THE EFFECTS OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY IN SMALL MANUFACTURING COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

(Undergraduate Thesis)

By

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FACULTY OF ECONOMICS AND BUSINESS
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ABSTRACT

THE EFFECTS OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY IN SMALL MANUFACTURING COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

RESEARCHER

LIA HERMANTO

The object of the research presented in this paper is to provide empirical evidence on the effects of working capital management on profitability in small manufacturing companies listed in Indonesia Stock Exchange. Panel regressions (fixed effects) and instrumental variables were used to model a sample of 53 small manufacturing companies listed in Indonesia Stock Exchange, covering the time period 2012 – 2015. The empirical result showed the number of days account receivable and the number of days inventories had a negative effect to the profitability (ROA), while the rest variables have no significant level. The number of days accounts receivable, the number of days inventories, current asset ratio, current liabilities ratio, the sales growth of the company, and the leverage had effect to the profitability (ROA) simultaneously with or without control variables. Moreover, managers can improve the firms' profitability by shortening receivable conversion period and inventory conversion period.

Keywords: Profitability, Working Capital Management, Small Companies.

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Researcher

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Hereby declare that:

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Bandar Lampung, 23 January 2017

The Declaring

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BIOGRAPHY

The author was born in Bandar Lampung on Wednesday, June, 6th 1994, as the second child of three siblings. Daughter of Mr. Hermanto and Mrs. Misirah and the second sister of Eva Hermanto and Devi Hermanto.

Academic Study author begins by completing an education at Taman Indria Tamansiswa Kindergarten in 1999, and continue to Taman Muda Tamansiswa Elementary School in 2000, then went to SMPN 16 Bandar Lampung and graduated in 2009. In 2012, entering the next level of her education the author continued at SMAN 4 Bandar Lampung and graduated.

In 2012, the author was accepted as a student in University of Lampung entered with PMPAP test, Management Department in Economics and Business Faculty, then choose in Bilingual Class and took Financial concentration. In January 2015, the author did the local internship or KKN in Bima Sakti, Way Kanan for 40 days.

Now with full of struggle, hard work and learning process are relentless, eventually, Writers can complete the educational strata 1 (one) in the Department of Management Faculty of Economics and Business, University of Lampung.

DEDICATIONS

By expecting blessings of Allah SWT, I dedicate this thesis to:

My parents, Hermanto and Misirah.

" Thank you for all the sacrifices you have given, also provide the best facilities and fully supported me. You are the truest blessing in my life. Without your love I am nothing and I love you so much. I will try as hard as I can to make you both proud. "

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" Thank you for the prayers that have been given and the support that make the spirit in completing this thesis "

Lecturers and friends,

" Thank you for the direction and support that has been given me to be a better "

Beloved alma mater,

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MOTTO

رَّبِّ زِدْنِي عِلْمًا ﴿١١٤﴾

My Lord, Increase me in knowledge

(20:114)

فَإِنَّ مَعَ ٱلْعُسْرِ يُسْرًا ﴿٥﴾

So Verily, with hardship, there is relief

(94:5)

Don’t Decrease The Goal. Increase The Effort.

– QQDStories

Be Stubborn About Your Goals, But Flexible With Your Methods.

– Lia Hermanto

Strive For Progress Not Perfection.

– Lia Hermanto

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Hopefully, this script would give a positive contribution to the educational development and for those who are interested to conduct the further research.

Bandar Lampung, January 23rd 2017

Lia Hermanto

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I. INTRODUCTION

1.1 Background

Indonesia is one of developing countries in the world. The economics character of Indonesia is not much different from other developing countries. The economic growth in the purpose and process are facing the problem in fulfilling the capital that will be invested in its development. In another side, the developments of technology are significantly increased; there are many same companies in the production which make the competitiveness continuously increase. From those ways make the management of the company complicate. From the current condition, the economics of Indonesia is not stable, with the result, it is hard for the companies to survive with that kind of conditions. It greatly affects the policies that are embraced by the company. Not infrequently, the company should change the adopted policy in order to improve and intensify the policies are running.

The company in demanded to always do the initiative, innovation and creativity with the purpose to increase the efficiency and productivity in an effort to win the market and constantly adapt to all particulars of changes that will occur in the future in the condition of the economy, government regulations, consumer condition and the market competition. Therefore, the company has to grow, running and build management by conceptual also systematically through the resources throughout the company.

One of the important resources of the company is financial resources, the, i.e., working capital. The working capital sense here has a comprehensive meaning covering other aspects within to measure the value added to the company.

In order to create the profit, the capital maintenance has an important role. Due to the fact that, the manager in the company is not only thinking about how to get and choose the source of financial which needs to produce profit but also expected to monitor, control, also, restraint in capital utilization. Then, a manager has to take a decision and the right solution to enable the company which can run effectively and efficiency. And one of them is taking a decision regarding the working capital.

World mention that working capital is the main problem that company always face because almost all of financial attention devoted to managing capital and current assets is a significant portion of the assets. Furthermore, working capital required by every company to conduct the operations, such as: to provide advances for purchase of raw materials, to pay the wages of employees and et cetera. Whereas, the funds expended forward to returning again into the company in a short time through the sale of its production. Similarly, the progress of the company will be in line with the needs of the capital required to fund the business activities, where the greater company will be the greater the required capital. Capital used to invest in current assets is called working capital. The components of working capital are cash, securities, accounts receivable, inventories, and current liabilities. The working capital has an important role in long-term investment, long-term policy, dividend policy and the merger or reorganization of the company.

Good working capital management is very important in the financial sector because of mistakes and errors in managing the working capital could the business activities become obstructed and even stopped. With the result that, made existence the analysis of the company's working capital is very important to know the situation of working capital at this time. Subsequently, it is linked to the financial situation that will be faced in the future. From this information, it can be defined what the programs make, or the steps should be taken to overcome.

Working Capital Management is very influential in decision-making regarding the amount and the composition of current assets and how to defray these assets. The companies which cannot consider the satisfaction of working capital level, accordingly the company has the possibility to get insolvency and even liquidation. Current assets must be substantial to cover the current liabilities, thus depicts a satisfactory safety margin. Meanwhile, if the company establishes excessive working capital will affect the company over liquid.

The working capital has flexibility, the proportions of working capital can be increased or decreased according to the necessary of the company. Assign the working capital which consists of cash, accounts receivable; inventories should be used as efficiently as possible. The amount of working capital should be compatible with the necessary of the company because either excess or deficiency of working capital will bring negative impact to the company. Excessive working capital in the form of cash and securities could disserve the company because it causes for a large fund without the use productively. Besides that, the working capital also will inflict inefficiency and extravagance in the operations of the company.

The existence of efficiency the working capital can be seen from the receivable turnover and inventories turnover. The working capital turnover starts from when the cash invested in the working capital components until back into the cash. The shorter and faster turnover of working capital, then the company is more efficient.

