The Effect Of Working Capital Management And Fixed Assets Investment On Profitability
(Study On Automotive And Component Companies Listed On The Indonesian Stock Exchange)

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Abstract
Purpose - This study aims to analyze the influence of working capital management and investment in fixed assets towards profitability.

Design/methodology/approach - This research was implemented in the automotive and part companies listed on the Indonesia Stock Exchange for the period 2006 – 2014. The sample was taken using the method of purposive sampling. Eight companies were selected for a sample. Used multiple regression analysis as statistical method

Finding - The results of the research show that CCC and AP have negative and considerable influence on ROA, AR have positive and not considerable influence on ROA, while IVR and FAT have positive and considerable influence on ROA. LVR as a control variable has a negative and not significant effect on ROA, while NPM has a positive and considerable influence on ROA

Originality -
Keyword - working capital management, investment in fixed assets, profitability, return on assets, cash conversion cycle, average collection period, average payment period, inventory conversion period, leverage, net profit margin.

Paper Type – Research Paper
introduction

Impact crisis happening finances raises a number of problems in Indonesia namely increase fuel prices, policy monetary, rising foreign exchange rates that cause decline rupiah value. A number of impacts will affect the goods needed and in period long will become a threat for industry automotive water land.

Objective something company reviewed from corner view economy is for obtain profit (profit oriented). According to Ririn Setiorini (2009) company demanded for always initiative, creative and innovative with objective increase efficiency and productivity in effort win the market and for always adapt self to all type the changes to be happen in the future come good condition economy, conditions consumers, as well condition competitors. By because That company must grow, walk as well as build management conceptually and systematically through beneficiary owned resources company.

Management the company was also sued in obtain nor in use fund must based on consideration efficiency and effectiveness (Riyanto, 2010:4).

Profitability very important for company Because can reflect success and continuity life something company. The more tall level profitability so performance company the more good (Yulianti, 2013). Profitability is ability something company For produce profit during something period certain (Riyanto, 2010:35). Profitability high company can created if management company know various influential factor to profitability company That own and have ability in manage factor (Sartono: 2008). Profitability high company can created when management company know various influential factor to profitability company That own and have ability in manage factor (Rosyid, 2012).

Every company always need working capital For finance the operation everyday, for example For purchase material raw, pay wages labour, wages employees, and others etc., where are the funds that have been issued That expected can return Again enter in company in short time through results sale production (Riyanto, 2010:57). According to (Brigham and Houston, 2013:258) working capital sometimes called gross working capital, in simple terms refers to assets smoothly used in operation. Working capital management very important Because concerns determination working capital policy nor implementation working capital policy the in operation everyday. Working capital management interested to decision investment in assets current and debt smoothly. Especially about How use and composition both of them will influence risk.

No funds only are at in working capital, but funds can invest in assets stay. Invested funds in assets still undergo a rotational process. The company held investment in assets still with hope will obtain more funds invested in assets still the. Turnover of funds embedded in assets still the that is investment in machinery, buildings, vehicles, etc., embedded funds inside it will accept returned by the company in time a number of years in a manner gradually through depreciation (Riyanto, 2010:115). Investment in assets still consists of durable assets used company for obtain goods and services, order company can produce so company must have durable assets so that the production process can walk with smoothly and will enlarge opportunity for obtain profit.

Cycle cash conversion defined as cash journey, which started of cash disbursed (for buy ingredients) until with cash back again (accounts receivable paid) and can counted with addition period collection receivables with period conversion supply reduced period suspension of debt (Mamduh: 2008). Research conducted by Raheman et al. (2010), Nobanee and Alhajjar (2009) said that cycle cash conversion effects negative and significant to profitability. Whereas according to study Tauringana and Afrifa (2013) produced that cycle relative cash conversion No important to profitability. Larasati and Paranoan (2012), Stephen and Elvis (2011) also produced that cycle no cash conversion own influence on profitability.

Period collection accounts receivable (receivables conversion period) is the average time needed for convert receivables company into cash, which is for receive cash after happen sale (Brigham and

Period conversion inventory (inventory conversion period) is the average time needed for convert material raw become goods so and then sell goods the (Brigham and Houston, 2013:261). Research conducted by Mathuva (2010) produces that period collection receivables influential positive and significant to profitability. Whereas according to study Tauringana and Afrifa (2013), Mansoori and Muhammad (2012) relationship between periods collection receivables to profitability impact negative.

Debt deferral period (payables deferral period) is the average time needed for buying raw materials and power work and payment (Brigham & Houston, 2013: 260). Based on studying Raheman et. al (2010) yielded that period effect of debt suspension positive No significant to profitability. Results of research conducted Nobanee and Alhajjar (2009), Mathuva (2010) yield that period effect of debt suspension positive and significant to profitability. Whereas according to study Falope & Ajilore (2009), Stephen and Elvis (2011), Mansoori and Muhammad (2012) influences between period suspension of debt against profitability impact negative.

Difference study This with study previously is sample used different namely in the company automotive along components that have listed on the Indonesia Stock Exchange (IDX) and period different research. Besides it, deep study This use variable control that is total asset turnover, net profit margin, quick ratio, and leverage.

**Literature Review**

**Signaling theory**

Signaling Theory was started for the first time by Ackerlof, Spence and Stiglitz who made they won the Nobel Economics in 2001. Theory developed in knowledge economics and finance for consider reality that company insiders in general own more information well and faster related with condition up-to-date and prospects company compared to with outside investors (Arifin, 2005).

