods and services from firms in the goods market sector, corporate sector and in return receive money. In this flow of the household sector acts as a buyer of goods and services, while the corporate sector as a seller. Consumer income spent on goods and services acquired from the sale of its production factors. Household sector offers its factors of production (land, labor, capital and skills) to the corporate sector. In return for the household sector receive money (income consumers). This transaction occurred in the market of production factors.

Macroeconomic Theory

Macroeconomic Theory derived from the word "Macro" meaning large. Understanding Macroeconomic Theory by Sadono Sukirno¹⁰, macroeconomic analysis is an

¹⁰ Sadono, Sukirno, 2000, *Pengantar Teori Makroekonomi*, 2nd Ed, Jakarta, PT. Raja Grafindo Persada , page 4

analysis of overall economic activity, the analysis is global in nature and do not pay attention to the economic activities carried out by small units in the economy.

Bruce Glassburner and Aditiawan Chandra¹¹ explain, Macroeconomics examines the relationships between the great powers in an economic system, such as aggregate consumption, aggregate investment, and so forth.

Key issues are analyzed in Macroeconomic Theory is how to use the factors of production are available to efficiently so that the prosperity of the community can be maximized. This analysis arises based on the needs and desires of human thinking are not limited, while the ability of factors of production to produce goods and services to meet the needs and wishes of the people is limited. Macroeconomic analysis shows how the aggregate expenditures (aggregate demand) and aggregate supply will determine the equilibrium level of activity of an economy.

Macroeconomic Analysis of The Origins of the Development

Until the decade of the 1930s, economists do not devote their analysis to various problems such as unemployment and sluggish economic growth. Economists who belong to the classical school (classical economists) is an economist who lived in the era of Adam Smith (1776) Keynes and his contemporaries (1936), not many make the analysis of the problems of unemployment, inflation, economic instability and economic growth. This is because according to their beliefs these issues only temporary validity. According to them, free market system will create an efficient level of economic activity in the long run, so that the free market system will make the adjustments that cause these problems will go away by itself and fast economic growth will take place again.

¹¹ B. Glassburner and A. Chandra, 1979, *Teori dan Kebijakan Ekonomi Makro*, LP3ES, Jakarta, page 12

In the years 1929-1932, a worldwide economic slowdown occurred that began with the economic downturn in the United States. This period is called The Great Depression. At the peak of the economic downturn, a quarter of the workforce in the United States is unemployed and the national income decline sharply. There was a serious economic slowdown that spread around the world, to other industrial countries as well as to poor countries.

The economic slowdown has created awareness to the economists that the market mechanism cannot automatically lead to strong economic growth. This inability encourages a leading British economist of that era, which is John Maynard Keynes, to put forward theories that ultimately form the basis for modern macroeconomic theory. Theories are presented in the book entitled General Theory of Employment, Interest and Money, published in 1936.

According Sadono Sukirno¹², Keynes thought that the fruit is very useful for further development of macroeconomic theory is a statement about:

Aggregate expenditure is public expenditure on goods and services, is the main factor that determines the level of economic activity that reached a state. In a free market system is the use of full employment is not always created and the necessary business and government policy to create full employment levels of usage and firm growth.

B. The Role of Corporate Net Income for Continuity

Planning refers to the creation of a detailed operating program for all phases of operation. Planning is a process of "touching" the opportunities and threats from outside; Determination of the desired objectives and utilization of resources in order to achieve that goal. It is closely related to good planning is the establishment of corporate goals. Goal is a goal or end result.

¹² Sadono Sukirno, op cit, page 7.

In setting the goal of an enterprise, many companies emphasize the need for profit. Profit is an inseparable element of any successful company. But in the world economy, profits have a broad sense; the profit cannot be the only goal of the company. To obtain the maximum profit, the company must produce products or provide services at the level of quality, good value and in volume, time and cost as well as a specific price in the long run, so can guarantee profits. With the profits, companies have the ability to grow and remain able to maintain and develop its existence as a system in the future.

Profit is the return (return) in excess of the investment. Jay M. Smith and K. Fred Skousen¹³, has provided a more complete definition of the concept of profit: The amount that can be returned by the entity to its investors while maintaining the level of welfare of the entity in question.

It is clear that all interested companies to measure earnings. In fact, companies are classified according to whether the main purpose of their profit or not-they are for-profit entity or a not for profit. Although a not for profit entity, he remained involved in the exchange relationship and should assess the performance and its ability to survive in the long run. Profit is a measure of the difference between what the company's input to make and sell products, with what he received. Profit is also a measure of where companies become more prosperous with the transactions done.

There are many reasons for measuring profit. According to Hansen and Mowen¹⁴, there are many reasons to measure the benefits, namely: Determining the viability of the company, the managerial performance measure, determines whether the companies comply

¹³ Jay M. Smith & K. Fred Skousen, 1993, *Akuntansi Intermediate, translated by* Nugroho Widjajanto, Comprehensive Volume 9th Ed, 1st Volume, Erlangga, Jakarta, page 120.

¹⁴ Don R. Hansen & Marryanne M. Mowen, 2001, *Manajemen Biaya: Akuntansi dan Pengendalian, translated by* Thomson Learning, Book Two, Salemba Empat, Jakarta, page 664.

with regulations or not and signaled to the market about the opportunities for others to make a profit.

Profits are used to measure managerial performance. In this case, the return is an indicator of the efficiency in using resources, because that costs are kept under the profit. Profit can be an attraction other companies because it is a sign of opportunity. A company with high profitability signaled to the market that other companies can also profit by entering the market. Small profits do not attract competition. This is the reason for the company to exercise caution and avoid large profits in the short term.

C. Macro Factors That Affect the Company's Net Income Inflation

Sadono Sukirno¹⁵ defines inflation as rising prices prevailing in the economy.

Inflation rate (percentage increase price increase) is different from one period to another. There are times when a low inflation rate, reaching below 4-6%. Moderate inflation rate reached between 5-10%. A very serious inflation could reach the level of several hundred or several thousand percent in one year.

According to Ari Sudarman¹⁶, sourced and inflation occurs because one or a combination of the following issues:

Aggregate spending levels that exceed the ability of companies to produce goods and services, workers in various economic activities demanding higher wages, rising prices of imported goods, the addition of excessive money supply without being followed by the increase of production and supply of goods as well as political turmoil and the economy as a result of a lack of government responsibility.

Fiscal and monetary policy of a country can lead to an increase or decrease in inflation. Monetary policy is used to monitor the circulation of money, while fiscal policy to

¹⁵ Sadono Sukirno, *op cit*, page 15.

¹⁶ Ari Sudarman, *op cit.*, page 15

adjust revenues and government spending. According to Donald A. Ball and Wendell H. Mc. CULLOCH¹⁷:

A successful policy is marked by the first, the elimination of artificial control of the economy such as wages and prices, the second implementation of fiscal and monetary tightening. Tightening here, including low taxes and poor growth of foreign money supply growth.

Inflation affects the business world; therefore the financial manager of a company should be able to anticipate well. In fact, almost all companies need the loan money that pose immediate rise in inflation and real interest rates. Interest rates can be calculated from the difference between inflation and nominal interest rates. High rates of inflation lead to greater number of loans and interest rates higher. Lenders generally less dared to loan interest rates even higher. This is because of the currency to be paid at maturity does not match the currency value at the time the loan is given.

Owners of money are generally more inclined to spend money for something that has added value. If the owner of the money will provide a loan of money, generally used variable interest rate based on the original rate and the changes that may occur during the term of borrowing, so the risk of lending to the responsibility of the borrower.

High and low inflation in a country is more or less effect on the company's business activities, so the management company is required to analyze the inflation rate. Inflation effect on currency values, therefore the higher the rate of inflation in a country, the lower the value of its currency. The high inflation rate resulted in prices of goods and services produced or offered by countries with high inflation rates, become more expensive and less competitive impact that the company cannot sell its export products. This encourages a balance of

¹⁷ Donald A. Ball dan Wendell H. Mc.Culloch, 2000, *Bisnis Internasional*, translated by Budi Susanto, Book One, Salemba Empat, Jakarta, page 255

payments deficit. Management companies should pay attention to government policies to correct the deficit balance, such as policy issues related to monetary and fiscal policies, currency controls, ease of exports and barriers to imports. The high level of inflation pushes up interest rates so as not to encourage companies to make new investments.

Inflation also brings bad consequences that inflation tends to lower the level of prosperity of a majority of the community. Most of the actors of economic activity consist of salaried workers who remain. Inflation is usually faster than wages of workers. Therefore, the workers' real wages will fall and this situation means the prosperity of a majority of the decline.

Rupiah Exchange Rate

All business activities involve transferring money from one country to another. In other words there is a need to convert one currency into another currency. This has led to a demand for foreign exchange transactions. Institutions and corporations are important actors in the foreign exchange market because their needs are great and will vary currency.

According to Dahlan Siamat¹⁸, foreign currency exchange rate is the price of a currency expressed in another currency.

Between 1945 and 1970, rates among major currencies were fixed. All countries were required to establish an exchange rate parity of their currencies against the U.S. dollar. A country can implement a major adjustment in the exchange rate by changing the parity rate against the U.S. dollar. If the country's money is made cheaper against the dollar, the adjustment is called devaluation. On the other hand, revaluation occurs if the currency becomes more costly to the U.S. dollar.

¹⁸ Dahlan Siamat, 2001, *Manajemen Lembaga Keuangan*, 3rd Edt, LPFE UI, Jakarta, page 234

Since 1973, the international currency system of floating exchange rates¹⁹ prevailing. For most currencies, there is no exchange rate parity and no distance where currencies may fluctuate. Most of the major currencies, including U.S. dollar, fluctuated freely depending on their value given by the traders on the foreign exchange market.

Geographically, the foreign exchange markets (foreign exchange market) reach all parts of the world, where prices are constantly moving currency at any time on any day. David K. Eitman and Arthur I. Stonehill²⁰ define the foreign exchange market as follows:

Foreign exchange market or currency exchanges are often referred to is a mechanism by which people can transfer purchasing power between countries, to obtain or provide credit for international trade transactions and minimize the possible risk of loss (exposure of risk) due to a currency exchange rate fluctuations.

The foreign exchange market provides a mechanism of purchasing power from one currency to another currency. Because the foreign exchange market transactions in the form of a continuous supply for the volume of sales and purchases is very large, then the currency markets are efficient. As a result it is difficult to generate profits by shopping from one bank to another bank. According to Keown and Scott²¹:

Foreign exchange markets operate simultaneously within 3 (three) levels. At the first level, consumers buy and sell foreign currency (i.e. foreign currency) through the bank. At the second level, the bank buys and sells foreign currency from other banks in the same commercial center. At the last level, the bank buys and sells foreign currency from banks in the commercial center in another country.

¹⁹ Floating exchange rate system called "floating exchange rate regime", **read** Keown , Arthur J. & Scott, David F, *Dasar-dasar Manajemen Keuangan*.

²⁰ Eitman & Stonehill, 1986, *Multinational Business Finance*, Translated by Chaerul D. Djakman & Dwi Sulistyorini, Addison-Wesley, page 89

²¹ Keown, Arthur J. & Scott, David F, *op cit*, page 882

Two types are offered in the market exchange rate is the rate offered and requested. Asked Risk (Exchange Rate is stored) is the rate that is "required" banks or currency traders to be paid by consumers in the domestic currency for foreign currency at the bank to sell and consumers buy. Exchange rates are requested often referred to as Selling Rate (selling rate) or Offer Rate (exchange offer). Bid Rate (offered rates) is the rate at which banks buy foreign currency from customers to pay in local currency. Offered rates are also often referred to as Buying Rate (buying rate). Bank sells one unit of foreign currency more expensive than the purchase price. Therefore, a direct quote requested is greater than the direct quote is given. This difference is known as the bid-asked spread. For large-volume transactions and continuous trading, the spreads are small and can be less than 0.5%. Higher spreads for currencies that are rarely traded. This is to compensate for the bank holding the foreign currency risk and banking services in exchange for currency.

In Indonesia, the U.S. dollar is still the staple of the foreign currency exchange. Instability of the Rupiah against the U.S. dollar briefly topped Rp.11,000.- per U.S. dollar, also influence business activity. This can be illustrated as follows: decrease in the exchange rate between Rp.5,000,- to Rp.8,000.- against the U.S. dollar means that the U.S. dollar becomes more expensive in the Rupiah. The reflection that the value of Dollar rises is that the amount needed to buy the dollar rose. In other words, the dollar had appreciated against the Rupiah. On the other hand, the amount to be assessed in a cheaper dollar, meaning Rupiah appreciated against the dollar.

So it stands to reason, if the U.S. dollar exchange rate to break the more than Rp 10.000/US dollar, this is certainly a distinct blow to the business sector and business. Where the price of production materials and operating expenses increased several fold. To survive, companies need to tighten up the various forms of operational expenses. This has an impact on corporate profits.

D. Micro Factors that Affect the Company's Net Income

Receivables Turnover Rate

Receivables as one asset play an important role and contributed to the activities of the company, because receivables are part of the working capital used in the operation of the company to earn income. Receivables as elements of working capital are always in the circumstances to operate for the company is still doing.

Receivable management for companies that sell products on credit should be a matter of controlling the amount of accounts receivable, accounts receivable control and collection, evaluation of the political wisdom that run corporate credit sales, which led to the problem of a healthy level of turnover. A good level of turnover is expected to impact on the company's sales volume increased.

Turnover rate can be searched and measured by:

$$\text{Turnover velocity} = \frac{\text{Credit Sales}}{\text{Average Receivables}} = x \text{ times}$$

$$\text{Period receivable turnover} = \frac{365 \text{ days}}{x \text{ times}} = y \text{ days}$$

Operating Costs

According to Mulyadi,²² cost is a sacrifice of economic resources is measured in units of money, which has occurred or is likely to occur for a particular purpose.

Term costs is often used in the same sense of the term burden (expense). According to Adolph Matz and Milton F. Usry²³, burden is defined as the outflow of goods and services, which will be charged to or matched (matched) with income (revenue) to determine the profit (income).

²² Mulyadi, 1991, *Akuntansi Biaya*, 5th Edt, Publishing Section STIE YKPN Yogyakarta, page 8.

²³ Adolph Matz & Milton F. Usry, 1990, *Akuntansi Biaya: Perencanaan dan Pengendalian*, translated by Alfonsus Sirait & Herman Wibowo, 9th Edt, 1st Volume, Erlangga, Jakarta, page 19.