According to Munawir (2004), determining the efficient working capital policy, the companies face the problem of liquidity and profitability. If the company decides to expand the amount of working capital, then the level of liquidity will be maintained, but it also decreases the level of profitability because the opportunity to earn a greater profit will decline. And vice versa, if the company wants to increase the profitability will affect liquidity. The company which has a high level of liquidity is having a good appraisal in the eyes of the creditors because it allows the company to settle up the obligations on time. But from the shareholders perspective, the high liquidity is not necessarily to assign the higher profits. In addition, determination of the financial sources also important issues that must be faced by the company. Stipulation the financial sources can be fulfilled from the internal sources such as withdrawal the capital through sales of stock to the society or retained earnings which can reuse into capital. In addition to internal sources, the financial sources also can be fulfilled from the external sources of the company such as borrow the funds from the creditors or issued the bonds that offered to the public.

If the company uses more debt than own capital, this may affect profitability decline due to the interest expense must pay to the creditors also increased. So, if the company decides to escalate the debt quantity, this means increasing the financial risk. Moreover, when the company cannot manage the debt properly, then it will affect negatively and reduce the profitability. Conversely, if the company can manage the financial sources well and can be used for investments in productive projects, it will affect positively and increased the profitability.

The past research has also been conducted by Deloof (2003) to the 1009 non-financial companies in Belgium from 1992 to 1996, entitled “Does working capital management affect profitability of Belgian firms?.” the used dependent variable: Gross Operating Income, independent variables: sales growth ratio, financial debt ratio, fixed financial assets ratio, number of days account receivable, numbers of days inventories, number of days account payable, cash conversion cycle. The result from this study is the relation of sales growth ratio, financial fixed assets ratio to gross operating income is a positive and highly significant effect. This means that if the sales growth ratio and financial fixed assets ratio are increased, the gross operating income also increase. The relation financial debt ratio, number of days accounts receivable, inventories number of days, the number of days accounts payable on the gross operating income was negative, and the effect is very significant. This means that if the financial debt ratio, number of days accounts receivable, the number of inventories, the number of days accounts payable, decreased, then there will be an increase in gross operating income.

Subsequent research conducted by Yunus (2005) to the consumer goods industry sector companies listed on the Indonesia Stock Exchange, entitled "Effect of working capital on profitability in the company's food and beverage industry sectors listed on the Indonesia Stock Exchange." The used variables are similar to the used variables by Deloof, but there are some differences in the results of research conducted by Deloof. The results of Yunus showed that the only financial debt ratio, fixed financial assets ratio, and a number of days accounts receivable variables have significant results and variable sales growth ratio, the number of days inventories, accounts payable, and cash conversion cycle has no effect significantly to the gross operating income ratio. While the research of Deloof only variable cash conversion cycle that has no significant effect on gross operating income.

Based on the results of research conducted by Garcia & Martinez (2007), it can be concluded that there was the important role of working capital management on value generation in Small to Medium-sized Enterprise (SMEs), while there are significant negative relation between Small to Medium-sized Enterprise (SMEs) profitability and the number of the days accounts payable and days of inventory. Whereas, the cash conversion cycle does not have a significant effect on the gross operating income ratio. All in all, which are robust to the presence of endogeneity, demonstrate that managers can create value by reducing their inventories and the number of days for which their accounts are outstanding. Moreover, shortening the cash conversion cycle also improves the firm's profitability. The effects of working capital management on Small to Medium-sized Enterprise (SMEs) profitability was tested using the panel data methodology by collected a panel of Small to Medium-sized Enterprise (SMEs) covering the period 1996-2002. Where measure ROA the return on assets, AR the number of days accounts receivable, INV the number of days inventories, AP the number of days accounts payable, CCC the cash conversion cycle, SIZE the company size, SGROW the sales growth, DEBT the debt level, and GDPGR the annual GDP growth.

The follow-up result comes from Gama (2015), it can be concluded that the negative relationship with profitability was found for INV, AP and CCC variables. In order to control, it also for possible endogeneity problems, an alternative, consisting on the regression with instrumental variables, the result are similar to those obtained with the fixed effects regression except for the AR variable, which displays a positive relationship. Regarding the control variables SIZE, SGROW, GDPGR, CLR and DEBT, all of them statistically significant, the relation with profitability is positive for the first four, and negative for the last one.

In general, smaller company stocks tend to have a greater return than the larger company stocks; this phenomenon is commonly called the size effect. In Fama and French study (1995) found that firm size related to profitability. Fama and French (1995) stated that partial that firm size significantly influences returns. Shares of small companies have a tendency income (earnings) which is lower than the large company stocks. Size effect in revenue occurred due to the likely lower profitability of small company stocks. Large-cap company has an annual return larger than the small capitalization companies; These results led to debate whether this difference is only temporary or will occur in the long term.

Regardless of differences of opinion can be concluded, that the size of the company's market capitalization is a risk factor to be reckoned in calculating the rate of return shares. A theory that holds that smaller firms, or those companies with a small market capitalization, outperform larger companies. This market anomaly is a factor used to explain superior returns in the Three Factor Model, created by Fama and French - the three factors being the market return, companies with high book-to-market values, and small stock capitalization.

Knowing which industries generally provide the highest returns is one way to explore investments of time and money. Sageworks, a financial information company, recently conducted a financial statement analysis of privately held companies. From that information, this study tried to use the small company for the sample. That shows the earliest empirical evidence regarding the size effect, i.e., the tendency of stocks of small companies that have a higher return than stocks of large companies. Banz (1981)

There are two things that have to concern based on the mismatch results in several studies described before, some studies state the number of days accounts receivable has a positive relationship to the return on assets of the company, while others stated that the number of days accounts receivable has a negative effect on the return on assets of the company and there are the same case in other variables: leverage and the growth in its sales. So that further research is necessary to provide empirical evidence about the effects of working capital management on profitability company. The title of this research is, **“The effects of working capital management on profitability in small manufacturing companies listed on Indonesia Stock Exchange.”**

1.2 Problem Formulation

This is important to give analysis and ideas of the working capital management. Based on the effects described in the background, then the authors formulate problem as follows:

1. Does the working capital management affect the profitability in small manufacturing companies listed on the Indonesia Stock Exchange, covering the time period 2012 – 2015?
2. Which variable related to the management working capital has the most dominant influence on profitability ?

1.3 Purpose of The Research

Based on the formulation of the problem that has been described, the purposes of this research are:

1. To analyze the effect of working capital management on the profitability of small manufacturing companies listed on the Indonesia Stock Exchange.
2. To know the variable related to the management working capital has the most dominant influence on profitability (return on total assets ratio).

