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**THE EFFECT OF WORKING CAPITAL EFFICIENCY AND LIQUIDITY  
TOWARD PROFITABILITY OF WHOLESALE AND RETAIL TRADE  
COMPANIES LISTED IN INDONESIAN STOCK  
EXCHANGE**

**THESIS**



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Bismillahirrahmanirrahim, Alhamdulillahirabbil'alamin

In the name of Allah SWT, the most gracious and the most merciful praise to Allah SWT, the cherisher and sustainer of the world, the almighty for everything that is given to me. Absolutely, I accomplish all of these great jobs, so that I can hold my Bachelor Degree in Accounting is because of Allah SWT sincerity. My regard and invocation is for the last prophet, Rasulullah Muhammad SAW, the messenger of Allah SWT.

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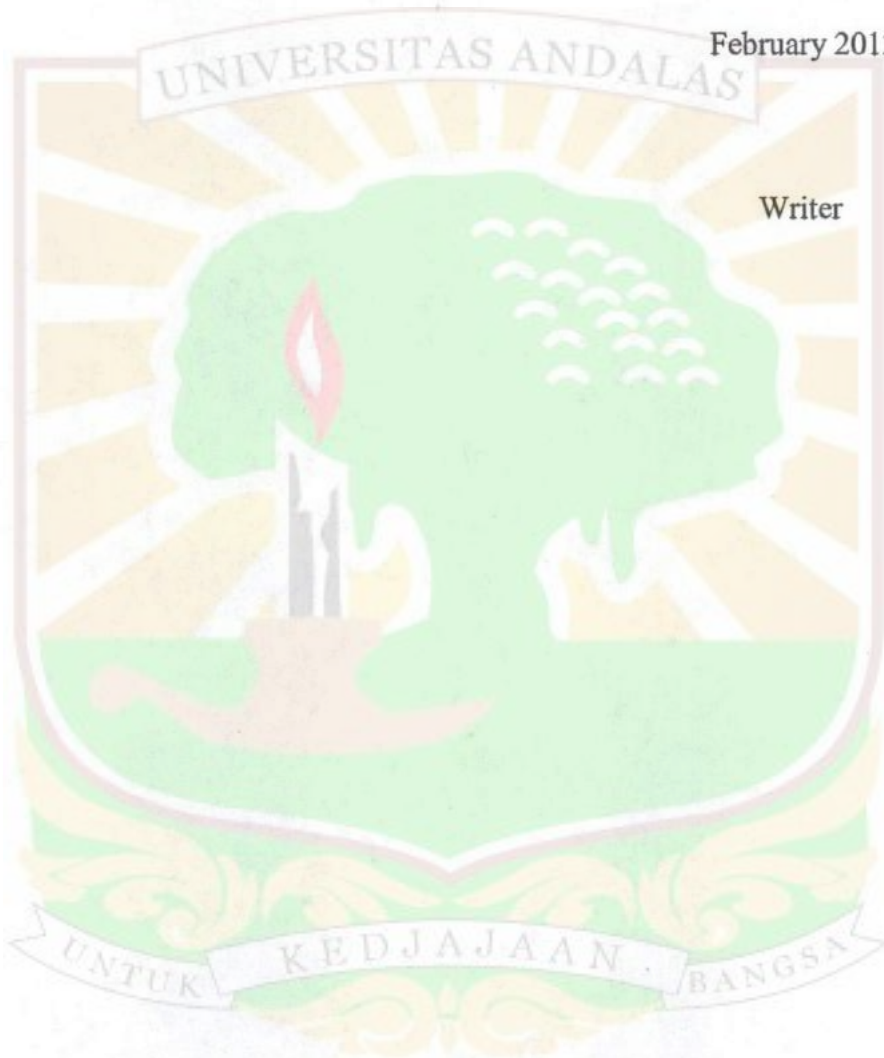


In this thesis writing, the writer realized the thesis still have many limitations and weakness. Therefore, the writer hope suggestion, advice and critics for the improvement of this research study.

Padang,

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Writer





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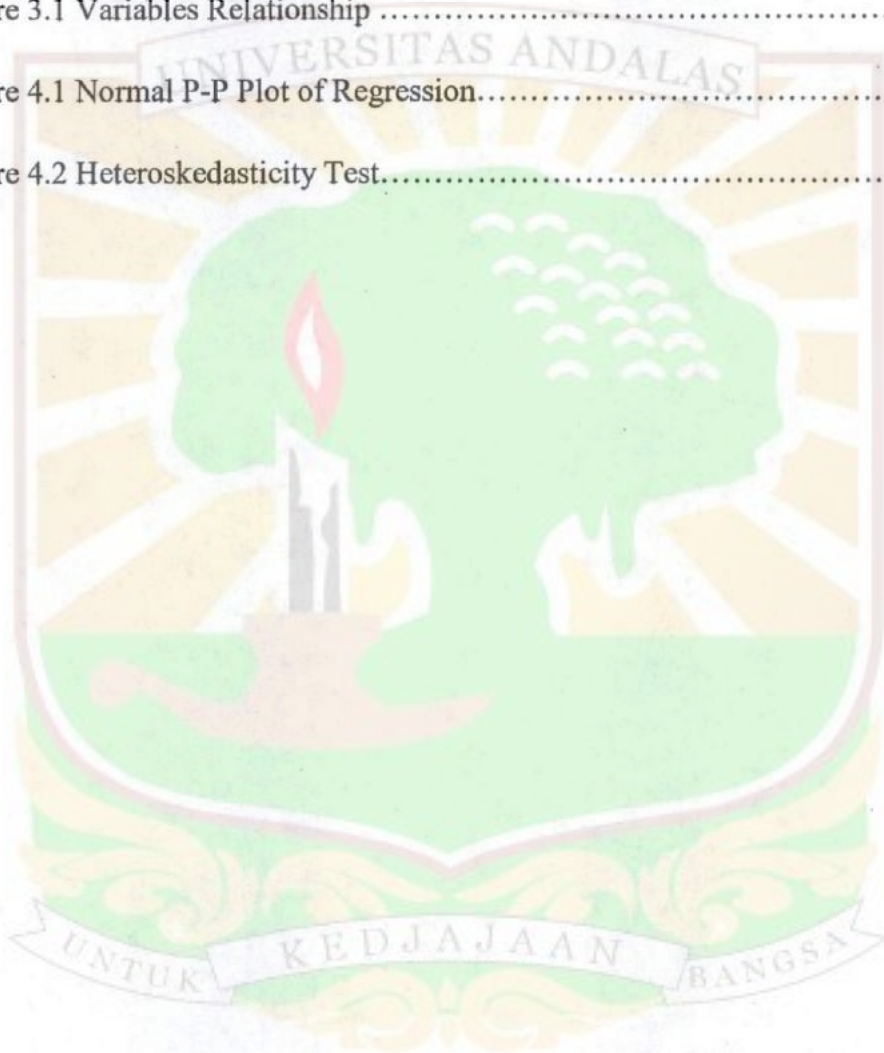


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## ABSTRACT

This research analyzed the effect of working capital efficiency and liquidity toward profitability. The purpose of this research is to get empirical evidence that the working capital efficiency and liquidity statistically have significant effect toward profitability of wholesale and retail trade companies listed in Indonesian Stock Exchange. The sample of this research is wholesale and retail trade companies listed in Indonesian Stock Exchange continually from 2006-2009. There are 8 companies used as sample research. The result of this research with F test shows that all variables independent have significant effect to profitability. The result of this research with t-test indicates that the working capital efficiency has insignificant effect to profitability. For liquidity, it significantly influences to profitability.

*Keywords: Profitability, Working Capital Efficiency, Liquidity*





# CHAPTER I

## INTRODUCTION

### 1.1 Background

Nowadays, economic conditions in the world are more difficult. It caused competition in the business world more stringent. Company demanded to be more effective and efficient in managing and running a business, but good management is not enough without followed by good working capital as well. Good and efficient working capital management very helping the company in running the operation.

Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. The two main aspects of working capital management are ratio analysis and management of individual components of working capital. A few key performance ratios of a working capital management system are the working capital turnover, inventory turnover and the receivable turnover. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management.

Working capital also gives investors an idea of the company's underlying operational efficiency. Money that is tied up in inventory or money that customers still own to the company cannot be used to pay off any of the company's obligations. So, if a company is not operating in the most efficient manner, its will show up as an increase in the working capital. This can be seen by comparing the working capital from one period to another, slow collection may signal an underlying problem in the company's operations.

For efficient management of working capital, management of cash is as important as the management of other items of current assets like receivables and inventories. Too little cash may place the firm in an illiquid position, which may force the creditors and other claimants to stop transacting with the firm. Too much

cash results in funds lying idle, thereby lowering the overall return on capital employed below the acceptable level. An adequate amount of cash is always needed for meeting any unforeseen contingencies and also liabilities as well as day-to-day operating expenses of the business.

Efficient working capital management plays an important role of overall corporate strategy in order to create shareholder value. Working capital is regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished good. The way of working capital management can have a significant impact on both the liquidity and profitability of the company (Shin and Soenen, 1998). The main purpose of any firm is maximum profit. But, maintaining liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Thus, strategy of firm must be a balance between these two objectives of the firms. Because the importance of profit and liquidity are the same so, one objective should not be at cost of the other. If we ignore about profit, we cannot survive for a longer period. Conversely, if we do not care about liquidity, we may face the problem of insolvency. For these reasons working capital management should be given proper consideration and will ultimately affect the profitability of the firm.

Efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on the one hand and avoid excessive investment in these assets on the other hand (Eljelly, 2004). As a result, companies can minimize risk and improve their overall performance if they can understand the role and determinants of working capital. Keeping an optimal balance among each of the working capital components is the main objective of working capital management. Business success heavily depends on the ability of the financial manager to effectively manage receivables, inventory, and payables (Filbeck and Krueger, 2005). Firms can decrease their financing costs and raise the funds available for expansion projects by minimizing the amount of investment tied up in current assets.



Working capital management plays an important role in managerial enterprise, it may impacts to success or failure of firm in business because working capital management affect to the profitability of the firm.

The main objective of company is to maximize the profit. But, preserving liquidity of the firm is an important objective too. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the firms. One objective should not be at cost of the other because both have their importance. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care about liquidity, we may face the problem of insolvency or bankruptcy. For these reasons working capital management should be given proper consideration and will ultimately affect the profitability of the firm.

Liquidity and profitability are two important and vital aspects of corporate business life. No firm can survive without liquidity. A firm not making profit may be considered as sick but, one having no liquidity may soon meet its downfall and ultimately die. As a matter of fact, liquidity is a prerequisite for the very survival of a business firm. Liquidity management has thus, become a basic and broad aspect of judging the performance of a corporate entity.

The working capital approach to liquidity management has long been the prominent technique used to plan and control liquidity. The working capital includes all the items shown on a company's balance sheet as short-term or current assets, while net working capital excludes current liabilities. This measure is considered a useful tool in accessing the availability of funds to meet current operations of companies. Efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of the inability to meet due short-term obligations, on one hand, and avoids excessive investment in these assets, on the other. This is due in part to the reduction of the probability of running out of cash in the presence of liquid assets.

In determining the policy of working capital efficiency, the company faced with the trade off problem between liquidity and profitability factors (Van Horne, 1997). If the company decided to establish working capital in large numbers, the possibility of liquidity levels will be maintained but the opportunity to obtain



great profits will decline which ultimately have an impact in declining profitability. Conversely, if companies want to maximize profit, the possibility to influence the level of corporate liquidity. The higher liquidity, then more better the company's position of creditors overviews. Therefore there is a greater likelihood that the company will be able to pay its obligations on time. On the other hand in terms of shareholder viewpoint, high liquidity is not always beneficial because the likely cause of idle funds that could be used to invest in projects that profitable to the company (Tunggal, 1995).

Dani (2003) conducted research the effect of liquidity, leverage and working capital efficiency on profitability (a case study in Modern Toolsindo Bekasi). Financial ratios used are Current Ratio, Debt to Equity Ratio (DER), Working Capital Turnover (WCT) and Return on Investment (ROI). The analytical tool used is multiple linear regression analysis. His research used one companies sample by analyzing balance sheets and income statement in 1997-2002. In his research Dani (2003) using multiple linear regression analysis of the results showed that simultaneously liquidity, leverage and working capital efficiency has proved a positive and significant influence on the level of profitability PT Modern Toolsindo. While the partially leverage variables are not positive effect on profitability variable. In this study, which is differenciated with the Dani's research is the leverage variable and object under study.

Hernawati (2007) conducted research on the analysis of the influence of working capital efficiency, liquidity, and solvency toward profitability of consumption goods industry listed in Jakarta Stock Exchange. In her research, Hernawati (2007) using multiple linear regression and analysis results showed that only variable working capital efficiency is partially which has an influence on profitability, while variable liquidity and solvability had no influence on profitability.

Fatma (2008) conducted research the analysis of the influence of working capital efficiency to liquidity at PT. Indofood Sukses Makmur Tbk. In her research Fatma (2008) using multiple linear regression analysis results showed that simultaneously working capital efficiency significant influence to liquidity.

Almost similar topic with research conducted by Dani and Hernawati, but distinct from the leverage variable (Dani) and solvency variable (Hernawati), object under study and year of observation. While, Fatma's research showed the relationship between working capital efficiency and liquidity, that give additional information for this study. This study examines wholesale and retail trade companies as sample research. In addition, the year of observation is year 2006-2009.

Based on the explanation above, the author interested in doing further research which is poured in the thesis titled **“The Effect of Working Capital Efficiency and Liquidity Toward Profitability of Wholesale and Retail Trade Companies Listed in Indonesian Stock Exchange”**.

### **1.2 Problem Definition**

Based on the background stated above, then the problems the writer would like to discuss in this research are: how significant working capital efficiency and liquidity variables can influence profitability?