Glenn A. Welsch and Paul N. Gordon²⁴ defines the cost (cost) as the expenditures are capitalized as property, and then became expenditure (expense) when the related goods and services used or made goods are sold.

Many companies take a profit center approach to cost control. Areas of work, department, departments and entire manufacturing plants were identified as different cost centers and their managers are considered responsible for the performance cost of these units. The overall cost of each unit consists of 2 (two) types:

1. Direct costs, the cost incurred is proportional to the output of goods or services. Labor and raw materials typically fall into this category.
2. Indirect costs, are costs that are not affected by changes in output. Even if output is zero, these costs are incurred. The cost of employee salaries and insurance costs in this category.

While the profit center manager is responsible for all direct costs in their units, indirect costs are not in themselves be under their control. But because of all the costs that can be controlled at some level in the organization, top managers must identify where the location of control and consider high-level managers responsible for the lower costs that are under their control.

Success in planning and cost control depends on a careful analysis and study of the relationship between costs and changes in business activity. It requires the classification of each type of expenditure as a fixed cost, variable cost and semi variable costs.

Fee amount will remain unchanged despite the increase or decrease the volume of activity. However, the amount of the fee will remain the same only in the range of certain activities. Variable costs, increased proportionately with increased activity and decreased

²⁴ Glenn A. Welsch & Paul N. Gordon, 2000, *Anggaran: Perencanaan dan Pengendalian Laba*, translated by Purwatiningsih & Maudy Warouw, 2nd Book, Salemba Empat, Jakarta, page 298.

proportionally with the decrease in activity. Variable costs include raw materials, direct labor and the cost of a particular helper. Typically variable costs can be directly identified with the activities that lead to the existence of such costs. Semi-variable costs have two properties, both fixed and variable. Fuel costs, maintenance costs, pension costs, including the class of semi-variable cost.

Information on costs is needed by management. Without cost information, management does not have sacrificed a measure of whether the input has a lower economic value than the value of output, so it is unknown whether the normal course of business make a profit or not. Without cost information, management has no basis to allocate economic resources are sacrificed in generating other economic resources. Information on costs is useful for management to manage a variety of allocation of economic resources to ensure that the resulting output has a higher economic value than the input value is sacrificed.

III. RESEARCH METHODOLOGY

A. Strategies and Methods

Research Strategy

Strategy research study is associative, because this study aims to determine how much the relationship of macro factors on inflation, exchange rate and the amount of micro form factor accounts receivable turnover and operating costs to the company's net profit in the manufacturing sector companies listed on the Stock Exchange.

Research Methods

The research method used in this study is ex post facto correlation approach, which is a study that has happened and then tracing backward to determine the factors that could cause the incident, the issue of a correlation relationship between two or more variables. This method was chosen because according to the research objectives to be achieved which is to determine the relationship between the inflation rate, exchange rate of Rupiah, receivables turnover and operating costs to net income of the company. Ex Post Facto data is data that the event has occurred and the data available on the company, the Bank Indonesia and the Central Bureau of Statistics.

The research was carried out detailed analysis and in particular on the macro factors of the inflation rate, exchange rate of Rupiah, and micro factors in the form of accounts receivable turnover and operating costs affecting net earnings.

In addition, this study also uses an empirical method, the study based on quantitative data, and analyzed and tested with statistical methods, such as simple correlation (simple regression), multiple correlation (multiple regression), the correlation coefficient, significance test and the product moment.

B. Population and Sample

Population

The population in this study is in the form of financial statements Balance Sheet and Profit and Loss, customer data, and data derived from the company's competitors. Data Rupiah exchange rate against the U.S. dollar issued by Bank Indonesia and the monthly inflation rate data released by the Central Bureau of Statistics.

Samples

Samples taken in this study is the data rate of annual inflation and rupiah exchange rate, data rate of turnover and number of operational costs in the manufacturing sector companies listed on the Stock Exchange during the three years from 2007 until 2009.

C. Research Analysis Units

In this study, researchers used the unit of analysis in the form of institutions, namely the manufacturing sector companies listed on the Indonesian Stock Exchange.

D. Data Collection Instruments

The data used in this study is secondary data in the form of corporate financial report documents the manufacturing sector companies listed on the Stock Exchange and the data derived from the Bank Indonesia website which can be accessed at http://www.bi.go.id/bank_indonesia2/monetary/inflation, and the site of the Central Bureau of Statistics in webmaster@mailhost.bps.go.id.

The Research Instrument

Another method used is the Research Library (Library Research). Research Library (Library Research) is intended to obtain information or data which is done by studying the

literature or books based on various theories and analyzes are presented of some of the literature.

E. Data Analysis Methods

To discuss the study, researchers used a statistical test based on the data obtained. Because there are more than one independent variable, namely four independent variables and one dependent variable, so use Analysis of Multiple Linear Regression and Correlation (Multiple Linear Regression and Correlation). Plan for data processing and for data analysis, the computer program SPSS Ver. 17 is used. Data analysis tools used to analyze the data and hypothesis testing are as follows:

Description of Statistics

In the description of the research data will be described in more detail the data used and processed which will allow readers to find out how much the ratio obtained from the data that will be tested. In this descriptive analysis consists of:

a. Mean : $\mu = \frac{1}{n} \sum_{i=1}^n$ atau $\mu = \frac{1}{n}(X_1 + X_2 + \dots + X_n$

b. Median : $K = \frac{n - 1}{2}$

c. Modus : $\text{Mod} = Lo + c \left\{ \frac{(f_1)_0}{(f_1)_0 + (f_2)_0} \right\}$

d. Variance : $\sigma^2 = \frac{1}{n} \sum_{i=1}^n (X_i - \mu)^2$

e. Std. Deviation : $S = \sqrt{\frac{1}{n} \sum_{i=1}^n (X_i - \mu)^2}$

f. Range : $C = \frac{X_n - X_1}{k}$

g. Minimum : $X_1 =$ the smallest value of data

h. Maximum : $X_n =$ The largest value of data

Normality Test Data

Testing for normality of data using the *Kolmogorov-Smirnov One Sample Test* of the formula:

$$D = \text{Max} |F_o(X_i) - S_N(X_i)| \quad S_N(X_i) = F_i / N$$

Where:

$F_o(X)$ = cumulative distribution function is determined.

$S_N(X)$ = the observed cumulative frequency distribution of a random sample with N observations.

$i = 1, 2, \dots, N.$

The test criteria: if the probability of significance > 0.05 then the data is normal

Classical Linear Regression Testing Assumptions

Classical linear regression model can be used to make estimates or estimates, hypothesis testing, and internal forecasts the dependent variable (dependent) in the regression based on simple assumptions which are often called the classical assumption of Ordinary Least Square Estimator (OLS).

Assuming that the estimates of regression coefficients obtained by ordinary least squares methods (Ordinary Least Square Estimators) is not the best linear unbiased estimator (BLUE = *Best Linear Unbiased Estimator*), and assuming normality, the estimators are normally distributed are expressed as follows:

a. Zero Expected Values for Residuals

One of the assumptions of regression analysis is the residuals have mean zero (zero mean) or the average value of nuisance faults (mean residual) = zero, in mathematical form $E(\varepsilon_i | X_i) = 0$.

b. Linearity

By testing whether the assumption of linearity have been met, this is done by making a plot of standardized residuals with the estimated value of the dependent variables standardized; named scatter plots of residuals. The study used the standardized residuals and predicted values in the plot. From the scatter plot if there is a relationship that is approximately 95% of the residual lies between -2 and +2, meaning the assumption of linearity are met.

c. Regression Normality

Testing for normality of regression performed before determining statistical methods to be used as parametric or non-parametric. If data are not normally distributed, then parametric statistics techniques cannot be used for the analysis tool, so it must use the technique of Non-Parametric Statistics. While this regression normality assumption states that the residual-normal distribution or residual confounding errors follow a normal distribution and independent with zero *means* and *variance* $\sigma^2 : \varepsilon_i \sim \text{NID}(0; \sigma^2)$. In the P-P plot if multiple values are plotted along a line roughly normal and the direction of the diagonal, then this indicates the normality assumption fulfilled.

d. Multicollinearity Test

The assumption of multicollinearity due to a state where independent variables have high correlation with each other, that there is a strong pair correlation > 0.80 between the independent variables. If there is a perfect collinierity the regression coefficients on the independent variable X cannot be determined and its standard error is infinite.

Meanwhile, if there is collinearity less than perfect, then even though the regression coefficients can be determined but it has a high standard error of the mean regression coefficients cannot be determined with high accuracy.

e. Heteroscedastic test (Heteroscedasticity)

This assumption states that the residual variance around the regression line is constant for any combination of the independent variable. Mathematically: $\sigma^2(\varepsilon_i) = \sigma^2(\varepsilon_j) = \sigma^2$ (homoskedasticity). Validity of this assumption has been shown in the absolute value of residual regression on independent variables.

One way to detect heteroscedasticity is to look at the graph scatter plots of residuals. If the regression graph scatter plots of residuals do not form a specific pattern (wavy, wide and narrow, linear pattern or quadratics), then the assumption of heteroscedasticity in the regression did not occur.

f. Residual Autocorrelation in Regression Testing

Autocorrelation arises because sequential observations over time related to one another, this problem arises because the residuals (errors) are not free from one observation to another observation. Autocorrelation of the residuals usually occurs when the load regression analysis of time series data. In a study conducted by the autocorrelation test-d test Stats Durbin-Watson (DW) using the following criteria:

- 1) If the DW value lies between d_U (upper limit) and $(4 - d_L)$ or $d_U < d < 4 - d_L$ then the correlation coefficient equal to zero which means no autocorrelation.
- 2) If the DW value is lower than d_L (lower limit), the autocorrelation coefficient greater than zero which means there is a positive autocorrelation.
- 3) If the DW value is greater than $(4 - d_L)$, then the autocorrelation coefficient is smaller than zero, which means there is negative autocorrelation.

- 4) If the DW is located between d_L and d_U or lies between $(4 - d_L)$ and $(4 - d_U)$, then the results are inconclusive.

F. Tests of Hypotheses

In this study the data processing using the computer program SPSS Ver. 17.00, which is a computer program to calculate the statistical value which consists of:

Correlation Analysis

Simple Correlation Analysis

Used to determine how closely the relationship between the independent variables with the dependent variable. The formula of the product moment correlation coefficient (Riduwan, 2005:136) is as follows:

$$r_{xy} = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{\{n \sum X^2 - (\sum X)^2\} \{n \sum Y^2 - (\sum Y)^2\}}}$$

Description:

| | | |
|----------|---|--|
| r_{xy} | : | The correlation coefficient |
| N | : | Number of samples |
| $\sum X$ | : | The value of the independent variables |
| $\sum Y$ | : | The value of the dependent variable |

In general, the correlation coefficient lies between -1 and 1 or $-1 < r < 1$. Correlation coefficient has the smallest value of -1 and the largest one, with the following criteria:

- If $r = 1$, the correlation between X and Y are perfectly positively, which means an increase or decrease in X strongly influences the increase or decrease in Y
- If $r = -1$, the correlation between X and Y perfectly negative, which means an increase or decrease in X does not affect the increase or decrease in Y
- If $r = 0$, the correlation between X and Y is very weak (no relation).

Tabel 1. Guidelines for Providing Interpretation Correlation Coefficient

| The coefficient interval | Relations |
|--------------------------|-------------|
| 0,00-0,19 | very weak |
| 0,20-0,39 | Weak |
| 0,40-0,59 | Medium |
| 0,60-0,79 | Strong |
| 0,80-1,00 | very strong |

Sources: Riduwan, *Methods and Techniques Develop Thesis*, 2005, page 136.

A.2. Analysis of Multiple Correlation

Multiple correlation is used to determine how closely the relationship between all independent variables X1 X2 X3 X4 with the dependent variable Y. The correlation coefficient can be obtained from (Riduwan, 2005:139):

$$R_{X_1X_2X_3X_4Y} = \sqrt{\frac{r^2_{X_1Y} + r^2_{X_2Y} + r^2_{X_3Y} + r^2_{X_4Y} - 2(r_{X_1Y}) \cdot (r_{X_2Y}) \cdot (r_{X_3Y}) \cdot (r_{X_4Y}) \cdot (r_{X_4X_3X_2X_1})}{1 - r^2_{X_1X_2X_3X_4}}}$$

Description:

r_{X_1Y} = correlation X1 with Y

r_{X_2Y} = correlation X2 with Y

r_{X_3Y} = correlation X3 with Y

r_{X_4Y} = correlation X4 with Y

$r_{X_1X_2X_3X_4}$ = X1 X2 X3 X4 correlation with Y

The correlation coefficient has a value of -1, 0, and 1.

$R_{Y X_1 X_2 X_3 X_4} = 1$ or close to x1, x2, x3, x4 and Y is very strong.

$R_{Y X_1 X_2 X_3 X_4} = 0$ or close to x1, x2, x3, x4 and Y is weak.

Level relationships that occur in a correlation coefficient can be searched by using the table above.

Regression Analysis

Simple Regression Analysis

Simple regression analysis is used to determine whether there is linearity effects of independent variables on the dependent variable. This test uses a linear regression formula (Riduwan, 2005:145) as follows:

$$\hat{Y} = a + bX + \varepsilon$$

where:

\hat{Y} = The subjects in the dependent variable is predicted.

a = price Y when $X = 0$ (constant prices)

b = number of direction or regression coefficients, which showed an increase or decrease in the dependent variable based on the independent variable. If b (+) then go up, and if b (-) then a decline.

X = Subject to the independent variables that have a certain value.