1.4 Research Benefits

Based on the research findings on the effect of working capital on profitability in small manufacturing companies listed on Indonesia Stock Exchange, it will obtain the expected benefits of this research for parties as follows:

1. For academics, this study may provide empirical evidence about the effects of working capital management on company profitability, so it can provide in-depth insight and knowledge of the topics covered in this study.
2. For investors, can be taken as a consideration and evaluation in the outlook for the effects of working capital management on company profitability so that it can assist in making investment decisions in the company.
3. For the researchers and the general public can be used as additional information and reference as well as a comparison for the future research.

II. LITERATURE REVIEW

2.1 Theoretical Basis

2.1.1 Definition of Working Capital

Working Capital is something that always needed for any company in every field, even it is for service companies as well as manufacture companies for financing the business activities. Furthermore, the company has expectation funds released can be re-entered into the company in the relatively short period. Definition of capital in the company is not a unity of the opinion yet among the economist. To consider the definition of capital, the authors expressed the opinion from some economists that provides the definitions of capital. The definition of working capital according to Djarwanto (2001) is related to the total funds used during the accounting the certain accounting period is intended to generate revenue for the concerned accounting period (current income). The Weston and Brigham (1994) propound that working capital is the investment of the company in short-term assets, such as cash, marketable securities, accounts receivable and inventories.

Meanwhile, according to Munawir (2004), working capital is the excess value of the assets owned by the company from all debts owed. Every company needs working capital to be used for finance the daily activities of the company. The shortage of cash will affect the company unable to pay the short-term obligations while the shortage of the inventories will generate the company unable to make the profit because the client canceled to buy the products of the company so there is no such receivable. Munawir (2004)

Zariyawati et al. (2009) stated that working capital is an important issue in corporate financial decisions. Management working capital is the efforts of the company to maintain the liquidity of the company in daily operations which can run well while on the other hand the company can still suffice the short term obligations. The manager of the company who cannot manage a company with good working capital will affect the growth and the profitability of the company which will eventually bring the company to the financial distress and bankruptcy.

Wijaya (2010) stated that the main goal of the company is improving the value of the company. The companies should always try to make the right decisions with the purpose of increasing the profits and optimising the value of the company. Dong & Su (2010) Explains that one of the important financial decisions for the company is the management of working capital. The main objective of working capital management is providing sufficient support for the running of the business of the company. Management of the efficient working capital management plays an important role in the strategy of the company, especially the effort to create the value for the company. The problem that arises is the increase in the corporate profits which could sacrifice aspects of the liquidity of the company. Therefore, the companies must be able to balance the goal of maximising profit and the efforts to maintain the liquidity of the company since both are equally important to the company.

The According to Munawir (2004), the short-term financial management is the management of current assets and current liabilities of the company. The goal of short-term financial management is managing each current assets of the company (cash, marketable securities, accounts receivable and inventories) and liabilities (accounts payable, notes payable, accrued liabilities) to achieve a balance between the profit and the risk which can make a positive contribution to the value of the company, for instance:

1. Current assets in large amounts consequently reduce the profits.
2. Current assets in small amounts, as a result, increase the risk of non-payment.
3. Current liabilities in large amounts consequently may increase the risk which cannot pay at the due date.

2.1.2. The Types of Working Capital

According to Taylor in Sawir (2005) classify the working capital in two specific: the first is permanent working capital which must remain at the company to able run functional, or in other words continuously working capital required for the continuity for running the business. Whereas there are two specifics, which are the primary working capital: the minimum working capital which must exist in the company to ensure the continuity of the business, and the normal working capital: the amount of working capital needed to organise the normal production area. The second is the variable working capital which is the amount of working capital where the number fluctuates according to the changing circumstances.
Specifically, divided into three types, the first is seasonal: the working capital

which the number fluctuates due to the season fluctuations, secondly is cyclical: the working capital which the number fluctuates due to the conjuncture fluctuations. And the last is emergency: working capital which the number fluctuates due to the unknown emergency situations previously (such as labour strikes, flood, or accidental alteration in economic circumstances).

According to Riyanto (2001), to fulfill the needs of working capital, on the top of that preferably financed the capital by minimally. However, the capital turnover of the company can be improved; the companies should seek the external funding to cover the needs of working capital. Then the company can use the principles of expenditure, videlicet:

1. The capital acquired as short-term loans can only be used to finance the working capital.
2. The Capital acquired as long-term or short-term loans then the first calculated in the critical time period.

In addition, working capital is always in the state of the operational conditions or rotating in the company, for the involved company in the business operating condition. Working capital turnover period start from when the invested cash in components is working capital until when the cash back. The shorter period means that the faster-moving or, the higher turnover rate. How long working capital turnover period is dependent on how long the period of rotation in each component of the working capital. The trade goods turnover period is shorter than the goods which had the production process.

2.1.3. The Determination of Working Capital

The availability of sufficient the working capital allows the company to operate in economically, efficiency, and avoid the risk from the liquidity problems. To determine the enough working capital need to determine the factors that affect the working capital. According to Riyanto (2001) the size of the needs working capital depends on two factors, which are the expenditure of the average cash in daily or fixed turnover and the rotation period or dependent working capital period.

If the company is only running once the business, then the required working capital; sufficient working capital issued during one turnover period only. But in general, the company was established not intend for only running one the business. For the company which mentioned, the working capital is not enough only the amount of one turnover period, but by the amount of the daily expense multiplied by the turnover period. Riyanto (2001).

The large companies have striking differences in working capital compared with small companies. A large company with multiple sources of funds may require a smaller working capital compared with the total assets or sales. The company's activities mean the business condition, for example, a company that offers services would not be needed supplies. A company that sells in cash will not provide accounts receivable. So that the necessary working capital is getting smaller. The availability of credit, if the company can borrow to finance the cash credit, so it needs the less cash. Advantage behavior will increase the amount of production and also total current assets. A large number of current assets will reduce overall profits. The greater the level of current assets, the smaller the risk. The cash provides security in paying bills. Inventories provide a smaller risk, will need more goods for sale.

To determine the amount of working capital is considered sufficient for a company is not an easy thing because the working capital needed by a company is influenced. The several factors are the nature or type of the company, the time is taken to produce goods which will sell, the terms of the purchase and sale, the level of turnover inventory, the sales volume and the seasons and cycles factors. Munawir (2004)

2.1.4. Working Capital Sources and Uses

Funding sources need to be separated to the permanent working capital requirements and the variable working capital requirements. The variable working capital requirements where the working capital only needs to take a few moments and does not need a continuous basis (typically needs at the time in sales volume peak), it should be spent with short-term funding sources period or the time of the working capital needed.

Credit is the biggest asset of the investment bank. Similarly, credit interest income is the largest source of income for banks. If repayment fails then the ability of banks to grant, new loans will be disturbed. In addition to the income of the bank also will lower interest income due to the non-acceptance of credit. Although, many of the capital needed for expansion of credit. Decrease in the ability of banks to provide credit for disrupting the implementation of banking intermediation.