### **1.3 Research Objective**

The purpose that the writer wants to reach by doing this research is to get empirical evidence that the working capital efficiency and liquidity statistically have significant effect toward company profitability.

### **1.4 Research Benefit**

The research is expected to provide benefits to many parties, among others:

1. For writer and reader is expected to add an understanding regarding the development of environmental accounting and disclosure.
2. For investors expected to provide information in considering those aspects that need to be decision making inform of investment.
3. For other researchers in the field of accounting and finance is expected this study can be a reference in developing theory, perception and views for future research.

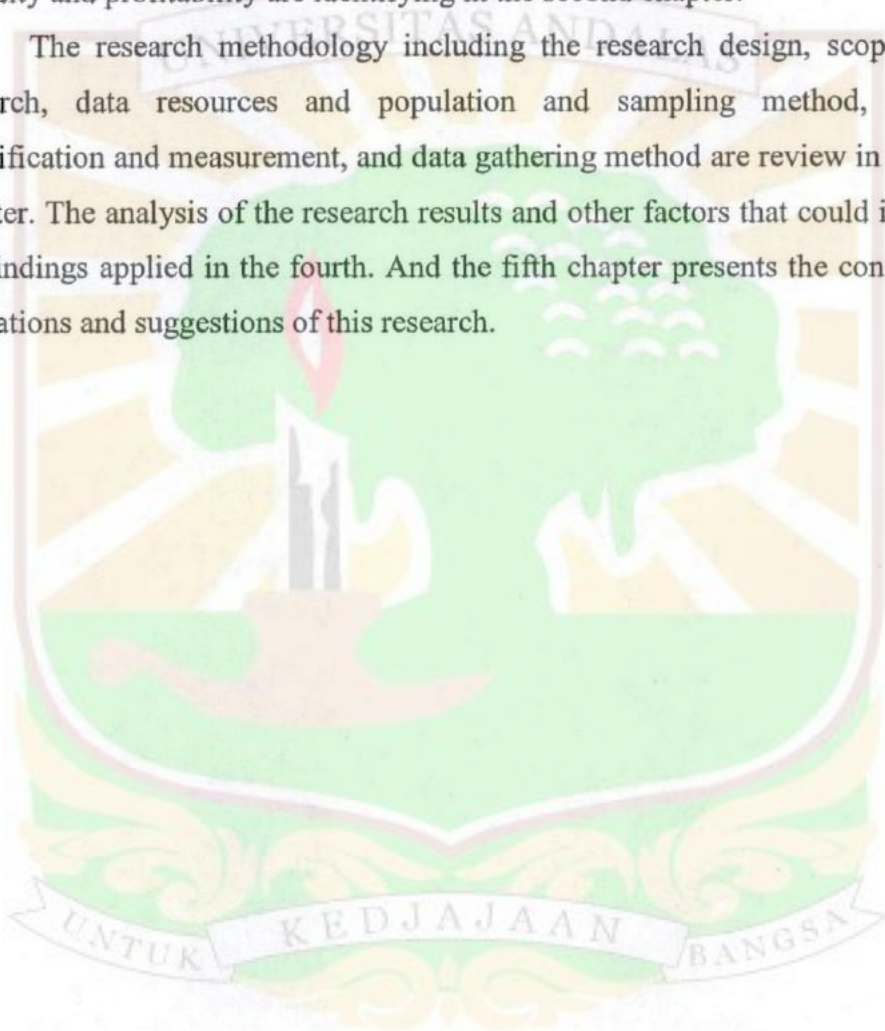


4. For society, this research hopefully gives additional information and knowledge about working capital, liquidity and profitability.

### **1.5 Writing Systematic**

The writing systematic of this research comprises five parts. The first chapter describes background, problem definition, research objective, research benefit and also writing systematic. The theoretical framework of working capital, liquidity and profitability are identifying in the second chapter.

The research methodology including the research design, scope of the research, data resources and population and sampling method, variable identification and measurement, and data gathering method are review in the third chapter. The analysis of the research results and other factors that could influence the findings applied in the fourth. And the fifth chapter presents the conclusions, limitations and suggestions of this research.





## CHAPTER II

### THEORETICAL FRAMEWORK

#### 2.1 Company Performance

Company performance is a company achievement for a time period that is measured by gain and its components (Munawir, 1979). Whereas Tandelilin (2001) explains one of information that investor used in assessing the company is financial statement. Financial statement is accounting information that describes the number of asset's company own, the number of company's revenue and every company activity that can affect company's assets and revenues. From that definition, company performance can be done by analyzing company's financial statement.

##### 2.1.1 Methods to Measure Company Performance

There are several methods that can be used to assess company performance:

1. Comparative analysis is comparing company's financial statement for two periods.
2. Trend analysis is a method to find out the tendency, position and improve of company's finance.
3. Common size statement is a method to find out the percentage of investment of each asset to total asset to understand the capital structure and financing component related to number of sales.
4. Sources and uses of fund analysis is finding out the source and the use of working capital for certain period.
5. Gross profit analysis is finding out the cause of company's gross profit from the profit budgeted.
6. Cash flows statement analysis is finding out source and use of cash for certain period.
7. Break even analysis is determining sales rate that have to be achieved in order to get break even point.

8. Balance Scorecard measures company performance from the financial and financial views.
9. Economic Value Added (EVA) is operating profit after tax less total cost of capital used to produce the profit.
10. Ratio analysis is finding out the relationship of particular item in financial statement.

There are several ratio analysis to measure company's financial performance that is generally used: (a) Profitability Ratio, to asses profit of the company, (b) Activity Ratio, to measure efficiency of company's operating activity and reveal hidden problems, (c) Leverage Ratio to measure how the capital stuctures of company, (d) Liquidity Ratio to measure how the liquidity of the company to fulfill its short term obligations.

### **2.1.2 Financial Performance Measure**

The recommended measures for financial analysis are grouped into five broad categories: liquidity, solvency, profitability, repayment capacity and financial efficiency.

Liquidity measures the ability of the business to meet financial obligations as they come due, without disrupting the normal, ongoing operations of the business. Liquidity can be analyzed both structurally and operationally. Structural liquidity refers to balance sheet measures of the relationships between assets and liabilities and operational liquidity refers to cash flow measures. A frequent cause of liquidity problems occurs when debt maturities are not matched with the rate at which the business' assets are converted to cash. Two recommended measures of liquidity are the current ratio and quick ratio. The current ratio measures the relationship between total current assets and total current liabilities. Quick ratio is similar to the current ratio but is more rigorous measure of liquidity because it excludes inventory from current assets.

Solvency measures the amount of borrowed capital used by the business relative the amount of owner's equity capital invested in the business. In other words, solvency measures provide an indication of the business' ability to repay all indebtedness if all of the assets were sold. Solvency measures also provide an indication of the business' ability to withstand risks by providing information



about the operation's ability to continue operating after a major financial adversity. Unlike liquidity, solvency is concerned with long-term as well as short-term assets and liabilities. Solvency measures evaluate what would happen if all assets were sold and converted into cash and all liabilities were paid. The most straightforward measure of solvency is owner equity, using the market value of assets and including deferred taxes in the liabilities. As with working capital, adequacy of equity depends on business size, making comparisons difficult without using ratios. Three widely used financial ratios to measure solvency are the debt to asset ratio, the equity to asset ratio (sometimes referred to as percent ownership) and the debt to equity ratio (sometimes referred to as the leverage ratio). These three solvency ratios provide equivalent information, so the best choice is strictly a matter of personal preference. The debt to asset ratio expresses total liabilities as a proportion of total assets. The higher the ratio, the greater the risk exposure of the operation. The equity to asset ratio expresses the proportion of total assets financed by the owner's equity. The debt to equity ratio reflects the capital structure of the operation and the extent to which debt capital is being combined with equity capital. It is a measure of the degree to which you are leveraging your equity.

Profitability measures the extent to which a business generates a profit from the factors of production: labor, management and capital. Profitability analysis focuses on the relationship between revenues and expenses and on the level of profits relative to the size of investment in the business. Several useful measures of profitability are the rate of return on equity (ROE), return on investment (ROI), operating profit margin and net income. The ROE measures the rate of return on the owner's equity employed in the business. It is useful to consider the ROE in relation to ROI to determine if the operation is making a profitable return on its borrowed money. ROI measures the return of owners investment related to company assets. The operating profit margin measures the returns to capital per dollar of gross revenue. Recall, that the two ways an operation has of increasing profits is by increasing the profit per unit produced or by increasing the volume of production while maintaining the per unit profit. The operating profit margin focuses on the per unit produced component of earning



profit and the asset turnover ratio focuses on the volume of production component of earning a profit. Net income comes directly off of the income statement and is calculated by matching revenues with the expenses incurred to create those revenues, plus the gain or loss on the sale of capital assets. Net income represents the return to the operation for unpaid operator and family labor, management and owner's equity. Such working capital, net income is an absolute dollar amount and not a ratio, thus comparisons to other operations is difficult because of size differences.

Repayment capacity measures the ability to repay debt from both operation and non operation income. It evaluates the capacity of the business to service additional debt or to invest in additional capital after meeting all other cash commitments. Measures of repayment capacity are developed around an accrual net income figure. The short-term ability to generate a positive cash flow margin does not guarantee long-term survivability. Long-term survivability requires the operation to be profitable. The only way for an unprofitable operation to survive long-term is for income infusions from non operation sources to offset operating losses. These cash infusions usually come from off operation employment, inheritances and gifts or from a lender when the operation's assets appreciate faster than the operation is losing money and the operation can then successfully refinance its debts.

Two measures of repayment capacity are the term debt and capital lease coverage ratio and the capital replacement and term debt repayment margin. The term debt and capital lease coverage ratio provides a measure of the ability of a borrower to cover all required term debt and capital lease payments. The higher the ratio is over 1:1, the greater the margin to cover the payments. Higher ratio values also indicate greater flexibility on the part of the operation to withstand and adjust to temporary adverse economic conditions. Even though the operation may be generating sufficient accrual earnings to cover all term debt and capital lease payments, there may not be sufficient cash to make the payments on a timely basis, thus cash flow analysis is needed as well. The capital replacement and term debt repayment margin is used to evaluate the ability of the borrower to generate funds needed to service existing term debts and replace capital assets. It also enables



users to evaluate the ability to acquire additional capital, service additional term debt and to evaluate the risk margin.

Financial efficiency measures the degree of efficiency in using labor, management and capital. Efficiency analysis deals with the relationships between inputs and outputs. Because inputs can be measured in both physical and financial terms, a large number of efficiency measures in addition to financial measures are usually possible. Several measures of financial efficiency are the asset turnover ratio, inventory turnover, receivable turnover and average collection period. The assets turnover ratio measures how efficiently operational assets are being used to generate revenue. The higher the ratio, the more efficiently assets are being used to generate revenue. Inventory turnover measures how efficiently the firm convert inventory to sales. If the firm has inventory that sells well, the ratio value will be high, and also the otherwise. Receivable turnover shows the efficiency of accounts receivable management. The higher ratio indicates the working capital invested in low amounts. The last efficiency measures, average collection period measures how many days, on averages, the company's credit customers take to pay their account.

### **2.1.3 Company Profitability**

Profitability is the ability of a company to make profit related to sales, total assets and owner's equity. The most important profitability measurement is net profit, where creditors and investors having interest in accessing the ability of company in making profit at present and in the future.

Several ratios are used to measure profitability, as follow :

#### **I. Gross Profit Margin (GPM)**

Gross Profit Margin measures the gross profit from generated sales. This ratio is very influenced by cost of good sold. If cost of good sold is higher, gross profit margin will be lower and viceversa. A decrease in this ratio may indicate more intensive competition in the market, declining selling prices or an increased cost of purchases. An increase in this ratio may indicate that the company has a competitive advantage in the market and therefore is able to charge higher prices for its products or can source its purchases at a lower cost. If this ratio remains



constant while the net profit margin is falling, this might indicate control over expenses is weak. The formula of GPM is :

$$\text{GPM} = \frac{\text{Sales} - \text{Cost of good sold}}{\text{Sales}}$$

## 2. Net Profit Margin (NPM)

NPM is the ratio of net income to sales, and indicates how much of each rupiah of sales is left over after all expenses. The formula is :

$$\text{NPM} = \frac{\text{Net Profit after Tax}}{\text{Total Sales}}$$

## 3. Operating Profit Margin

OPM is the ratio of operating profit (earning before interest and tax/EBIT) to sales. This is a ratio that indicates how much of each rupiah of sales is left over after operating expenses. The formula is :

$$\text{OPM} = \frac{\text{Operating income/ EBIT}}{\text{Total Sales}}$$

## 4. Return On Investment (ROI)

ROI is ratio that measures the return of owners investment related to company assets. Some analysts believe that ROI is the most important ratio in evaluating profitability because ROI connects revenue and investment, and can be measured by formula :

$$\text{ROI} = \frac{\text{Net profit after tax}}{\text{Total assets}}$$

## 5. Return On Equity (ROE)

ROE is ratio that measures return on equity that is invested in a company. This ratio is calculated by formula :

$$\text{ROE} = \frac{\text{Net profit after tax}}{\text{Total equity}}$$

## 6. Price Earning Ratio ( PER)

Simple connection of present or expected earning per share with present price of stock is often used by management and owner. This ratio can be used to show how stock market appreciates gain achievement and prospect of company.

The calculation is quite simple and connects present price of common stock with newest earning per share available on year basis. This formula is :

$$\text{PER} = \frac{\text{Price of stock per share}}{\text{Earning per share}}$$

According to Husnan (1997) profitability is the ability of the company to get profit. According to Munawir (1991) profitability or rentability is the ability of the company to get the profit in certain period. And according to J. Weston, profitability is the net income from the various judgment and decision.