ε = Error term

Besides the price of a and b can be searched by the following formula:

$$b = \frac{n\sum XY - (\sum X)(\sum Y)}{n\sum X^2 - (\sum X)^2} \quad \text{and} \quad a = \frac{(\sum Y) - b(\sum X)}{n}$$

Multiple Regression

Regression analysis is used to assess the value of the variable Y based on the estimated value of the variable X and variable Y changes for each unit change in variable X . Form multiple regression equation with 4 independent variables (Riduwan, 2005:145) is as follows:

$$\hat{Y} = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon$$

Description:

Y = Income

X_1 = Net profit margin

| | | |
|---------|---|--|
| X2 | = | Return on assets |
| X3 | = | Return on equity |
| X4 | = | DER |
| a | = | Intercept coefficient (the value of Y, if X ₁ , X ₂ , X ₃ , X ₄ , X ₅) |
| b1...b5 | = | coefficient of each variable X ₁ , X ₂ , X ₃ , X ₄ , X ₅ |
| ε | = | Error term |

Correlation Test

Test the significance of the correlation

Aims to find any relationship between the independent variables with the dependent variable. Hypothesis testing steps are as follows:

a) Determine Ho and Ha (test form)

Ho : $\rho = 0$ there is no relationship between the independent variables with the dependent variable

Ha : $\rho \neq 0$ there is a relationship between the independent variables with the dependent variable

b) Establish the real level (α) / level of confidence (1 - α)

Hypothesis testing is used as a tool to determine whether there is a relationship between two variables using *t* test analysis with a confidence level of 95% and the real level of $\alpha = 5\%$.

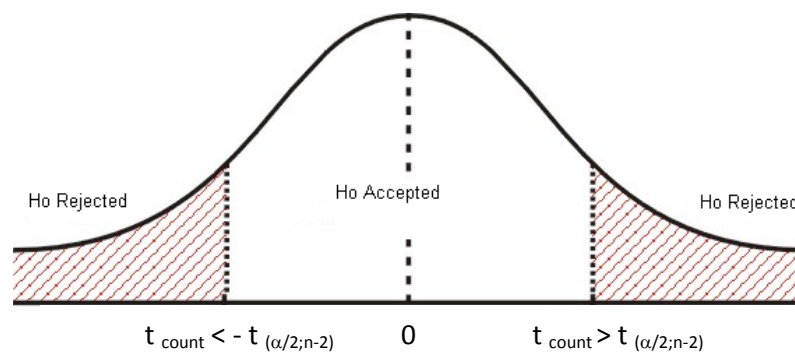
c) Select the statistical test (Riduwan, 2005:137)

$$t_o = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

d) Determine the critical region (rejection region Ho)

(1) Ho is accepted, Ha rejected if $-t_{(\alpha/2, n-2)} \leq t_{\text{count}} \leq t_{(\alpha/2, n-2)}$

(2) H_0 is rejected, H_a accepted if $t_{\text{count}} < -t_{(\alpha/2, n-2)}$ atau $t_{\text{count}} > t_{(\alpha/2, n-2)}$



e) Comparing the test statistic with the critical areas:

(1) H_0 is accepted, H_a rejected if $-t_{(\alpha/2, n-2)} \leq t_{\text{count}} \leq t_{(\alpha/2, n-2)}$

(2) H_0 is rejected, H_a accepted if $t_{\text{count}} < -t_{(\alpha/2, n-2)}$ or $t_{\text{count}} > t_{(\alpha/2, n-2)}$

f) Drawing conclusions

Test the significance of multiple correlation

By testing the hypothesis as follows:

a) $H_0 : \rho_{1-4} = 0$ there was no relationship variables $X_1.. X_4$ variables with Y

$H_a : \rho_{1-4} \neq 0$ there are multiple variables link variables $X_1 \dots X_4$ with Y

b) H_0 is rejected if $F_{\text{count}} > F_{(\alpha; n-6)}$

c) Test statistics (Riduwan, 2005:139)

$$F_o = \frac{\frac{R^2}{k}}{\frac{(1-R^2)}{n-k-1}}$$

- d) Comparing F_o with F_{table}
- e) Drawing conclusions

Regression Testing

Test the significance of the regression

Testing the hypothesis in this study was conducted to test the magnitude t_{count} by seeking to be compared with the t_{table} . The hypothesis testing was conducted with the following steps:

- a) Hypothesis

$H_o : \beta = 0$ no effect of the independent variable on the dependent variable

$H_a : \beta \neq 0$ there is the influence of independent variables on the dependent variable

- b) Test Significance regression (t test)

T test used to determine whether there is a regression significance influence or not, t test formula (Riduwan, 2005:137) is as follows:

$$t_0 = \frac{b}{S_b}$$

S_b = standard error of regression coefficient

Before determining S_b , S_e determined in advance so the standard error of estimated (Riduwan, 2005:137) as follows:

$$S_e = \sqrt{\frac{\sum Y^2 - a \sum Y - b \sum XY}{n - 2}}, \quad \text{so}$$

$$S_b = \frac{S_e}{\sqrt{\sum X^2 - \frac{(\sum X)^2}{n}}}$$

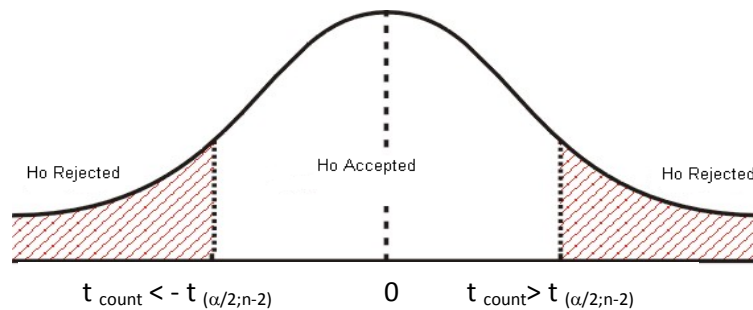
/ 2, (n-2) α = 5%; $T_{Table} = t_{\alpha}$

c) Seeing t_{table} using the standard error $\alpha = 5\%$; $t_{table} = t_{\alpha/2; (n-2)}$

(1) H_0 is accepted, H_a rejected if $-t_{(\alpha/2, n-2)} \leq t_{count} \leq t_{(\alpha/2, n-2)}$

(2) H_0 is rejected, H_a accepted if $t_{count} < -t_{(\alpha/2, n-2)}$ or $t_{count} > t_{(\alpha/2, n-2)}$

d) Then compare t_{count} with t_{table}



f) Criteria for decision making are:

(1) H_0 is accepted, H_a rejected if $-t_{(\alpha/2, n-2)} \leq t_{count} \leq t_{(\alpha/2, n-2)}$

(2) H_0 is rejected, H_a accepted if $t_{count} < -t_{(\alpha/2, n-2)}$ or $t_{count} > t_{(\alpha/2, n-2)}$

Test the significance of multiple regression

By testing the hypothesis as follows:

a) $H_0 : \beta_1 \dots \beta_4 = 0$ by $X_1 \dots X_4$ is no influence on Y

$H_a : \beta_1 \dots \beta_4 \neq 0$ by $X_1 \dots X_4$ effect on Y

b) H_0 is rejected if $F_o > F_{(\alpha; n-6)}$.

c) Test statistics (Riduwan, 2005:139)

$$F_o = \frac{\frac{R^2}{k}}{\frac{(1-R^2)}{n-k-1}}$$

- d) Then compare t_{count} with t_{table}
- e) Drawing conclusions

Coefficient of Determination

To state the size of the contribution of independent variables on the dependent variable can be determined by the formula coefficient of determination (Riduwan, 2005:136) as follows:

$$KP_1 = (r_{x_1 y})^2 \cdot 100 \%$$

$$KP_2 = (r_{x_2 y})^2 \cdot 100 \%$$

$$KP_3 = (r_{x_3 y})^2 \cdot 100 \%$$

$$KP_4 = (r_{x_4 y})^2 \cdot 100 \%$$

$$KP_5 = (r_{x_1 x_2 x_3 x_4 y})^2 \cdot 100 \%$$

Where:

KP = coefficient of determination

r = The correlation coefficient

3.6. Hypothesis Testing

Hypothesis testing is used in partial regression and multiple regressions. Of processing data using a computer program that will be seen the following results:

A. The hypothesis of this study are:

1) $H_0 : \rho_1 = 0$ (no significant relationship exists between changes in the inflation rate to net income of the company)

$H_1 : \rho_1 \neq 0$ (There is a significant relationship between changes in the inflation rate with the change in net earnings)

2) $H2_o : \rho_2 = 0$ (no significant relationship exists between changes in exchange rate with a net profit of the company)

$H2_a : \rho_2 \neq 0$ (There is a significant relationship between changes in exchange rate with a net profit of the company)

3) $H3_o : \rho_3 = 0$ (no significant relationship exists between the level of turnover with net profit of the company)

$H3_a : \rho_3 \neq 0$ (There is a significant relationship between the rate of turnover with a net profit of the company)

4) $H4_o : \rho_4 = 0$ (no significant relationship exists between changes in operating expenses to net income of the company)

$H4_a : \rho_4 \neq 0$ (There is a significant relationship between changes in operating expenses to net income of the company)

5) $H5_o : \rho_5 = 0$ (no significant relationship exists between changes in the inflation rate, exchange rate changes, the level of turnover and operating costs with the change in net earnings)

$H5_a : \rho_5 \neq 0$ (There is a significant correlation between the inflation rate, exchange rate changes, turnover rates and changes in operating expenses to net income of the company)

B. To examine the relationship of independent variables with the dependent variable individually (partial), can be seen from the P value contained in Simple Regression.

Testing Procedure:

➤ $H_o : P \text{ value} \geq \alpha$ means there is no significant relationship between value independent variables (inflation rate / exchange rate Rupiah /

receivable turnover / operating costs) with the dependent variable (net income).

- H_a : $P \text{ value} < \alpha$ value means there is a significant relationship between independent variables (inflation rate / exchange rate Rupiah / receivable turnover / operating costs) with the dependent variable (net income).

C. To test the effect of independent variables to be bound simultaneously (together) can also be seen from the Significance F contained in Multiple Regression.

Testing procedures:

- H_o : Significant $F \geq \alpha$ means simultaneously the independent variable (the inflation rate, dollar exchange rate, the rate of turnover and operating costs) are not significantly associated with the dependent variable (net income).
- H_a : Significant $F < \alpha$ means simultaneously with the independent variable (the inflation rate, dollar exchange rate, the rate of turnover and operating costs) was significantly associated with the dependent variable (net income)

IV. ANALYSIS AND DISCUSSION

A. Overview of Sample

Before presenting the results of research and data analysis, the authors would like to advance that research is done through an agency or institution that is the Capital Market Reference Center (Capital Market References Center) Indonesia Stock Exchange Building Tower 2, floor 2 Road. Sudirman Kav. 52-53, Jakarta 12190.

Stock Exchange is an institution that serves as a place to trade shares. To date have been recorded at 348 issuers that have been listed in Indonesia Stock Exchange as a public company, which consists of companies engaged in various fields, such as agriculture, mining, basic industrial chemicals, industrial consumer goods, property, real estate, infrastructure, utilities, transportation, finance, and engaged in trade, services and investment. For all issuers that have registered as a public company in Indonesia Stock Exchange must comply with regulations as the company went public, such as the regulations concerning the obligation for the issuer to deliver and report information about the state of his company. Each issuer shall provide data on performance outcomes so that information can be discovered by investors and the public.

Stock Exchange is a meeting place between the owners of shares of stock with a prospective buyer. Stock trading is a tool that can make it easier for shareholders to sell shares held to prospective buyers or vice versa. Therefore, the researchers conducted research on the Indonesia Stock Exchange to obtain the necessary information pertaining to liquidity problems (inflation), solvency (operating costs) and profitability (return on investment) and its influence on stock prices on consumer goods industries are listed on the Stock Exchange Indonesia, the company that made this study a sample of 30 companies engaged in the

manufacturing industry in this study because it has company data and complete financial information is presented according to the matter to be discussed by the researchers.

It will be pointed out that only 30 manufacturing industries listed in Indonesia Stock Exchange are used in research and engaged in various fields.

1. PT. Astra International Tbk.

Founded in 1957 under the name PT. Astra International incorporated. In 1990, the Company changed its name to PT. Astra International Tbk. Company's scope of activities such as general trade, industrial, mining services, transportation, agriculture, construction and consulting services. The scope of the main activities of subsidiary companies include automobile assembly and distribution, following a motorcycle spare parts, sales and rental of heavy equipment, mining and related services, plantation development, financial services, infrastructure and information technology.

2. PT. Astra Otoparts Tbk.

The scope of activities of establishments primarily engaged in automobile parts trade both locally and export and manufacturing industries in metals, plastics and automobile parts

3. PT. Aqua Golden Mississippi Tbk.

Companies engaged in the manufacturing and bottling of drinking water in containers. The Company started its commercial operations in 1974. Is the parent company of PT. Tirta Investama and the main parent company is Danone, a company established and based in France.

4. PT. Bentoel International Tbk.

According to article 3 of the Company's budget, aims and purposes of the Company, among others, are doing business in general trade, industry and services.

The Company started its commercial operation since 1989, which at that time engaged in the rattan industry. The Company currently acts as the parent company (holding company) and distributor of cigarettes. The number of permanent employees of the Company and its subsidiaries is as many as 5739 employees and 5839 respectively by December 31, 2009 and 2008.

5. PT. Cahaya Kalbar Tbk.

PT. Light Kalbar Tbk. (IDX: CEKA) is a multinational company that produces food that is headquartered in Jakarta, Indonesia. The company was founded in 1986. The company produces various kinds of foodstuffs.

6. PT. Delta Djakarta Tbk.

Factory "Anker Bir" was established in 1932 under the name Archipel Brouwerij. Scope of its activities is primarily to produce and sell Pilsner beer and black beer with the brand name "Anker", "Carlsberg ", " San Miguel ", " White Horse "and" San Miguel Light ", as well as non-alcoholic beverages.

7. PT. Gudang Garam Tbk.

PT. Gudang Garam, Tbk. (IDX: GGRM) is a cigarette manufacturer from Indonesia. Established on June 26, 1958 by Surya Wonowidjojo, this company is a leader in the production of clove cigarettes. The company has a complex of 514 acres of tobacco in Kediri, East Java. President Susilo Wonowidjojo this company is. Gudang Garam was established on June 26, 1958 by Tjoa Ing Hwie. In the age of about twenty years, Ing Hwie got an offer from his uncle worked in a cigarette factory Cap 93 which is one of the famous cigarette factory in East Java at that time. Thanks to hard work and industriousness he was getting promoted and eventually occupied the position of director at the company. In 1956 Ing Hwie left Cap 93. He bought land in Karachi and started his own cigarette production,

beginning with the cigarette brand of the cornhusk with Ing Hwie. After two years running Ing Hwie change the name of his company to Tjap Gudang Garam Cigarette Factory.

8. PT. HM Sampoerna Tbk.

The scope of activities include manufacturing and trading companies as well as equity investments in tobacco-Integration of other companies. Commercial tobacco production activities have been initiated in 1913 in Surabaya as a home industry.