Based on Munawir (2004) the working capital source in the company can come from:

a. The results of operations are the amount of net income that appears in the calculation of profit loss plus depreciation and amortization; this number indicates the amount of working capital that came from the result of the operations company.
b. Gain on sale of marketable securities (short-term investments).
c. Sales of non-current assets.
d. The sale of shares or bonds

The amount of working capital that resulted from the operations company can be calculated by analyzing the income statements report of the company. With the gains or profits from the company business, and if the profits are not taken by the owner of the company, so the profits will increase the capital of the company concerned.

Securities owned companies for the short term (marketable securities) is one of the elements of current assets that can be sold immediately and will be beneficial for the company. The sale of securities leads to changes in working capital elements of the form in securities that turn into cash. The gain from the sale of securities is a source of working capital for growth. Conversely, if the sale occurs in progress, it will cause a reduction in working capital. If the securities or short-term investment was sold at a sale price equal to the acquisition price (without profit or loss), then sales of these securities will not affect the amount of working capital (working capital has not increased nor reduced). To analyze the sources of working capital, the resources derived from the gain on sale of securities must be separated with working capital that resulted from the company's principal businesses. Munawir (2004)

Other sources that can supplement working capital are a result of sales of fixed assets, long-term investments and other non-current assets that are no longer needed by the company. Changes in these assets into cash or receivables will cause an increase in working capital of the sale proceeds. If the results of the sale of fixed assets or other non-current assets are not immediately used to replace the assets, it will cause the state of liquid assets large, so it exceeds the amount of working capital required (lack of working capital were exaggerated).

Besides the four sources above there is no longer any another source that can be obtained to add to its current assets, for example, the loan or credit from banks and other short-term loans also trade payables acquired from the seller or supplier. The increase in current assets offset or coupled with the increase in current liabilities, so that the working capital (in the sense of net working capital) remains unchanged. Munawir (2004)

While Sawir (2005) sources will supplement working capital, videlicet:

1. An increase in the capital sector, whether from income or the rise of the capital stock.

2. Reduction or decrease in fixed assets due to the sale of fixed assets as well as through the depreciation process.
3. There is additional long-term debt, either in the form of bonds or other long-term debt.

Riyanto (2001), adding a source of working capital for the company should be used as efficiently as possible, and the company could run the operations of the company well, then the goals of the company can be achieved. However, the working capital has to be able to finance the expenditures over the daily operations company. The use of working capital will lead to changes in the shape or decrease the amount of current assets owned by the company but does not always use current assets followed by change and decrease the amount of working capital of the company.

While Sawir (2005), the use of working capital which will reduce working capital as follows:

1. Reduced own capital because of losses, as well as the privacy decision by the owner of the company.
2. Payment of long-term debt.
3. The addition or purchase of fixed assets.

In addition, the use of current assets that result in reduced working capital, there are also the use of current assets that do not change the amount of either the number of working capital and the number of current assets itself, namely the use of working capital or current assets just cause or result in changes in the form of liquid assets (working capital is not reduced). Munawir (2004) the use of current assets that do not reduce working capital, such as:

1. Purchase of securities (marketable securities) in cash.
2. The purchase of a commodity or other materials in cash.
3. Change a form accounts receivable to other shapes, for example from trade receivables (accounts receivable) to notes receivable (notes receivable).

2.1.5. Profitability

According to Sawir (2005) definition, the ability Profitability is the net result of various policies and management decisions. Meanwhile, according to Tobing and Talankky in Ruwindas (2011), profitability is the ability to make a profit and the potential to earn revenue in the future which can be measured by return on equity (ROE) and return on assets (ROA). Based on the definitions, it concludes that profitability is the ability of the company makes a profit by doing a variety of policies and appropriate management decisions.

Financial ratio analysis that will be used to measure the profitability is the return on asset (ROA). The reason for choosing return on asset of various profitability ratios exist is because the return on assets (ROA) is a ratio used to measure the ability of the management company to manage the current assets to make a profit. The greater return on asset (ROA) of a company, the greater the profit level achieved by the company and the better the company's position in terms of the use of its assets.

From a different perspective, firm's size by Garcia (2007). Using panel data analysis with both random effect and fix effect models, they revealed a negative relationship between return on asset and cash conversion cycle; They argued that small and medium-size firms also can increase their profitability by shortening cash conversion cycle. Samiloglo and Demirgunes (2008) conducted a study to examine the relationship between working capital management and profitability. Applying multiple regression analyses over a sample of manufacturing firms listed in Istanbul stock exchange for the period of 1998-2007, they found that the accounts receivable cycle, the inventory conversion period have a negative impact on profitability, which means the shorter cycle of these variables causes increasing in profitability.

2.1.6. The Small Companies

Small companies are viewed as an essential element of a healthy and vibrant economy. According to the report of Bolton, They are seen as vital to the promotion of an enterprise culture and to the creation of jobs within the economy. Small companies are believed to provide an impetus to the economic progress of developing countries and its importance is gaining widespread recognition. However, the small firms are defined, constitute the bulk of enterprises in all economies in the world. Thus, given their reliance on short-term funds, it has long been recognized that the efficient management of working capital is crucial for the survival and growth of small firms. A large number of business failures have been attributed to inability of financial managers to plan and control properly the current assets and current liabilities of their respective firms. (Smith, 1973)

Working capital management (WCM) is of particular importance to the small business. With limited access to the long-term capital markets, these firms tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory. However, the failure rate among small businesses is very high compared to that of large businesses. The success factors or impediments that contribute to success or failure are categorized as internal and external factors. The factors categorized as external include financing (such as the availability of attractive financing), economic conditions, competition, government regulations, technology and environmental factors. While the internal factors are managerial skills, workforce, accounting systems and financial management practices.

While the performance levels of small businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on small business survival and growth (Kargar and Blumenthal, 1994). The management of working capital is important to the financial health of businesses of all sizes. The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that small businesses are not very good at managing their working capital. Given that many small businesses suffer from undercapitalisation, the importance of exerting tight control over working capital investment is difficult to overstate. A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronised and one should not impinge on the other for long. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of same should give the desired impact on either profitability or liquidity. If resources are blocked at the different stage of the supply chain, this will prolong the cash operating cycle. Although this might increase profitability (due to increase sales), it may also adversely affect the profitability if the costs tied up in working capital exceed the benefits of holding more inventory and/or granting more trade credit to customers.

According to Ang (1997) in Haryanto and Yunita, the grouping markets of companies are divided into three parts, as follows:

1. Large Capitalization

The large capitalization stocks are under common control that assessed market capitalization is large or larger than Rp 5 trillion. The large capitalizations value is called the first tier stocks.

2. Medium Capitalization

The medium capitalization stocks are under common control that assessed market capitalization is ranging between Rp 1 trillion to Rp 5 trillion. The medium capitalizations value is called the second tier stocks.

3. Small Capitalization

The small capitalization stocks are under common control that assessed market capitalization is under Rp 1 trillion. The small capitalizations value is called the third tier stocks.