Other factors that can be influence the profittability :

1. *Profit margin*, is the ratio between “*net operating income*” dengan “*net sales*”
2. *Turnover of operating assets* is turnover rapidity of operating assets in a certain period.

## 2.2 Working Capital

### 2.2.1 Meaning of Working Capital

Working capital is the amount of capital that a business has available to meet the day-to-day cash requirements of its operations. Working capital is the difference between resources in cash or readily convertible into cash (current assets) and organizational commitments for which cash will soon be required (current liabilities). It refers to the amount of current assets that exceeds current liabilities. Working capital refers to that part of the firm's capital, which is required for financing short-term or current assets such as cash, marketable securities, and inventories. Working capital policy refers to decisions related to types and amounts of current assets and the means of financing them. These decisions will necessarily involve:

- a. the management of cash and inventories
- b. credit policy and collection of accounts receivables
- c. short-term borrowing and other financing opportunities such as trade credit
- d. inventory financing
- e. receivables financing

Working capital management is primarily concerned with the day-to-day operations rather than long-term business decisions. For example, plans for



introducing new products to the market and plans for obtaining the facilities and equipment necessary to produce them are strategic in nature, as are the long-term financing needs of the firm. On the other hand, working capital management policies target short-term concerns such as the:

- a. availability of raw material and inventories
- b. continuous operation of the production line
- c. granting credit to customers and collecting past accounts ready to due date
- d. taking advantage of credit purchases and the discounts for early payments
- e. the management of the cash account

These factors help promote smooth operation of the business on a day-to-day basis.

The working capital meets the short-term financial requirements of a business enterprise. It is the investment required for running day-to-day business. It is the result of the time lag between the expenditure for the purchase of raw materials and the collection for the sales of finished products. The components of working capital are inventories, accounts to be paid to suppliers, and payments to be received from customers after sales. Financing is needed for receivables and inventories net of payables. The proportions of these components in the working capital change from time to time during the trade cycle. The working capital requirements decide the liquidity and profitability of a firm and hence affect the financing and investing decisions. Lesser requirement of working capital leads to less need for financing and less cost of capital and hence availability of more cash for shareholders. However the lesser working capital may lead to lost sales and thus may affect the profitability.

The management of working capital by managing the proportions of the WCM components is important to the financial health of businesses from all industries. To reduce accounts receivable, a firm may have strict collections policies and limited sales credits to its customers. This would increase cash inflow. However the strict collection policies and lesser sales credits would lead to lost sales thus reducing the profits. Maximizing account payables by having longer credits from the suppliers also has the chance of getting poor quality materials from supplier that would ultimately affect the profitability. Minimizing inventory



may lead to lost sales by stock outs. The working capital management should aim at having balanced, optimal proportions of the WCM components to achieve maximum profit and cash flow.

There are two concepts of working capital:

#### 1). Gross Working Capital

According to this concept, working capital refers to the firms investment in current assets. The amount of current liabilities is not deducted from the total of current assets. This concept views working capital and aggregate of current assets as two interchangeable terms. This concept is also referred to as 'current capital' or 'circulating capital'.

The proponents of the gross working capital concept advocate this for the following reasons:

- a) Profits are earned with the help of assets, which are partly fixed and partly current. To a certain degree, similarity can be observed in fixed and current assets so far as both are partly financed by borrowed funds, and are expected to yield earnings over and above the interest costs. Logic then demands that the aggregate of current assets should be taken to mean the working capital.
- b) Management is more concerned with the total current assets as they constitute the total funds available for operating purposes than with the sources from which the funds come.
- c) An increase in the overall investment in the enterprise also brings about an increase in the working capital.

#### 2). Net Working Capital

The net working capital refers to the difference between current assets and current liabilities. Current liabilities are those claims of outsiders, which are expected to mature for payment within an accounting year and include creditors dues, bank overdraft and outstanding expenses. Net working capital can be positive or negative. A negative net working capital occurs when current liabilities are in excess of current assets.



"Whenever working capital is mentioned it brings to mind current assets and current liabilities with a general understanding that working capital is the difference between the two".

Net working capital is a qualitative concept, which indicates the liquidity position of the firm and the extent to which working capital needs may be financed by permanent sources of funds. This needs some explanation.

Current assets should be sufficiently in excess of current liabilities to constitute a margin or buffer for obligations maturing within the ordinary operating cycle of a business. A weak liquidity position poses a threat to the solvency of the company and makes it unsafe. Excessive liquidity is also bad. It may be due to mismanagement of current assets. Therefore, prompt and timely action should be taken by management to improve and correct the imbalance in the liquidity position of the firm.

The net working capital concept also covers the question of a judicious mix of long-term and short-term funds for financing current assets. Every firm has a minimum amount of net working capital, which is permanent. Therefore, this portion of the working capital should be financed with permanent sources of funds such as owners' capital, long-term debt, preference capital and retained earnings. Management must decide the extent to which current assets should be financed with equity capital and borrowed capital.

Several economists uphold the net working capital concept. In support of their stand, they state that:

- a) In the long run what matters is the surplus of current assets over current liabilities.
- b) It is this concept which helps creditors and investors to judge the financial soundness of the enterprise.
- c) It is the excess of current assets over current liabilities, which can be relied upon to meet contingencies since this amount is not liable to be returned.
- d) It helps to ascertain the correct comparative financial position of companies having the same amount of current assets.

It may be stated that gross and net concepts of working capital are two important facets of working capital management. Both the concepts have operational significance for the management and therefore neither can be ignored. While the net concept of working capital emphasizes the qualitative aspect, the gross concept underscores the quantitative aspect.

### **2.2.2 Component of Working Capital**

Working capital has two components: Current assets and Current liabilities.

Current assets comprise several items. The typical items are:

1. Cash
2. Accounts Receivables
3. Inventory of:
  - a. Raw materials
  - b. Work in process, and
  - c. Finished goods
4. Advance payments towards expenses or purchases, and other short-term advances which are recoverable.
5. Temporary investment of surplus funds which could be converted into cash whenever needed.

A part of the need for funds to finance the current assets may be met from supply of goods on credit, and deferment on account of custom, usage or arrangement, of payment for expenses. The remaining part of the need for working capital may be met from short-term borrowing from financiers like banks. These items are collectively called current liabilities. Typical items of current liabilities are:

1. Goods purchased on credit
2. Expenses incurred in the course of the business of the organization (e.g., wages or salaries, rent, electricity bills, interest etc.) which are not yet paid.
3. Temporary or short term borrowings from banks, financial institutions or other parties



4. Advances received from parties against goods to be sold or delivered, or as short term deposits.
5. Other current liabilities such as tax and dividends payable. Some of the major components of current assets are explained here in brief:

### **Cash**

All of us know that the basic input to start any business is cash. Cash is initially required for acquiring fixed assets like plants and machinery which enables a firm to produce products and generate cash by selling them. Cash is also required and invested in working capital. Investments in working capital is required, as firms have to store certain quantity of raw materials and finished goods and also for providing credit terms to the customers.

A minimum level of cash helps in the conduct of everyday ordinary business such as making of purchases and sales as well as for meeting the unexpected payments, developments and other contingencies. As discussed earlier cash invested at the beginning of the operating cycle gets released at the end of the cycle to fund fresh investments. However, additional cash is required by the firm when it needs to buy more fixed assets, increase the level of operations or for bringing out change in working capital cycle such as extending credit period to the customers.

The demand for cash is affected by several factors, some of them are within the control of the managers and some are outside their control. It is not possible to operate the business without holding cash but at the same time holding it without a purpose also costs a firm either directly in the form of interest or loss of income that could be earned out of the cash.

In the context of working capital management, cash management refers to optimizing the benefit and cost associated with holding cash. The objective of cash management is best achieved by speeding up the working capital cycle, particularly the collection process and investing surplus cash in short term assets in most profitable revenues.

## **Accounts Receivable**

Firms prefer to sell for cash rather than on credit, but competitive pressures force most firms to offer credit. Today the use of credit in the purchase of goods and services is so common that it is taken for granted. Selling goods or providing services on credit basis leads to accounts receivable. When consumers expect credit, business units in turn expect credit from their suppliers to match their investment in credit extended to consumers. The granting of credit from one business firm to another for purchase of goods and services is popularly known as trade credit.

Though commercial banks provide a significant part of requirements for working capital, trade credit continues to be a major source of funds for firms and accounts receivable that result from granting trade credit are major investment for the firm.

Both direct and indirect costs are associated with carrying receivables, but it has an important benefit for increasing sales. Excessive levels of accounts receivables result in decline of cash flows and many results in bad debts which in turn may reduce the profit of the firm. Therefore, it is very important to monitor and manage receivables carefully and regularly.

## **Inventory**

Three things will come to your mind when you think of a manufacturing unit machines, men and materials. Men using machines and tools convert the materials into finished goods. The success of any business unit depends on the extent to which these are efficiently managed. Inventory is an asset to the organization like other components of current assets.

Inventory constitutes a very significant part of working capital or current assets in manufacturing organization. It is essential to control inventories (physical/quantity control and value control) as these are significant elements in the costing process constituting sometimes more than 60% of the current assets.

Inventory stock is desirable because it meets several objectives and needs but an excessive inventory is undesirable because it costs a lot to firms.



Inventory consists of raw material components and other consumables, work in process and finished goods, is an important component of current assets. There are several factors like nature of industry, availability of material, technology, business practices, price fluctuation, etc. that determines the amount of inventory stock. Inventory stock ensures smooth production process, price stability and immediate delivery to customers. Since inventory is like any other form of assets, stock inventory has a cost. The cost includes opportunity cost of funds blocked in inventory, storage cost, stock out cost, etc. The benefits that come from stock inventory should exceed the cost to justify a particular level of inventory.

### **Marketable Securities**

Cash and marketable securities are normally treated as one item in any analysis of current assets although these are not the same as cash they can be converted to cash at a very short notice. Holding cash in excess of immediate requirement means the firm is missing out an opportunity income. Excess cash is normally invested in marketable securities, which serves two purposes are provide liquidity and also earn a return.

### **2.2.3 Kind of Working Capital**

Ordinarily, working capital is classified into two categories:

- a. Fixed, Regular or Permanent Working Capital; and
- b. Variable, Fluctuating, Seasonal, Temporary or Special Working Capital

### **Fixed Working Capital**

The need for current assets is associated with the operating cycle, which, as you know, is a continuous process. As such, the need for current assets is felt constantly. The magnitude of investment in current assets however may not always be the same. The need for investment in current assets may increase or decrease over a period of time according to the level of production. Nevertheless, there is always a certain minimum level of current assets, which is essential for the firm to carry on its business irrespective of the level of operations. This is the irreducible minimum amount necessary for maintaining the circulation of the



current assets. This minimum level of investment in current assets is permanently locked up in business and is therefore referred to as permanent or fixed or regular working capital. It is permanent in the same way as investment in the firm's fixed assets. Permanent working capital can be distinguished in :

1. Primary working capital, which is the minimum amount of working capital which must exist in the company to ensure business continuously.
2. Normal working capital, the amount of working capital needed to carry out the normal production area .

### **Fluctuating Working Capital**

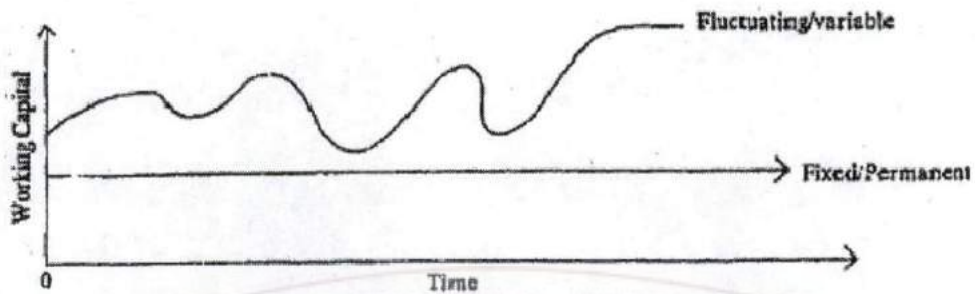
Variable working capital, the amount of working capital changes depend on changes in circumstances. Variable working capital can be distinguished in:

1. Seasonal working capital, the amount of working capital changes due to section fluctuations.
2. Cyclical working capital, the amount of working capital changes caused by fluctuations in conjuncture.
3. Emergency working capital, the amount of working capital changes because of an emergency that can't be known or predictable before ( Bambang Rianto, 1981).

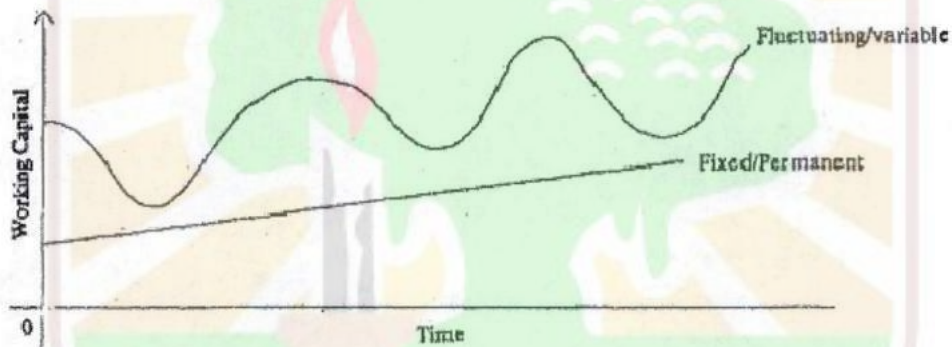
Depending upon the changes in production and sales, the need for working capital, over and above the permanent working capital, will fluctuate. The need for working capital may also vary on account of seasonal changes or abnormal or unanticipated conditions. For example, a rise in the price level may lead to an increase in the amount of funds invested in stock of raw materials as well as finished goods. Additional doses of working capital may be required to face cut throat competition in the market or other contingencies like strikes and lockouts. Any special advertising campaigns organised for increasing sales or other promotional activities may have to be financed by additional working capital. The extra working capital needed to support the changing business activities is called the fluctuating (variable, seasonal, temporary or special) working capital. Figures 2.1 and 2.2 give an idea about fixed and fluctuating working capital.