9. PT. Holcim Indonesia Tbk.

In accordance with article 3 of the Articles of Association, the scope of its activities mainly include cement plant operations and other activities related to the cement industry, as well as investing in other companies. In accordance with article 3 of the Articles of Association, the scope of its activities mainly include cement plant operations and other activities related to the cement industry, as well as investing in other companies.

10. PT. Indo Kordsa Tbk.

The main stem of the company is Global Endustriyel Iplik Kordsa Kord Sanayi ve Ticaret AS Bezi, a company that domiciled in Turkey. The Company is engaged in the manufacture and marketing of tires, filament yam (nylon fibers, polyester, rayon), nylon yarn for tire and polyester raw material (purified terephthalic acid).

11. PT. Indocement Tunggal Perkasa Tbk.

In accordance with Article 3 of the Company's budget, the scope of its activities, among others, the fabricate of cement and building materials, mining, construction and trade. At this time, the company and its subsidiaries are involved in several businesses including the fabricate and sale of cement (as a core business) and

ready mix concrete, as well as the mining company aggregate. Head office located at Wisma Indocement 8th Floor, Jl. Jend. Sudirman Kav. 70-71, Jakarta. Factory located in Coventry - West Java, Palimanan - West Java, and Tarjun - South Kalimantan. The cement business includes the operations of the twelve (12) plants are located in three different locations, namely: nine integrated cement plant in Coventry - Bogor, two integrated cement plant in Palimanan - Cirebon and an integrated cement plant in Tarjun - South Kalimantan, with total manufacture capacity of around 17.1 million tons of cement per year. The produce of ready mix concrete and comprise the operations of four subsidiaries.

12. PT. Indospring Tbk.

The scope of activities of the Company is engaged in the automobile industry in particular Parts spring, in the form of leaf spring (leaf spring) and the coil spring (spiral spring).

13. PT. Kabelindo Murni Tbk.

The scope of activities of the company is engaged in the manufacture of electric cables, telephone cables and equipment associated with cable.

14. PT. Kedawung Setia Industrial Tbk.

Companies and factories are based in Surabaya began commercial production in 1975 with the scope of company activities include industrial metal goods, household appliances which are operated electronically, construction and general trade, including import and export.

15. PT. Kalbe Farma Tbk.

Companies engaged in production and development of pharmaceutical products.

16. PT. Kimia Farma Tbk.

Company founded in 1971. In 2003, the company established a 2 (two) subsidiary, PT KF Trading & Distribution and PT Kimia Farma Apotek.

17. PT. Langgeng Makmur Industri Tbk.

Company founded in 1968. In 1976, the Company's name change from PT Jaya lasting Plastic Industry Ltd to PT Langgeng Makmur Plastic Industry Ltd which has been approved by the Minister of Justice. Companies engaged in manufacturing furniture made of plastic and aluminum, nonstick cookware, plastic sacks, pipes and related products.

18. PT. Mandom Indonesia Tbk.

Companies domiciled in North Jakarta with a factory located in Jakarta and MM2100 Industrial Area, Cibitung, West Java. Its head office is located at Jl. Yos Sudarso By Pass, Jakarta. In accordance with article 3 of the Articles of Association, the scope of its activities mainly include the production and trade of cosmetics, perfumes, cleaning agents and plastic packaging. The Company started commercial production in April 1971. The factory located in Cibitung began commercial operations on January 4, 2001. The Company's products are marketed at home and abroad, including to the United Arab Emirates, Japan, Malaysia and the Philippines.

19. PT. Mayora Indah Tbk.

The Company was founded in 1977 with the scope of its activities are run businesses in the industrial field, trade and agents / representatives. The company is currently running the business field of food industry, confectionery and biscuits.

20. PT. Multi Prima Sejahtera Tbk.

Company founded in 1982 whose activities are engaged in manufacturing spark plugs and automobile parts, trade in goods of own production and / or companies that have a special relationship as well as the participation in companies and / or other legal entity.

21. PT. Mustika Ratu, Inc.

The Company is engaged in manufacturing, trading and distribution of traditional herbal medicine and cosmetics as well as a healthy drink. The Company started commercial operations in 1978.

22. PT. Sekar Laut Tbk.

The Company is engaged in the manufacture of crackers, tomato sauce, chili sauce and seasoning. Firms controlled by Sekar Group.

23. PT. Selamat Sempurna Tbk.

Companies engaged in manufacturing equipment (spare parts) of a wide range of plant machinery and vehicles, and the like.

24. PT. Semen Gresik Tbk.

The scope of activities of the Company and its subsidiaries covering a wide range of industrial activities, but the main activity is in the cement industry. Location of a cement factory of the Company and its subsidiaries are located in Gresik and Tuban, Indarung and Pangkep. The production of the Company and its subsidiaries marketed at home and abroad.

25. PT. Sepatu Bata Tbk.

Companies engaged in the business of producing leather shoes, cloth, casual and sports shoes, sandals and a special shoe industry, and import and distribution of footwear.

26. PT. Siantar Top Tbk.

Company founded in 1987, when the scope of activities of the company engaged in the snack food industry.

27. PT. Sumi Indo Kabel Tbk.

The scope of business activities the company is producing the conductor, power cables, control cables and telecommunication cables.

28. PT. Tunas Ridean Tbk.

The Company started commercial operations in 1981. The Company and its subsidiaries are divided into two divisions according to the main activities, namely the sale of a motor vehicle dealership and rental services.

29. PT. Ultrajaya Milk Industry

The Company is engaged in food and beverage industry, in particular drink that is packed in aseptic carton packaging technology that is processed by UHT (Ultra High Temperature).

30. PT. Unilever Tbk.

Established in 1933 under the name Lever 's Zeepfabrieken NV In 1980 the company name was changed to PT. Unilever Indonesia. Engaged in the production, marketing and distribution of consumer goods.

B. Description of Data

In the description of the data the researchers will describe the data into independent variables (inflation, exchange rate U.S. dollar against the Rupiah, turnover and operating costs), and the dependent variable (net income) in this thesis. The research data presented in appendix.

C. Descriptive Statistics

Descriptive statistics to provide an overview of the data for inflation, U.S. dollar exchange rate against Indonesian Rupiah, receivables turnover and operating costs and net income of the dependent variable, include the mean, median and mode are presented as follows:

Table 2. The Statistic

| | | Inflation | Exchange Rate | Receivables turnover | Operational Cost | Net Income |
|----------------|---------|-------------------|----------------------|----------------------|----------------------|----------------------|
| N | Valid | 90 | 90 | 90 | 90 | 90 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 8,2333 | 10313,00 | 17,1791 | 2,324E+011 | 843389,167 |
| Median | | 7,3700 | 10500,00 | 6,7465 | 4,495E+010 | 93123,5000 |
| Mode | | 6,30 ^a | 9414,00 ^a | ,38 ^a | 7390,50 ^a | 1695,00 ^a |
| Std. Deviation | | 2,03656 | 674,60700 | 40,40537 | 5,262E+011 | 1809025,11 |
| Variance | | 4,148 | 455094,6 | 1632,594 | 2,769E+023 | 3,27E+012 |
| Range | | 4,73 | 1611,00 | 298,39 | 2,95E+012 | 10038305,0 |
| Minimum | | 6,30 | 9414,00 | ,38 | 7390,50 | 1695,00 |
| Maximum | | 11,03 | 11025,00 | 298,76 | 2,95E+012 | 10040000,0 |
| Sum | | 741,00 | 928170,00 | 1546,12 | 2,09E+013 | 75905025,0 |

a. Multiple modes exist. The smallest value is shown

Variable inflation

Inflation variable has a mean or arithmetic average of 8,23 located around the median of 7,37 and 6,30 mode. While the standard deviation of 2,0365 show deviations around the mean with the smallest value and the largest value 6,30 and 11,03 respectively. Inflation variable has a range score of values of 4,73 and a total sum of 741.

US Dollar to Indonesia Rupiah exchange rate variable

U.S. dollar exchange against the Indonesian rupiah rate variable have a mean or the arithmetic mean of 10313. The median is 10.500 and the mode of 9.414, while the standard deviation of 674,6070. The largest value is 11.025 and the smallest score is 9.414. U.S. dollar exchange rate variable in the Indonesia Rupiah has value range of 1611 and with a total sum of 928.170.

Accounts receivable turnover variable

Turnover variable has a mean or arithmetic average around the 17,1791, the median lie at 6,7465 and mode is 0,38 while standard deviation of 40,4053 which indicates the deviation around the mean. The smallest value is 0,38 and the largest value of 298,76. Turnover variable score has a range of values of 298,39 and a total sum of 1546,12.

Variable operating costs

Variable operating costs have mean or the arithmetic mean of $2,324e+11$ set around the median of $4,495e+10$ and with 7390,50 mode. The standard deviation is $5,262e+11$ indicates the deviation around the average. The largest value is $2,95e+12$ and the smallest value is 7390,50. The variable operating costs have a range of value of $2,95e+11$ and a total sum of $2,09e+13$.

Net income variable

Net income variable has a mean or the arithmetic mean of 843.389,167 set around the median of 93.123,5 and the mode is 1.695. While the standard deviation of 1.809.025,11 indicates the deviation around the average, the largest value is 10.040.000 and the smallest 1.695. The net income variable score has a range of values of 10.038.305 and a total sum of 75.905.025.

D. Normality Test Data

Normality test data with the Kolmogorov-Smirnov One Sample Test is performed to see whether the distribution of the data normally distributed or not. Based on the results of SPSS Ver. 17:00 indicates that the test for normality as follows:

Table 3. One-Sample Kolmogorov-Smirnov Test

| | | Inflation | Exchange_Rate | Receiv.Turnover | InOperating_Costs | InNet_Income |
|----------------------------------|-----------------------------------|-----------|---------------|-----------------|-------------------|--------------|
| | N | 3 | 3 | 72 | 90 | 90 |
| Normal Parameters ^{a,b} | Mean | 8.2333 | 10313.00 | 7.012097 | 26.210101 | 11.681954 |
| | Std. Deviation | 2.48037 | 821.619 | 3.3063823 | 1.5869552 | 2.1473827 |
| | Most Extreme Absolute Differences | .303 | .257 | .110 | .072 | .073 |
| | Positive | .303 | .196 | .110 | .072 | .069 |
| | Negative | -.218 | -.257 | -.082 | -.061 | -.073 |
| | Kolmogorov-Smirnov Z | .524 | .445 | .934 | .686 | .689 |
| | Asymp. Sig. (2-tailed) | .946 | .989 | .348 | .735 | .729 |

a. Test distribution is Normal.

b. Calculated from data.

Normality test results show the data for net income with a probability of significance $0.729 > 0.05$ means that the data are normally distributed, the probability of inflation obtained a significance of $0.946 > 0.05$ means that the data are normally distributed, the U.S. dollar exchange rate against rupiah gained for the significance probability $0.989 > 0.05$ means that the data are normally distributed, the probability of turnover of receivables acquired a significance of $0.348 > 0.05$ means that the data are normally distributed and operational costs with a significance probability of $0.735 > 0.05$ mean normally distributed, so as all the data are normally distributed, then the subsequent analysis using parametric statistics.

E. Classical Regression Testing Assumptions

Classical linear regression model can be used to make estimates or forecasts, based on simple assumptions which are often called the classical assumption of Ordinary Least Square Estimator (OLS), assuming that the estimates of regression coefficients obtained by ordinary least squares methods (Ordinary Least Square Estimators) is not the best linear unbiased estimator (BLUE = Best Linear Estimator Unbiased), and assuming normality, the estimators are normally distributed are expressed as follows:

1. Zero Expected Values for Residuals

This situation generated by the completion of residual statistics, seen all of the residual mean is zero on the Residual Statistics presented in the Appendix.

Table 4. Residuals Statistics

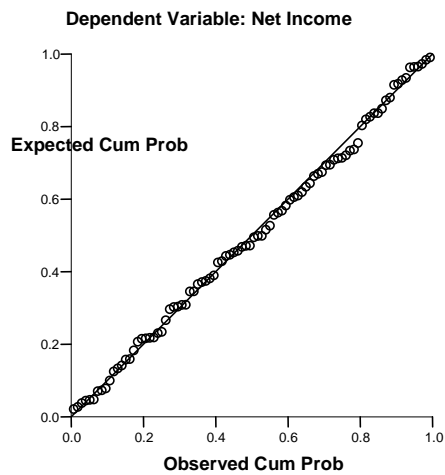
| | Coefficient ^a | | | | |
|-----------------------------------|--------------------------|----------|-----------|----------------|----|
| | Minimum | Maximum | Mean | Std. Deviation | N |
| Predicted Value | -19684,0 | 1E+007 | 843389,2 | 1796242,861 | 90 |
| Std. Predicted Value | -,480 | 5,103 | ,000 | 1,000 | 90 |
| Standard Error of Predicted Value | 40104,906 | 197519,6 | 47284,495 | 21209,548 | 90 |
| Adjusted Predicted Value | -22080,0 | 9879596 | 844751,7 | 1793211,710 | 90 |
| Residual | -949222 | 776717,8 | ,00000 | 214670,51551 | 90 |
| Std. Residual | -4,321 | 3,536 | ,000 | ,977 | 90 |
| Stud. Residual | -4,700 | 3,621 | -,004 | 1,021 | 90 |
| Deleted Residual | -1123089 | 814501,5 | -1362,51 | 235337,96057 | 90 |
| Stud. Deleted Residual | -5,432 | 3,914 | -,007 | 1,082 | 90 |
| Mahal. Distance | 1,978 | 70,972 | 3,956 | 8,124 | 90 |
| Cook's Distance | ,000 | ,809 | ,021 | ,088 | 90 |
| Centered Leverage Value | ,022 | ,797 | ,044 | ,091 | 90 |

a. Dependent Variable: Net Income

2. Regression normality

For this study used PP plot of regression standardized residuals to test for normality.

