# THE EFFECT OF COMPANY'S FUNDAMENTAL FACTORS ON THE STOCK PRICE IN LQ 45 

A THESIS<br>Presented as Partial Fulfillment of the Requirements to Obtain the Bachelor Degree in Accounting Department



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Yogyakarta, August 29, 2001
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Yogyakarta, July 2005

Indri Susanti

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Language Advisor :


## CHAPTER I

## INTRODUCTIONS

### 1.1. Background of the Problem

In business practices, the source of financing is obtained in two ways, i.e. internal and external sources of financing. The later refers to the form of financing which is accomplished through the source outside the company, such as stock capital, participant capital, credit from bank, credit from seller, obligation credit, insurance credit, etc. The former is achieved through the depreciation of the fixed asset (Bambang Riyanto: 1995).

The external financing is obtained in the stock market through "go public' activity, i.e. by selling the stocks to public. The stock market represents the alternative place for the company to gain the fund from society (investor) to extend its efforts, to afford the new investment and to support other corporate activities in which the additional fund is required. Issuing some of its shares to the society, the company shifts to the public company.

The development of stock market which gives rise to the ease in investments and also assures a level of advantage attract investors to invest in the form of security ownership. Investors are more likely to channel their fund through the stock market when they consider that their investment is secure. This feeling of secure comes from clear, genuine and timely information.

As a result, there is a demand on the availibility of information concerning the financial statement, used as the basis of investment decision making by investors in the stock market. An information is assumed informative when it alters the belief among the decision makers. The belief in the information, such as the financial statement, alters the price through the change in the securities demand and supply.

The decision a company makes in listing in the stock market bears some consequences which must be addressed by the company management. Given that the company has changed to the public company, the public including investor, governmental and also the society have the interest to know and moniter the company performance.

The importance of fundamental and technical analyses in the stock decision is increasingly recognized in the sluggish stock market condition. Along with the hypothesis of efficient capital market, the fundamental analysis is adopted to assess the acceptability of stock price, using some financial ration approach slich as return on asset (ROA), return on equity (ROE), dividend pay out ratio, debt to equity ratio (DER), book value equity per share and beta.

Return On asset (ROA) provides the information on the management ability in using company's asset to reach a certain level of profitability. Value of return on equity (ROE) shows the extent of management ability in using equity of company to reach the certain level of profitability. The Ratio of Dividend pay out gives the information about
level of company profit which is paid to the stockholder in the form of dividend. Debt To equity ratio (DER) shows the capital structure used by the management to run the business. Ratio of book value equity per share shows the book value of company share, that is, total asset subtracts with the total liabilities for every sheet of share and beta represents the measurement of systematic risk of a security or portfolio relative to the market risk.

Among research which have been conducted by former researcher about the effect of financial ratio to the stock price, the research on the effect of profitability and financial leverage (in addition to non-financial research) on the initial is conducted by Trisnawati (1996). The financial ratio such as EPS, rate of return on asset is addressed in this research. The result indicates that there is no significant correlation between financial information at prospectus and the initial return.
$O^{\prime}$ Conner (1973) tested the benefit of 10 financial ratios in predicting the share. This result, however, shows that the financial ratios do not impose the significant effect. Ou and Penman tested the benefit of the financial statement analysis in predicting the share profitability and used 68 financial ratios. It suggests that the accounting information (financial ration) contains the fundamental information which is not reflected in the stock price.

Silalahi (1991), analyzed some factors influencing the stock price change in 38 companies listed in the Jakarta Stock Exchange for the period of 1989 to 1990 . He indicates that the rate of return on total assets, dividend
pay-out ratio, volume of share commerce, and the interest rate of deposits jointly influence the change in the stock price. Furthermore, he indicates that the ROA has the most dominant influence.

Sulaiman (1995) analyzed the factors influencing the stock price of food and beverage company in the Jakarta Stock Exchange indicating that the return on assets (ROA), dividend pay-out ration (DPR), financial leverage, growth rate, liquidity, structure influence the stock price. Partially, return on assets (ROA), growth rate, liquidity, interest rate have a significant influence on the stock price.

Leki (1997) examined the effect of fundamental variable from the technical variable on the stock price in the heavy equipment and allied product industry which go public for the period of 1991-1996 in 10 companies as the sample. The result showed that fundamental and technical variables jointly influence the stock price. The fundamental and technical variahles involve return on investment (ROI), dividend pay-out (DPO), interest rate, liquidity, volume of stock trade, past stock price and capital gain / loss. The partial test showed that ROI, past stock price and capital gain/loss strongly and significantly influence the stock price.

Based on the above explanation, this research is aimed at reexamining the factors influencing the share price and also the factor which dominantly influence the stock price in the Indonesian companies. Thus the title of the research is to be taken "The effect of Company Fundamental Factor on the stock price in LQ $45 "$.

### 1.2. Formulation of the Problem

The questions put forward are as follows :

1. Do liquidity ratio, activity ratio, financial leverage ratio and profitability ratio have influence on stock price in LQ 45 simultaneously?
2. Which factor dominantly influences the stock price in LQ 45 individually?

### 1.3. The objectives of Research

This research is aimed :

1. To examine to what extent liquidity ratio, activity ratio, financial leverage ratio and profitability ratio influence the stock price in LQ 45.
2. To identify factors, among the factors identified above, which dominantly influence the stock price in LQ 45.

### 1.4. Benefit of the Research

1. To practitioners, this research is expected to widen the insight concerning the stock exchange and facilitate the investment decision.
2. To academicians, results of this research serve as the reference materials to comprehend the stock characteristics in Indonesia.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

### 2.1. Theoretical Review

### 2.1.1. Definition of Capital Market and General Stock Market

A capital market is defined as a market which shares the long-term finance instrument (or securities) which can be traded, in the form of both debt and equity, published by government, public authorities and private enterprise.

The reason of capital market development is because it has some appeals. Firstly, it is assumed that, in addition to banks, a capital market is an alternative of fund collecting. Capital market allows the company publish the security which is in the form of letter of debt (bond) and or stock. Thereby, the company prevents itself from higher debt to equity ratio in order to make the cost of capital of the firm is no longer minimal. Secondly, capital market enables all investors have various investment choices in reference to their risk preference, so that it enables them to form the portfolio, in line with the amount they are ready to account and the level of profit they want to achieve.

Capital market is differentiated into two; primary market is a market for first published and offered stock in the capital market, while the secondary market is a market for the existing shares and they have been traded in the stock exchange.

Capital market represents the meeting of supply and demand on the long-term fund. As a result, the efficacy of capital market is influenced by some factors, for example:
a. Security supply

This factor means that many companies publish securities in capital market. A major concern related to the security supply involves the number of companies in a state needing fund for the profitable investment and the willingness of companies to comply with the full disclosure conditions required by the capital market.
b. Security Demand

It entails that there must be society members with a large amount of money to buy the offered security.
c. Condition of politics and economics

These factors influence the supply and demand of securities.
d. Law and Regulation Requirements.
e. Role of capital market supporting institutes
f. The institutes including BAPEPAM, stock exchange, public accountant, underwriter, commendation sponsor, notary, law consultant, clearing institute are supposed to work professionally and can be relied on so that the activities of emission and transaction in stock exchange take place quickly, efficiently and reliably.

As noted previously, it is assumed that long-term security commerce takes place in the capital market, while its commercial activity is conducted in stock market.

The stock exchange represents the concrete form of capital market. In the stock exchange, investor, either individual or company buys and sells the other stock or share. There are some definitions of stock exchange, as follows:

Stock exchange represents the company whose main service is to organize the security commercial activity in the secondary market (Suad Husnan, 1994: 24). Furthermore, he stated that the stock exchange is a meeting place involving an electronics system without organized meeting place and is used to carry out the meeting traded transaction or stock commerce (Suad Husnan, 1994).

### 2.1.2. Stock

### 2.1.2.1 The Definition of Stock

There are some definitions of share, cited as follows:
According to Nopirin, Share Represent a rights to pay a certain amount of money in the future and gives a revenue in the form of dividend to its owner. (Nopirin, 1992 : 6). Share is an evidence of taking part or participant in a Holding Limited (Bambang Riyanto, 1995 : 240).

Based on the above definitions, a conclusion can be drawn that in general share represent marketable securities issued by a holding limited company (or refers to as emitent), suggesting that the share owner is also an owner of the company. Thereby, if someone (investor) buys the share, he or she automatically becomes the owner of the company.

Stock is grouped under the marketable securities giving a fixed result, thus its pricing remains difficult to determine. It pays attention the importance of investor and company, also pays attention the intern and extern factor of a company.

Sereh (1997) stated that conducting a better share valuation requires data in the form of
a. Audited Financial statement of company in the last years (the longer the better). By analyzing this financial statement, the past performance of a company is better known, because the audited financial statement is conducted by an independent public accountant.
b. Company's financial projection in the future (usually a company presents the projection for five years). The projection figure serves as a standard in analyzing the future financial statement.
c. Assumptions related to economics prospect, the industrial sector in which the company operates, and also the prospect of the company itself.

Price of a company share should not be determined recklessly. When the company is being established, the share price is reflected from the sum of rupiahs (equity) per share. As soon as the company operates, and is well-established, the company starts to yield in the form of cash dividend, bonus stock. trade mark, goodwill, earning power. The same is true for the current and non current asset.

Factors which trigger the increase in the share price, according to Sereh (1987) are:
a. Factors measured with numbers : Profit obtained in the last several years, Portion of retained earning, and Increase in the company's fixed asset.
b. Factor which cannot be measured with numbers : Prospect of company's business in the future, Trade Mark, goodwill, and Management quality.

### 2.1.2.2. Method of Share Assessment

Share Price intrinsically represents the level of sacrifice which must be done by each investor in taking part in company. This price will change in line with supply and demand. The price level is influenced more by considerations made by buyer or seller organizing the transaction in the stock exchange.

Normative goal which is achieved by the company is to maximize the company's value which determines the stock price change in the capital market. The increase in share price means the company's value enhances which, in turn, influences the stockholder's prosperity. The higher the stock price, the higher the equity value of the stockholder (Horne, 1994).