**Figure 2. 1:Fixed working capital remaining constant overtime**



**Figure 2.2: Fixed working capital increasing over time**



As seen in Figure 2.1, that fixed working capital is stable over time, whereas variable working capital is fluctuating-sometimes increasing and sometimes decreasing. The permanent working capital line, however, may not always be horizontal. For a growing firm, permanent working capital may also keep on increasing over time as has been shown in Figure 2.2.

Both these kinds of working capital, permanent and temporary are required to facilitate production and sales through the operating cycle, but temporary working capital is arranged by the firm to meet liquidity requirements that are expected to be temporary.

#### **2.2.4 Role of Working Capital**

Working capital has several roles, firms use it in many ways. Most fundamentally, working capital investment is the lifeblood of a company. Without it, a firm cannot stay in business. The roles of working capital are :

1) use of working capital is providing the ongoing investment in short-term assets that a company needs to operate. A business requires a minimum cash balance to meet basic day to day expenses and to provide a reserve for unexpected costs. It also needs working capital for prepaid business costs, such as licenses, insurance policies, or security deposits. Furthermore, all businesses invest in some amount of inventory, from a law firm's stock of office supplies to the large inventories needed by retail and wholesale enterprises. Without some amount of working capital finance, businesses could not open and operate.

2) Working capital is addressing seasonal or cyclical financing needs. Here, working capital finance supports the build up of short-term assets needed to generate revenue, but which come before the receipt of cash. For example, a toy manufacturer must produce and ship its products for the holiday shopping season several months before it receives cash payment from stores. Since most businesses do not receive prepayment for goods and services, they need to finance these purchase, production, sales, and collection costs prior to receiving payment from customers.

3) Working capital is providing liquidity. Adequate and appropriate working capital financing ensures that a firm has sufficient cash flow to pay its bills as it awaits the full collection of revenue. When working capital is not sufficiently or appropriately financed, a firm can run out of cash and face bankruptcy. A profitable firm with competitive goods or services can still be forced into bankruptcy if it has not adequately financed its working capital needs and runs out of cash.

4) Working capital is also needed to sustain a firm's growth. As a business grows, it needs larger investments in inventory, accounts receivable, personnel, and other items to realize increased sales. New facilities and equipment are not the only assets required for growth; firms also must finance the working capital needed to support sales growth.



5) Working capital is to undertake activities to improve business operations and remain competitive, such as product development, ongoing product and process improvements, and cultivating new markets. With firms facing heightened competition, these improvements often need to be integrated into operations on a continuous basis.

### **2.2.5 Determinants of Working Capital Needs**

There are no set rules or formulas to determine the working capital requirements of a firm. The corporate management has to consider a number of factors to determine the level of working capital. The amount of working capital that a firm would need is affected not only by the factors associated with the firm itself but is also affected by economic, monetary and general business environment. Among the various factors the following are important ones.

#### **1. Nature and Size of Business**

The working capital needs of a firm are basically influenced by the nature of its business. Trading and financial firms generally have a low investment in fixed assets, but require a large investment in working capital. Retail stores, for example, must carry large stocks of a variety of merchandise to satisfy the varied demand of their customers. Some manufacturing businesses' like tobacco, and construction firms also have to invest substantially in working capital but only a nominal amount in fixed assets. In contrast, public utilities have a limited need for working capital and have to invest abundantly in fixed assets. Their working capital requirements are nominal because they have cash sales only and they supply services, not products. Thus, the amount of funds tied up with debtors or in stocks is either nil or very small. The working capital needs of most of the manufacturing concerns fall between the two extreme requirements of trading firms and public utilities.

The size of business also has an important impact on its working capital needs. Size may be measured in terms of the scale of operations. A firm with larger scale of operations will need more working capital than a small firm. The hazards and contingencies inherent in a particular type of business also have an



influence in deciding the magnitude of working capital in terms of keeping liquid resources.

## 2. Manufacturing Cycle

The manufacturing cycle starts with the purchase of raw materials and is completed with the production of finished goods. If the manufacturing cycle involves a longer period the need for working capital will be more, because an extended manufacturing time span means a larger tie up of funds in inventories. Any delay at any stage of manufacturing process will result in accumulation of work in process and will enhance the requirement of working capital. You may have observed that firms making heavy machinery or other such products, involving long manufacturing cycle, attempt to minimise their investment in inventories (and thereby in working capital) by seeking advance or periodic payments from customers.

## 3. Business Fluctuations

Seasonal and cyclical fluctuations in demand for a product affect the working capital requirement considerably, especially the temporary working capital requirements of the firm. An upward swing in the economy leads to increased sales, resulting in an increase in the firm's investment in inventory and receivables or book debts. On the other hand, a decline in the economy may register a fall in sales and, consequently, a fall in the levels of stocks and book debts.

Seasonal fluctuations may also create production problems. Increase in production level may be expensive during peak periods. A firm may follow a policy of steady production in all seasons to utilise its resources to the fullest extent. This will mean accumulation of inventories in off season and their quick disposal in peak season. Therefore, financial arrangements for seasonal working capital requirement should be made in advance. The financial plan should be flexible enough to take care of any seasonal fluctuations.

## 4. Production Policy



If a firm follows stable production policy, even when the demand is seasonal, inventory will accumulate during offseason periods and there will be higher inventory costs and risks. If the costs and risks of maintaining a constant production schedule are high, the firm may adopt the policy of varying its production schedule in accordance with the changes in demand. Firms whose physical facilities can be utilised for manufacturing a variety of products can have the advantage of diversified activities. Such firms manufacture their main products during the season and other products during off season. Thus, production policies may differ from firm to firm, depending upon the circumstances. Accordingly, the need for working capital will also vary.

#### 5. Turnover of Circulating Capital

The speed with which the operating cycle completes its round. (i.e., cash → raw materials → finished product → accounts receivables → cash) plays a decisive role in influencing the working capital needs.

#### 6. Credit Terms

The credit policy of the firm affects the size of working capital by influencing the level of book debts. Though the credit terms granted to customers to a great extent depend upon the norms and practices of the industry or trade to which the firm belongs, yet it may endeavor to shape its credit policy within such constraints. A long collection period will generally mean tying of larger funds in book debts. Slack collection procedures may even increase the chances of bad debts.

The working capital requirements of a firm are also affected by credit terms granted by its creditors. A firm enjoying liberal credit terms will need less working capital.

#### 7. Growth and Expansion Activities

As a company grows, logically, larger amount of working capital will be needed, though it is difficult to state any firm rules regarding the relationship between growth in the volume of a firm's business and its working capital needs. The fact to recognize is that the need for increased working capital funds may



precede the growth in business activities, rather than following it. The shift in composition of working capital in a company may be observed with changes in economic circumstances and corporate practices. Growing industries require more working capital than those that are static.

#### 8. Operating Efficiency

Operating efficiency means optimum utilisation of resources. The firm can minimise its need for working capital by efficiently controlling its operating costs. With increased operating efficiency the use of working capital is improved and pace of cash cycle is accelerated. Better utilisation of resources improves profitability and helps in relieving the pressure on working capital.

#### 9. Price Level Changes

Generally, rising price level requires a higher investment in working capital. With increasing prices the same levels of current assets need enhanced investment. However, firms which can immediately revise prices of their products upwards may not face a severe working capital problem in periods of rising levels. The effects of increasing price level may, however, be felt differently by different firms due to variations in individual prices. It is possible that some companies may not be affected by the rising prices, whereas others may be badly hit by it.

#### 10. Other Factors

There are some other factors, which affect the determination of the need for working capital. A high net profit margin contributes towards the working capital pool. The net profit is a source of working capital to the extent it has been earned in cash. The cash inflow can be calculated by adjusting noncash items such as depreciation, outstanding expenses, losses written off, etc, from the net profit.

The firm's appropriation policy is the policy to retain or distribute profits also has a bearing on working capital. Payment of dividend consumes cash resources and thus reduces the firm's working capital to that extent. If the profits are retained in the business, the firm's working capital position will be strengthened.



In general, working capital needs also depend upon the means of transport and communication. If they are not well developed, the industries will have to keep huge stocks of raw materials, spares, finished goods, etc. at places of production, as well as at distribution outlets.

### **2.2.6 Sources of Working Capital**

Analysis sources of working capital is very important for the internal and external analysts. The main purpose of this analysis is to determine where capital is used comes from. In other words, analyzing the source of working capital is closely related to the proceeds and can be used by companies in daily operations in a certain period. Reports that describe where it comes from working capital and for what it is used are called the consolidated sources of working capital. Based on the above description, it can be said sources at the company's work generally be obtained from:

1. Increase in non current liabilities. Expenditures such bonds expense will cause added in cash (current assets) without being followed by adding in the short-term debt.
2. Increase in share capital. Expenditure of shares will usually cause added in cash or current assets without accompanied by adding in short-term debt. An exception in this case is when issuing new shares is accompanied by a decrease in long-term debt such as bonds convertible to shares capital.
3. Increase in amount of retained earnings. An increasing in the number of retained earnings will result increase in working capital. In this case the income or net income is of a source working capital.
4. Decreasing of noncurrent assets. A reduction in noncurrent asset usually will be an increase in the working capital. Sales of building, machinery, and other heavy equipment will resulting in added cash without being followed by additional in short-term debt.

Working capital come from various sources, that are as follows :

#### **a. Net Income**

Working capital is obtained from the sale of goods and other profit that enhance cash and accounts receivable. However, most of this working capital



should be used to cover the cost of goods sold and operating expenses incurred to earn revenue, in the form of selling expense and administrative expenses. So, actually, which is a source of working capital is net income and the amount of working capital from short-term operation, and this can be determined by analyzing the company's income statement.

In the calculation of income there are two types of business costs:

- 1) the cost items that require the use of working capital, for example the purchase of merchandise or raw materials, payment of salaries, wages, and insurance premiums,
- 2) the cost items that do not require a cash expenditure or debt that eventually caused also does not require the use of working capital, for example: depreciation expenses, depletion, and amortization. Although these costs are calculated as operating expenses in determining net income, but in calculating the amount of working capital derived from the company's operating results, these costs should be excluded because these costs are not using working capital. Different with the case of losses due to uncollectible accounts. Losses of uncollectible account will decrease accounts receivable. Contrarily preparation should be deducted from the assets that had no effect on working capital.

b. Gain from sale of marketable securities

Securities as one of the items in current assets can be sold and will result benefit. Sales of securities showed as shift in the form of current assets items of the securities items to cash items. The gains are received as additional source of working capital and also viceversa.

c. Sales of fixed assets, long-term investments, and other non-current assets

Other sources for working capital is the sale of fixed assets, long-term investments, and other current assets that are not used anymore by the company. Changes in non current assets into cash that will added to working capital as much as the net result of sales of these non current asset. Gains or losses from sales of long-term investments and other non current assets can be incorporated into extraordinary items.

d. The sale of bonds and stocks and contribution of funds from the owners



Mortgage loan, bonds, and shares may be issued by the company, if necessary amount of working capital, for example for company expansion. Long-term loan in form of bonds usually less preferred because of any interest expense on the liability beside the obligation of returning the loan principal.

**e. Bank loans and other short-term loans**

Short-term loans (such as bank loans) for some companies is an important source of its current assets, primarily for additional working capital needed as cost to seasonal and cyclical working capital, emergencies, or other short term needs. Because dependency of bank loans and other short-term loans, so, any of a high-level credit rating for the company is very importance.

**f. Loan from suppliers or trade creditor**

One important source of working capital are loans provided by the supplier. Materials, goods, supplies, and services commonly purchased on credit or by promissory notes. If the company can sell goods and collect payment of receivables before the time that must be repaid, the company only requires a small amount of working capital.

### **2.3 Working Capital Efficiency**

Working capital management is a simple and straightforward concept of ensuring the ability of the organization to fund the difference between short-term assets and short-term liabilities. In practice, working capital management has become one of the most important issues in organizations, where many financial managers are finding it difficult to identify the important drivers of working capital and the optimum level of working capital. Consequently, companies can minimize risk and improve their overall performance if they can understand the role and determinants of working capital.

The main objective of working capital management is to maintain an optimal balance among each of the working capital components. Business success heavily depends on the ability of the financial managers to effectively manage receivables, inventory, and payables (Filbeck and Krueger, 2005). Firms can reduce their financing costs and/or increase the funds available for expansion projects by minimizing the amount of investment tied up in current assets. Because of working capital is the most important issues in organization or



company, so, not easy to manage it efficiently. We conjecture that the following factors are significant influences on a firm's working capital efficiency.

a) industry practices are significant determinants of a firm's working capital management practices. It is important to control for the influence of industry practices on a firm's working capital practices.

b) firm size may influence the efficiency of a firm's working capital management. Larger firms may require larger investments in working capital because of their larger sales levels. Or, alternatively, larger firms may be able to use their size to forge relationships with suppliers that are necessary for reductions in investments in working capital. Current supply chain management practices require a lot of coordination between companies and are typically easier for a larger firm to implement than for a smaller firm to implement. Thus, firm size is likely to influence the efficiency of a firm's working capital management.

c) the proportion of a firm's assets accounted for by fixed assets might exercise an influence on a firm's working capital performance. For example, the inventory problems of an automobile parts manufacturer are likely to be quite different from that of a software manufacturer. Further, the receivables problems of these types of companies are also likely to be different.

d) firm sales influence a firm's working capital management.