Figure 3. Normal P-P Plot of Regression Standardized



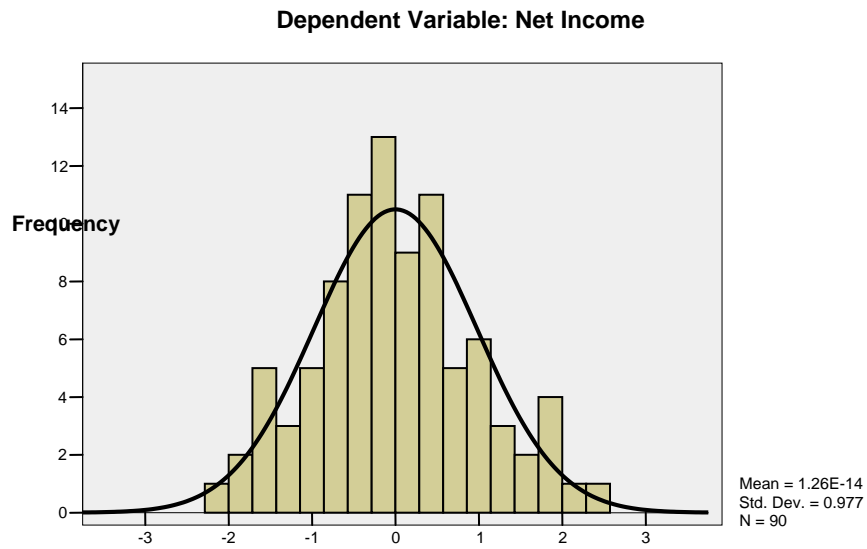
Look at the chart in Appendix PP plot multiple values are plotted along a rough diagonal line, then this indicates the normality assumption is met.

3. Linearity

Assumption of linearity test performed by making a plot of standardized residuals with the estimated value of the dependent variable that is named standardized scatter plots of residuals. Seen from the scatter plot chart in the Appendix there is a relationship that is approximately 95% of the residual lies between -2 and +2, meaning the assumption of linearity are met.

Figure 4. Regression Standardized Residual

Histogram



4. Multicollinearity test

Table 5. Coefficient Correlations

Coefficient ^a

| Model | | Operational Costs | Exchange Rate | Inflation | Receivable Turnover | |
|-------|--------------|---------------------|---------------|-----------|---------------------|-------------|
| 1 | Correlations | Operational Costs | 1,000 | ,168 | -,458 | -,950 |
| | | Exchange Rate | ,168 | 1,000 | -,829 | -,140 |
| | | Inflation | -,458 | -,829 | 1,000 | ,359 |
| | | Receivable Turnover | -,950 | -,140 | ,359 | 1,000 |
| 1 | Covariances | Operasional Cost | 2,99E-014 | 2,12E-006 | -,002 | ,000 |
| | | Exchange Rate | 2,12E-006 | 5267,282 | -1663157 | -20761,453 |
| | | Inflation | -,002 | -1663157 | 8E+008 | 20243768,7 |
| | | Receivable Turnover | ,000 | -20761,5 | 2E+007 | 4156276,455 |

a. Dependent Variable: Net Income

Table 6. Collinearity Diagnostics

Coefficient^a

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | |
|-------|-----------|------------|-----------------|----------------------|-----------|----------|---------------------|------------------|
| | | | | (Constant) | Inflation | Ex. rate | Receivable turnover | Operational Cost |
| 1 | 1 | 3,652 | 1,000 | ,00 | ,00 | ,00 | ,00 | ,00 |
| | 2 | 1,280 | 1,689 | ,00 | ,00 | ,00 | ,02 | ,01 |
| | 3 | ,053 | 8,281 | ,00 | ,03 | ,00 | ,50 | ,36 |
| | 4 | ,015 | 5,815 | ,02 | ,32 | ,00 | ,46 | ,61 |
| | 5 | ,001 | 9,091 | ,97 | ,64 | 1,00 | ,01 | ,02 |

a. Dependent Variable: Net Income

The assumption of multicollinearity due to a state where independent variables have high correlation with each other, if the correlation coefficient between the independent variable is less than 0.80 proving there is no extreme multicollinearity.

Shown in Table correlation coefficient between the variables, so the assumption is not the case multicollinearity met. While using the collinearity diagnostics in the Appendix shows the eigenvalue value nothing is close to zero and the condition index (CI) no greater than 15, multicollinearity is not the case then the assumption is filled.

5. Heteroscedasticity test

Scatter plot

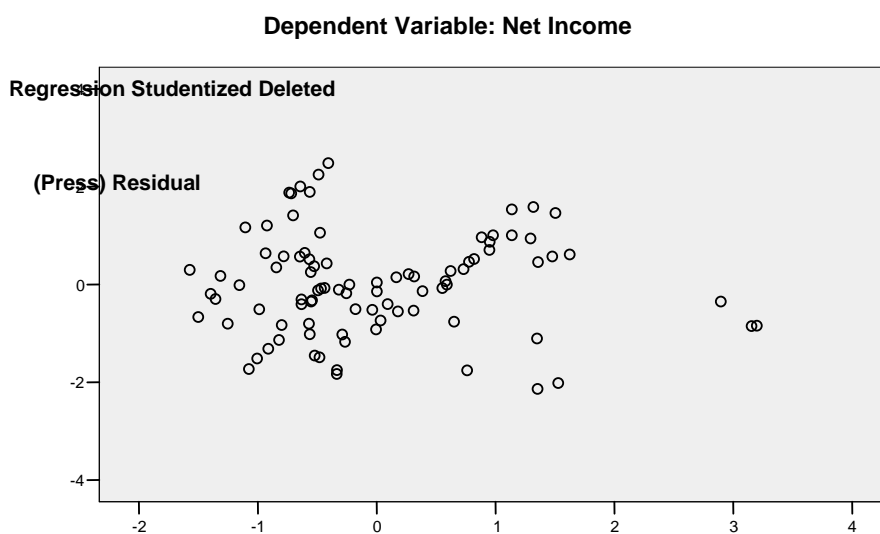


Figure 5. Regression Standardized Predicted Value

One way to detect heteroscedasticity is to look at the graph scatter plots of residuals. If the regression graph scatter plots of residuals do not form a specific pattern (wavy, widened and narrowed, or quadratic linear pattern), seen in the scatter plot Chart Appendix does not form a specific pattern, then the regression did not occur heteroscedasticity assumptions are met.

F. Tests of Hypotheses

Correlation Test

a. Correlation Analysis

Correlation analysis was used to determine the level (degree) the closeness of the relationship between the independent variables with the dependent variable, the greater the correlation the stronger the relationship.

1) Correlation of X_1 and Y (simple)

SPSS calculation results are as follows:

Table 7. Correlation of Inflation Rate (X_1) Vs Net Income

| | | Inflation | Net Income |
|------------|---------------------|-----------|------------|
| Inflation | Pearson Correlation | 1 | ,604 ** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,604 ** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

In the calculation of simple correlation r of 0.604 is obtained. This suggests that the relationship of inflation to net income is strong and unidirectional (positive).

2) Correlation X_2 and Y (simple)

SPSS calculation results are as follows:

Table 8. Correlation of USD (X2) Vs Rupiah Exchange (Y)

| | | Exchange rate | Net Income |
|---------------|---------------------|---------------|------------|
| Exchange rate | Pearson Correlation | 1 | ,475** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,475** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

In the calculation of simple correlation r of 0.475 is obtained. This suggests that the U.S. dollar exchange rate relationship with the Indonesian Rupiah to net profit is being and direction (positive).

3) Correlation X_3 and Y (simple)

SPSS calculation results are as follows:

Table 9. Correlation of Receivable Turnover (X3) Vs Net Income

| | | Receivable turnover | Net Income |
|---------------------|---------------------|---------------------|------------|
| Receivable turnover | Pearson Correlation | 1 | ,935** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,935** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

In the calculation of simple correlation r of 0.935 is obtained. This suggests that the relationship with net turnover is very strong and unidirectional (positive).

4) Correlation X_4 and Y (simple)

SPSS calculation results are as follows:

Table 10. Correlation of Operating Cost (X4) Vs Net Income (Y)

| | | Operational Cost | Net Income |
|------------------|---------------------|------------------|------------|
| Operational Cost | Pearson Correlation | 1 | ,991 ** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,991 ** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

In the calculation of simple correlation r of 0.991 is obtained. This suggests that the relationship with net operating costs are very strong and unidirectional (positive).

5) Correlation $X_1X_2X_3X_4$ and Y (Multiple)

SPSS calculation results are as follows:

Table 11. Correlation of All V's Net Income (Y)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | ,993 ^a | ,990 | ,985 | 219663,521 | ,588 |

a. Predictors: (Constant), Operational Cost, Exchange Rate, Inflation, Receivable Turnover

b. Dependent Variable: Net Income

Obtained from the calculation of multiple correlation of 0.993 r . From these results, it appears that the relationship of macro and micro economic variables to net income is very strong and unidirectional (positive).

Correlation Significance Test

1) Hypothesis Testing Correlation of X_1 and Y

Aimed to determine whether or not the relationship between inflation (X_1) with net income (Y), the hypothesis states that: There is a correlation of inflation with net earnings. Hypothesis testing steps are as follows:

(1) Determining H_0 and H_a (test form):

$H_0 : \rho = 0$ no relationship inflation with net earnings

$H_a : \rho \neq 0$ there is relationship inflation with net earnings

(2) Establish the real level (α) / degree of confidence ($1-\alpha$) . Confidence level 95% and the real level of $\alpha = 5\%$

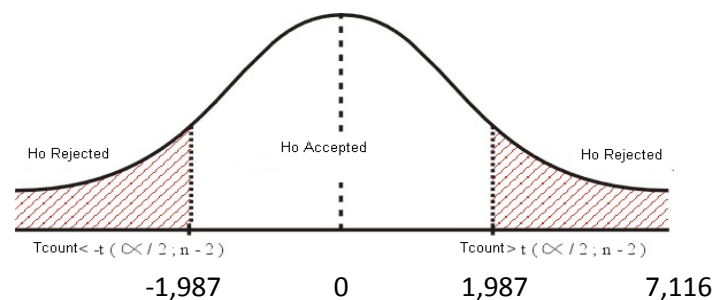
(3) Choosing a statistical test

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

(4) Calculate the test statistic t

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0,604\sqrt{90-2}}{\sqrt{1-(0,604^2)}} = 7,116$$

(5) Compare the value of the test statistic with the critical areas



(6) Drawing conclusions

Based on this count that $t > t$ table or $7.116 > 1.987$ and 0.000 indicate the significance probability of < 0.05 then H_0 is rejected, this means there is a significant positive relationship between inflation and the net income, thus the research hypothesis is accepted.

2) Correlation Hypothesis Test X_2 and Y

Aims to find out whether or not the relationship between the U.S. dollar against the rupiah exchange rate (X_2) with net income (Y), the hypothesis

states that: There is a relationship between the U.S. dollar against the rupiah exchange rate with net income.

Hypothesis testing steps are as follows:

(1) Determining H_0 and H_a (test form)

$H_0 : \rho = 0$ there is no relationship between the U.S. dollar against the rupiah exchange rate with net income

$H_a : \rho \neq 0$ there is a relationship between the U.S. dollar against the rupiah exchange rate with net income

(2) Establish the real level (α) / degree of confidence ($1-\alpha$) . Confidence level

95% and the real level of $\alpha = 5\%$

(3) Select the statistical test

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

(4) Calculate the test statistic t

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0,475\sqrt{90-2}}{\sqrt{1-(0,475^2)}} = 5,060$$

(5) Compare the value of the test statistic with the critical areas



(6) Drawing conclusions

Based on the $t_{count} > t_{table}$ or $5.060 > 1.987$ in demonstrating the significance probability of $0.000 < 0.05$, significant and H_0 is rejected, meaning that there are positive and significant relationship between the

U.S. dollar exchange rate dollars against the Indonesian Rupiah to net income, thus the research hypothesis is accepted.

3) Hypothesis Testing Correlation X_3 and Y

Aimed to determine whether or not the relationship between Receivable turnover (X_3) with net income (Y), the hypothesis states that: There is a relationship between turnover with net earnings.

Hypothesis testing steps are as follows:

(1) Determining H_0 and H_a (test form)

$H_0 : \rho = 0$ there is no relationship between turnover with net earnings

$H_a : \rho \neq 0$ there is a relationship between turnover with net earnings

(2) Establish the real level (α) / degree of confidence ($1-\alpha$) . Confidence level 95% and the real level of $\alpha = 5\%$

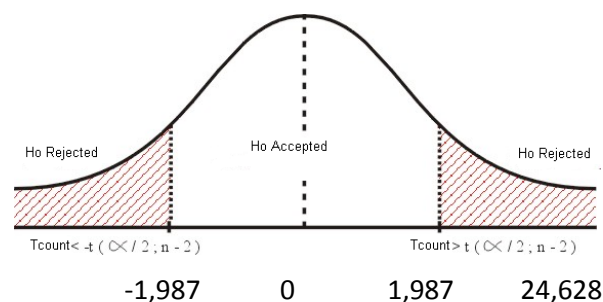
(3) Select the statistical test

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

(4) Calculate the test statistic t

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0,935\sqrt{90-2}}{\sqrt{1-(0,935^2)}} = 24,628$$

(5) Compare the value of the test statistic with the critical areas:



(6) Drawing conclusions

Based on the $t_{count} > t_{table}$ or $24.628 > 1.987$ in demonstrating the significance probability of $0.000 < 0.05$, significant and H_0 is rejected, meaning that there is a significant and positive relationship between Receivable Turnover to net income, thus the research hypothesis is accepted.

4) Test of Hypothesis Correlation X_4 and Y

Aimed to determine whether or not the relationship between operating costs (X_4) with net income (Y), the hypothesis states that: There is a relationship of operational costs to net income. Hypothesis testing steps are as follows:

(1) Determining H_0 and H_a (test form)

$H_0 : \rho = 0$ There is no relationship of operational costs to net income

$H_a : \rho \neq 0$ There is a relationship of operational costs to net income

(2) Establish the real level (α) / degree of confidence $(1-\alpha)$. Confidence level

95% and the real level of $\alpha = 5\%$

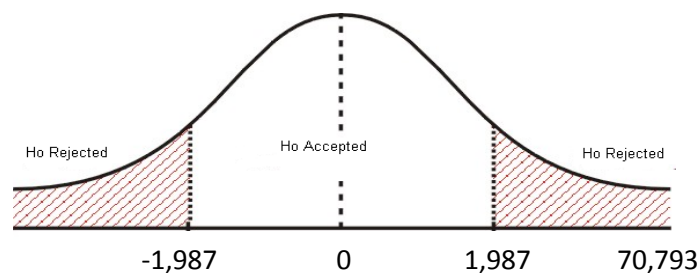
(3) Select the statistical test

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

(4) Calculate the test statistic t

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0,991\sqrt{90-2}}{\sqrt{1-(0,991^2)}} = 70,793$$

(5) Compare the value of the test statistic with the critical areas



(6) Drawing conclusions

Based on the t count $>$ t table or $70.793 > 1.987$ in demonstrating the significance probability of $0.002 < 0.05$, significant and H_0 is rejected, meaning that there is a significant and positive relationship between operating costs to net income, thus the research hypothesis is accepted.