In making decision to buy or sell the shares, an investor considers the possibility of profit gains and level of risk burden he/she must
account on. It is generally understood that share investment represents the investment alternative which involves the higher risk. As a consequence, an investor has to be offered by the higher level of profit when encounters a high risk investment.

In general, a rational investor makes the decision to buy or sell the share based on feasibility analysis of the stock price in reference to the information obtained. Jones (1991), argues that investors frequently relate the intrinsic value of share to current market price. If the intrinsic value is higher than market price, the share is considered undervalued, and the share is more likely to purchase or retain when it has already been achieved. In contrast, when the intrinsic value of the share is lower than its market price, the share is considered overvalued and this share is unlikely purchased or it is sold when it has been accomplished. When the intrinsic value is equal to its market price, the share assessed is considered correct and usually there is no transaction over to the share.

In general, there are two approaches adopted to assess the share price; technical and fundamental approaches. Usman (1990) explains that technical approach believes that the investor is non rational so that capital market represents the reflection of mass behavior, whereas the fundamental approach starts from the basic assumption that an investor is a rational human being so that they try to learn the relation between the price and company conditions. This leads the proponent of fundamental approach to base their stock price analysis on the fundamental elements
(the internal element of company) to estimate the intrinsic value of the share. The basic argument of this approach is that the share price is equal to intrinsic value of the share or equal to the discounted value of revenue flow which is obtained in the future (divident and capital gain).

Jones (1991) divides the basic approaches of fundamental follower in estimating the share price into two;
a. Present Value Approach.

This classical method is often adopted to estimate the intrinsic value, where the value of a security can be estimated with a present value process involving the revenue capitalization (discounting) or in other words, the current value of security with discounted from the cash flow which is expected to be accepted by the investor.
b. Price Earning Ratio Approach.

The carning multiplier or price earning ratio approach assumes that the current stock price represents the net revenue of each share and price earning ratio, so that price earning ratio is estimated by dividing the current share price by the net revenue of each share. Implementing this approach for estimating the stock price, the investor should estimate the net revenue and the future price earning ratio.

Based on this approach, it is concluded that the intrinsic value of share is shaped by the cash flow and risk factor. The investment risk of share depicts the variability of cash flow to be accepted. Therefore, every
decision to buy or sell the share in made in accordance to the trade-off between the risk and the expected amount of revenue (Jones, 1991).

The way of share valuation is explained further, as follows;
a. Concept of Share Price Valuation

The valuation is based on the estimation of present value of cash flow of a company revenue. In general, the present value dividend in the n -th year is:

$$
D=\left\{D n /(1+r)^{n}\right\}
$$

If investor wishes to hold the share during n years, the formula is as follows (Suad Husnan, 1994 : 271) :

Po $\left\{\Sigma \mathrm{D} /(1+\mathrm{r})^{\mathrm{t}}\right\}+\mathrm{Pn} /(1+\mathrm{r})^{\mathrm{n}}$
Where:
$\mathrm{P}_{0}=$ Share Price in the 0 -th year
$\mathrm{Pn}=$ Share $\operatorname{Price}$ in the n -th year
$\mathrm{D}=$ distributed Dividend
$r=$ the profit level which is considered as reasonable by investor
$\mathrm{t}=$ period

The formula conveys that the current share price represents the present value of revenue to be accepted by investor in the future. The reasonable level of profit is used to estimate the present value. The feasibility depends heavily on the investment risk.
b. Model based on the Cash Flow

1) Model with the constant growth

One of the simple models which is widely used is the model with the constant growth. The adopted assumptions are :
(a) the company maintains the constant dividend pay out ratio (i.e., the portion of profit distributed as dividend).
(b) Every profit which is re-invested achieves the same level of profit each year.
(c) As a result, EPS ( Earning per share) and DPS ( Dividend per share) will increase with the constant percentages each year.The next assumption is that $r>g . r$ and $g$ represent the level of profit and growth, respectively. If company is able to use the fund obtained from profit advantageously, the company does not necessarily distribute the profit as dividend. If so, the company's business is exceptionally profitable and possibly invites other investors to enter the business. As a result, it is difficult to achieve the profit level of re-investment $(=R)$ which is much more higher than $r(t h e ~ l e v e l ~ o f ~$ profit conditioned by investor). If the r value is not much bigger than $r$ when $b$ ( proportion of the
retained earning) smaller than 1 ( 1 means company does-not distribute its profit at all), it is-more likely that $r$ is smaller than $g$.
2) Model with Two Growths

This model represents the extension of the constant growth model. Growth changes after a specific period of time. Growth at the first period is considered as higher than the next period of growth $(\mathrm{gl}>\mathrm{g} 2)$ and that goes over time. For example, dividend growth of 5 year period is estimated at $20 \%$ and the next period will only achieve $10 \%$ increase. The share price is estimated by the following formula (Suad Husnan, 1994 : 277):

$$
P_{o}=\sum_{t=1}^{S} D_{o} \frac{(1+0,20)^{t}}{(1+r)}+\sum_{t=6}^{\infty} \frac{D_{s}(1+0,10)^{1-5}}{(1+r)^{t}}
$$

Where :
$\mathrm{Po}=$ the current share price
Do $=$ Dividend in the 0-th year
$\mathrm{t}=\mathrm{t}$-th year
$r=$ the level of profit considered reasonable by investor
D5 $=$ Dividend in the $5{ }^{\text {th }}$ year

The second term of right side of the equation can be simplified inte $6 /(r-0,10)$. In this case $G_{6}=D_{5}(1+0,10)$. The value of $D_{6} /(r-0,10)$ is achieved in the $6^{\text {th }}$ year. To calculate its present value, we multiply it by ( $1 .(1+r) 6)$. In consequence, the above equation is written as follows (Suad Husnan, 1994:277):

$$
P_{0}=\sum_{r=1}^{5} \frac{D o(1+0,20)}{(1+r)^{1}}+\frac{D G}{(r-0,1)}+\frac{1}{(1+r)^{G}}
$$

3) Model with three periods of growth

This model represents the extension of model with two growth, using the additional scenario. The model assumes there periods;
(a) Early Period, the period in which the profit growth (and dividend) is the highest among the previous periods.
(b) Transitional period, this period shows the duration in which the growth in the early period finally goes down to normal. The decrease of growth during this transitional period is assumed in linear way Everlasting constant Growth period forever, it is assumed that the growth has come to normal and will take place perpetually. For example, the growth of the
early period is $20 \%$ per year and lasts for 5 years. The transitional period is estimated to take place during 3 years, and in the normal period, dividend is estimated equal to $14 \%$ per year perpetually. Because in period 1, the dividend growth is equal to $20 \%$ and finally decrease to $14 \%$ in period 3 hence during 3 year in period 2 the decrease is $6 \%$, thereby the decrease is equal to $2 \%$ each year. This means the growth of $6^{\text {th }}$ year is $18 \%$. The growth of $7^{\text {th }}$ and $8^{\text {th }}$ years are equal to $16 \%$ and $14 \%$, respectively. The growth level takes place everlastingly.
(c) Cross Sectional Regression Model

Many security analyses adopt other approaches, using such kind of profit multiplication ratio to estimate the share price. The widely used ratio is Price Earning Ratio ( PER). One of factors influencing PER is the dividend growth ( profit). The higher the dividend growth the higher PER, all factors being equal. The companies operate in the growth phase have the higher PER compared to those operate in established industry. It follows that a way of estimating PER is by relating it to the growth. If the PER values are plotted on the vertical axis and the
growth value on the horizontal axis, the following figure results:


Figure 1. The relation between PER and Growth Level

One of the models which relates PER to the estimated profit level. The points plotted in figure are estimated with the regression equation and the following results is obtained : PER $=4+2.3$. $($ growth). Thereby, if a share is estimated to have the growth equal to 10, hence the estimated PER equals to $4+2.3(10)=27$. When the share is offered with the PER below 27, the share is potentially bought and in contrast, with the PER is higher than 27, it is likely that short selling is done to the share.
(d) The developed model

The value of company carning is adopted in calculating the fundamental or intrinsic value of share.

One of the popular approaches which uses the earning value to estimate the intrinsic value is PER (Price Earning Ratio). PER indicates share price to earnings ration. This ratio shows the amount the investor valuates the price from share on the earnings multiplication. For example the value of PER is 5 . This indicates that the share price represents the multiplication of 5 times company earnings. For example, earnings being used is of annual earnings and all earnings is distributed in the form of dividend thus the value of PER equivalent to 5 shows the duration of share purchase to achieve the return of the same amount is within 5 year. ( Jogiyanto, HM, 2000).
(e) Model based on the fundamental factors.

A Fundamental analysis represents a study examining the matters related to finance of a business with the purpose of understanding the basis nature and operational characteristics of public enterprise which publish the common share. The fundamental analysis tries to estimate the Share Price in the future by (i) estimating the fundamental factors influencing Share Price in the future, and (ii) applying the variable
relations so that the share price estimate is obtained.
This model is referred to as Share Price Forecasting
Model (Suad Husnan, 1998 : 474).


The traditional security analysis generally uses ' top down'. Stock/ security ( Securities Analysis) analysis is referred to as Equity analyses, covering three steps; Economic, Industrial, and Company analyses.

## (f) Technical analysis

The technical analysis is aimed at estimating the Share Price by examining its price change in the past. The analysis assumes that (i) Share Price reflects the relevant information, (ii) the information is shown by changes in price in the past, and (iii) changes in share price follow a recurrent pattern. The analysis relies on changes in share price in the past. Hence the major analysis tools are graphs or charts (Jogiyanto H.M, 2000).

### 2.1.3. Efficient Capital Market Hypothesis

The efficient capital market hypothesis involves the understanding that price and stock profit level in the capital market reflect various relevant information. The new information in a particular efficient capital market will be immediately reflected in the price and forms a hierarchy of reasonable share profit level in the capital market. The faster new information is reflected in the price security.

Jogiyanto (1998) mentions that in 1970, Fama developed a theory related to category of capital markets based on the level of efficiency;
a. Weak form Market efficiency capital market.