Errors or mistakes in the management of working capital will lead to poor company's financial condition so that the company's activities can be hampered or suspended entirely. Any of errors or mistakes in working capital management can lead to excess or lack in the provision of working capital (Tunggal, 1995). Any of excess working capital in an enterprise can be caused by :

1. Issuances of bonds/shares in amounts that more than necessary.
2. Sales of non current assets that cannot be replaced.
3. The occurrence of operating income that is not used for dividends payment, to purchase fixed assets or for other similar purposes.
4. The conversion of fixed assets into working capital. Conversion in here that is not accompanied by the replacement of fixed assets into working capital by the depreciation process, depletion and amortization



5. Because of the accumulation or temporary reservoir of funds available for investments and so forth.

While the shortage of working capital by Wijaya (1995) can be caused by:

1. Because of operating losses, among others caused by:
  - a) Sales volume that is not sufficient, so too small to cover the cost of the company.
  - b) Declining in selling prices due to competition without any reduction in cost of goods sales.
  - c) Too many accounts payable that cannot be billed.
  - d) The increasing in costs not offset by increasing sales or revenues.
  - e) Increasing cost, but sales and revenues decline.
2. The existence of an extraordinary loss.

Extraordinary loss are losses that are not caused by normally operation of the company.

3. Unfavorable dividend policy

This happens because the company decided to pay dividends despite the company's financial condition is not possible to provide dividends to its shareholders.

4. Use of working capital to acquire noncurrent assets.

Working capital deficiency sometimes occurs because the investment of current assets to acquires non current assets. This happens when an old asset that should be replaced with new one or if purchased new other fixed assets or because the purchase of shares of other companies as an investment.

5. The increase in general price level

Because of increasing prices, the company issued a number of rupiah more to maintain the physical volume of inventories and fixed assets and finance of credit sales in the same physical volume.

Indicator of good working capital management is the presence of working capital efficiency viewed from the working capital turnover (Husnan, 1997) which starts from the cash assets invested in components of working capital until back to cash. The shorter period of its rotation, the faster the rotation so that the higher the

turnover of working capital and companies more efficient that ultimately higher profitability. Ratio used to measure the efficiency of working capital are :

### 1. Working Capital Turnover

This ratio indicates the number of sales (in rupiah) that can be obtained by company for each rupiah of working capital. Formula of working capital turnover (WCT) is as follow :

$$\text{WCT} = \frac{\text{Net Sales}}{(\text{Current assets} - \text{Current liabilities})}$$

### 2. Inventory Turnover

This ratio measures the efficiency of trade inventory management. This ratio is an indicator that quite popular to assess operational efficiency, which shows how well the management controls the existing capital of inventories from the Inventory. The formula is :

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

### 3. Receivable Turnover

This ratio shows the efficiency of accounts receivable management. The higher ratio indicates the working capital invested in low amounts. The formula of receivable turnover (RT) is:

$$\text{Receivable Turnover} = \frac{\text{Accounts Receivable}}{\text{Sales Per day}}$$

Working capital policy that efficient face management on decisions that resulted in an tradeoff between liquidity and profitability factors (Van Horne, 1997). The decision to set a large amount of working capital allows the level of liquidity maintained but may decrease profitability. Conversely decisions tend to maximize the profitability can disturb fluency level of liquidity.



## 2.4. Liquidity

Liquidity is generally defined as the ability of the company to meet its short-term obligations and to convert assets into cash or cash equivalent. Short-term is generally viewed as a time span up to one year. Short term also reflects the operating cycle: buying, manufacturing, selling, and collecting. Assets that may be converted into cash in a short period of time are referred to as liquid assets; they are listed in financial statement as current assets. Current assets are often referred to as working capital. These assets represent the resources needed for the day to day operations of the company's long-term, capital investments. Current assets are used to satisfy short-term obligations, or current liabilities. The amount by which current assets exceed current liabilities is referred to as the net working capital.

Liquidity may be defined as ability to realize value in money the most liquid of assets (Van Horne, 1997).

A company that cannot pay its creditors on time and continue not to honor its obligations to the suppliers of credit, services, and goods can be declared a sick company or bankrupt company. Inability to meet the short term liabilities may affect the company's operations and in many cases it may affect its reputation too. Lack of cash or liquid assets on hand may force a company to miss the incentives given by the suppliers of credit, services, and goods. Loss of such incentives may result in higher cost of goods which in turn affect the profitability of the business. So there is always a need for the company to maintain certain degree of liquidity. However, there is no standard norm for liquidity. It depends on the nature of the business, scale of operations, location of the business and many other factors.

Every stakeholder has interest in the liquidity position of a company. Supplier of goods will check the liquidity of the company before selling goods on credit. Employees are also have interest in the liquidity to know whether the company can meet its employees' related obligations: salary, pension, provident fund etc. Shareholders are interested in understanding the liquidity due to its huge impact on the profitability. Shareholders may not like high liquidity as profitability and liquidity are inversely related. However, shareholders are also aware that nonliquidity will deprive the company from getting incentives from the suppliers, creditors, and bankers.



One can understand the liquidity position by analyzing the financial statements of a company. Following financial items are required to understand the liquidity position of a company:

- a) Current Assets
- b) Current Liabilities

Liquidity position of a company can be examined through financing decisions or investment decisions. A company can finance its investment by different combination of current and long term sources. In other words, a company can invest the money, raised through short term source or long term sources, in the current assets or non-current assets. Some of the relevant business strategies are as follows:

- Financing the current assets by current sources
- Financing the current assets by the long term sources
- Financing non-current assets by the short term sources
- Financing non-current assets by long term sources

One can get an idea about the above mentioned decisions by seeing the balance sheet or determining the working capital of a company.

Liquidity ratios demonstrate a company's ability to pay its current obligations. In other words, they relate to the availability of cash and other assets to cover accounts payable, short-term debt, and other liabilities. All small businesses require a certain degree of liquidity in order to pay their bills on time, though start-up and very young companies are often not very liquid. In mature companies, low levels of liquidity can indicate poor management or a need for additional capital. Any company's liquidity may vary due to seasonality, the timing of sales, and the state of the economy. But liquidity ratios can provide small business owners with useful limits to help them regulate borrowing and spending. Some of the best known measures of a company's liquidity include:

#### 1. Current ratio

Current ratio measures the ability of an entity to pay its short-term obligations. "Current" usually is defined as within one year. Though the ideal current ratio depends to some extent on the type of business, a general rule of



thumb is that it should be at least 2:1. A lower current ratio means that the company may not be able to pay its bills on time, while a higher ratio means that the company has money in cash or safe investments that could be put to better use in the business.

In general, a lower current ratio contain more risk than a higher current ratio, but sometimes a lower current ratio even showed corporate leaders are very effective use of current assets. That is when the balance is adjusted with only a minimum requirement of inventory and receivables turnover increased to the level maximum. Total cash required depends on the size of the company and especially of the amount of money necessary to pay the current liabilities, the regularly cost and emergency expenses (Tunggal, 1995).

Current ratio indicates the level of safety margin short-term creditors, or the company's ability to pay the liabilities. But a company with a high current ratio does not necessarily guarantee will be able to repay corporate liabilities have matured since the proportion or distribution of currents assets that are not profitable, such as relatively high amount of inventory compared to the estimated level of future sales so low inventory turnover and show any over-investment in inventory or any large amount in receivables balance that may be difficult to recover.

The formula of current ratio (CR) is:

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

## 2. Quick ratio (or "acid test")

Quick ratio provides a stricter definition of the company's ability to make payments on current obligations. Ideally, this ratio should be 1:1. If it is higher, the company may keep too much cash on hand or have a poor collection program for accounts receivable. If it is lower, it may indicate that the company relies too heavily on inventory to meet its obligations. The formula of quick ratio is:

$$\text{Quick ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

## 2.5 Previous Research

As a reference of this study presented the results of previous research that has been implemented, they are as follows:

Dani (2003) conducted research on the effect of liquidity, leverage and working capital efficiency on profitability (a case study in Modern Toolsindo Bekasi). Financial ratios used are Current Ratio, Debt to Equity Ratio (DER), Working Capital Turnover (WCT) and Return on Investment (ROI). The analytical tool used is multiple linear regression analysis. His research used one companies sample by analyzing balance sheets and income statement in 1997-2002. In his research Dani (2003) using multiple linear regression analysis of the results showed that simultaneous liquidity factors, leverage and working capital efficiency has proved a positive and significant influence on the level of profitability PT Modern Toolsindo. While the partial leverage variables that are not only positive effect on profitability variable.

Hernawati (2007) conducted research on the analysis of the influence of working capital efficiency, liquidity, and solvency toward profitability of consumption goods industry listed in Jakarta Stock Exchange. In her research, Hernawati (2007) using multiple linear regression and analysis results showed that only variable working capital efficiency is partially which has an influence on profitability, while variables liquidity and solvability had no influence on profitability.

Fatma (2008) conducted research the analysis of the influence of working capital efficiency to liquidity at PT. Indofood Sukses Makmur Tbk. In her research Fatma (2008) using multiple linear regression analysis results showed that simultaneously working capital efficiency significant influence to liquidity.



## 2.6 Research Hypothesis

Management of working capital is an important component of corporate financial management because it directly affects the profitability of the firms. Working capital management plays an important role in a firm's profitability and risk as well as its value (Smith, 1980). Management of working capital refers to management of current assets and current liabilities. Firms may have an optimal level of working capital that maximizes their value. Large inventory and generous trade credit policy may lead to high sales.

Liquidity and profitability are two important and vital aspects of corporate business life. No firm can survive without liquidity. A firm not making profit may be considered as sick firm because has problem in liquidity and may soon meet its downfall or bankrupt. As a matter of fact, liquidity is a prerequisite for the very survival of a business firm. Liquidity management has thus, become a basic and broad aspect of judging the performance of a corporate entity.

Based on theories and previous researches, the following hypothesis is developed:

- H1 : Working capital efficiency has significant influence to profitability
- H2 : Liquidity has significant influence to profitability
- H3 : Working capital efficiency and liquidity as a group have significant influence to profitability

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **3.1 Type of Research**

This research is a kind as hypothesis testing. Sekaran (2003) stated that hypothesis testing is a research that had have explanation and description, it is intended to explain causal relationship between research variables. This kind of research is an explanatory research to test the hypothesis concern with relationship between independent variable to dependent variable in this research.

#### **3.2 Determining Population and Sample**

##### **3.2.1 Research Population**

Population refers to the entire group of peoples, events, or things of interest that the researcher wish to investigate (Sekaran, 2003). Population in this research is all wholesale and retail trade company listed in Indonesia Stock Exchange (IDX). Data obtained from secondary data sources. Secondary data is data collected by researchers through a second party or second hand.

##### **3.2.2 Research Sample**

A sample is a subset of the population, or elements of the population (Sekaran, 2003). The research sample in this research are all wholesale and retail trade company listed in IDX continually year 2006-2009. Sample used in this research is chosen by using purposive sampling method, which is obtaining sample according to specific types or criteria that can provide the desired information (sekaran, 2003). It is important to ensure that only firm listed and actively traded in IDX which included as the sample in this research. So that, this research does not included Delisted and Newly listed firm during research period. The numbers of population in this research are 16 companies, but only 8 companies researcher use as sample . The data are taken from Indonesian Capital Market Directory (ICMD) 2006-2009.



to compare against competitors or an industry average. Experts suggest that companies usually need at least 10-14 percent ROI in order to fund future growth. If this ratio is too low, it can indicate poor management performance or a highly conservative business approach. On the other hand, a high ROI can mean that management is doing a good job, or that the firm is undercapitalized. ROI can be measured by formula :

$$\text{ROI} = \frac{\text{Net profit after tax}}{\text{Total assets}}$$

### 3.5.2 Independent Variable (X)

Independent variable is variable that influenced the dependent variables. Independent variables are used in this research, include :

#### a. Working Capital Efficiency (X1)

Working capital used in this research is a quantitative concept of working capital that is excess of current assets over current liabilities should be paid. Variable of working capital efficiency is measured by looking at working capital turnover. Working capital turnover means a measurement comparing the depletion of working capital to the generation of sales over a given period. This provides some useful information as to how effectively a company is using its working capital to generate sales. Working capital turnover ratio shows the number of sales that can be obtained for each company working capital. The indicators of the working capital turnover are as follows :

- 1) Net sales
- 2) Current assets

Current assets are assets of the company in the form of cash or other assets are expected to be liquidated into cash, sold or used in one year or in the company normal activity cycle if it exceeds one year. Balance sheet items included in the estimated current assets is cash, short-term investment, note receivable, account receivable, income receivable, inventories and prepaid expenses.

### 3) Current liabilities

Current liabilities are debts or financial obligations of the company that repayment or payment will be done in the short term (one year from the balance sheet date). Balance sheet items that go into estimated current liabilities are account payable, note payable, tax payable, accrued expenses, long-term debt and unearned revenue. To measure the amount of Working Capital Turnover (WCT) used the formula:

$$\text{WCT} = \frac{\text{Net sales}}{\text{Current assets} - \text{Current liabilities}}$$

#### b. Liquidity (X2)

Liquidity ratio in this research is measured by current ratio (CR). This ratio indicates the company's ability to meet its short term obligations using its current assets. "Current" usually is defined as within one year. Though the ideal current ratio depends to some extent on the type of business, a general rule of thumb is that it should be at least 2:1. A lower current ratio means that the company may not be able to pay its bills on time, while a higher ratio means that the company has money in cash or safe investments that could be put to better use in the business. The indicators of the current ratio are as follows:

##### 1). Current assets

Current assets are assets of the company in the form of cash or other assets are expected to be liquidated into cash, sold or used in one year or in the company normal activity cycle if it exceeds one year.