5) Hypothesis Testing Correlation $X_1X_2X_3X_4$ and Y (Multiple)

Aims to determine whether or not there are multiple relationships between macro and micro economic variables ($X_1X_2X_3X_4$) with net income (Y), the hypothesis states that: There is a relationship of macro and micro economic variables to net income.

Hypothesis testing steps are as follows:

(1) Determining H_0 and H_a (test form)

$H_0 : \rho_1 \dots \rho_4 = 0$ there is no relationship of multiple macro and micro economic variables to net income

$H_a : \rho_1 \dots \rho_4 \neq 0$ there are multiple variables link the macro and micro economy with net income

(2) Establish the real level (α) / degree of confidence $(1-\alpha)$. Confidence level

95% and the real level of $\alpha = 5\%$

(3) Select the statistical test

Using the F table

$$\begin{aligned} F_{\text{table}} &= F_{(1-\alpha)\{(dk=k), (dk=n-k-1)\}} \\ &= F_{(1-\alpha)\{(dk=4), (dk=90-4-1)\}} \\ &= F_{(1-0,05)(4,85)} \end{aligned}$$

How to find $F_{table} = 4$, a number the numerator

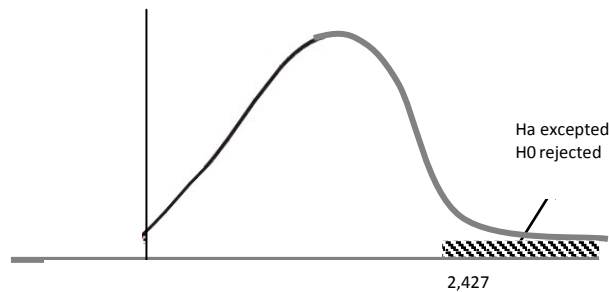
= 85, as the denominator

$$F_{table} = 2,479$$

(4) Calculate the test statistic F

$$F_{count} = \frac{R^2 / k}{(1 - R^2) / (n - k - 1)} = \frac{0,986 / 4}{0,014 / 85} = 1478,799$$

(5) Compare the value of the test statistic with the critical areas



(6) Drawing conclusions

Based on this count that $F > F_{table}$ or $1487.799 > 2.479$ means there are multiple variables is a significant relationship with the macro and micro economic net income, thus the research hypothesis is accepted.

Regression Testing

Simple regression analysis is used to determine whether there is linearity effects of independent variables on the dependent variable.

Regression Analysis

a) Regression X_1 and Y (simple)

The results of calculations performed with SPSS Ver. 17:00 is as follows:

Table 12. Regression X_1 and Y Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -3576548 | 639647,9 | | -5,591 | ,000 |
| | Inflation | 536834,5 | 75441,258 | ,604 | 7,116 | ,000 |

a. Dependent Variable: Net Income

Based on the results obtained by calculation from the constant (intercept) at -3576548 and a regression coefficient b for 536,834.5 form of simple linear regression equation as follows:

$$\hat{Y} = -3576548 + 536834,5X_1 + \epsilon$$

From the regression equation can be seen that the effect of inflation on net income is the same direction (positive), it is shown on the regression coefficients or values b in the regression equation that shows a positive figure of 536,834.5 which means that every 1 unit increase in inflation will be followed by net profit increase of 536,834.5 units. Vice versa, if inflation has decreased one unit of the net profit will likely decreased by 536,834.5 units. And the value of the coefficient a (intercept) is equal to -3576548 which has meaning if there is no inflation ($X_1 = 0$), estimated net income of -3,576,548 units.

b) Regression X₂ and Y (simple)

The results of calculations performed with SPSS Ver. 17:00 is as follows:

Table 13. Regression X₂ and Y

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1E+007 | 2600122 | | -4,725 | ,000 |
| | Exchange Rate | 1273,117 | 251,589 | ,475 | 5,060 | ,000 |

a. Dependent Variable: Net Income

Based on the results obtained by a calculation performed for -1E +007 and the regression coefficient b 1273.117 of simple linear regression equation form as follows:

$$\hat{Y} = -1E+007 + 1273,117X_2 + \varepsilon$$

From the regression equation can be seen that the influence of Indonesian Rupiah exchange rate against the U.S. dollar net income is unidirectional (positive), it is shown on the regression coefficients or values b in the regression equation that shows a positive figure of 1273.117 which means that every dollar increase in exchange rate a U.S. dollars will be followed by a unit increase in net income of 1273.117 unit. Vice versa, if the U.S. dollar against the Indoensian Rupiah exchange rate has decreased one unit of the net profit will likely experience a decrease of 1273.117 unit. And the value of the coefficient a (intercept) is at -1E +007 which has no meaning if there is Indonesia Rupiah exchange rate U.S. dollar ($X_2 = 0$), estimated net income -1E +007 units.

c) **Regression X₃ and Y (simple)**

The results of calculations performed with SPSS Ver. 17:00 is as follows:

Table 14. Regression X₃ and Y

| Coefficients^a | | | | | | |
|---------------------------------|---------------------|-----------------------------|------------|---------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 124600,5 | 74237,530 | | 1,678 | ,097 |
| | Receivable Turnover | 41840,041 | 1698,861 | ,935 | 24,628 | ,000 |

a. Dependent Variable: Net Income

Based on the results obtained by calculation from the constant (intercept) of 124,600.5 and a regression coefficient b for 41840.041 form of simple linear regression equation as follows:

$$\hat{Y} = 124600,5 + 41840,041X_1 + \varepsilon$$

From the regression equation can be seen that the effect on net income receivable turnover is unidirectional (positive), it is shown on the regression coefficients or values b in the regression equation that shows a positive number of 41840.041 which means that every 1 unit increase in turnover will followed by a rise in net profit 41840.041 units. Vice versa, if the accounts receivable turnover decreased 1 unit of the net profit will likely experience a decline of 41840.041 units. And the value of the coefficient a (intercept) is equal to 124,600.5 which has meaning if there is no turnover ($X_3 = 0$), estimated net income of 124,600.5 units.

d) Regression X₄ and Y (simple)

The results of calculations performed with SPSS Ver. 17:00 is as follows:

Table 15. Regression X₄ and Y

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 51284,362 | 27564,140 | | 1,861 | ,066 |
| | Operasional Cost | 3,41E-006 | ,000 | ,991 | 70,793 | ,000 |

a. Dependent Variable: Net Income

Based on calculations performed at 51284.362 and obtained a regression coefficient of 3.41 E +006 b form a simple linear regression equation as follows:

$$\hat{Y} = 51284,362 + 3,41E+006X_2 + \varepsilon$$

From the regression equation can be seen that the influence of operating costs to net income is a direct (positive), it is shown on the regression coefficients or the value of b in the regression equation that shows a positive rate of 3.41 E +006 which means that any increase in Operational Costs 1 unit will be followed by the increase in net profit of 3.41 E +006 units. Vice versa, if the operating costs decreased 1 unit of the net profit will likely experience a decline of 3.41 E +006 units. And the value of the coefficient a (intercept) is equal to 51284.362 that has meaning if there are no operational costs (X₄ = 0), estimated net income of 51284.362 units.

e) **Regression $X_1X_2X_3X_4$ and Y (Multiple)**

The results of calculations performed with SPSS Ver. 17:00 is as follows:

Table 16. Regression $X_1X_2X_3X_4$ and Y

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|--------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|--------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 650159,8 | 574807,2 | | 1,131 | ,261 | | |
| | Inflation | 100260,8 | 27639,777 | ,113 | 3,627 | ,000 | ,171 | 5,844 |
| | Exchange rate | -134,945 | 72,576 | -,050 | -1,859 | ,066 | ,226 | 4,421 |
| | Receivable turnove | 1412,908 | 2038,695 | ,032 | ,693 | ,490 | ,080 | 12,515 |
| | Operasional Cost | 3,16E-006 | ,000 | ,920 | 18,282 | ,000 | ,065 | 15,289 |

a. Dependent Variable: Net Income

Based on the results obtained by a calculation performed by 650,159.8; b1 at 100,260.8; at -134 945 b2: b3 of 1412.97708; b4 at 3.16 E-006; the form of simple linear regression equation as follows:

$$\hat{Y} = 650159,8 + 100260,8X_1 - 134.945X_2 + 1412,908X_3 + 3,16E-006X_4 + \varepsilon$$

- (1) From the regression equation can be seen that the effect of inflation on net income is not the direction (negative), it is shown on the regression coefficients or the value of b1 in the regression equation which shows a negative figure of 100,260.8 which means that any increase in inflation one unit will be followed by a decrease to net income of 100,260.8 units. Vice versa, if inflation has decreased one unit of the net income will likely increase by 100,260.8 units.
- (2) From the regression equation can be seen that the influence of exchange rates on net income is not the direction (negative), it is shown on the regression coefficients or the value of b2 in the regression equation which shows a negative figure of 134 945 which means that every 1 unit increase in the exchange rate will followed by a decline in net income of 134 945

units. Vice versa, if the exchange rate has decreased 1 unit of the net income will tend to increase by 134 945 units.

(3) From the regression equation can be seen that the effect on net income receivable turnover is a direct (positive), it is shown on the regression coefficients or the value of b_3 in the regression equation that shows a positive rate of 1412.908 which means that any increase in turnover 1 unit will be followed by the increase in net income of 1412.908 unit. Vice versa, if the accounts receivable turnover decreased 1 unit of the net profit will likely experience a decrease of 1412.908 unit.

(4) From the regression equation can be seen that the influence of operating costs to net income is a direct (positive), it is shown on the regression coefficients or the value of b_4 in the regression equation that shows a positive rate of 3.16 E-006 which means that any increase Operational costs will be followed by a unit increase in net income of 3.16 E-006 unit. Vice versa, if the operating costs decreased 1 unit of the net profit will likely experience a decline of 3.16 E-006 unit.

(5) and the coefficient a (intercept) is equal to 650,159.8 which has meaning if there is no macro-and micro-economic variables ($X_1 X_2 X_3 X_4 = 0$), estimated net income of 650,159.8 units.

Parameter Regression Significance Test

a) Regression Hypothesis Test X_1 and Y

The first research hypothesis states that:

H1: There is the effect of inflation on net income

(1) The hypothesis to be tested are as follows:

Ho: $\beta = 0$, no effect of inflation on net income

Ha: $\beta \neq 0$, there is the effect of inflation on net income

(2) The real level $t_a (\alpha) = 5\%$ or level of confidence $(1-\alpha) = 1-5\% = 95\%$, due to the greater level of confidence the more accurate the results obtained.

(3) $t_{table} = t_{(\alpha/2) (n-2)} = t_{(0,05/2)(90-2)} = 1,987$

(4) Statistics Tcount

Here are the results of calculations SPSS Ver. 17:00.

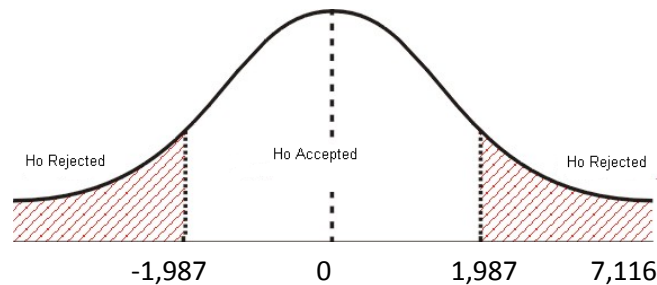
Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -3576548 | 639647,9 | | -5,591 | ,000 |
| | Inflation | 536834,5 | 75441,258 | ,604 | 7,116 | ,000 |

a. Dependent Variable: Net Income

(5) Determine the critical region

To clarify the above calculation, we used the image as follows:



(6) Testing criteria

Ho is rejected, accepted Ha with $t_{hitung} < t_{(\alpha/2;n-2)}$

(7) Conclusions

With $\alpha = 5\%$ and $n = 50$ or $t_{(0,05/2;90-2)}$ earned a t_{table} of 1.987 can be seen that $t_{count} = 7,116 > t_{table} = 1,987$ and the probability of significance $0.000 < 0.05$ then a significant and Ho is rejected which means that there is a positive and significant effect of inflation on net income, so the research hypothesis H1 is accepted.

b) Regression Hypothesis Test X_2 and Y

The second research hypothesis states that:

H2: There is the influence of the U.S. dollar against the rupiah exchange rate to net income.

Hypotheses to be tested are as follows:

(1) $H_0: \beta = 0$, There is no influence of the U.S. dollar against the rupiah exchange rate to net income

$H_a: \beta \neq 0$, There is the influence of the U.S. dollar against the rupiah exchange rate to net income.