2.2 Previous Research

In this research, the researchers tried to examine the effect of working capital management on firm profitability. This research is conducted because based on previous studies, they showed inconsistent results about the effect of working capital management, as presented in the following table:

Table 1. Summary of Previous Research

No	Researcher	Title	Variable	Sample	Results
1.	Marc Deloof (2003)	Does working capital management affect the profitability of Belgian firms?	**Independent**: Gross Operating Income, Sales Growth Ratio, Financial Debt Ratio, Fixed Financial Assets Ratio, Number of days account receivable, numbers of days account payable, cash conversion cycle. **Dependent**: Gross Operating Income	Belgian Non-financial Firms covering the period 1992 – 1996	Based on the results of research conducted, it can be concluded that there was a connection among sales growth ratio and fixed financial assets ratio to gross operating income. Viceversa, financial debt ratio, the number of days account receivable, the number of days inventories, the number of days accounts payable to gross operating income is negative.
2.	Dr. Hadori Yunus, Ak (2005)	Effect of working capital on profitability in food and beverage industry sector listed on Indonesia Stock Exchange.	**Independent**: Sales Growth, Financial Debt, Fixed Financial Assets, Number of days accounts receivable, Number of days inventories, Number of days accounts payable, and Cash	Food and beverage industry sector listed on Indonesia Stock Exchange	The results of Yunus showed that the only financial debt ratio, fixed financial assets ratio, and a number of days accounts receivable variables have significant results and variable sales growth ratio, the number of days inventories, accounts payable, and cash conversion cycle has no effect significantly to the gross operating

Table 1. Summary of Previous Research (Continue)

			Conversion Cycle **Dependent**: Gross Operating Income		income ratio.
3.	Pedro Juan Garcia – Teruel Pedro Martinez – Solano (2007)	Effects of working capital management on SME Profitability	**Independent**: The number of days accounts receivable, the number of days inventory and the number of days account payable, and Cash Conversion Cycle. **Dependent**: Return on Assets **Control**: The size of the firm, the growth of sales, leverage, current assets ratio, current liabilities ratio.	8872 Small to Medium-sized Enterprises (SMEs) covering the period 1996-2002.	Based on the result of research conducted, it can be concluded that there was the important role of working capital management is in value generation in SMEs. While there is a significant negative relation between SME’s profitability and the number of the days accounts payable and days of inventory. While, current assets and cash ration to profitability is positive.
4.	Anggita Langgeng Wijaya (2012)	The influence of the working capital component to the company profitability.	**Independent:** The ratio of total current assets to total assets, The ratio of total current liabilities to total assets, Current Ratio, Leverage Ratio, Cash Ratio. **Dependent:** Profitability which measures by use return on invest capital.	Manufacture Company which listed on Indonesia Stock Exchange during the 2005-2007 period.	Based on the research result, it can be concluded that there are two working capital components which positive, they are the ratio of total current assets to total assets ratio and positive cash effect on the profitability of the company. The other components of the ratio of total current liabilities to total assets, leverage on profitability, current ratio to profitability are negative.

Table 1. Summary of Previous Research (Continue)

5.	Maria Amelia Pais Paulo Miguel Gama (2015)	Working Capital Management and SMEs Profitability: Portuguese Evidence	**Independent**: The number of days accounts receivable, the number of days accounts payable, the number of days inventory, and cash conversion cycle. **Dependent**: Return on Assets **Control**: The size of the firm, the growth of sales, leverage, current assets ratio, current liabilities ratio.	6063 Portuguese Small and Medium-sized firms (SMEs) covering the time period 2002-2009.	Based on the results of research conducted, it can be concluded that there was a negative relationship with profitability was found for INV, AP, and CCC variables. In order to control also for possible endogeneity problems, an alternative, consisting on the regression with instrumental variables, the result is similar to those obtained with the fixed effects regression except for the AR, which displays a positive relationship. Regarding the control variables SIZE, SGROW, GDPGR, CLR and DEBT, all of them statistically significant, the relation with profitability is positive for the first four, and negative for the last one.

Source: Journals and research, processed.

2.3 The Conceptual Framework

Working capital management, which consists of current assets and current liabilities management, is the main function of financial managers in all corporations. While the working capital management takes up a major part of executive manager’s attention and time, there is a deserved attention to working capital management in the finance literature. (Deloof, 2003). The utmost important component of working capital related to inventories, accounts receivables and accounts payables (Ross, 2002).

Financial executives have to make different decisions about the level of these components in order to the best results. The dynamic nature of short-term business emporium, the daily need to substituting current assets, and current liquidation liabilities help to clarify the importance of working capital management and financial executive duties. The direct effect of working capital management on profitability and liquidity position of firms also refers the importance of working capital management (Nobanee, Abdullatif, & Al Hajjar in Mansori, 2012).

Research by Gama (2012) found that one of the utmost important components of working capital which is the number of days accounts receivable is a positive effect on profitability. This contrast with research conducted by Garcia (2006) who found results that the number of days accounts receivable has no effect on the profitability.

According to Widhiarso, The more variables are controlled, the research we are doing more qualified. Of course, not all variables can be included in the control variables. Terms of the control variables are variables other than the independent variable that influences the dependent variable are based on a researcher who did with their researchers.

In addition, sales growth ([this year's sales – previous year's sales]/previous year's sales), and the leverage (financial debt/total assets) are included as control variables in the regressions that have been conducted by Deloof 2003, Garcia (2007) and Gama (2012).

Based on the description above, can be made framework that describes the relationship between the working capital management with profitability that shown in the following figure:

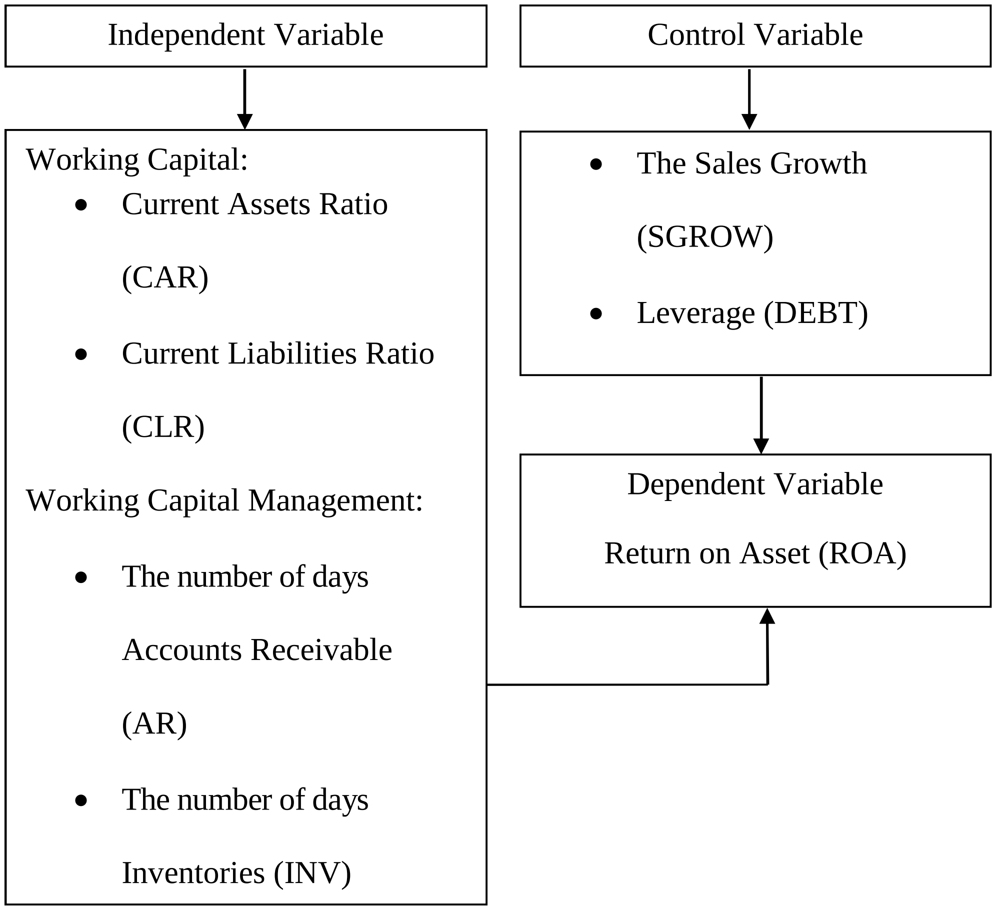

Figure 1. Conceptual Framework

Figure 1 before shows the relationship variables examined in this research, which this figure can be seen that the researchers will examine the effect of independent variables (AR, INV, CAR, and CLR) and control variable (SGROW, and DEBT) on the dependent variable (ROA).

2.4 Hypothesis

Based on the relationship between aims of the research as well as theoretical, conceptual framework against channeling research problem formulation, then the hypothesis proposed is as follows:

1. H_0: The number of days accounts receivable, the number of days inventories, current asset, current liabilities, the sales growth, and leverage do not have the significant effect on the profitability of the company (return on asset).
2. H_a:The number of days account receivable, the number of days inventories, current asset, current liabilities, the sales growth, and leverage have the significant effect on the profitability of the company (return on asset).

III. RESEARCH METHODOLOGY

3.1 Research Object

3.1.1. Population and Sample

Although we do not shop directly in manufacture place, but most of the products that we use every day come from manufacturing business. The foods that we consume, the phone that everyone has and the computer or laptop we are using right now are all products that were assembled and created as part of a manufacturing business.

Hill said that a manufacturing business is any business that uses components, parts or raw materials to make a finished good. These finished goods can be sold directly to consumers or to other manufacturing businesses that use them for making a different product. Manufacturing businesses in today's world are normally comprised of machines, robots, computers and humans that all work in a specific manner to create a product.

Manufacturing businesses can be very simple, with only a few parts required for assembly, or they can be very complicated, with hundreds of parts needed to create a finished product. Compared to other businesses, manufacturing businesses usually have more legal regulations and environmental laws to deal with. These things can range from scrutinized labor laws to environmental and pollution issues. Although labor unions are not as common as they were 50 years ago, they still heavily exist in the manufacturing industry, where wages, benefits, and other rights are negotiated (Hill).

From the explanation above, the population in this research will be all of the manufacture companies listed on Indonesia Stock Exchange in 2012 – 2015, as many as 150 companies. Samples were taken from population by purposive sampling method with several criteria must be met as follows:

1. The company listed on Indonesia Stock Exchange (IDX).
2. The company has presented the complete financial report, covering the time period 2012 – 2015.
3. The sample of the company has the needed information during the period in this study.
4. Small manufacturing company.

Small manufacturing companies were chosen by the total assets as a proxy of variable size companies. This is because the total assets of more stable and representative in showing the size of the company than the market capitalization and sales are heavily influenced by demand and supply. (Sudarmadji and Sularto, 2007)

According to Bull, he defined the small company universe by market capitalization and fundamental size and for consistency, he includes the most liquid equity security line for each remaining company that reports its own consolidated financial results in each portfolio at the point of construction. In this research to ensure defining the small manufacturing company, the data has processed. It showed all of the total asset and the size of the firm was measured as the logarithm of assets. Then the researcher ranks the remaining companies by those fundamental so that further exclusions can be applied based on either or both measures.

Based on the criteria outlined above, then we obtained all of the population as the sample and shown in the following table:

Table 2. Research Sample

Sample Characteristics	**Emiten**
The manufacturing company that listed on Indonesia Stock Exchange	150
Manufacturing companies which do not listing, covering time period 2012 – 2015	(20)
Manufacturing companies which lost, covering time period 2012 – 2015	(21)
Market Capitalisation Value above IDR 1 Billion	(56)
Total Research Sample	**53**
Total Observations	**212**

Source: data processed

3.2 Research Design

3.2.1. Type and Source of Data

The data used in this research is panel data, which the panel data is a combination of time series data and cross-section data. Meanwhile, the data used in this research is secondary data. Secondary data is a source of research data obtained by researchers indirectly through an intermediary medium (obtained and recorded by the other party). The use of secondary data on the basis of the consideration that the companies studied was gone public company, which has an obligation to make financial reporting to parties outside companies.

Secondary data in this research in the form of annual reports from manufacturing companies listed on Indonesia Stock Exchange in 2012 – 2015. Meanwhile, a source of quantitative data used in this research is audited company's financial statements as well as journals and other support references.

3.3 Research Variable and Operational Variable

3.3.1. Research Variable

The variables in this study consisted of three variables, namely the dependent variable / dependent (Y), the independent variable / free (X) and the control variable (X). So based on the issues that have been discussed previously, the variables to be analyzed are grouped into:

1. Dependent Variable

The dependent variable is the variable that explained or influenced by independent variables. The dependent variable (Y) in this company is the return on assets ratio expressed with ROA. This variable was defined as the ratio of earnings, before interest and tax, to assets. The reason for choosing return on asset of various profitability exist is because the return on assets is a ratio used to measure the ability of the management company to manage the current assets to make a profit. The greater return on asset (ROA) of a company, the greater the profit level achieved by the company and the better the company's position in terms of the use of its assets. (Garcia, Gama, and Yuliati, 2013)

2. Independent Variable

Independent variables are variables that describe or affect other variables. The dependent variable in this company is working capital with sub-variables; The number of days Accounts Receivable (X_1), The number of days Inventories (X_2), Current Asset Ratio (X_3), Current Liabilities Ratio (X_4). Each variable is expressed with a notation AR, INV, CAR, and CLR sequentially. And these are the explanation of the reason using these variables for working capital management: Today, accounts receivables is the important factor, or more accurately stated, policies on trade credits. Ceteris paribus, shorter accounts receivable is better as it means that the company does not have to wait to receive payments for their products. As money flows in faster, liquidity rises. (Bjorkman and Hillergren, 2014). According to Brealey, et al., in Bjorkman and Hillergren, 2014 the number of days inventories is not actually making the firm any money. It decreases the liquidity of the company and only benefits the profitability when it is sold. Since current assets and liabilities are related to the sector of activity (e.g. Jose et al., 1996; Garcia-Teruel and Martinez-Solano, 2007), a sector – wise description for variables is also presented.