##### 2). Current liabilities

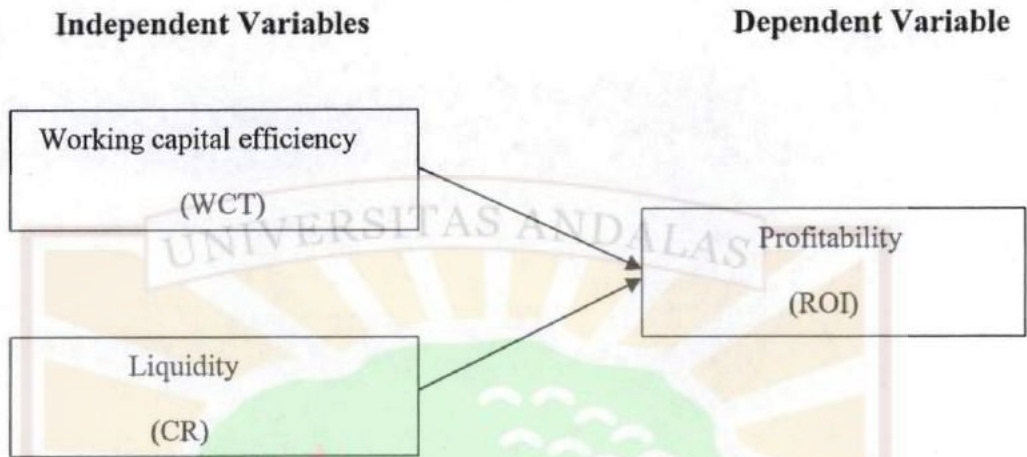
Current liabilities are debts or financial obligations of the company that repayment or payment will be done in the short term ( one year from the balance sheet date).

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$



The relationship of working capital efficiency (WCT) and liquidity(CR) toward profitability (ROI) is describes as follow :

Figure 3.1



### 3.6 Data Analysis Method

#### 3.6.1 Classic Assumption Test

Classic assumption test used to test whether the regression model actually showed a significant and representative. This test to examine the quality of data that will be used in this research by using SPSS.

Classic Assumption Test that are used in this research :

##### a. Normality test

The normality test is using the Kolmogorov-Smirnov test. The standard of this test, if the value of Sig >  $\alpha$ , than the data is assumed to be normal ( $\alpha = 0.05$ ). The result of this kolmogorov-smirnov test then described by normal P-P plot of regression charts. According to the charts, the data is assumed to be normal if it have a normal data distribution, at least close to normal distribution, where some dots are spread out following the diagonal line.

##### b. Multicollinearity test

Multicollinearity test intend to test whether the regression models found a correlation between independent variables. If correlation happens between

independent variables, so there are multicollinearity problems in the regression model. Detection of multicollinearity, is:

1) Magnitude VIF ( variance inflation factor) and Tolerance Model-free regression multicollinearity is :

a. VIF value  $< 10$

b. Having tolerance value  $> 0.1$

2) The amount of correlation between independent variables.

c. Heteroskedasticity test

Heteroskedasticity test is intended to test whether in the regression model occur variance inequality and residual from one observation to other observation. If the residual variance from one observation to the other observation is fixed, it is called homoscedasticity and if different called heteroskedasticity. A good regression model that is homoscedasticity or it is not happens heteroskedasticity. Basic analysis of the heteroskedasticity test by using scatter plots chart is as follows:

1. If there is some dots spread out to make a certain character of form, then it's assumed that there is heteroskedasticity in the regression model.
2. If there are no certain characters of forms made by the dots, then it's assumed that there is no heteroskedasticity in the regression model.

d. Autocorrelation Test

Autocorrelation Test is done to investigate whether any relation between error factor at  $t$  period and  $t-1$  period (previous period). If there were any relation, it must be any autocorrelation problem. It will be showed in value of Durbin-Watson.

### 3.6.2 Hypothesis Testing

#### 1. Multiple Regression

Multiple regressions are the test that is used to know the influence of independent variables to the dependent variables. Multiple regressions



should have a more than one independent variables. Generally the formula of multiple regressions is:

### Equation Model

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Where; Y = *Return On Investment*

X1 = *Working Capital Turnover*

X2 = *Current Ratio*

a = *Costanta*

b1,b2 = *Regression Coefficient*

e = *Error*

This research used multiple regression model by Statistical Program For Social Science (SPSS) software to analyze the data and examine the research hypothesis.

### 2. Statistical t- Test or partial test

t test is used to test whether all independent variables that included in a regression model, can influence the dependent variable partially. The statistical t-test is observed from the Coefficient Correlation table. For each independent variable, if the t value > t table or the value of sig <  $\alpha$  (0.05), it is assumed that the capability of independent variable to influence the dependent variable-partially is significant, and vice versa. Decision making of partially hypothesis testing is also based on probability values or Sig value obtained from the data processing through the SPSS as follows:

- a) Hypothesis is accepted if the value of Sig < 0.05 or t value > t table
- b) Hypothesis is rejected if the value of Sig > 0.05 or t value < t table

In the t test, value of Sig can be seen on the results of processing of SPSS in the table coefficients on column sig or significance.

### 3. Statistical F- Test or Simultaneous test

The purpose of the F-Test is to find whether all independent variables that included in regression model, can influence the dependent variable, if act

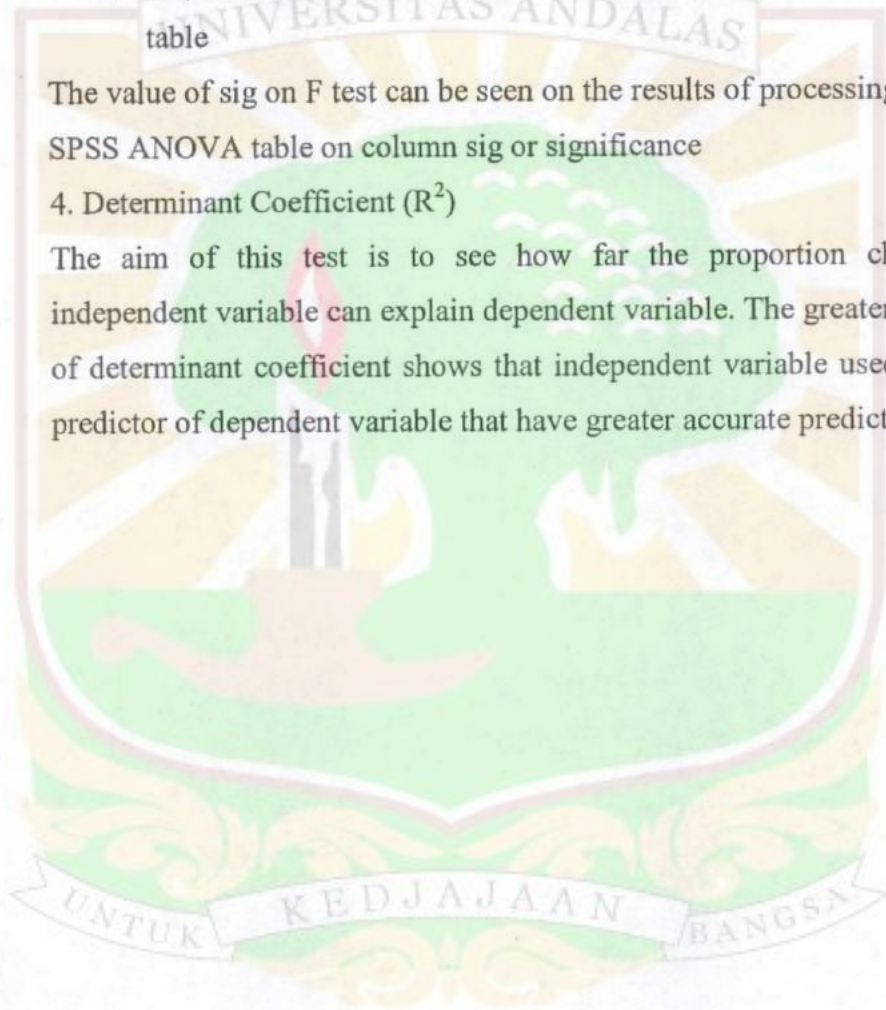
as a group. The statistical F-test is observed from the ANOVA table. If the F value  $>$  F table or the value of Sig  $<$   $\alpha$  (0.05), it is assumed that the capability of independent variables to dependent variable, if act as a group and vice versa. Decision-making based on probability values or sig value obtained from the data processing through the SPSS as follows:

- a) Hypothesis is accepted if the value of Sig  $<$  0.05 or F value  $>$  F table
- b) Hypothesis is rejected if the value of Sig  $>$  0.05 or F value  $<$  F table

The value of sig on F test can be seen on the results of processing from the SPSS ANOVA table on column sig or significance

#### 4. Determinant Coefficient ( $R^2$ )

The aim of this test is to see how far the proportion changes of independent variable can explain dependent variable. The greater the value of determinant coefficient shows that independent variable used as value predictor of dependent variable that have greater accurate prediction.





## CHAPTER IV

### RESULTS AND ANALYSIS

#### 4.1 General Description of Sample

There are many sectors of industry that we can find in IDX. A wholesale and retail trade company is plotted as the sample in this research. The main focus of this research is to measure the significant influence of working capital efficiency and liquidity to profitability of textile companies listed in IDX. From 16 companies listed in Indonesian Stock Exchange only 8 companies that meet sampling criteria. The sample of the research is presented in table.

**Table 4.1. Wholesale and retail trade companies listed in IDX 2006-2009**

No	Code	Name of Emiten
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk
2.	ALFA	PT Alfa Retailindo Tbk
3.	EPMT	PT Enseval Putra Megatrading Tbk
4.	FISH	PT FKS Multi Agro Tbk
5.	HERO	PT Hero Supermarket Tbk
6.	MAPI	PT Mitra Adiperkasa Tbk
7.	META	PT Metamedia Technologies Tbk
8.	MICE	PT Multi Indocitra Tbk
9.	MPPA	PT Matahari Putra Prima Tbk
10.	RALS	PT Ramayana Lestari Sentosa Tbk
11.	RIMO	PT Rimo Catur Lestari Tbk
12.	SDPC	PT Millenium Pharmacon International Tbk
13.	TGKA	PT Tigaraksa Satria Tbk
14.	TKGA	PT Toko Gunung Agung Tbk
15.	TMPI	PT AGIS Tbk
16.	WICO	PT Wicaksana Overseas Tbk

**Table 4.2 Wholesale and Retail Trade Companies Sample**

No	Code	Name of Emiten
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk
2.	EPMT	PT Enseval Putra Megatrading Tbk
3.	FISH	PT FKS Multi Agro Tbk
4.	MICE	PT Multi Indocitra Tbk

5.	MPPA	PT Matahari Putra Prima Tbk
6.	RALS	PT Ramayana Lestari Sentosa Tbk
7.	SDPC	PT Millenium Pharmacon International Tbk
8.	TGKA	PT Tigaraksa Satria Tbk

Source: Indonesian Capital Market Directory 2006

## 4.2 General Description of Research Variable

### 4.2.1 Working Capital Efficiency

Working capital efficiency in this research is measured by using *working capital turnover* (WCT). Working capital used in this study is a qualitative concept of working capital that is excess of current assets over current liabilities should be paid. Working capital turnover ratio shows the number of sales that can be obtained for each company working capital. In other word, we can determine it in the formula:

$$WCT = \frac{\text{Net Sales}}{\text{Current Assets} - \text{Current Liabilities}}$$

The result of WCT calculation completely are shown in the Table 4.3.

Table 4.3  
Working Capital Turnover

No	Name of Emiten	Working Capital Turnover (WCT)			
		2006	2007	2008	2009
1	PT Akbar Indo Makmur Stimec Tbk	9.78	4.96	8.68	10.63
2	PT Enseval Putra Megatrading Tbk	7.95	7.55	7.17	6.87
3	PT FKS Multi Agro Tbk	25.36	51.43	43.12	23.31
4	PT Multi Indocitra Tbk	1.48	1.43	1.81	1.68
5	PT Matahari Putra Prima Tbk	7.78	4.18	4.45	3.87
6	PT Ramayana Lestari Sentosa Tbk	4.81	4.37	4.04	4.40
7	PT Millenium Pharmacon International Tbk	11.94	11.27	12.44	12.66
8	PT Tigaraksa Satria Tbk	11.90	12.77	11.20	11.26

Source: Calculated from ICMD data



#### 4.2.2 Liquidity

Liquidity in this research is measured by current ratio (CR). This ratio indicates a company's ability to meet its short term obligations by using current assets. Current Ratio is the ratio of current assets with current liability or stated by formula:

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The result of current ratio calculation can be seen in the Table 4.4.

Table 4.4  
Current Ratio

No	Name of Emiten	Current Ratio (CR)			
		2006	2007	2008	2009
1	PT Akbar Indo Makmur Stimec Tbk	1.36	1.95	1.33	1.13
2	PT Enseval Putra Megatrading Tbk	1.84	1.91	1.90	1.92
3	PT FKS Multi Agro Tbk	1.34	1.08	1.19	1.22
4	PT Multi Indocitra Tbk	6.67	7.79	6.70	7.21
5	PT Matahari Putra Prima Tbk	1.60	2.20	1.60	1.80
6	PT Ramayana Lestari Sentosa Tbk	2.90	3.20	2.90	3.00
7	PT Millenium Pharmacon International Tbk	1.45	1.39	1.32	1.49
8	PT Tigaraksa Satria Tbk	1.35	1.30	1.39	1.48

Source: Calculated from ICMD data

#### 4.2.3 Profitability

Profitability in this research is measured by return on in investment (ROI). ROI is calculated by formula:

$$ROI = \frac{\text{Net profit after tax}}{\text{Total assets}}$$

The results of ROI calculation are shown in the Table 4.5.