Market is said to be a weak form efficiency when the price of securities fully reflects information of share price and commerce
volume data in the past. When the efficient market is weak shapely, the past values cannot be used to predict the present price. Thus, the investor cannot use the past information to obtain the abnormal advantage.
b. Semi-strong form efficiency capital market

A market is considered as semi strong efficient, when the security prices fully reflect all information publicized, including the information stated in financial statement of the company emitent.
c. Strong form efficiency capital market

A market is deemed to be efficient in the strong form when the security prices reflect all told efficient in the strong form if the price security fully expresses all available information, including private information.

In the next development, Fama made further development in the category of market efficiency by making some changes in the observation method and analyses on the capital market efficiency. Two new analysis methods being used were the return predictability and event study.

Return predictability is an analysis method developed by Fama to determine whether a capital market has reached the weak form of efficiency. Where as the event study is adopted to include a capital market into the semi-strong form of efficiency.

To Fama, in one particular capital market which has been efficient in the form of semi-strong, announcement of information publicized is
immediately used by investors as a basis to change their investment decision and this change in decision made by investors is reflected in the reasonable price of profit level of share investment.

### 2.1.4. Stock LQ 45

LQ 45 index consists of 45 shares with high market liquidity and capitalization. Shares in LQ 45 index have to fulfill the criteria and pass the selection as follows (Maulani,2003):

1. Listed in 60 tops in the total share transaction in the regular market (average of transaction value during the last 12 months),
2. The ranking is based on the market capitalization average during the last 12 months,
3. Listed in Jakarta Stock Exchange within 3 months,
4. The company's finance performance and growth prospect, and
5. The frequency and the total days of transaction of regular market.

### 2.2.Theoretical Framework

Among research which have been conducted by former researcher about the effect of financial ratio to the stock price, the research on the effect of profitability and financial leverage (in addition to non-financial research) on the initial is conducted by Trisnawati (1996). The financial rati, such as EPS, rate of return on asset is addressed in this research. The
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### 2.3.Research Hypothesis

The hypothesis development is made on the basis of literature review and previous paper research related to fundamental factors influence of company on the stock price.

According to efficient stock market hypothesis, stock prices reflect all important informations related with fundamental conditions of companies that their stocks are traded on stock market. Liquidity ratio, activity ratio, financial leverage ratio and profitability ratio are parts of important information that can be used as a performance indicators of companies. Therefore, it can be understood that ail of ratios including liquidity ratio, activity ratio, financial leverage ratio and profitability ratio have a relation or an effect toward stock prices. 13ased on that assumption, the first hypothesis can be formulated as follows:
$\mathrm{Hal}=$ iiquidity ratio, activity ratio, financial leverage ratio and profitability ratio simultaneously influence the stock price in LQ 45

On this research, the liquidity ratios involve two ratios, current ratio and quick ratio. The current ratio and quick ratio reflect fundamental condition of company on its ability to cover all current liabilities. For company management or investors, this ratios is very important because continuity of company operational will be depended on this ability. The company will not operate normally if it has current liabilities that cannot be covered immediately.

The activity ratios include average collection period, inventory turnover, fixed asset turnover and total asset turnover. The average collection period, inventory turnover, fixed asset turnover and total asset turnover ratios reflect fundamental condition of company on its ability to use all company's assets that consist of current assets and fixed assets for creating profit.

The financial leverage ratios include debt ratio, debt to equity ratio, debt to total and times interest earned. The debt ratio, debt to equity ratio, debt to total and times interest earned ratio reflect fundamental condition of company on structure of its capital that consist debt and equity. The debt that has more contribution on company's structure of capital show that its operation support with more debts. The problem is how far company's ability maximizes its performance to create profit and cover all of its debt.

The profitability ratios include gross profit margin, operating profit margin, net profil margin, returri on investment and return on equity. All of ratios on profitability ratios show company's ability on creating profit. That ability is very important because protit is main objectives for company. It can
be understood that without good profit, a company cannot run well. Based on that assumption, the second hypothesis can be formulated as follows:

Ha2 $=$ liquidity tatio, activity ratio, financial leverage ratio and profitability ratio individually influence the stock price in LQ 45

The liquidity ratios that reflect fundamental condition of company on its ability to cover all current liabilities will have a more important information for management and investors. It is based on assumption that continuity of company operational will be depended on this liquidity aspect. The company will not operate normally if it has current liabilities that cannot be covered soon. Besides, there is a big potential problem if a company cannot cover all its current liabilities that is a bankruptcy risk. Based on that assumption, the third hypothesis can be formulated as follows:
$\mathrm{Ha} 3=$ Factor of liquidity ratios predominantly influences the stock price in LQ 45


## CHAPTER III

## RESEARCH METHODOLOGY

### 3.1. Determination of Research Samples

The research population is annual financial report of go public company which have been published and listed in Jakarta Stock Exchange. The deternination of Jakarta Stock Exchange is based on assumption that Jakarta Stock Exchange is the biggest stock market in Indonesia. Besides that, other considerations of choosing Jakarta Stock Exchange as a source of data is because the data provided are complete and it is easy to get the data from Jakarta Stock Exchange.

The number of companies listed on Jakarta Stock Exchange are 298 emitens, consisting of farming sectors ( 8 emitens), minning sectors ( 6 emitens), manufactur sectors ( 144 emitens), property and real estate sectors (31 emitens), infrastructure, utilities and transportations sectors ( 13 emitens), financial sectors ( 49 emitens) and trading, services and investment sectors (47 emitens).

The emitens that will serve as research samples are emitens that are listed in Jakarta Stock Exchange and included as a part of LQ 45 index. According to the rules, LQ 45 index is determinated periodically within 6 months, therefore the research samples will be obtained from 12 emitens which are listed most constantly on LQ 45 index for period years 2001 2003.

### 3.2. Data Collecting Method

Financial ratio data and company's stock price analyzed are within years 2001-2003. The financial ratio calculation will be done based on company's financial repors published and accesible on Information Center of Capital Market - Jakarta Stock Exchange Corner.

### 3.3. Research Variables and Operational Definition

The operational definition for each of research variables are:

## a. Dependent Variable

The dependent variable on this research is stock price changes. The changes of stock prices will be analyzed from changes on stock prices which occurs as transactions on Jakarta Stock Exchange on years - $t$ compared with a previous year. Therefore, measurement of this variable used ratios scala formulated as follows:

Stock Prices Changes $=\frac{\mathrm{HS}_{\mathrm{t}}-\mathrm{HS}_{\mathrm{t}-1}}{\mathrm{HS}_{\mathrm{t}-1}} \times 100 \%$
Where :
$\mathrm{HS}_{\mathrm{t}}=$ Stock price on year -t .
$\mathrm{HS}_{1-1}=$ Stock price on year $\mathrm{t}-1$

## b. Independent Variable

The independent variable on this research is linancial ratios changes. The changes of financial ratios will be analyzed from changes on financial ratios on years - $\mathfrak{t}$ compared with a previous year. Therefore, measurement of this variable used ratios scala formulated as follows:

$$
\text { Financial Ratio Changes }=\frac{F R_{t}-F R_{t-1}}{F R_{t-1}} \times 100 \%
$$

The financial ratios used in this research are :

1. Liquidity Ratios, including current ratio and quick ratios.
2. Activity Ratios, including average collection period, Inventory turnover, fixed asset turnover and total asset turnover
3. Financial Leverage Ratios, including debt ratio, debt to equity ratio, debt to total and times interest earned.
4. Profitability Ratios, including gross profit margin, operating profit margin, net profit margin, return on investment and return on equity.


## (current assets - inventories) <br> 2. Quick ratio <br> Current Liabilities

b. Activity Ratios, such as :

(Annual credit sales/360)
Cost of Good Sold
2. Inventory turnover $=$

08 ?
Average Inventory
3. Fixed asset turnover $=$

4. Total Asset Turnover $=$

$\therefore$ Financial Leverage Ratios, such as :

1. Debt Ratio $=\frac{\text { Total Asset }}{\text { Long Term Debt }}$
2. Debt to Equity Ratio $=\frac{\text { Total Equity }}{\text { Long Term Debt }}$
3. Debt to Total $=\frac{\text { Tong term dcbt }+ \text { Capitalization ratio }}{\text { stockholders' equiti) }}$

## EBIT

4. Times Interest Earned =

Interest Charge
d. Profitability Ratios, such as :

2. The Basic Assumption Testing of Classical Regression

The regression model adopted undoubtedly shows the significant and representative relation or called as BLUE (Best Linear Unbiased Estimator). Therefore, the regression model has to fulfill the basic assumption of classical regression. The assumption suggests the absence of autocorrelation, heteroscedasticity, and multicolinearity symptom
among independent variables in the regression. The elaboration of the basic assumption testing of classical regression is as follows:

## 1) Autocorrelation ( serial correlation)

The estimation of linear regression model contains the assumption that there is no serial correlation among disturbance terms, that is :

$$
\operatorname{Cov}(e i, e j=0 i j)
$$

Factors influencing the occurrence of serial correlation shall be as follows:
(a) The observation data which is started from the inertia of ascending observation data influenced by the previous data.
(b) excluding the specific independent variable which previously influences the dependent variable.
(c) the inaccurate model

When the serial correlation symptom presents, the obtained variant residual ( error terms)is lower, resulting in the higher R2. In addition, the hypothesis testing by using $t$-test and $F$ test will be misleading. To test if the result of regression estimation contains the serial correlation among its disturbance terms, Durbin Watson Statistic is adopted;

$$
D W=\frac{\sum_{t=2}^{N}\left(e_{t}-e_{t .2}\right)^{2}}{\sum_{t=1}^{N} t_{t}^{2}}
$$

$\mathrm{t}=\mathrm{times}$

The estimation value of regression model using D.W the hypothesis contexts is as follows :
(a) (4-DW.L)<DW $<4 \quad=$ negative autocorrelation
(b) $(4-\mathrm{DW} . \mathrm{U})<$ DW,(4-DW.L) $=$ inconclusive
(c) $2<\mathrm{DW}<(4-\mathrm{DW} . \mathrm{U})=$ no autocorrelation found
(d) DW.U $<$ DW $<2$ = no positive autocorrelation
(e) DW.L<DW $<$ DW.U $=$ inconclusive
(f) $0<$ DW $<$ DW.L $=$ positive autocorrelation
where :
DW.U = maximum DW value
DW.L $\quad=$ minimum DW value
2) Heteroscedasticity

Heteroscedasticity, according to Wise Sritua (1993:31), refers to :
One of the main assumptions of classic linear regression model is that variant of each disturbance term limited by certain value regarding the independent variable is in form of constant equal to $\sigma^{2}$

$$
E\left(\sigma_{1}^{2}\right)=\sigma^{2} i=1,2,3,4, \ldots, n
$$

Way of detecting :
There are various methods used to test the presence of heteroscedasticity situation in variant of error terms of a regression model. They involve Spearman Rank Correlation, Glejser, Goldfeld Quandt, Park, other Homogeneity-Variants Barlett, etc. Correlation Coefficient is adopted in this research.
3) Multicollinearity

Multicollinearity is a situation in which independent variable correlations are found. In this case, independent variables are not orthogonal. Orthogonal variables are independent ones which have the same correlation values so that the correlation coefficient of among these independent variable is equal to one. Hence, - the regression coefficient is incalculable - the value of standard error of each regression is infinite.