3. Control Variable

Control variables in this study are the sales growth (X_5) and Leverage (X_6). Each variable is expressed with a notation SGROW and DEBT sequentially. (Garcia-Teruel and Martinez-Solano, 2007; and Gama, 2015)

3.3.2. Operational Variable

1. Dependent Variable

The dependent variable used in this research is returned on assets ratio (ROA) of the companies. Return on assets of the companies is a measurement of the ability of the company as a whole in making the profit by the number of assets available within the company.

$$\text{ROA} = \frac{\text{Earnings After Tax}}{\text{Total Assets}} \times 100\%$$

2. Independent Variable

Working capital is the company's investment in short-term assets such as cash, marketable securities and accounts receivable. The sub-variables:

a. The Number of Days Account Receivables

The Accounts receivable day is the number of days that a customer invoice is outstanding before it is collected. The point of the measurement is to determine the effectiveness of a company's credit and collection efforts in allowing credit to reputable customers, as well as its ability to collect cash from them. Agency theory as a basic in understanding corporate governance.

The formula for accounts receivable days is:

$$\text{AR} = \frac{\text{Accounts Receivable}}{\text{Annual Revenue}} \times \text{Number of days in the year}$$

b. The Number of Days Inventories

Days' sales in inventory (DSI) are a way to measure the average time required for a company to convert its inventory into sales. A small number of days' sales in inventory indicate that a company is more efficient at selling off its inventory.

The days' sales in inventory figure are intended for the use of an outside financial analyst who is using ratio analysis to estimate the performance of a company. The metric is less commonly used within a business since employees can access detailed reports that reveal exactly which inventory items are selling better or worse than average. The formula is:

$$\text{INV} = \frac{\text{Inventory}}{\text{The cost of goods sold}} \times 365\ days$$

c. Current assets ratio

A current asset is an item on an entity's balance sheet that is either cash, a cash equivalent, or which can be converted into cash within one year.

It can be formulated as follows (Gama, Maria A P P M. 2015):

$$\text{CAR} = \frac{\text{Current Assets}}{\text{Total Assets}}$$

Creditors are interested in the proportion of current assets to current liabilities since it indicates the short-term liquidity of an entity. In essence, having substantially more current assets than liabilities indicates that a business should be able to meet its short-term obligations.

d. Current Liabilities Ratio

A current liability is an obligation that is payable within one year. The cluster of liabilities comprising current liabilities is closely watched, for a business must have sufficient liquidity to ensure that they can be paid off when due.

It can be formulated as follows (Gama, Maria A P P M. 2015):

$$\text{CLR} = \frac{\text{Current Liabilities}}{\text{Total Liabilities}}$$

3.Control Variable

Researchers began developing the research with complex designs. Testing correlation or comparison of two variables and variables by using two groups began to be replaced with a more complex analysis. One of them is involving the control variables.

The reason why the researcher using control variable, first, the results of analysis to explain the phenomenon to the optimum for other variables that also affect the dependent variable, the effect would be disconnected. Second, the analysis will have the higher statistical power.

According to Widhiarso, The more variables are controlled, the research we are doing more qualified. Of course, not all variables can be included in the control variables. Terms of the control variables are variables other than the independent variable (X) that influence the dependent variable (Y). The control variables considered in this study were used:

a. The growth in its sales

It can be formulated as follows (Garcia-Teruel, Pedro J, and Martinez-Solano, Pedro. 2007):

$$\mathrm{SGROW} = \frac{\mathrm{Sales1} - \mathrm{Sales0}}{\mathrm{Sales0}}$$

b. Leverage

It can be formulated as follows (Gama, Maria A P P M. 2015):

$$\mathrm{DEBT} = \frac{\mathrm{Total\ Debt}}{\mathrm{Total\ Assets}}$$

3.4 Analysis Tools

3.4.1. Descriptive Analysis

Descriptive statistics provide a description of data from the average value/mean, standard deviation, maximum, and minimum (Ghozali, 2011). It aims to provide an overview of the object under study through the sample data to make general conclusions so that the variables used in the study are easier to understand.

3.4.2. Multiple Linear Regression Analysis

Multiple linear regression analysis is used to measure the strength of the relationship between two or more variables, and also shows the direction of the relationship between the dependent variable and independent variables (Ghozali, 2011). The equation formulated as follows:

$ROA = \alpha + \beta_1 AR + \beta_2 INV + \beta_3 CAR + \beta_4 CLR + \beta_5 SGROW + \beta_6\ DEBT + \varepsilon$

Description:

Y=	ROA	= Return onAssets
X_1=	AR	= The Number of Days Accounts Receivable
X_2=	INV	= The Number of Days Inventories
X_3=	CAR	= Current Assets Ratio
X_4=	CLR	= Current Liabilities Ratio
X_5=	SGROW	= The Sales Growth
X_6=	DEBT	= Leverage
β_1, β_2, β_3, β_4, β_5, β_6,		= Coefficient of Regression
α		= Constanta
ε		= Error

This study uses an Eviews software to do the multiple regression models for panel data, where there are three approaches on the panel data, that are:

1. Pooling Least Square

This approach is the simplest approach with two other approaches. With this approach, we cannot see the differences between individuals and differences over time because the intercept and slope of the model are the same (Annida, 2009).

2. Fixed Effect Approach

On this approach, the panel data model has an intercept which may vary for each individual and the time is each cross-section unit is fixed in time series (Annida, 2009).

3. Random Effect Approach

On this approach, the difference between time and individuals are accommodated by error. Error in this approach is divided into error for the individual components, an error for the time component and composite error. This study uses Generalize Least Square (GLS). Advantages of random effect model compared to fixed effect model is the degrees of freedom, are not necessary to estimate the intercept of N cross-sectional (Annida, 2009).

Tests were conducted to test which approach is used, are Chow Test and Hausman Test.

- Chow Test is a test that is performed to determine whether the model used is pooled least squares or fixed effect. This test uses F distribution statistics if the value of F-statistic is greater than the F table, means this study using a fixed effect approach (Annida, 2009).

  Ho: Model is using *pooled least square* approach

  H_1: Model is using *fixed effect* approach

- Hausman Test is a test that is performed to determine whether the model used fixed effect or random effect approach. This test using chi-square distribution, whereby if the probability of Hausman smaller than α (Hausman test results significantly), the model used is the fixed effect approach (Annida, 2009).