(2) To find t_{table} , researchers used real level $t_a (\alpha) = 5\%$ or level of confidence $(1-\alpha) = 1-5\% = 95\%$, due to the greater level of confidence the more accurate the results obtained

(3) $t_{table} = t_{(\alpha/2) (n-2)} = t_{(0,05/2)(90-2)} = 1,987$

(4) Statistics T_{count}

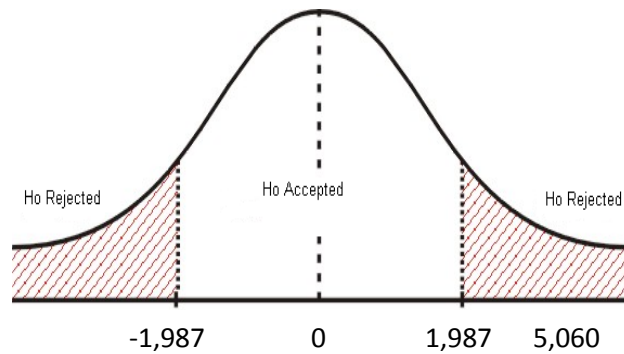
Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1E+007 | 2600122 | | -4,725 | ,000 |
| | Exchange rate | 1273,117 | 251,589 | ,475 | 5,060 | ,000 |

a. Dependent Variable: Net Income

(5) Determine the critical region

To clarify the above calculation, we used the image as follows:



(6) Testing criteria

Ho is rejected, Ha accepted if the $t_{\text{count}} < t_{(\alpha/2;n-2)}$

(7) Conclusions

With $\alpha = 5\%$ and $n = 50$ or $t_{(0,05/2;190-2)}$ can be obtained $t_{\text{table}} = 1.987$ and $t_{\text{count}} = 5,060 > t_{\text{table}} = 1,987$ and with the probability of significance $0.000 < 0.05$ then a significant and Ho is rejected, which means that there is a positive and significant effect of the U.S. dollar against the rupiah exchange rate to net income, therefore H2 research hypothesis accepted.

c) Hypothesis Testing Regression X_3 and Y

The third research hypothesis states that:

H3: There is the influence of turnover on net profit

(1) The hypothesis to be tested area as follows:

Ho: $\beta = 0$, There is no influence of turnover on net profit

Ha: $\beta \neq 0$, There is the influence of turnover on net profit

(2) The real level $t_a (\alpha) = 5\%$ or level of confidence $(1-\alpha) = 1-5\% = 95\%$, due to the greater level of confidence the more accurate the results obtained

(3) $t_{\text{table}} = t_{(\alpha/2) (n-2)} = t_{(0,05/2(90-2)} = 1,987$

(4) Statistics t_{count}

Here are the results of calculations SPSS Ver. 17:00

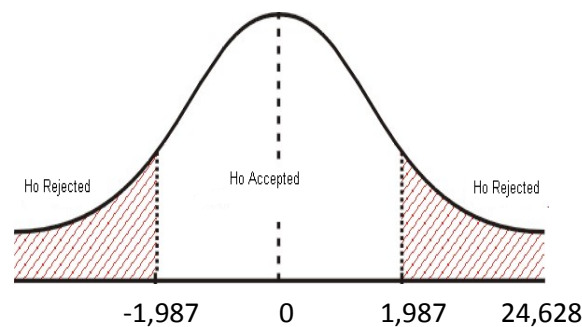
Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 124600,5 | 74237,530 | | 1,678 | ,097 |
| | receivable turnover | 41840,041 | 1698,861 | ,935 | 24,628 | ,000 |

a. Dependent Variable: Net Income

(5) Determine the critical region

To clarify the above calculation, we used the image as follows:



(6) Testing criteria

Ho is rejected, accepted Ha if $t_{\text{count}} < t_{(\alpha/2; n-2)}$

(7) Conclusions

With $\alpha = 5\%$ and $n = 50$ or $t_{(0,05/2; 90-2)}$ earned a T_{Table} of 1.987 can be seen $t_{\text{count}} = 24.628 > T_{\text{Table}} = 1.987$ and with a significance probability of $0.000 < 0.05$ is significant, and Ho is rejected, which means that there are positive and significant turnover to net income, thus the research hypothesis H3 is received.

d) Hypothesis Testing Regression X₄ and Y

The fourth research hypothesis states that:

H4: There is the influence of operating cost to net income

Hypotheses to be tested are as follows:

(1) $H_0: \beta = 0$, There is no influence of operating cost to net income

$H_a: \beta \neq 0$, There is the influence of operating cost to net income

(2) To find t_{table} , researchers used real level t_a (α) = 5% or level of confidence $(1-\alpha) = 1-5\% = 95\%$, due to the greater level of confidence the more accurate the results obtained

(3) $t_{table} = t_{(\alpha/2)(n-2)} = t_{(0,05/2)(10-2)} = 1,987$

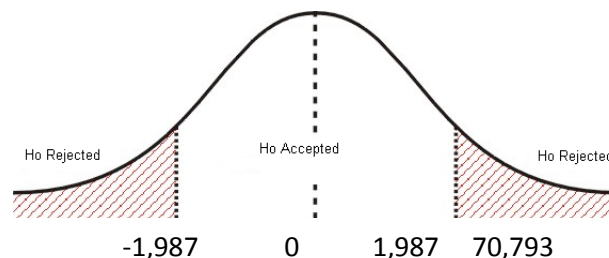
(4) Statistics t_{count}

| Coefficients | | | | | | |
|--------------|------------------|-----------------------------|------------|---------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 51284,362 | 27564,140 | | 1,861 | ,066 |
| | Operasional Cosl | 3,41E-006 | ,000 | ,991 | 70,793 | ,000 |

a. Dependent Variable: Net Income

(5) Determine the critical region

To clarify the above calculation, we used the image as follows:



(6) Testing criteria

H_0 is rejected, H_a accepted if the calculated $t_{count} < t_{(\alpha/2;n-2)}$

(7) Conclusions

With $\alpha = 5\%$ dan $n = 50$ or $t_{(0,05/2;90-2)}$ can be obtained $T_{Table} = 1.987$ and $t_{count} = 70.793 > T_{Table} = 1.987$, with a significance probability of $0.002 < 0.05$ is significant, and H_0 is rejected, the means that there are

Table 17. ANOVA^b : Testing Hypotheses Regression X_1, X_2, X_3, X_4 and Y

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|----------|-------------------|
| 1 | Regression | 3E+014 | 4 | 7,179E+013 | 1487,799 | ,000 ^a |
| | Residual | 4E+012 | 85 | 4,825E+010 | | |
| | Total | 3E+014 | 89 | | | |

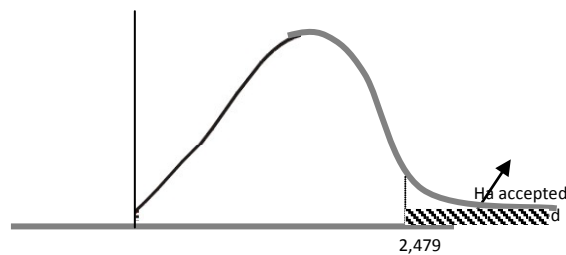
a. Predictors: (Constant), Operational Cost, Exchange rate, Inflation, , Receivable turnover

b. Dependent Variable: Net Income

(4) Calculate the test statistic t

$$F_{count} = \frac{SS_{Reg}/(k-1)}{SS_{Res}/(n-k-1)} = \frac{3E+014/4}{4E+012/85} = \frac{7,179E+013}{4,825E+010} = 1487,799$$

(5) Compare the value of the test statistic with the critical areas



(6) Drawing conclusions

Based on this count that $F_{count} > F_{table}$ or $1487,799 > 2,479$ and with a significance probability of $0.000 < 0.05$ means that there are multiple significant effects of macro and micro economic variables on net income, thus the research hypothesis H5 is accepted.

Coefficient of Determination

a. Coefficient of Determination X_1 and Y

Here are the results of the coefficient of determination R square:

Table 18. Coefficient of Determination X_1 and Y

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,604 ^a | ,365 | ,358 | 1449442,35 |

a. Predictors: (Constant), Inflation

By looking at the results of calculations on which the R square of 0.365 or 36.5%. This shows the contribution of inflation in explaining the net profit of 36.5% while the remaining 63.5% is explained by other factors not examined or not included in the model.

b. Coefficient of Determination X_2 and Y

Here are the results of the coefficient of determination R square:

Table 19. Coefficient of Determination X_2 and Y

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,475 ^a | ,225 | ,217 | 1601170,99 |

a. Predictors: (Constant), Exchange Rate

By looking at the results of the above calculation where R square of 0.225 or 22.5%. This shows the contribution of the U.S. dollar against the rupiah exchange rate in explaining the net profit by 22.5% while the remaining 77.5% described other factors not examined or not included in the model.

c. Coefficient of Determination X_3 and Y

Here are the results of the coefficient of determination R square:

Table 20. Coefficient of Determination X₃ and Y

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,935 ^a | ,873 | ,872 | 647570,539 |

a. Predictors: (Constant), Receivable turnover

By looking at the results of the above calculation where R square of 0.873 or 87.3%. This shows the contribution of the accounts receivable turnover in explaining net profit of 87.3% while the remaining 12.7% described other factors not examined or not included in the model.

d. Coefficient of Determination X₄ and Y

Here are the results of the coefficient of determination R square:

Table 21. Coefficient of Determination X₄ and Y

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,991 ^a | ,983 | ,983 | 238983,220 |

a. Predictors: (Constant), Operational Costs

By looking at the results of calculations on which the R square of 0.983 or 98.3%. This shows the contribution of operational costs in explaining the net profit of 98.3% while the remaining 1.7% described other factors that are not examined or not included in the model.

e. Coefficient of Determination X₁X₂X₃X₄ and Y (Multiple)

Here are the results of the coefficient of determination R square:

Table 22. Coefficient of Determination X₁X₂X₃X₄ and Y

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | ,993 ^a | ,986 | ,985 | 219663,521 | ,588 |

a. Predictors: (Constant), Operational Costs, Exchange Rate, Inflation, ,Receivable turnover

b. Dependent Variable: Net Income

By looking at the results of calculations on which the R square of 0.986 or 98.6%. This shows the magnitude of the positive influence of macro and micro economic variables against net profit of 98.6% while the remaining 1.4% is the influence of other factors.

G. Discussion of Research Findings

Based on data and analysis has been done shows that:

1. Obtained multiple correlation of 0.993 means the relation r macro and micro economic variables to net income is very strong and unidirectional (positive)
2. Multiple correlation hypothesis testing showed no significant positive relationship and macro and micro economic variables to net income, thus the research hypothesis is accepted.
3. Multiple regression hypothesis testing indicates there is positive and significant macro and micro economic variables on net income, thus the research hypothesis is accepted.
4. Multiple coefficient of determination, the magnitude of the positive influence of macro and micro economic variables against net profit of 98.6% while the remaining 1.4% are caused by other factors not analyzed in this study.
5. From the above it can be interpreted in the period under study conditions that macro and micro economic variables have a significant effect on net income. Changes in net income is largely influenced by other factors. It found that the height of macro and micro economic variables shows that the low and high profits, which means it also will result in low and high profits.

V. CLOSING

Based on the results of research by the author, it can be described conclusions, research limitations and suggestions.

A. Conclusion

Research has been conducted in manufacturing companies on the Stock Exchange, it can be concluded as follows:

1. Based on the test the first hypothesis, there is a significant and positive effect of inflation on net income, thus the research hypothesis H_1 is accepted where $T_{\text{count}} = 7.116 > T_{\text{Table}} = 1.987$ and 0.000 with a significance probability of <0.05 is significant, and H_0 is rejected.
2. Based on the test the second hypothesis, there are positive and significant exchange rate of rupiah against the U.S. dollar with reference to the net income, thus the research hypothesis H_2 accepted where $T_{\text{count}} = 5.060 > T_{\text{Table}} = 1.987$ and 0.000 with a significance probability of <0.05 is significant, and H_0 is rejected.
3. Under the third hypothesis testing, there is a significant and positive effect on net income receivable turnover, thus the research hypothesis H_3 is received where $T_{\text{count}} = 24.628 > T_{\text{Table}} = 1.987$ and 0.000 with a significance probability of <0.05 is significant, and H_0 is rejected.
4. Based on the fourth hypothesis testing, there are positive and significant operating costs to net income, thus the research hypothesis H_4 acceptable where $T_{\text{count}} = 70.793 > T_{\text{Table}} = 1.987$ and 0.002 with a significance probability of <0.05 is significant, and H_0 is rejected.
5. Based on a multiple hypothesis testing there are four significant influence of macro and micro economic variables on net income, thus the research hypothesis H_5 is accepted where $F_{\text{calculated}} > F_{\text{table}}$ or $1487.799 > 2.479$ and 0.000 with a significance probability of <0.05 .

B. Limitations of Research

The author stretch that there are limitations that happens because of time, effort, cost and others. These limitations include the instruments used, the fulfillment of the requirements (assuming) the analytical techniques used, the coverage and intensity of review of theory, also the research and internal data that can be reached by the author. But in lights of things, this study includes things such as correlation and regression analysis hypothesis, the use of theory will result in a significant added value in the field.

C. Suggestions

Of the conclusions in the can, the author tries to give suggestions as follows:

1. For companies, in order to improve profitability in the foreseeable future is expected to suppress the expenditures for operating expenses and other costs. Cost of sales commission and cost of vehicle maintenance operations to be the biggest expense in operating costs, should be suppressed.
2. Marketing division or marketing spearhead the sale, expected to be more active in marketing their products. It is expected to increase the volume of sales so that profits in the future can be improved. The marketing department should be more active in seeking a breakthrough sales strategies and a variety of the most appropriate in order to achieve sales targets. A range of innovative and effective way of promotion can also be applied.

This is done so the company could face resistance from competitors.

3. For those who intend to conduct further research in order to get better results, they should increase the amount of research data that is used or to find other data that is more relevant. It's worth further research can, increase the observation time period is longer, so as to provide a more accurate analysis. It is recommended to use factors or other variables that could be expected to affect net income such as inventory turnover (Inventory Turn Over),

income taxes and interest rates of Bank Indonesia.

APPENDIX

APPENDIX

Frequencies

Statistics

| | | Inflation | Exchange Rate | Receivable Turnover | Operational Costs | Net Income |
|----------------|---------|-------------------|----------------------|---------------------|----------------------|----------------------|
| N | Valid | 90 | 90 | 90 | 90 | 90 |
| | Missing | 0 | 0 | 0 | 0 | 0 |
| Mean | | 8,2333 | 10313,00 | 17,1791 | 2,324E+011 | 843389,167 |
| Median | | 7,3700 | 10500,00 | 6,7465 | 4,495E+010 | 93123,5000 |
| Mode | | 6,30 ^a | 9414,00 ^a | ,38 ^a | 7390,50 ^a | 1695,00 ^a |
| Std. Deviation | | 2,036 | 674,60700 | 40,40537 | 5,262E+011 | 1809025,11 |
| Variance | | 4,148 | 455094,6 | 1632,594 | 2,769E+023 | 3,27E+012 |
| Range | | 4,73 | 1611,00 | 298,39 | 2,95E+012 | 10038305,0 |
| Minimum | | 6,30 | 9414,00 | ,38 | 7390,50 | 1695,00 |
| Maximum | | 11,03 | 11025,00 | 298,76 | 2,95E+012 | 10040000,0 |
| Sum | | 741,00 | 928170,00 | 1546,12 | 2,09E+013 | 75905025,0 |

a. Multiple modes exist. The smallest value is shown

NPar Tests

One-Sample Kolmogorov-Smirnov Test

| | | Inflation | Exchange Rate | Receivable Turnover | Operational Costs | Net Income |
|----------------------------------|----------------|-----------|---------------|---------------------|-------------------|------------|
| N | | 90 | 90 | 90 | 90 | 90 |
| Normal Parameters ^{a,b} | Mean | 8,2333 | 10313,00 | 17,1791 | 2,324E+011 | 843389,167 |
| | Std. Deviation | 2,03656 | 674,60700 | 40,40537 | 5,262E+011 | 1809025,11 |
| Most Extreme Differences | Absolute | ,331 | ,276 | ,385 | ,329 | ,327 |
| | Positive | ,331 | ,242 | ,385 | ,326 | ,327 |
| | Negative | -,248 | -,276 | -,339 | -,329 | -,321 |
| Kolmogorov-Smirnov Z | | 3,139 | 2,617 | 3,655 | 3,125 | 3,102 |
| Asymp. Sig. (2-tailed) | | ,080 | ,113 | ,096 | ,111 | ,728 |

a. Test distribution is Normal.

b. Calculated from data.