Way Of Detecting :
Adopting Partial Correlation Coefficients by estimating correlations among the independent variables. If the error probability of correlation coefficient is smaller than a certain significance level (significance of $5 \%$ ), a specific independent variable correlate with the other independent variable. When the error probability of correlation coefficient is higher than a certain significance level (the significance of $5 \%$, a particular independent variable does not correlate with the other independent variable

## 3. Analyze method

The analysis will use Multiple Linear Regression Equation to analyze effect of variables liquidity ratios, activity ratios, leverage ratios and profitability ratios towards stock price partially and simultaneously. The aralysis steps are detailed as follows:
a. Analyze effect of financial reports information like financial ratios towards stock price
b. Hypothesis examination:

1. The examination of coefficients partial regression using t test
2. The examination of coefficients simultaniously regression using

F-test.
c. Analyze effect of published financial report information towards stock price using analyze formulation. The method used is Multiple Linear Regression fomulated as follows:

$$
Y_{i}=b_{0}+b_{1} X_{1}+b_{2} X_{2}+b_{3} X_{3}+b_{4} X_{4}+b_{5} X_{5 i}+e_{i}
$$

where:

$$
\begin{aligned}
& \mathrm{Y}=\text { Stock Price. } \mathrm{i}=\text { to } 1,2,3,4, \ldots \ldots \mathrm{n} \\
& \mathrm{~b} 0 \quad=\text { Constant }
\end{aligned}
$$

$$
\text { b1.. } 5=\text { Regression coefficient calculable with } \mathrm{n}^{\text {th }} \text { data pair }
$$ obtained from the estimation

X1 = Liquidity Ratios
X2 = Activity Ratios
X3 3 Financial Leverage Ratios
X4 = Profitability Ratios
ei $=$ Residu Factor

The examination of Multiple Linear Regression will be done with statistic software SPSS for windows versi 10.

## CHAPTERIV

## DATA ANALYST

### 4.1. Data Description

In this research, - the researcher has examined toward four aspects that are assumed to have effect to company's stock price fluctuation, including liquidity aspect, activity aspect, financial leverage aspect and profitability aspect. The data used in this research can be described as follows:

- The comparison of liquidity aspect among 12 sampel companies is used to know about company's ability to fill its liabilities on short term. In this research, liquidity aspect is measured by Current Ratio and Quick Ratio.
- The activity aspect is used to measure how effective the asset is used by understanding the asset activities. On this research, performance of company's activities is measured using average collection period, inventory turn over, fixed asset turn over and total asset turn over.
- The Financial leverage aspect indicates rate of company's financial leverage. In this research, performance of financial leverage is measured using debt ratio and debt to equity ratio.
- The profitability aspect is used to measure company's ability on creating proiit related with sales volume. In this research, performance of company's profitability is measured using gross profit margin, operating profit margin, net profit margin, return on investment and return on equity.

In terms of liquidity aspect, performance of 12 companies can be explained as follows:

The highest Current Ratio (CR) value on year 2001 was created by Timah with value as 2,67 and the lowest Current Ratio (CR) was created by Multipolar with value as 0,59 . In 2002, the highest Current Ratio (CR) value was created by HM Sampoerna with value as 3,29 and the lowest Current Ratio (CR) was created by Multipolar with value as 0,79 . In 2003, the highest Current Ratio (CR) value was created by HM Sampoerna with value as 4,07 and the lowest Current Ratio (CR) was created by Citra Marga Nusaphala Persada with value as 0,66 .

The highest Quick Ratio ( QR ) value in year 2.001 was created by Kalbe Farma with value as 1,43 and the lowest Quick Ratio ( QR ) was created by Gudang Garam with value as 0,40 . In 2002, the highest Quick Ratio $(\mathrm{QR})$ was value created by Indosat with value as 1,59 and the lowest Quick Ratio (QR) was created by Gudang Garam with value as 0,38 . In 2003, the highest Quick Ratio (QR) value was created by Indosat with value as 2,19 and the lowest Quick Ratio (QR) was created by Gudang Garam with value as 0,40 .

In terms of activity aspect, performance of 12 companies can be explained as follows:

The highest Inventory Turnover (ITO) value in year 2001 was reached by Astra International with value as $\mathbf{9 6 , 9 3}$ and the lowest Inventory Turnover (ITO) was created by Gudang Garam with value as 17,82 . In 2002,
the highest Inventory Turnover (ITO) value was reached by Ramayana Lestari Sentosa with value as 123,78 and the lowest Inventory Turnover (ITO) was created by Timah with value as 19,70 . In 2003 , the highest Inventory Turnover (ITO) value was created by Multipolar with value as 182,34 and the lowest Inventory Turnover (ITO) was created by Timah with value as $22,55$.

The highest fixed asset turnover (FATO) value in year 2001 was reached by Multipolar with value as 13,15 and the lowest fixed asset turnover (FATO) was created by Citra Marga Nusaphala Persada with value as 0,38. In 2002, the highest fuxed asset turnover (FATO) value was created by Multipolar with value as 9,75 and the lowest fixed asset turnover (FATO) was created by Citra Marga Nusaphala Persada with value as 0,38 . In 2.003, the highest fixed asset turnover (FATO) value was created by Multipolar with value as 10,70 and the lowest fixed asset turnover (FATO) was created by Citra Marga Nusaphala Persada with value as 0,40 .

The highest total asset turnover (TATO) value in year 2001 was created by Matahari Putra Prima with value as 1,99 and the lowest total asset turnover (TATO) was created by Indosat with value as 0,23 . In 2002, the highest total asset turnover (TATO) value was created by Matahari Putra Prima with value as 1,57 and the lowest total asset turnover (TATO) was created by Citra Marga Nusaphala Persada with value as 0,28 . In 2003, the highest total asset turnover (TATO) value was created by Matahari Putra

The highest Gross profit margin (GPM) value in year 2001 was created by Indosat and Citra Marga Nusaphala Persada with value as 1,00 and the lowest Gross profit margin (GPM) was created by Astra International and Multipolar with value as 0,19 . In 2002, the highest Gross profit margin (GPM) value was created by Indosat and Citra Marga Nusaphala Persada with value as 1,00 and the lowest Gross profit margin (GPM) was created by Timah with value as 0,12 . In 2003, the highest Gross profit inargin (GPM) value was created by Indosat and Citra Marga Nusaphala Persada with value as 1,00 and the lowest Gross profit margin (GPM) was created by Gudang Garam dan Multipolar with value as $\mathbf{0 , 2 0}$.

The highest operating profit margin (OPM) value in year 2001 was created by Citra Marga Nusaphala Persada with value as 0,96 and the lowest operating profit margin (OPM) was created by Matahari Putra Prima with value as 0,04 . In 2002, the highest operating profit margin (OPM) value was created by Citra Marga Nusaphala Persada with value as 0,45 and the lowest operating profit margin (OPM) was created by Timah dan Matahari Putra Prima with value as 0,03 . In 2003, the highest operating profit margin (OFM) value was created by Citra Marga Nusaphala Persada with value as 0,45 and the lowest operating profit margin (OPM) was created by Matahari Putra Prima with value as 0,03 .

The highest net profit margin (NPM) value in year 2001 was created by Citra Marga Nusaphala Persada with value as 1,17 and the lowest net profit margin (NPM) was created by Kalbe Farma, Timah and Matahari

Putra Prima with value as 0,02 . In 2002, the highest net profit margin (NPM) value was created by Citra Marga Nusaphala Persada with value as 0,28 and the lowest net profit margin (NPM) was created by Timah with value as 0,01 . In 2003, the highest net profit margin (NPM) value was created by Citra Marga Nusaphala Persada with value as 0,35 and the lowest net pronit margin (NPM) was created by Matahari Putra Prima with value as 0,02 .

The highest return on investment (ROI) value in year 2001 was created by Citra Marga Nusaphala Persada with value as 0,31 and the lowest return on investment (ROI) was created by Kalbe Farma with value as $\mathbf{0 , 0 2}$. In 2002, the highest return on investment (ROI) value was created by HM Sam.pocrna with value as 0,17 and the lowest return on investment (ROI) was created by Timah and Multipolar with value as 0,01 . In 2003, the highest return on investment (ROI) value was created by Astra International with value as 0,16 and the lowest return on investment (ROI) was created by Multipolar with value as 0,02 .

The highest return on equity (ROE) value in year 2001 was created by Citra Marga Nusaphala Persada with value as 1,09 and the lowest return on equity (ROE) was created by Timah with value as 0,09 . In 2002, the highest return on equity (ROE) value was created by Astra International with value as 0,56 and the lowest return on equity (ROE) was created by Timah and Multipolar with value as 0,02 . In 2003, the highest return on equity (ROE) value was created by Kalbe Farma with value as 0,39 and the lowest return on equity (ROE) was created by Multipolar with value as 0,03 .