Ho: Model is using *random effect* approach

H_1: Model is using *fixed effect* approach

3.4.3. Classical Assumption Testing

Good regression linear model can be regarded as a good model if the model meets the assumptions called classical assumptions. If the value of classical assumptions is met, then the method of estimation will create a Linear Unbiased Estimator and have a minimum variance that is often called BLUE (Best Linear Unbiased Estimator) (Widarjono, 2009).

1. Normality Testing

Normality test is used to determine the normality of the error term and variable, for both independent and dependent variables, whether the data is normally spread. A good regression model is the normal distribution of data or nearly normal. This study uses Jarque-Bera to measure whether or not the data is normally distributed (Widarjono, 2013).

To detect whether the residual is normally distributed or not, that is by comparing the value of JarqueBera with X^2 table, namely:

a. If the value JB> X2 table, then the residual distribution is not normal.

b. If the value JB <X2 table, then the residual normally distributed.

2. Multicollinearity Testing

At a regression model, we often see the close relationship between the independent variables. Multicollinearity test aims to test whether the regression model found a correlation among the independent variables (independent). In a good regression model should not have happened a correlation among the independent variables (Ghozali, 2011). As a rule of thumb, if the correlation coefficient is high at over 0,85 then we assume there is multicollinearity in the model (Widarjono, 2013).

3. Heteroscedasticity Testing

Heteroscedasticity test aims to test whether in the regression model occurred inequality variance from one observation to another observation. If the residual variance of observation to another observation remains then, it is called homoscedasticity, and if it is the difference it called heteroscedasticity. A good regression model that is homoscedasticity or not happen heteroscedasticity (Ghozali, 2011).

Heteroscedasticity testing in this study using the method of White. This method does not require assumptions about the normality of the disturbance variables. A White test based on the number of samples (n) multiplied by R^2that will follow the distribution of chi-squares with the degree of freedom as the independent variable, which not included in the contents of regression auxiliary (Widarjono, 2013).

Criteria for decision-making in this test are:

a. If the value of chi-squares (nR^2) count that is smaller than the value of chi-square table (X^2) then it is assumed there is no heteroscedasticity.

b. If the value of chi-squares count is greater than the value of chi-square table (X^2), it is assumed that there is heteroscedasticity.

4. Autocorrelation Testing

Autocorrelation test aimed at test whether a linear regression model was no correlation between bullies error in period t with an error in period t - 1 (previous) (Ghozali, 2011). This study is using the Durbin-Watson test, to examine whether there is an autocorrelation or not. The Durbin-Watson test is comparing the DW value with the value in the table at the level of k (the number of independent variables), n (number of samples), and α (significance level) that exist.

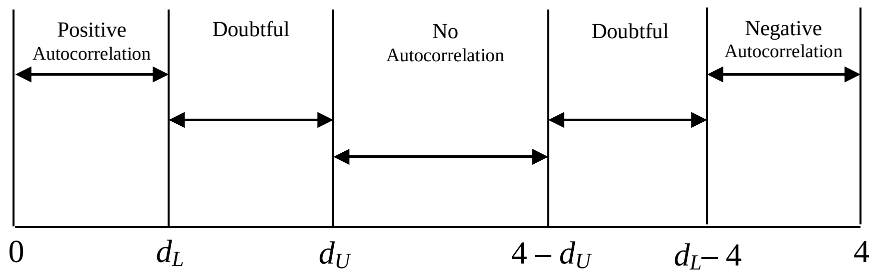

Figure 2.Decision Areas of Durbin-Watson Statistical Test.
Source: Widarjono (2013)

It can be seen in Figure 2 above, the decision whether or no autocorrelation that if the DW test> du and DW test <4 - du, we conclude that the proposed model does not occur autocorrelation at a certain significance level (Widarjono, 2013).

3.4.4. Hypothesis Testing

1. T-Statistical Testing

The t-statistical test basically shows how far the influence of the explanatory/independent variables in explaining the variations of dependent variable individually (Ghozali, 2011).

Hypothesis criteria:
Ho; $\beta i = 0$, meaning no significant effect between independent variable on the dependent variable (profitability) individually.
Ha; $\beta i \neq 0$ means there is significant influence between independent variable on the dependent variable (profitability) individually.

Testing criteria, if t count> t table, Ho is rejected, and Ha accepted this means that there is a relationship between independent variables and the dependent variable (profitability).

In the output regression, the partial test can also be done by looking at the value of probability. When the probability value (0,000) <α (0.05) then the hypothesis is accepted.

2. F-Statistical Testing

According to Ghozali (2011), F-test shows that all independent variables in the model are intended to have the simultaneous effect of the dependent variable. This test uses additional control variables that were entered into the regression model. The control variables are the sales growth (SGROW) and Leverage (DEBT).

Criteria hypothesis:

Ho; $\beta i = 0$, means there is no significant effect of the independent variables on the dependent variable (profitability) simultaneously.

Ha; $\beta i \neq 0$ means there is a significant relationship between the independent variables on the dependent variable (profitability) simultaneously.

Testing criteria, if the value of F count > F table, Ho is rejected, and Ha accepted this means that there is a relationship between independent variables and the dependent variable (profitability).

In the output regression, the simultaneous test can also be done by looking at the value of probability, when the probability value (0,000) $< \alpha$ (0.05) then the hypothesis is accepted.

V. CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the results of regression and analysis of data on the effects of working capital management on profitability in small manufacturing companies listed on Indonesia Stock Exchange covering period 2012 – 2015, it can be concluded that:

1. Working capital management is significantly affect the profitability of small manufacturing companies listed on Indonesia Stock Exchange covering periods 2012 – 2015.
2. Regarding the control variables all of them statistically do not have significant effect to profitability.
3. Others variable that current asset ratio and current liabilities ratio based on the results of regression shows that both of them do not have a significant influence on the profitability of the company.
4. Based on the regression in appendix 8, the variable related to the management working capital has the most dominant influence on the return on asset from the independent variable is the number of days account receivable.
5. So, the working capital management is important because it affects both the profitability and consequently the firm's value. Management performance would improve by managing working capital efficiently. Finally, the

relationship between working capital management and profitability would be affected by industry differences.

6. Supporting the international review of business research papers of Padachi that working capital management is having the particular importance role to the small companies.

5.2 Suggestion

Based on the results and conclusions that have been presented, some of the suggestions put forward, that are:

1. The next research can use the medium companies or large companies based on capitalisations of the company.
2. On the top of that, The Stock Exchange of Thailand (SET) is planning to set up a new exchange for listing startups in 2017. Thus can be one oprtion to make the future research in startup model.
3. Future studies should use the working capital management that adding put the number of days account payable and cash conversion cycle as the dependent variable. Because this study only uses two working capitals management variables, making it possible to find the components of data variables.
4. Investors should consider the working capital and working capital management that have a significant effect as consideration in making investments in companies, especially manufacturing.

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