Table 4.5  
Return on Investment (ROI)

No	Name of Emiten	Return on Investment(ROI)			
		2006	2007	2008	2009
1	PT Akbar Indo Makmur Stimec Tbk	0.12	2.47	1.65	0.36
2	PT Enseval Putra Megatrading Tbk	11.53	11.06	10.65	11.02
3	PT FKS Multi Agro Tbk	4.02	4.68	6.06	5.85
4	PT Multi Indocitra Tbk	16.90	12.10	8.90	10.40
5	PT Matahari Putra Prima Tbk	2.60	02.41	0.12	02.80
6	PT Ramayana Lestari Sentosa Tbk	10.18	12.36	12.71	10.43
7	PT Millenium Pharmacon International Tbk	4.81	4.14	3.08	03.55
8	PT Tigaraksa Satria Tbk	2.50	3.50	7.30	03.41

Source : Calculated from ICMD data

### 4.3 Classic Assumption Test

Classic assumption test is done before hypothesis testing. This research uses multiple regressions for data analysis. This test is important in multiple regression process to convince the data is reliable. Classic assumption test consist of normality test, multicollinearity test, heteroskedasticity test, and autocorrelation test.

#### 4.3.1 Normality test

The normality test is using the Kolmogorov-Smirnov test. The standard of this test, if the value of Sig >  $\alpha$ , than the data is assumed to be normal ( $\alpha = 0.05$ ). The result of this kolmogorov-smirnov test then described by normal P-P plot of regression chart. According to the chart, the data is assumed to be normal if it have a normal data distribution, at least close to normal distribution, where some dots are spread out following the diagonal line.



Figure 4.1 Normal P-P Plot of Regression

**Normal P-P Plot of Regression Standardized Residual**

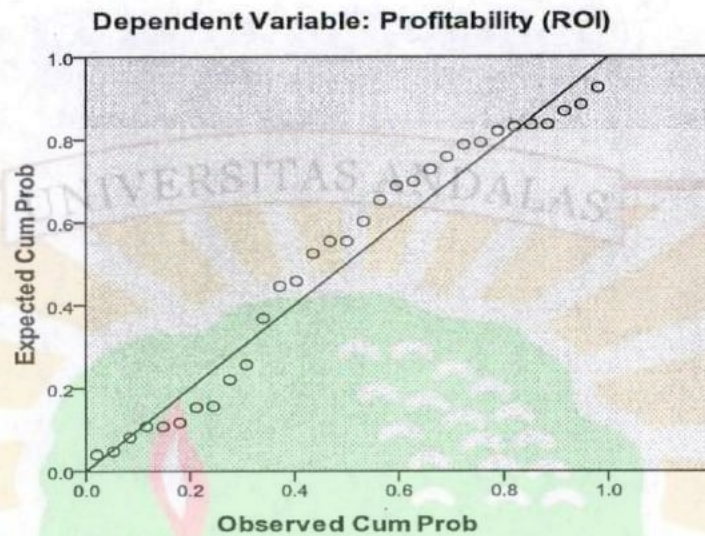


Figure 4.1 show that the distribution of some dots is spread out following the diagonal line. The data assumed to be normal.

**4.3.2 Multicollinearity test**

The test for multicollinearity is aimed to get information whether there is a correlation between the independent variables. A good regression model should not have a correlation between its independent variables. Multicollinearity test can be done by examining the tolerance value from variance inflation factors (VIF) on the coefficient correlation table. If  $VIF < 10$  and tolerance value  $> 0.1$  so, there is no multicollinearity.

Table 4.6 Multicollinearity test

	Collinearity Statistics	
	Tolerance	VIF
(constant)		
Working Capital Efficiency	0.700	1.428
Liquidity	0.786	1.272

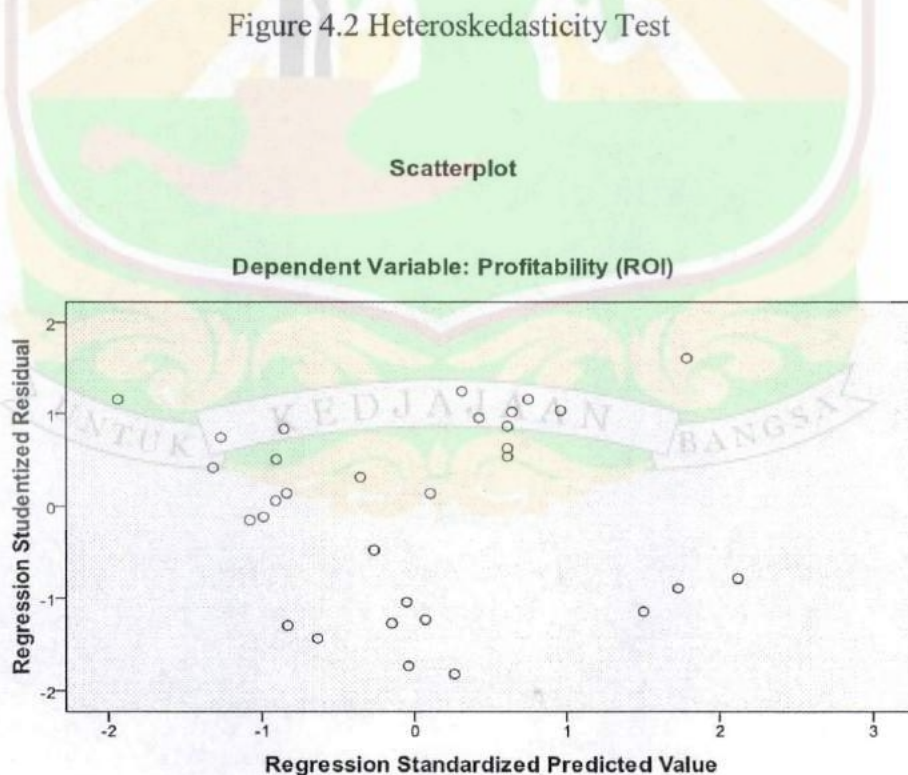
The table above shows that the values of VIF for each independent variable is fulfill the requirement of multicollinearity test. The value of VIF do not greater than 10,  $VIF = 1.428 < 10$ , and  $1.272 < 10$ . The values of tolerance do not less than 0.1. Tolerance of independence variable is  $0.700 > 0.1$  and  $0.786 > 0.1$ . It means there is no correlation between independent variable.

#### 4.3.3 Heteroskedasticity Test

The heteroskedasticity test is aimed at getting information whether there is a difference of variance from the residual of an observation to another observation in regression model. This test is done by using scatter plot chart. The standard are:

1. If there is some dots spread out to make a certain character of form, then it's assumed that there is heteroskedasticity in the regression model.
2. If there are no certain characters of forms made by the dots, then it's assumed that there is no heteroskedasticity in the regression model.

The result of the hetteroskedasticity test of this research is described below in the chart :





The figure 4.2 shows that some dots are not made certain characters of form and the dots itself are randomly spread out above and below the zero point. Based on standard, it is assumed that there is no heteroskedasticity in the beta regression model.

#### 4.3.4 Autocorrelation Test

Autocorrelation test aims to test whether in a regression model, there is a correlation between errors factor in a period with errors factor in prior periods. Basis for making decision whether autocorrelation exist or not can be seen from the value of Durbin Watson (DW) Table dL; dU at  $\alpha$ , n, (k=2) where level of significance ( $\alpha$ ) 5%, number of observation (n) 32 and number of independent variable (K=2). In this research the value of dL is 1.391 and the value of dU is 1.600.

- 1) If  $dU \leq DW \leq (4 - dU)$  or  $1.600 \leq DW \leq 2.400$ , it indicates that autocorrelation are not exist.
- 2) If  $(4 - dL) \leq DW \leq dL$  or  $2.609 \leq DW \leq 1.391$ , it indicates that autocorrelation are exist.

Table 4.7 Autocorrelation Test

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.790 <sup>a</sup>	.625	.583	2.84868	1.831

a. Predictors: (Constant), Liquidity (CR), Working Capital Efficiency (WCT)

b. Dependent Variable: Profitability (ROI)

The result obtained in Table 4.7 above shows that the Durbin-Watson value for dependent variable, profitability, is 1.831. Therefore, Durbin-Watson values obtained were between  $1.600 \leq DW \leq 2.400$ , it can be concluded that there is no autocorrelation in the regression model used in this study.

#### 4.4. Result of Hypothesis Testing

##### 4.4.1 The Equation Model

After analyzing the result from the SPSS program that have done , the statistical equation model that can be made is:

Equation 4.1 Equation model

$$\text{Profitability} = 5.723 + 0.081 \text{ Working Capital Efficiency} + 1.353 \text{ Liquidity} + e$$

Table 4.8

The effect of increasing +1 independent variable to dependent variable of wholesale and retail trade companies

Independent Variable	If	Dependent variable (Profitability)
Working capital efficiency	+1	0.081
Liquidity	+1	1.353

##### 4.4.2 Statistical t-Test

The aim of statistical t-test is to find whether all independent variables that included in a regression model, can influence the dependent variable partially. The statistical t-test is observed from the Coefficient Correlation table.

Hypothesis used to test relationship between working capital efficiency and profitability is:

H1 : Working capital efficiency has significant influence to profitability

Hypothesis used to test relationship between liquidity and profitability is:

H2 : Liquidity has significant influence to profitability

For each independent variable, working capital efficiency and liquidity use same criteria, is as follow;

- If the t value > t table or the value of sig <  $\alpha$  (0.05), it means hypothesis is accepted and it is assumed that the capability of independent variable to influence the dependent variable partially is significant, and vice versa.
- If the t value < t table or the value of sig >  $\alpha$  (0.05), it means hypothesis is rejected.

The result of t-test of the regression model is:



Table 4.9 t-Test

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	5.723	1.404		4.076	.000		
	Working Capital Efficiency (WCT)	.081	.055	.206	1.465	.155	.700	1.428
	Liquidity (CR)	1.353	.307	.587	4.413	.000	.786	1.272

a. Dependent Variable: Profitability (ROI)

From the table 4.9, the Sig value for working capital efficiency is 0.155, which is  $> 0.05$ . For liquidity, the sig value is 0.000 which is  $< 0.05$ . Based on criteria on research methodology, we can make decision that a hypothesis (H1) is rejected and hypothesis (H2) is accepted. Therefore, we can conclude that the capability of working capital efficiency to influence the profitability is insignificant, but the capability of liquidity to influence the profitability is significant.

#### 4.4.3. Statistical F-Test

The purpose of the F-Test is to find whether all independent variables that included in regression model, can influence the dependent variable, if act as a group.

Hypothesis used to test relationship between working capital efficiency and liquidity to profitability is:

H3 : Working capital efficiency and liquidity as a group have significant influence to profitability

The criteria are used as a guidance to make decision to determine hypothesis be accepted or rejected is as follow:

- a) If  $F \text{ value} > F \text{ table}$  or the value of  $\text{Sig} < \alpha (0.05)$ , it means hypothesis is accepted and it is assumed that the capability of independent variables to influence dependent variable is significant, if act as a group and vice versa.
- b) If  $F \text{ value} < F \text{ table}$  or the value of  $\text{Sig} > \alpha (0.05)$ , it means hypothesis is rejected.

The result of statistical F-test of the regression model is:

Table 4.10 F-Test

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

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	364.957	3	121.652	14.991	.000 <sup>a</sup>
	Residual	219.105	27	8.115		
	Total	584.062	30			

a. Predictors: (Constant), Liquidity (CR), Working Capital Efficiency (WCT)

b. Dependent Variable: Profitability (ROI)

From table 4.10 above, the F value is 14.991 and the Sig value is 0.000 which is  $< \alpha$  (0.05). Based on criteria on research methodology, we can make decision that a hypothesis (H3) is accepted. Therefore, we can conclude that working capital efficiency and liquidity as independent variables significantly influencing profitability as dependent variable if act as a group.

#### 4.4.4. R Square Test

The purpose of statistical R Square test is to find out whether all independent variables that included in regression model can described the dependent variable. The statistical R Square test is observed from the model summary table if the value for R Square is above 50%, assumed the capability of the independent variables to describe the dependent variable are high and vice versa.

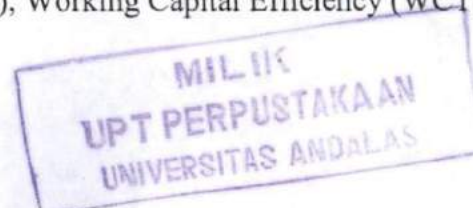
The regression result for the R Square test is:

Table 4.11 R Square Test

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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.790 <sup>a</sup>	.625	.583	2.84868	1.831

a. Predictors: (Constant), Liquidity (CR), Working Capital Efficiency (WCT)





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

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.790 <sup>a</sup>	.625	.583	2.84868	1.831

a. Predictors: (Constant), Liquidity (CR), Working Capital Efficiency (WCT)

b. Dependent Variable: Profitability (ROI)

From table 4.11 the value of R Square for regression model is 0.625 or 62.5%. It means the capability of independent variable in describing dependent variable is very significant. There is 62.5% profitability as dependent variable is described by working capital efficiency and liquidity as independent variables and 37.5% remaining is described by other factors.

Table 4.12

#### Summary of the Result of Hypothesis Testing

	Hypothesis	Result	Meaning
H1	Working capital efficiency has significant influence to profitability	Reject	It means working capital efficiency is insignificant influence to profitability of wholesale and retail trade companies
H2	Liquidity has significant influence to profitability	Accept	It means that increasing of liquidity will significant influence to profitability of wholesale and retail trade companies

H3	Both working capital efficiency and liquidity simultaneously have significant influence to profitability	Accept	As a group, working capital efficiency and liquidity significantly influencing profitability of wholesale and retail trade companies
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### 4.5 Discussion and Analysis

This research is aimed to measure the influence of working capital efficiency and liquidity to profitability. From previous study, there were studies that related to this subject. It will be explained the result of this study.