## b. Examination for Classic Assumption

The data of this research cover financial ratios on liquidity aspect, activity aspect, financial leverage aaspect and profitability aspect in period 2001-2003. Before the data are examined, the data are examined for classic assumption, including autocorrelation, multicollineraty and heterocedasticity.

The autocorrelation examination is used to ensure if there is dependency on the data, which means that data on a period is not affected by previous data. The multicollinearity examination is used to ensure if there is no correlation between independent variables. The heterocedasticity examination is used to ensure if values of dependent variables is varied on same measurement for high dependent variables and low dependent variables.

The result of classic assumption examination with Computer Statistic Programme SPSS for windows versi 10 and can be concluded as follows:
a. Autocorrelation Examination

The autocorrelation examination of the data will be examined using Dubin Watson Test. According to autocorrelation theory, a group of data stated has no autocorrelation if value of Dubin Watson is between 2 and $4-\mathrm{dU}$. The result of autocorrelation examination can be explained as follows:

Table 4.1
The result of Durbin Watson examination

| $R$ | $R$ square | Durbin Watson |
| :---: | :---: | :---: |
| 0,921 | 0,847 | 2,103 |

Result of examination as seen on table 4.1 shows that value of Durbin Watson is 2,103. According to DW table, the value of dL is 1,16 and dU is 1,80 . Therefore, the value of Durbin Watson which is 2,103 located between dU and $4-\mathrm{dU}(4-1,80=2,2)$, so that it can be concluded that there is no atocorelation between the data.

## b. Multicollincarity Examination

Multicollinearity exammination off the data are examined using correlation analysis. According to multicollinearity examination, a group of data stated has no multicollinearity if correlation valued $\leq 0,9$. How ever, if its correlation valued $>0,9$, it can be concluded that the data have multicollinearity. The result of multicollinearity examination can be explained as follow:

Result of examination as seen on appendices show that corelation value of financial ratios on liquidity aspect, activity, financial leverage and prolitability has correlation value $\leq 0.9$. Because of the correlation value $\leq 0,9$, so it can be said that between independent variable there is no multicollinearity.

## c. Heterocedasticity Examination

The heterocedasticity examination of researched data conducted using Spearman Rank Corelation. According to theory of heterocedasticity examination, if Spearman Rank Corelation results significant value $<0,05$, it can be concluded that the data have heterocedasticity. On the other hands, if its value is $>0,05$, it can be concluded that there is no heterocedasticity on the data. The result of heterocedasticity examination can be explained as follow:

Result of examination as seen on appendices shows that corelation between financial ratios on liquidity aspect, activity, financial leverage and profitability with unstandardized of residual has significant value as $>0,05$. So, it can be concluded that each of financial ratios has no heterocedasticity.

## d. Normality Examination

The data normality examination is conducted using graphic method. According to theory of normality examination, if the data distributed as balanced onside and inside trend path, it can be concluded that the data have a normal distribution (Ghozali, 2001:34). The result of normality examination can be explained as follow:

Table 4.2
The result of normality examination


Based on graphic it can be seen that data used in this research, which include data of financial ratios on liquidity aspect, activity aspect, financial leverage aspect and profitability aspect, are distributed as normal onside and inside trend path. Thus, it can be coricluded that the data have a normal distribution

### 4.2. Hypothesis Model Examination

The hypothesis examination model used in this research is Multiple Linear Regression. The Multiple Linear Regression is used to examine effect of independent variables including financial ratios on liquidity aspect, activity aspect, financial leverage aspect and profitability aspect toward dependent variable that is stock price. The result of multiple linear regression examination can be explained as follows:

## a. T test Examination

$T$ test is used to examine significancy of independent variables including financial ratios on liquidity aspect, activity aspect, financial leverage aspect and profitability aspect toward dependent variable, that is, stock price.

> If $t_{\text {test }}>t_{\text {table, }}$ it means that $H_{a}$ is accepted and $H_{0}$ is rejected
> If $t_{\text {test }} \leq t_{\text {table, }}$, it means that $H_{0}$ is accepted and $H_{a}$ is rejected

## Tabel 4.3

The result of test as individual ( T test)

| Independent Variables | $T_{\text {test }}$ | $T_{\text {tablic }}$ | Notes |
| :---: | :---: | :---: | :---: |
| Curreit Ratio | 2,453 | 1,697 | $\mathrm{H}_{a}$ is accepted |
| Quick Ratio | -4,976 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is accepted |
| Inventory Turn Over | 1,259 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is rejected |
| Fixed 4sset Turn Over | -1,058 | 1,697 | $\mathrm{H}_{4}$ is rejected |
| Total Assel Turn Over | 2,396 | 1,697 | $\mathrm{H}_{4}$ is accepted |
| Debt latio | 1,179 | 1,697 | $\mathrm{H}_{\mathrm{n}}$ is rejected |
| Debs to Equity Ratio | 0,242 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is rejected |
| Gross Profil Margin | 1,277 | 1,697 | $\mathrm{Ha}_{\mathrm{a}}$ is rejected |
| Operational Profit Margin | -0,299 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is rejected |
| Net Proilt Margin | 0,371 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is rejected |
| Return on Investment | 2,284 | 1,697 | $\mathrm{H}_{\mathrm{a}}$ is accepted |
| Returri on Equity | -2,663 | 1,697 | $\mathrm{H}_{4}$ is accepted |

Sources: Data Proceed

The data examination result of liquidity aspect on current ratio has $t_{\text {test }}$ as $2,453>t_{\text {tatel }}$ as 1,697 . Because of $t_{\text {test }}>t_{\text {table, }}$ it can be concluded that $H_{a}$ is accepted or current ratio has an effect to stock price. Quick ratio has $t_{\text {test }}$ as $-4,976>t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}>t_{\text {table, }}$, it can be concluded that $H_{a}$ is accepted or quick ratio has an effect to stock price.

The data examination result of activity aspect on inventory turn over has $t_{\text {test }}$ as $1,259<t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {table, }}$, it can be concluded that $H_{a}$ is rejected or inventory turn over has no effect on stock price. Fixed asset turn over has $t_{\text {test }}$ as $-1,058<t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {table }}$, it can be concluded that $H_{a}$ is rejected or fixed asset turn over has no effect to words stock price. Total asset turn over has $t_{\text {test }}$ as $2,396>$ $t_{\text {tabel }}$ as 1.697. Because of $t_{\text {test }}>t_{\text {table }}$, it can be concluded that $H_{a}$ is accepted or tctal asset turn over has an effect to words stock price.

The data examination result of financial leverage aspect on debt ratio has $t_{\text {test }}$ as $1,179<t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {table }}$, it can be concluded that $H_{a}$ is rejected or debt ratio has no effect to words stock price. Debt equity ratio has $t_{\text {test }}$ as $0,242<t_{\text {tabes }}$ as 1,697 . Because of $t_{\text {test }}$ $<\mathrm{t}$ table, it can be concluded that $\mathrm{H}_{\mathrm{a}}$ is rejected or debt equity ratio has no effect to words stock price.

The data examination result of profitability aspect on gross profit margin has $t_{\text {test }}$ as $1,277<t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {table }}$, it can be concluded that $H_{a}$ is rejected or gross profit margin has no effect to stock price. Operational profit margin has $\mathrm{t}_{\text {test }}$ as $-0,299<\mathrm{t}_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {tuble }}$, it can be concluded that $H_{a}$ is rejected or operational profit margin has no effect to words stock price. Net profit margin has $t_{\text {test }}$ as $0,371<t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}<t_{\text {table }}$, it can be concluded that $H_{a}$ is rejected or net profit margin has not an effect to stock price. Return on investment has $t_{\text {test }}$ as $2,284>t_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}>t_{\text {table }}$, it
can be concluded that $H_{a}$ is accepted or return on investment has an effect to words stock price. Return on equity has $\mathrm{t}_{\text {test }}$ as $-2,663>\mathrm{t}_{\text {tabel }}$ as 1,697 . Because of $t_{\text {test }}>t_{\text {table }}$, it can be concluded that $H_{a}$ is accepted or return on equity has an effect to stock price.

## b. F test

F test is used to examine significancy of independent variables which include financial ratios on liquidity aspect, activity aspect, financial leverage aspect and profitability aspect toward dependent variable, that is, stock price simultaneously.

If $F_{\text {test }}>t_{\text {table }}$, it means that $H_{a}$ is accepted dan $H_{0}$ is rejected
If $\mathrm{F}_{\text {test }} \leq \mathrm{t}_{\text {table }}$, it means that $\mathrm{H}_{0}$ is accepted dan $\mathrm{H}_{\mathrm{a}}$ is rejected

Tabel 4.4
The result of test simultaneously ( F test)

| Independent Variabel | $\mathrm{F}_{\text {test }}$ | $\mathrm{F}_{\text {table }}$ | Sig test | Note |
| :---: | :---: | :---: | :---: | :---: |
| CR, QR, ITO, FATO, <br> TATO, DR, DER, GPM, <br> OPM, NPM, ROI, ROE | 7,408 | 2,16 | 0,000 | $\mathrm{H}_{\mathrm{a}}$ is accepeted |

Sources: Data Proceed

The data examination shows that $\mathrm{F}_{\text {test }}$ as $7,408<\mathrm{t}_{\text {tabel }}$ as 2,16 . Because of $\mathrm{F}_{\text {test }}>\mathrm{F}_{\text {table, }}$, it can be concluded that $\mathrm{H}_{\mathrm{a}}$ is accepted or independent variables include Current Ratio (CR), Quick Ratio (QR), Inventory Turn Over (ITO), Fixed Asset Turn Over (FATO), Total Asset Turn Over (TATO), Debt Ratio (DR), Debt Equity Ratio (DER), Gross

Profit Margin (GPM), Operational Profit Margin (OPM), Net profit Margin (NPM), Return on Investment (ROI) and Return on Equity (ROE) simultaneously has an effect toward stock price. The significant value of $0,000(<0,05)$ shows that effect of that 12 independent variables toward dependent variable is significant or real.

That result indicates that investors use information about company's financial performance on investment decision, so value of stock price on market is reflection of company's fundamental condition, especialiy that related with financial aspect.