APPENDIX

Correlations

Correlations

| | | Inflation | Net Income |
|------------|---------------------|-----------|------------|
| Inflation | Pearson Correlation | 1 | ,604** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,604** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

Correlations

| | | Exchange Rate | Net Income |
|---------------|---------------------|---------------|------------|
| Exchange Rate | Pearson Correlation | 1 | ,475** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,475** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

APPENDIX

Correlations

Receivable Turnover : Net Income

Correlations

| | | Receivable Turnover | Net Income |
|---------------------|---------------------|------------------------|------------|
| Receivable Turnover | Pearson Correlation | 1 | ,935** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,935** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

Operational Costs : Net Income

Correlations

| | | Operational Costs | Net Income |
|-------------------|---------------------|----------------------|------------|
| Operational Costs | Pearson Correlation | 1 | ,991** |
| | Sig. (2-tailed) | | ,000 |
| | N | 90 | 90 |
| Net Income | Pearson Correlation | ,991** | 1 |
| | Sig. (2-tailed) | ,000 | |
| | N | 90 | 90 |

** . Correlation is significant at the 0.01 level (2-tailed).

APPENDIX

Regression

Y=Net Income; X=Inflation

Variables Entered/Removed^b

| Model | Entered | | Method |
|-------|------------------------|-------------------|--------|
| | Variables | Variables Removed | |
| 1 | Inflation ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: Net Income

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,604 ^a | ,365 | ,358 | 1449442,35 |

a. Predictors: (Constant), Inflation

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 1E+014 | 1 | 1,064E+014 | 50,636 | ,000 ^a |
| | Residual | 2E+014 | 88 | 2,101E+012 | | |
| | Total | 3E+014 | 89 | | | |

a. Predictors: (Constant), Inflation

b. Dependent Variable: Net Income

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -3576548 | 639647,9 | | -5,591 | ,000 |
| | Inflation | 536834,5 | 75441,258 | ,604 | 7,116 | ,000 |

a. Dependent Variable: Net Income

APPENDIX

Regression

Y= Net Income; X=Exchange Rate

Variables Entered/Removed^b

| Model | Variables Entered | Variables Removed | Method |
|-------|----------------------------|-------------------|--------|
| 1 | Exchange rate ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: Net Income

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,475 ^a | ,225 | ,217 | 1601170,99 |

a. Predictors: (Constant), Exchange Rate

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 7E+013 | 1 | 6,565E+013 | 25,607 | ,000 ^a |
| | Residual | 2E+014 | 88 | 2,564E+012 | | |
| | Total | 3E+014 | 89 | | | |

a. Predictors: (Constant), Exchange Rate

b. Dependent Variable: Net Income

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -1E+007 | 2600122 | | -4,725 | ,000 |
| | Exchange Rate | 1273,117 | 251,589 | ,475 | 5,060 | ,000 |

a. Dependent Variable: Net Income

APPENDIX

Regression

Y=Net Income; X=Receivable Turnover

Variables Entered/Removed^b

| Model | Variables Entered | Variables Removed | Method |
|-------|----------------------------------|-------------------|--------|
| 1 | Receivable Turnover ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: Net Income

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,935 ^a | ,873 | ,872 | 647570,539 |

a. Predictors: (Constant), Receivable Turnover

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---------|-------------------|
| 1 | Regression | 3E+014 | 1 | 2,544E+014 | 606,552 | ,000 ^a |
| | Residual | 4E+013 | 88 | 4,193E+011 | | |
| | Total | 3E+014 | 89 | | | |

a. Predictors: (Constant), Receivable Turnover

b. Dependent Variable: Net Income

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 124600,5 | 74237,530 | | 1,678 | ,097 |
| | Receivable Turnover | 41840,041 | 1698,861 | ,935 | 24,628 | ,000 |

a. Dependent Variable: Net Income

APPENDIX

Regression

Y=Net Income ; X=Operational Costs

Variables Entered/Removed^b

| Model | Variables Entered | Variables Removed | Method |
|-------|--------------------------------|-------------------|--------|
| 1 | Operational Costs ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: Net Income

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,991 ^a | ,983 | ,983 | 238983,220 |

a. Predictors: (Constant), Biaya Operasional

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|----------|-------------------|
| 1 | Regression | 3E+014 | 1 | 2,862E+014 | 5011,697 | ,000 ^a |
| | Residual | 5E+012 | 88 | 5,711E+010 | | |
| | Total | 3E+014 | 89 | | | |

a. Predictors: (Constant),Operational Costs

b. Dependent Variable: Net Income

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-------------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 51284,362 | 27564,140 | | 1,861 | ,066 |
| | Operational Costs | 3,41E-006 | ,000 | ,991 | 70,793 | ,000 |

a. Dependent Variable: Net Income

APPENDIX

Regression

Y=Net Income ; X₁=Inflation, X₂=Exchange Rate, X₃=Receivable Turnover, X₄=Operational Costs

Variables Entered/Removed^b

| Model | Variables Entered | Variables Removed | Method |
|-------|--|-------------------|--------|
| 1 | Costs Operational, Exchange Rate, Inflation, Receivables Turnover ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: Net Income

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | ,993 ^a | ,986 | ,985 | 219663,521 | ,588 |

a. Predictors: (Constant), Operasional Costs, Exchange Rate, Inflation, Receivable Turnover

b. Dependent Variable: Net Income

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|----------|-------------------|
| 1 | Regression | 3E+014 | 4 | 7,179E+013 | 1487,799 | ,000 ^a |
| | Residual | 4E+012 | 85 | 4,825E+010 | | |
| | Total | 3E+014 | 89 | | | |

a. Predictors: (Constant), Operasional Costs, Exchange Rate, Inflation, Receivable Turnover

b. Dependent Variable: Net Income

Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|---------------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|--------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 650159,8 | 574807,2 | | 1,131 | ,261 | | |
| | Inflation | 100260,8 | 27639,777 | ,113 | 3,627 | ,000 | ,171 | 5,844 |
| | Exchange Rate | -134,945 | 72,576 | -,050 | -1,859 | ,066 | ,226 | 4,421 |
| | Receivable Turnover | 1412,908 | 2038,695 | ,032 | ,693 | ,490 | ,080 | 12,515 |
| | Operational Costs | 3,16E-006 | ,000 | ,920 | 18,282 | ,000 | ,065 | 15,289 |

a. Dependent Variable: Net Income

Coefficient Correlations^a

| Model | | | Operational Costs | Exchange Rate | Inflation | Receivable turnover |
|-------|--------------|---------------------|-------------------|---------------|-----------|---------------------|
| 1 | Correlations | Operational Costs | 1,000 | ,168 | -,458 | -,950 |
| | | Exchange Rate | ,168 | 1,000 | -,829 | -,140 |
| | | Inflation | -,458 | -,829 | 1,000 | ,359 |
| | | Receivable turnover | -,950 | -,140 | ,359 | 1,000 |
| | Covariances | Operational Costs | 2,99E-014 | 2,12E-006 | -,002 | ,000 |
| | | Exchange Rate | 2,12E-006 | 5267,282 | -1663157 | -20761,453 |
| | | Inflation | -,002 | -1663157 | 8E+008 | 20243768,7 |
| | | Receivable turnover | ,000 | -20761,5 | 2E+007 | 4156276,455 |

a. Dependent Variable: Net Income

Collinearity Diagnostics^a

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | |
|-------|-----------|------------|-----------------|----------------------|-----------|---------------|---------------------|------------------|
| | | | | (Constant) | Inflation | Exchange rate | Receivable turnover | Operational Cost |
| 1 | 1 | 3,652 | 1,000 | ,00 | ,00 | ,00 | ,00 | ,00 |
| | 2 | 1,280 | 1,689 | ,00 | ,00 | ,00 | ,02 | ,01 |
| | 3 | ,053 | 8,281 | ,00 | ,03 | ,00 | ,50 | ,36 |
| | 4 | ,015 | 5,815 | ,02 | ,32 | ,00 | ,46 | ,61 |
| | 5 | ,001 | 9,091 | ,97 | ,64 | 1,00 | ,01 | ,02 |

a. Dependent Variable: Net Income

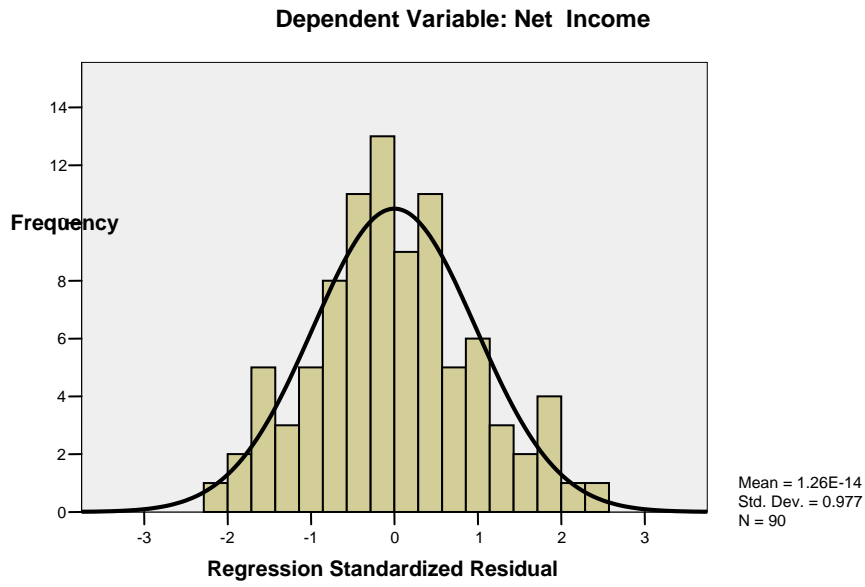
Residuals Statistics^a

| | Minimum | Maximum | Mean | Std. Deviation | N |
|-----------------------------------|-----------|----------|-----------|----------------|----|
| Predicted Value | -19684,0 | 1E+007 | 843389,2 | 1796242,861 | 90 |
| Std. Predicted Value | -,480 | 5,103 | ,000 | 1,000 | 90 |
| Standard Error of Predicted Value | 40104,906 | 197519,6 | 47284,495 | 21209,548 | 90 |
| Adjusted Predicted Value | -22080,0 | 9879596 | 844751,7 | 1793211,710 | 90 |
| Residual | -949222 | 776717,8 | ,00000 | 214670,51551 | 90 |
| Std. Residual | -4,321 | 3,536 | ,000 | ,977 | 90 |
| Stud. Residual | -4,700 | 3,621 | -,004 | 1,021 | 90 |
| Deleted Residual | -1123089 | 814501,5 | -1362,51 | 235337,96057 | 90 |
| Stud. Deleted Residual | -5,432 | 3,914 | -,007 | 1,082 | 90 |
| Mahal. Distance | 1,978 | 70,972 | 3,956 | 8,124 | 90 |
| Cook's Distance | ,000 | ,809 | ,021 | ,088 | 90 |
| Centered Leverage Value | ,022 | ,797 | ,044 | ,091 | 90 |

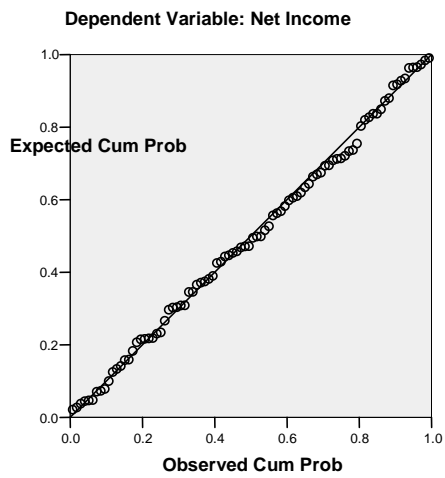
a. Dependent Variable: Net Income

APPENDIX

Histogram

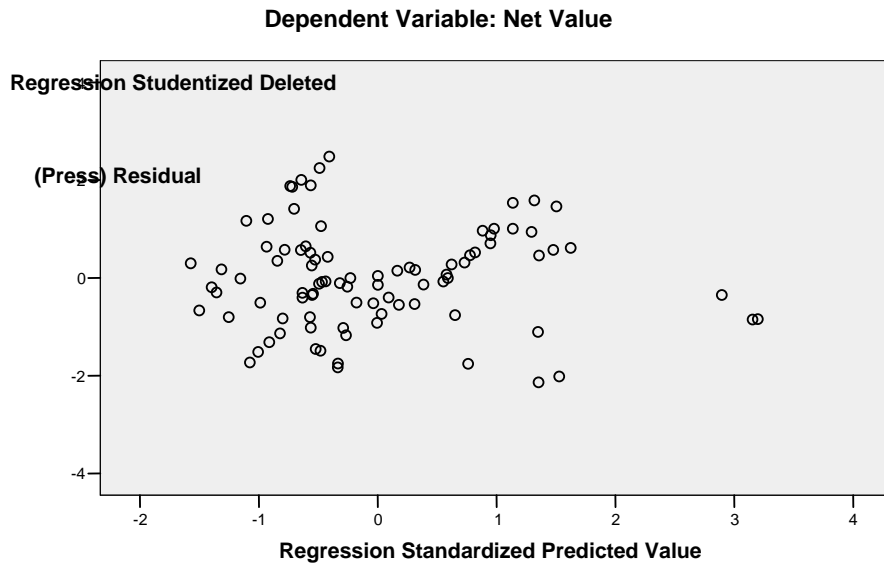


Normal P-P Plot of Regression Standardized Residual



APPENDIX

Scatter plot



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BIBLIOGRAPHY

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