#### I. The effect of working capital efficiency to profitability of Wholesale and Retail Trade Company

Based on the data that we have gotten by using SPSS program, there is a different between this research hypothesis with the empirical result. The hypothesis determined that working capital efficiency have significant influence to profitability. But the result by using SPSS determined that working capital efficiency has no significant influence to profitability.

Table 4.9 showed the t test of regression model about the effect of working capital efficiency to profitability. t test result showed the value of Sig was bigger than  $\alpha$  (0.05) then it means that working capital efficiency is insignificant influence to profitability. So, increase in working capital efficiency (WCT) isn't guarantee will followed by increasing in pofitability (ROI).

A good working capital ratio represent that company ability to pay it's current liability is also good. It's becaused more company ability to pay it's current liabilities, show that more effective a company in using its working capital. This research used working capital turnover (WCT) to measure working capital efficiency. The result determined that WCT has insignificant influence to profitability. It's different with previous research conducted by Dani (2003). Dani found that working capital efficiency (WCT) has positive and significant



influence to profitability (ROI). It's may be caused by different object or research sample and the fluctuation of WCT value for the research period. It is can showed that almost all companies have negative WCT value caused by more current liabilities due date before inventory and account receivable can be realized or convert into cash. Beside that, the sharply increased of WCT value in year 2006 because significantly increasing in sales and it is followed by increase in investment of inventory and account receivable. More working capital turnover, then less the idle fund.

## II. The effect of liquidity to profitability of Wholesale and Retail Trade Company

t test results for liquidity showed that Sig value is lower than  $\alpha$  (0.05). It means that liquidity has significant influence the the profitability. So, by increasing of liquidity will significantly increased of profitability in textile company. This result is similar with previous research conducted by Dani (2003). Dani found that liquidity (CR) has positive and significant influence to profitability (ROI).

Liquidity is influence the company performance because it is related to company ability to manage their assets to pay their current liabilities. Inability to meet the short term liabilities may affect the company's operations and in many cases it may affect its reputation too. Lack of cash or liquid assets on hand may force a company to miss the incentives given by the suppliers of credit, services, and goods. Loss of such incentives may result in higher cost of goods which in turn affect the profitability of the business. Supplier of goods will check the liquidity of the company before selling goods on credit. So, there is always a need for the company to maintain certain degree of liquidity.

If a company has a good liquidity, so it able to get credit from creditor because by a good company liquidity, the liabilities have guarantee to pay. So, company has additional fund to run the business operation and increase its profit.

## III. R Square Test

The value of R square is strong for wholesale and retail trade companies; it means that the ability of working capital efficiency and liquidity as independent variable in describing profitability as dependent variable is high or strong. But,

although r square test has high, the value of r square will be more increase if there is additional independent variable added to the model without considering the variable added could influence dependent variable or not.





## **CHAPTER V**

### **CONCLUSION**

The preceding chapter has presented the empirical results and this chapter provides conclusions, an assessment of the potential limitations present in this study and possible future directions for research.

#### **5.1 Research Conclusions**

The purpose of this study is to get empirical evidence that working capital efficiency and liquidity statistically has significant effect toward profitability of Wholesale and Retail Trade Company in Indonesian Stock Exchange. The research period is from 2006 until 2009.

Through a statistical test by using SPSS program, variable dependent in this research is profitability, while working capital efficiency and liquidity as independent variable. This research found that working capital efficiency (WCT) has insignificant influence to profitability (ROI) of Wholesale and Retail Trade companies. t test results for liquidity showed that liquidity (CR) is significantly influence to the profitability (ROI). But, from the statistical F test result, if the independent variables act as a group, they have a significant influence to profitability of wholesale and retail trade companies.

In the equation model, for variable working capital efficiency (WCT), the equation determine there is causal relationship between working capital efficiency (WCT) and profitability (ROI) but, the influence is insignificant while, liquidity (CR) showed positive direction to profitability (ROI). It means if liquidity increase, profitability will increase as well.

#### **5.2 Research Limitation and Suggestion**

Basically, this research has reduced many biases possibility to make it acceptable. This research is done by trying to be perfectly to find the maximum results, but however, there are still limitations:

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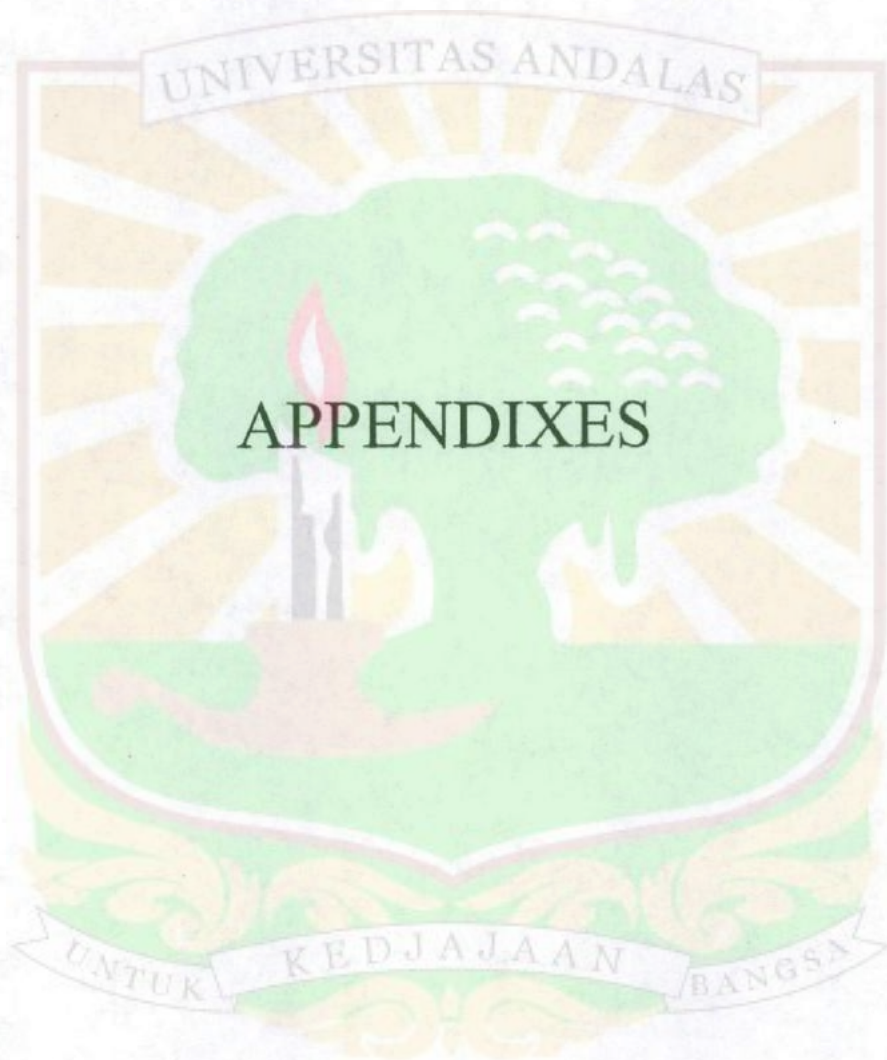
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APPENDIXES

**Data in Years 2006**

No	Code	Name of Company	(In million rupiah)			ROI
			Current Assets	Current Liabilities	Net Sales	
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk	67,276	49,661	174,227	0.12
2.	EPMT	PT Enseval Putra Megatrading Tbk	1,519,223	824,657	5,522,289	11.53
3.	FISH	PT FKS Multi Agro Tbk	157,631	117,299	1,022,615	4.02
4.	MICE	PT Multi Indocitra Tbk	175,349	26,293	221,130	16.90
5.	MPPA	PT Matahari Putra Prima Tbk	2,459,685	1,517,319	8,487,654	2.60
6.	RALS	PT Ramayana Lestari Sentosa Tbk	1,510,824	479,855	4,478,223	10.18
7.	SDPC	PT Millenium Pharmacon International Tbk	164,784	1113,601	610,868	4.81
8.	TGKA	PT Tigaraksa Satria Tbk	927,019	685,949	2,869,366	2.50



**Data in Years 2007**

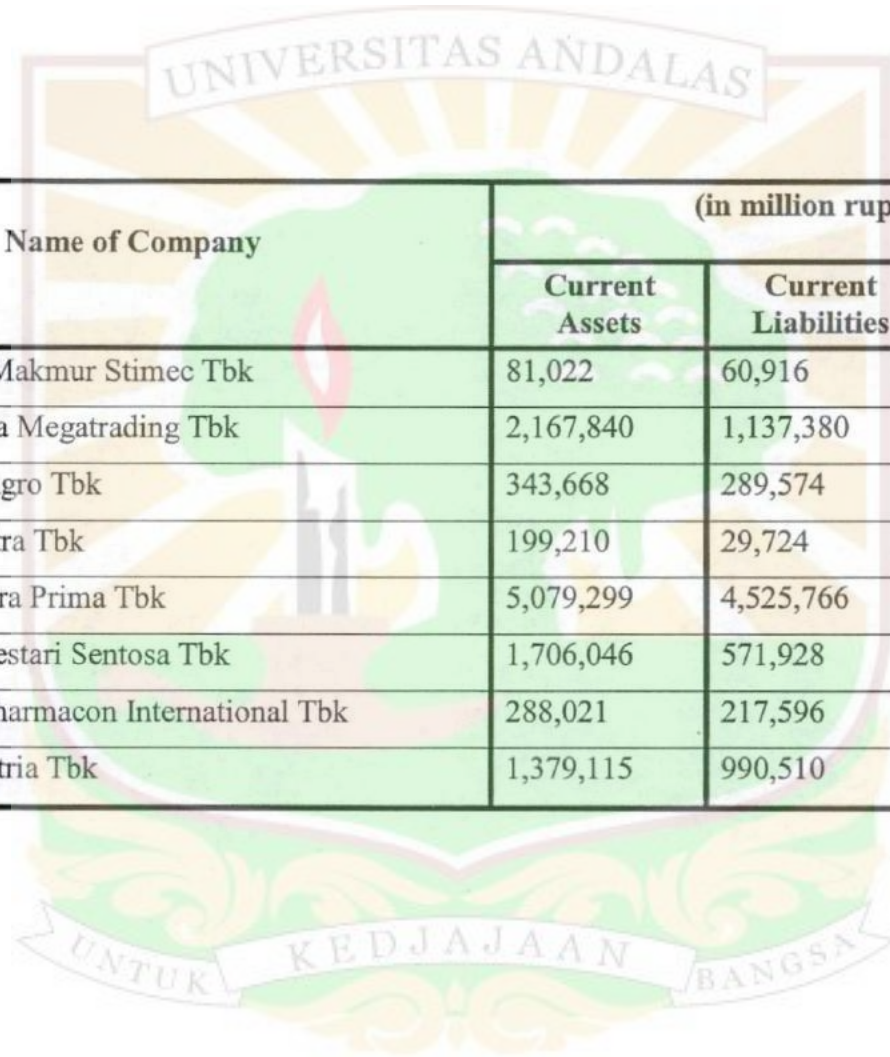
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No	Code	Name of Company	(in million rupiah)			ROI
			Current Assets	Current Liabilities	Net Sales	
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk	37,927	19,509	92,336	2.47
2.	EPMT	PT Enseval Putra Megatrading Tbk	1,770,393	926,735	6,367,357	11.06
3.	FISH	PT FKS Multi Agro Tbk	464,547	431,580	1,695,617	4.68
4.	MICE	PT Multi Indocitra Tbk	195,474	25,107	243,821	12.10
5.	MPPA	PT Matahari Putra Prima Tbk	4,426,517	1,964,933	9,768,075	02.41
6.	RALS	PT Ramayana Lestari Sentosa Tbk	1,836,007	625,693	4,892,649	12.36
7.	SDPC	PT Millenium Pharmacon International Tbk	221,740	159,172	704,830	4.14
8.	TGKA	PT Tigaraksa Satria Tbk	1,206,290	926,169	3,576,415	3.50

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Data in Years 2008

No	Code	Name of Company	(in million rupiah)			ROI
			Current Assets	Current Liabilities	Net Sales	
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk	81,022	60,916	174,643	1.65
2.	EPMT	PT Enseval Putra Megatrading Tbk	2,167,840	1,137,380	7,392,484	10.65
3.	FISH	PT FKS Multi Agro Tbk	343,668	289,574	2,332,493	6.06
4.	MICE	PT Multi Indocitra Tbk	199,210	29,724	307,870	8.90
5.	MPPA	PT Matahari Putra Prima Tbk	5,079,299	4,525,766	11,977,370	0.12
6.	RALS	PT Ramayana Lestari Sentosa Tbk	1,706,046	571,928	5,526,247	12.71
7.	SDPC	PT Millenium Pharmacon International Tbk	288,021	217,596	876,274	3.08
8.	TGKA	PT Tigaraksa Satria Tbk	1,379,115	990,510	4,353,190	7.40





**Data in Years 2009**

No	Code	Name of Company	(in million rupiah)			ROI
			Current Assets	Current Liabilities	Net Sales	
1.	AIMS	PT Akbar Indo Makmur Stimec Tbk	1,824,319	1,614,062	2,234,953	0.36
2.	EPMT	PT Enseval Putra Megatrading Tbk	25,939,420	13,486,451	85,501,267	11.02
3.	FISH	PT FKS Multi Agro Tbk	4,920,365	4,027,365	20,813,051	5.85
4.	MICE	PT Multi Indocitra Tbk	2,357,375	328,820	3,404,625	10.40
5.	MPPA	PT Matahari Putra Prima Tbk	5,066,239	3,144,994	10,280,457	02.80
6.	RALS	PT Ramayana Lestari Sentosa Tbk	1,758,933	626,179	4,310,395	10.43
7.	SDPC	PT Millenium Pharmacon International Tbk	2,440,937	1,642,394	10,109,340	03.55
8.	TGKA	PT Tigaraksa Satria Tbk	13,174,693	8,923,100	47,884,737	03.41