Based on individual analysis, it is obtained that Current Ratio, Quick Ratio, Total Asset Turn Over, Return on Investment (ROI) and Return on Equity (ROE) show that there is significant effect toward stock prices individually, while Inventory Turn Over, Fixed Asset Turn Over (FATO), Debt Ratio (DR), Debt Equity Ratio (DER), Gross Profit Margin (GPM), Operational Frofit Margin (OPM) and Net Profit Margin (NPM) do not show significant effect individually. This result can explain that the investors tend not to use all of financial parameters on decision making. There are other factors beside fundamental's company determination with financial ratios used as basics for stock investment.

Current Ratio and Quick Ratio are parameters showing how management can manage its financial so that it can manage its liquidity well. ROI as a profitability parameter indicates management ability to
create profit from asset optimalization owned by company, while ROE measures profitability and efficiency on capital.

From the writer's point of view, results for examination simultaneously show that there are effects among financial variables toward stock prices but they are not followed by result from individual examination which gives indication that Indonesian capital market is not yet efficient. The other important information like asset turn over, capital structure (Debt Ratio and Debt Equity Ratio) and profitability which are measured by gross profit margin, operational profit margin dan net profit margin do not show their effect toward stock prices, which reflects that both of ratios are not used by invetors on investment decision making. It can canse both of ratios do not show significant performance changes relatively for investors than other ratios.

According to efficient capital market hypothesis, usually is related to an understanding that stock price and stock return reflect all of relevant information. Every new information on efficient stock market will reflect on stock prices and create proper return quickly.

Therefore, if the reality like data examination shows a phenomenon which doєs not suit with efficient capital market hypothesis, it can be concluded that the stock market have not been efficient yet. It can be said that Indonesian capital market has been an efficient capital market but has weak form based on historical values which can not be used to
predict present value so that investors do not use historical information on investment decision making for today or future.

Beside analysis based on capital market efficiency, this result indicates that investor's investment preference in Indonesian will not always be based on matematic calculation contained in company financial report. According to theory about factors that cause stock price fluctuation like profit for previous years, retained earning and fixed asset increase. Sometimes investors deternine factors that can not be measure as quantitative, like company prospect on future, trade mark, goodwill and management quality.

Based on research results, it can be understood that there is a phenomenon showing that some ratios like liquidity ratio, activity ratio, financial leverage ratio and profitability ratio have influence on stock price. The result is similar with that of the research conducted by some previous researchers. For instance, Trisnawati's thesis (1996) which shows that there is no significant correlation between financial information at prospectus and the initial return. $O^{\prime}$ Conner (1973) tested the benefit of 10 financial ratios in predicting the share. This result, however, shows that the financial ratios do not impose the significant effect. Ou and Penman tested the benefit of the financial statement analysis in predicting the share profitability which suggests that the accounting information (financial ratio) contains the fundamental information which is not reflected in the stock price.

Silalahi (1991) examined and concluded that the rate of return on total assets, dividend pay-out ratio, volume of sharc commerce, and the interest rate of deposits jointly influenced the change in the stock price. Furthermore, he indicated that the ROA had the most dominant influence. Sulaiman (1995) analysis shows that the factors like the return on assets ( ROA ), dividend pay-out ration (DPR), financial leverage, growth rate, liquidity, structure influence the stock price. Partially, return on assets (ROA), growth rate, liquidity, interest rate have a significant influence on the stock price.

The differences of this research with the previous ones is on its research samples. The sample of this research includes 12 companies which are most frequently listed in LQ 45 during 2001 to 2003. Besides that, there are other differences in the use of variables which are classified based on liquidity aspects, activity aspects, financial leverage aspects and profitability aspects.

## CHAPTER V

## CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Conclusion

Based on test result, conclusion of this research can described as follows:

1. The liquidity ratio, activity ratio, financial leverage ratio and profitability ratio have influence to stock price in LQ 45 simultaneously. This is based on test result which show that Current Ratio (CR), Quick Ratio (QR), Inventory Turn Over (ITO), Fixed Asset Turn Over (FATO), Total Asset Turn Over (TATO), Debt Ratio (DR), Debt Equity Ratio (DER), Gross Profit Margin (GPM), Operational Profit Margin (OPM), Net profit Margin (NPM), Return on Investment (ROI) and Return on Equity (ROE) simultaneously have an effect toward stock price. The significant value of $0,000(<0,05)$ shows that effect of that 12 independent variables toward dependent variable is significant or real.
2. Based on individual analysis result, known that Current Ratio, Quick Ratio, Total Asset Turn Over, Return on Asset (ROA) and Return on Equity (ROE) show that there are significant effects toward stock prices individually. On the contrary, for Inventory Turn Over, Fixed Asset Turn Over (FATO), Debt Ratio (DR), Debt Equity Ratio (DER), Gross Profit Margin (GPM), Operational Profit Margin (OPM) and Net Profit Margin (NPM), they do not show significant effect individually.

This results can explain that there are tend for investors do not use all of financial parameters on decision making.There are others factors beside fundamental's companies determination with financial ratios as basic for stock investment.
3. Quick Ratio ( QR ) as part of liquidity ratio show influences most dominant toward stock price in LQ 45. This is based on test result show that Quick Ratio ( QR ) has highest value of beta coefficient, that is 0,813 and significancy as 0,000 .

### 5.2. Recommendations

Based on research conclusions above, the writer can give some recommendations as follows:

1. Investors should determine financial and non financial information on investment decision making. This is urgent because stock fluctuation on Indonesian capital market have not always related with financial information. There are many non financial informations that contributed toward stock price and market dynamic as a whole.
2. This research can improve on future by extension of liquidity ratio, activity ratio, financial leverage ratio and profitability ratio as research variables. The other research can use more long time period to improve analysis on trend financial performance of emitens that selected as samples.

## REFERENCES

Bambang Riyanto, 1995, The Fundamental of Company Financing, Yogyakarta, BPFE Publishing.

Brigham, F.Eugene and Joel F.Houston. (2001), Financial Management, Jilid $1^{\text {st }}$ Version, $8^{\text {th }}$ edition, Jakarta, Erlangga Publishing.

Brigham, F.Eugene and Joel F.Houston. (2001). Manajemen Keuangan, $2^{\text {nd }}$ Version, $8^{\text {th }}$ edition, Jakarta, Erlangga Publishing.

Dergibson Slagan and Sugiarto, 2000, Statistic Method for Business and Economic, Jakarta, Gramedia Pustaka Utama Publishing.

Fakhruddin H.M, 2001, Tools of Model Investment Analysis on Stock Market, Jakarta, Elex Media Komputindo Publishing.

Hendriksen, 1990, Basic Accounting Theory of The American Accounting Association, whwe e-bursa.com.

Horne, Van, C, James, 1994, The Fundamentals of Financial Managemem, $2^{\text {nd }}$ version, $6^{\text {th }}$ edition, Jakarta, Erlangga Publishing.

Imam Ghozali, 200, The Application of Multivariate Analysis with SPSS, Programme, Semarang, Badan Penerbit Universitas Diponegoro Pub:ishing.

Jogiyanto H.M, 1990, The Theory of Portfolio and Investment Analysis, $2^{\text {nd }}$ version, Yogyakarta, BPFE Publishing.

Jones on Jogiyanto H.M, 1990, The Theory of Porlfolio and Investment Analysis, $2^{\text {nd }}$ version, Yogyakarta, BPFE Publishing.

Leki, 1997, The Study of Fundamental Variable Effect from Technical Variables Toward Stock Price Changes, quoted from Novi, 2003, The Analysis of Financial Ratios Toward Stock Return, a Thesis of UNS, Surakarta.

Maulani, 2003, Stock LQ 45 , www.mainsaham.com.
Nopirin on Bambang Riyanto, 1995, The Fundamental of Company Financing, Yogyakarta, BPFE Publishing.

O'Conner, 1973, The Benefit of 10 Financial Ratios on Stock Prediction, quoted from Sri Rejeki, 2002, The Effect of Financial Report Toward Stock Price, a Thesis of UII, Yogyakarta.

Ou dan Penman, 1975, The Benefit of Financial Report Analysis on Return Stock Prediction, quoted from Andri, 2003, The Analysis of Fundamental Factors Effect Toward Stock Return, a Thesis of Atmajaya University, Yogyakarta.

Rico Lesmana and Rudi Surjanto, 2003, The Financial Performance Analyzing, Jakarta, Elex Media Komputindo Publishing.

Samsubar Saleh, 1996, The Inductive Statistics, $1^{\text {st }}$ edition, $2^{\text {nd }}$ version, Yogyakarta, UPP - AMP YKPN Publishing.

Sereh, 1997, The Analysis of Slock Valuation, quoted from Novi, 2002, The Analysis of Financial Ratios Toward Stock Return, a Thesis of UNS, Surakitita.

Silalahi, 1991, The Analysis of Factors Influence Stock Prices Changes, quoted from Andri, 2003, The Analysis of Fundamental Factors Eftect Toward Stock Return, a Thesis of Atmajaya University, Yogyakarta.

Singgih Santosa, 2001, SPSS Version 10, Jakarta, Elex Media Komputindo Pubiisihing.

Sri Rejeki, 2002, The Effect of Financial Report Toward Stock Price, a Thesis of UlI, Yogyakarta.

Suad Husnan, 1998, Perangkat dan Teknik Analisis Investasi, Edisi Keempat, Yogyakarta, Bagian Penerbitan STIE YKPN.

Sugiyono, $S^{\prime}$ atistik Untuk Penelition, Cetakan Kedua, CV. Alfabeta, Bandung,
1999.
Sulaiman, 1995, Analisis Faktor-faktor yang Berpengaruh Terhadap Harga Saham Perusahaan Food and Beverage di Bursa Efek Jakarta, diambil dari Novi, 2002, Analisis Rasio Keuangan terhadap Return Saham, Skripsi UNS, Surakarta.

Thian Hin, 2001, Menilai Harga Saham, Jakarta, Elex Media Komputindo.

Trisnawati, 1996, Pengaruh Profitabilitas dan Financial Leverage terhadap Itial Return, diambil dari Sri Rejeki, 2002, Pengaruh Laporan Keuangan terhadap Harga Saham, Skripsi UII, Yogyakarta.

Usman, Marzuki, 1990, ABC Pasar Modal Indonesia, Jakarta : PT Gramedia Pustaka.
whw.e-bursacom
www.jsx.co.id


Trisnawati, 1996, Pengaruh Profitabilitas dan Financial Leverage terhadap Iitial Return, diambil dari Sri Rejeki, 2002, Pengaruh Laporan Keuangan terhadap Harga Saham, Skripsi UII, Yogyakarta.

Usman, Marzuki, 1990, ABC Pasar Modal Indonesia, Jakarta: PT Gramedia Pustaka.

## www.e-bursa.com

www,jsx.co.id


## Regression

## Model Summary ${ }^{\text {b }}$

|  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
| Model | R | R Square | Adjusted $R$ <br> Square | Sta. Error of the <br> Estimate |
| 1 | $921^{3}$ | 847 | .733 | 1877.0216 |

## Model Summary ${ }^{\text {b }}$

| Model | Change Statistics |  |  |  |  | Durbin-Watson |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R Square Change | F Change | df1 | df2 | Sig. F Change |  |
| 1 | 847 | 7.408 | 12 | 16 | 000 | 2.103 |

a. Predictors: (Constant), Return on Equity, Inventory Turn Over, Debt to Equity Ratio, Total Asset Turn Over, Quick Ratio, Fixed Asset Turn Over, Gross Profit Margin, Net Profit Margin, Current Ratio, Debt Ratio, Return on Investment, Operational Profit Margin
b. Dependent Variable: Harga Saham

## ANOVA ${ }^{b}$

| Model | Sum of Squares | df | Mean Square | F | Sig. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 313192185.115 | 12 | 26099348.760 | 7.408 | $.000^{31}$ |
|  | Residual | 56371362.334 | 16 | 3523210.146 |  |  |
|  | Total | 369563547.448 | 28 |  |  |  |

a. Predictors: (Constant), Return on Equity, Inventory Turn Over, Debt to Equity Ratio, Total Asset Turn Over, Quick Ratio, Fixed Asset Turn Over, Gress Profit Margin, Net Profit Margin, Current Ratio, Debt Ratio, Return on Investment, Oporational Profit Margin
b. Dependent Variable: Harga Saham

Coefficients

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients Beta | $t$ | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Sta Error |  |  |  |
| 1 | (Constant) | -2679.395 | 4528.093 |  | -. 592 | 562 |
|  | Current Ratio | 2752.988 | 1122.377 | 633 | 2.453 | 026 |
|  | Quick Ratio | -8511.977 | 1710.482 | -. 813 | -4.976 | 000 |
|  | Inventory Turn Over | 19.518 | 15.505 | 246 | 1.259 | . 226 |
|  | Fixed Asset Turn Over | -185.332 | 175.090 | -. 139 | -1.058 | 306 |
|  | Total Asset Turn Over | 3071.374 | 1281.804 | . 379 | 2.396 | 029 |
|  | Debt Ratio | 7063.992 | 5993.891 | 303 | 1.179 | 256 |
|  | Debt to Equity Ratio | 162.523 | 671.396 | 050 | 242 | . 812 |
|  | Gross Profit Margin | 5694.745 | 4459.821 | 226 | 1.277 | . 220 |
|  | Operational Profit Margin | -6611.580 | 22123.153 | -. 136 | -. 299 | 769 |
|  | Net Profit Margin | 10315.311 | 27813.696 | 173 | 371 | 716 |
|  | Return on Investment | 50819.008 | 22249.444 | . 723 | 2284 | 036 |
|  | Return on Equity | -17574.139 | 6599.112 | - 662 | -2.663 | 017 |

a. Dependent Variable: Harga Saham

## Residuals Statistics ${ }^{\text {a }}$

|  | Minimum | Maximum | Mean | Std. Deviation | N |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Predicted Value | -963.3922 | 11359.1328 | 3286.1379 | 3344.4634 | 29 |
| Residual | -1862.3235 | 3376.7092 | $-1.7406 \mathrm{E}-12$ | 1418.8950 | 29 |
| Std. Predicted Value | -1.271 | 2.414 | .000 | 1.000 | 29 |
| Std. Residual | -.992 | 1.799 | .000 | .756 | 29 |

a. Dependent Variable: Harga Saham



|  |  |  | Current Ratio | Quick Ratio | Inventory Turn Over | Fixed Asset Turn Over | Total Asset Turn Over | Debt Ratio | Debt to Equity Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spearman's rho | Current Ratio | Correlation Coefficient | 1.000 | 272 | -.648** | . 163 | .329* | -.331* | - - -213 |
|  |  | Sig. (2-tailed) | . | . 109 | . 000 | . 342 | . 050 | . 049 | -220 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Quick Ratio | Correlation Coefficient | 272 | 1.000 | . 325 | -. 277 | - 239 | . 246 | . 292 |
|  |  | Sig. (2-tailed) | . 109 |  | . 080 | . 101 | . 160 | . 148 | . 089 |
|  |  | N | 36 | 35 | 30 | 36 | 36 | 36 | 35 |
|  | Inventory Turn Over | Correlation Coefficient | -.648** | 325 | 1.000 | . 139 | . 080 | . 223 | . 138 |
|  |  | Sig. (2-tailed) | . 000 | . 080 |  | 464 | .673 | 237 | 474 |
|  |  | N | 30 | 30 | 30 | 30 | 30 | 30 | 29 |
|  | Fixed Asset Turn Over | Correlation Coefficient | 163 | -. 277 | 139 | 1.000 | .550** | -.432** | -.520+1 |
|  |  | Sig. (2-tailed) | . 342 | $\square .101$ | - . 464 | - | . 001 | . 009 | . 001 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Total Asset Turn Over | Correlation Coefficient | .329* | -. 239 | . 080 | .550** | 1.000 | -. 215 | -.393* |
|  |  | Sig. (2-tailed) | . 050 | . 160 | . 673 | . 001 | - | . 207 | . 020 |
|  |  | N | 36 | 36 | - 30 | 36 | 36 | 36 | 35 |
|  | Debt Ratio | Correlation Coefficient | -.331* | 246 | . 223 | -.432** | -. 215 | 1.000 | .847* |
|  |  | Sig. (2-tailed) | 049 | 148 | 237 | . 009 | . 207 |  | . 000 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Debt to Equity Ratio | Correlation Coefficient | -. 213 | . 292 | . 138 | -. $520 \times 4$ | -.393* | .847** | 1.000 |
|  |  | Sig. (2-tailed) | .220 | . 089 | 474 | . 001 | . 020 | . 000 |  |
|  |  | N | 35 | 35 | 29 | 35 | 35 | 35 | 35 |
|  | Gross Profit Margin | Correlation Coefficient | -. 092 | . $4744^{\text {m* }}$ | . 029 | -.545** | -. 285 | .454** | .516*1 |
|  |  | Sig. (2-tailed) | . 592 | . 003 | . 879 | 001 | . 092 | . 005 | . 002 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Operational Profit Margin | Correlation Coefficient | -. 223 | . 133 | -. 102 | -. 318 | -.444** | . 290 | . $352^{*}$ |
|  |  | Sig. (2-tailed) | . 192 | . 438 | . 591 | . 059 | . 007 | . 086 | . 038 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Net Profit Margin | Correlation Coefficient | -. 274 | . 093 | -. 049 | -. 262 | -.456** | . 271 | . 300 |
|  |  | Sig. (2-tailed) | . 106 | . 589 | . 798 | . 123 | . 005 | . 109 | . 080 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Return on Investment | Correlation Coefficient | . 098 | -. 092 | -. 113 | . 208 | 244 | . 079 | -. 003 |
|  |  | Sig. (2-tailed) | . 569 | . 592 | . 554 | . 223 | . 152 | . 648 | . 985 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Return on Equity | Correlation Coefficient | -. 047 | -. 045 | -. 004 | . 055 | 193 | 463** | . 322 |
|  |  | Sig. (2-tailed) | . 786 | . 792 | . 985 | . 752 | 261 | . 004 | . 059 |
|  |  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |
|  | Unstandardized Residual | Correlation Coefficient | . 082 | . 117 | . 060 | . 099 | . 041 | . 058 | . 049 |
|  |  | Sig. (2-tailed) | 674 | . 545 | . 759 | 611 | 832 | . 766 | . 803 |
|  |  | N | 29 | 23 | 29 | 29 | 29 | 29 | 29 |


|  |  |  | Gross Profit Margin | Operational Profit Margin | Net Profit Margin | Return on Investment | Return on Equity | Unstandardized Residual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spearman's rho | Current Ratio | Correlation Coefficient | -. 092 | -223 | -. 274 | . 098 | -. 047 | . 082 |
|  |  | Sig. (2-tailed) | . 592 | . 192 | . 106 | . 569 | . 786 | . 674 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Quick Ratio | Correlation Coefficient | .474** | . 133 | . 093 | -. 092 | -. 045 | 117 |
|  |  | Sig. (2-tailed) | . 003 | . 438 | . 589 | . 592 | 792 | 545 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Inventory Turn Over | Correlation Coefficient | . 029 | -. 102 | -. 049 | -. 113 | -. 004 | . 060 |
|  |  | Sig. (2-tailed) | . 879 | . 591 | . 798 | . 554 | . 985 | 759 |
|  |  | N | 30 | 30 | 30 | 30 | 30 | 29 |
|  | Fixed Asset Turn Over | Correlation Coefficient | -545** | -. 318 | -. 262 | . 208 | 055 | 099 |
|  |  | Sig. (2-tailed) | . 001 | 059 | 123 | 223 | 752 | 611 |
|  |  | N | 36 | - 36 | 36 | - 36 | 36 | 29 |
|  | Total Asset Turn Over | Correlation Coefficient | - 285 | - $-444 *$ | - $-4.46^{* *}$ | - 244 | 193 | . 041 |
|  |  | Sig. (2-tailed) | . 092 | . 007 | . 005 | . 152 | . 261 | . 832 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Debt Ratio | Correlation Coefficient | .454** | 290 | 271 | . 079 | .463** | . 058 |
|  |  | Sig. (2-tailed) | . 005 | . 086 | 109 | . 648 | . 004 | 766 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Debt to Equity Ratio | Correlation Coefficient | .516** | . $352^{*}$ | . 300 | -. 003 | 322 | . 049 |
|  |  | Sig. (2-tailed) | . 002 | . 038 | . 080 | . 985 | . 059 | . 803 |
|  |  | N | 35 | 35 | 35 | 35 | 35 | 29 |
|  | Gross Profit Margin | Correlation Coefficient | 1.000 | . $558{ }^{\text {+4 }}$ | 501** | . 182 | . 190 | . 017 |
|  |  | Sig. (2-tailed) |  | . 000 | . 002 | . 287 | . 268 | . 930 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Operational Profit Margin | Correlation Coefficient | .558** | 1.000 | .953** | $641^{\text {m }}$ | . $570 \times$ | . 027 |
|  |  | Sig. (2-tailed) | . 000 |  | . 000 | . 000 | . 000 | . 889 |
|  |  | N | 36 | 36 | 36 | $\cdots 36$ | 36 | 29 |
|  | Net Profit Margin | Correlation Coefficient | .501** | .953** | 1.000 | .647** | .532* | . 075 |
|  |  | Sig. (2-tailed) | . 002 | . 000 |  | . 000 | . 001 | 698 |
|  |  | N | 36 | ${ }^{36}$ | 36 | 36 | 36 | 29 |
|  | Return on Investment | Correlation Coefficient | . 182 | . $641^{\text {+4 }}$ | .647** | 1.000 | .833** | -. 007 |
|  |  | Sig. (2-tailed) | 287 | . 000 | . 000 |  | . 000 | . 971 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Return on Equity | Correlation Coefficient | . 190 | .570** | .532** | .833** | 1.000 | . 072 |
|  |  | Sig. (2-tailed) | . 268 | . 000 | . 001 | . 000 |  | 711 |
|  |  | N | 36 | 36 | 36 | 36 | 36 | 29 |
|  | Unstandardized Residual | Correlation Coefficient | . 017 | . 027 | . 075 | -. 007 | . 072 | 1.000 |
|  |  | Sig. (2-tailed) | . 930 | 889 | 698 | . 971 | 711 |  |
|  |  | N | 29 | 29 | 29 | 29 | 29 | 29 |

[^0]|  |  | Current Ratio | Quick Ratio | $\begin{gathered} \text { Inventory Turn } \\ \text { Over } \\ \hline \end{gathered}$ | Fixed Asset Turn Over | Total Asset Turn Over | Debt Ratio | Debt to Equity Ratio | Gross Profit Margin |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Ratio | Pearson Correlation | 1.000 | . 204 | -.549** | . 091 | . 212 | -.392* | -. 111 | - 251 |
|  | Sig. (2-tailed) |  | 232 | . 002 | 598 | . 214 | . 018 | . 525 | . 140 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | . 36 |
| Quick Ratio | Pearson Correlation | . 204 | 1.000 | 253 | -.369* | -. 252 | . 164 | . 135 | 447* |
|  | Sig. (2-tailed) | 232 | . | . 178 | . 027 | . 139 | . 339 | . 441 | 006 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
| Inventory Turn Over | Pearson Correlation | -.549** | 253 | 1.000 | . 249 | 078 | 084 |  |  |
|  | Sig. (2-tailed) | 002 | . 178 |  | . 185 | 682 |  | . 0 | -. 152 |
|  | N | 30 | 30 | 30 | 30 |  | . 61 | . 962 | 422 |
| Fixed Asset Turn Over | Pearson Correlation | . 091 | -369* |  | 30 | 30 | 30 | 29 | 30 |
|  | Sig. (2-tailed) | 598 | -.369* | . 249 | 1.000 | .375* | -.349* | -. 238 | -.703** |
|  |  | . 598 | . 027 | . 185 |  | . 024 | . 037 | . 169 | . 000 |
| Total Asset Turn Over | Pearson Correlation | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
|  | Pearson Correlation | 212 | -. 252 | . 078 | .375* | 1.000 | -. 096 | -. 068 | -.591** |
|  | Sig. (2-tailed) | . 214 | . 139 | . 682 | . 024 |  | . 577 | . 698 | 000 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
| Debt Ratio | Pearson Correlation | -.392* | . 164 | . 084 | -.349* | -. 096 | 1.000 | 762** | .350* |
|  | Sig. (2-tailed) | . 018 | . 339 | . 661 | . 037 | -. 577 |  | . 000 | . 036 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
| Debt to Equity Ratio | Pearson Correlation | -. 111 | . 135 | . 009 | -. 238 | -. 068 | . $762{ }^{\text {** }}$ | 1.000 | 176 |
|  | Sig. (2-tailed) | . 525 | . 441 | . 962 | . 159 | . 698 | . 000 |  | 313 |
|  | N | 35 | 35 | 29 | 35 | 35 | 35 | 35 | 35 |
| Gross Profit Margin | Pearson Correlation | -. 251 | 447** | -. 152 | -.703** | -.591* | 350* | , 176 | 35 |
|  | Sig. (2-tailed) | . 140 | . 006 | . 422 | . 000 | 000 | . 036 | . 17 | 1.000 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 |  |
| Operational Profit Margin | Pearson Correlation | -. 280 | . 064 | -. 062 | -411* | -504** | 279 | 136 | 36 |
|  | Sig. (2-tailed) | . 098 | . 710 | . 744 | 013 |  |  | 136 | . 695 |
|  | N | 36 | 36 | 30 | 36 |  | . 00 | 437 | . 000 |
| Net Profit Margin | Pearson Correlation | -. 262 | . 038 | -050 | 333* | 36 | 36 | 35 | 36 |
|  | Sig. (2-tailed) | . 123 | 826 |  |  | . 43 | . 263 | . 155 | .572" |
|  | N |  | . 826 | . 791 | . 047 | . 007 | . 122 | . 373 | . 000 |
| Return on Investment | Pearson Correlation |  | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
|  |  | . 040 | -. 094 | -. 059 | . 062 | . 066 | . 136 | -. 058 | . 171 |
|  | Sig. (2-tailed) | . 816 | . 586 | . 756 | . 719 | . 704 | . 430 | . 743 | . 317 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |
| Keturn on Equity | Pearson Correlation | -. 143 | -. 034 | . 020 | -. 147 | -. 001 | 476** | . 278 | . 245 |
|  | Sig. (2-tailed) | . 404 | . 842 | . 915 | . 392 | . 996 | . 003 | . 106 | 149 |
|  | N | 36 | 36 | 30 | 36 | 36 | 36 | 35 | 36 |

Correlations

|  |  | Operational Profit Margin | Net Profit Margin | Return on Investment | Return on Equity |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Ratio | Pearson Correlation | -. 280 | -. 262 | 040 | -143 |
|  | Sig. (2-tailed) | . 098 | 123 | 816 | 404 |
|  | N | 36 | 36 | 36 | 36 |
| Quick Ratio | Pearson Correlation | . 064 | . 038 | - 094 | . 034 |
|  | Sig. (2-tailed) | 710 | 826 | 586 | . 642 |
|  | N | 36 | 36 | 35 | 36 |
| Inventory Turn Over | Pearson Correlation | -. 062 | -. 050 | . 059 | 020 |
|  | Sig. (2-tailed) | 744 | . 791 | 756 | 915 |
|  | N | 30 | 30 | 30 | 30 |
| Fixed Asset Turn Over | Pearson Correlation | - $411^{*}$ | - $333^{*}$ | . 062 | - 147 |
|  | Sig. (2-tailed) | . 013 | 047 | 719 | 392 |
|  | N | 36 | - 36 | - 36 | - 35 |
| Total Asset Turn Over | Pearson Correlation | - $504^{* *}$ | - $439{ }^{\circ}$ | - 0.066 | - - 0001 |
|  | Sig. (2-tailed) | 002 | . 007 | . 704 | . 996 |
|  | N | 36 | 36 | 36 | 36 |
| Debt Ratio | Pearson Correlation | 279 | . 263 | . 135 | . $476{ }^{+}$ |
|  | Sig. (2-tailed) | 100 | . 122 | 430 | 003 |
|  | N | 36 | 36 | 36 | 36 |
| Debt to Equity Ratio | Pearson Correlation | 136 | 155 | -. 058 | 278 |
|  | Sig. (2-tailed) | . 437 | . 373 | 743 | 106 |
|  | N | 35 | 35 | 35 | 35 |
| Gross Profit Margin | Pearson Correlation | .695*-1 | .572+4 | 171 | 245 |
|  | Sig. (2-zailed) | . 000 | 000 | 317 | 149 |
|  | N | 36 | 36 | 36 | 36 |
| Operational Profit Margin | Pearson Correlation | 1.000 | 957** | . $670 \times$ | $706^{*}$ |
|  | Sig. (2-tailed) |  | . 000 | 000 | 000 |
|  | N | 36 | 36 | 36 | 36 |
| Net Profit Margin | Pearson Correlation | .957** | 1.000 | . $685^{-}$ | ${ }^{751+}$ |
|  | Sig. (2-tailed) | . 000 |  | . 000 | . 000 |
|  | N | 36 | - 36 | 36 | 36 |
| Return on investment | Pearson Correlation | . $670 \times 1$ | - 686 | 1.000 | - ${ }^{839^{\circ}}$ |
|  | Sig (2-tailed) | . 000 | . 000 |  | . 000 |
|  | N | 36 | 36 | 36 | 36 |
| Return on Equity | Pearson Correlation | .706** | 751** | 839 | 1.000 |
|  | Sig. (2-tailed) | . 000 | . 000 | 000 |  |
|  | N | 35 | 36 | 35 | 36 |

$*$ Correlation is significant at the 0.01 level ( 2 -ailed).
$*$ Correlation is significant at the 0.05 level ( 2 -taifed).


[^0]:    Correlation is significant at the .01 level ( 2 -tailed)
    Correlation is significant at the .05 level ( 2 -tailed).