According to Brigham and Houston (2011) cues or signal is something action taken by company for give instruction for investors about How management looked prospect company. Signal This form information about what already done by management for realize desire owner. Signal can form stated information that company the Better than other companies (Brigham & Houston, 2011)

**Hypothesis Development**

**Influence Cycle Convert Cash Against Profitability**

Research conducted by Raheman et al. (2010), Nobanee and Alhajjar (2009), Aini (2012), Margaretha and Oktaviani (2016) showed that cycle cash conversion effect negative and significant profitability. Whereas according to study Tauringana and Afrifa (2013) produced that cycle relative cash conversion No important to profitability. Larasati and Paranoan (2012), Stephen and Elvis (2011), Mustafa Afeef (2011) also produced that cycle no cash conversion own influence on profitability. Based on the explanation above can formulated hypothesis as following:

\[ H_1 = \text{Cycle conversion cash influential negative and significant to profitability} \]

**Influence Period Collection accounts receivable to Profitability**

periods collection receivables to profitability impact negative significant. Based on explanation that, can formulated hypothesis as following:

\[ H_2 = \text{Period collection receivables influential negative and significant to profitability} \]

Influence Period Suspension of Debt against Profitability

Study Raheman et. al (2010) yielded that period effect of debt suspension positive No significant to profitability. Results of research conducted Nobanees and Alhajjar (2009), Mathuva (2010) yield that period effect of debt suspension positive and significant to profitability. Whereas according to study Falope & Ajilore (2009), Stephen and Elvis (2011), Mansoori and Muhammad (2012), Dewi and Wisadha (2015) influences between period suspension of debt against profitability impact negative. Based on explanation that, can formulated hypothesis as following:

\[ H_3 = \text{Period debt suspension influential negative and significant to profitability} \]

Influence Period Conversion Supply to Profitability

Research conducted Mathuva (2010), Nimalathasan (2008), Utami and Dewi (2016) produced that period conversion supply influential positive and significant to profitability. Whereas according to study Tauringana and Afrifa (2013), Mansoori and Muhammad (2012) relationship between periods conversion supply to profitability impact negative and significant. Based on explanation that, can formulated hypothesis as following:

\[ H_4 = \text{Period conversion supply influential negative and significant to profitability} \]

Influence Investment Asset Still to Profitability

Research conducted Apriani (2007), Bramasto (2010) which produced that investment assets still No have influence to profitability. Whereas research conducted by Firmansyah (2013), Hartini (2005), Toyin and Adigbite (2014) which produced that investment assets still influential positive and significant to profitability.

According to (Firmansyah: 2013) if a company invests or invests in assets still so company will obtain return investment. Too much investment Lots unemployed will need cost For cost maintenance assets fixed, as well as if the funds invested in the company experience failure so matter This will caused company become bankrupt or fall bankruptcy, for That investment assets still must optimized for value on investment assets still No experience loss so that investment assets keep doing company effective. Based on the investment assets stay right will be influential to return on assets (ROA) (M. Manullang, 2005:63). Based on explanation that, can formulated hypothesis as following:

\[ H_5 = \text{Investment Asset Still influential positive and significant to profitability} \]

Research Methodology

population in study This is companies in the sub-sector automotive and components listed on the Indonesia Stock Exchange (IDX). Sample in study This chosen in accordance with characteristics as following : (1) Company automotive and components listed on the Indonesia Stock Exchange (IDX) from 2014-2022; (2) Data retrieved is data already audited; (3) Company issue and publish report financial statements as of December 31 from 2006 to year 2014; and (4) Have complete data related with variables research. With criteria purposive sampling, then Company Automotive and Components that meet whole condition will set become sample. Based on results observation researcher, it is known as many as 8 companies fulfil criteria sampling. With thereby sample study as many as 8 companies Automotive and Components with time observation for 9 years, the period 2006–2014 so that the sample data in study This consists of 72 reports finance.
Cycle cash conversion (cash conversion cycle) is range time between actual cash outlay company for pay source Power productive (material raw materials and power work) and acceptance the cash Alone from sale product (i.e., the time needed between pay power work and materials standard and acceptance accounts receivable).

\[ CCC = IVR + AR - AP \] Day

Period Collection accounts receivable

(X2) Period collection receivables is the average time required for convert receivables company become cash that is, for accept cash after happen sales.

\[ AR = Receivables \]
\[ (Sales /365) \] Day

Period Suspension Debt

(X3) Period suspension debt is the average time needed for buy material raw materials and power work and payment.

\[ AP = Debt \]
\[ (HPP/365) \] Day

Period Conversion Supply

(X4) Period conversion supply is the average time required for convert material raw become goods so and then sell goods the.

\[ IVR = Average Inventory \]
\[ (HPP/365) \] Day

Investment Assets Still

(X5) investment assets still are something form investment with _ hope company they can produce profit through the operation.

\[ FAT = Sales \]
Fixed assets
Ratio
Return On Assets

(Y) ROA is the ratio used to measure the net profit derived from the use of assets.

\[ ROA = Profit After Tax \]
Total assets
Ratio

Operationalization Variable

Finding

Analysis Regression Double

Analysis equality regression double used for knowing influence from a number of variable free to One variable. Test results analysis This will give base for reception or rejection hypothesis research. Conclusion about hypothesis every variable independent figured out by the sign positive / negative and significance coefficient regression the variables concerned. Equality For test hypothesis in a manner whole in study This is as following:

\[ ROA it = \beta_0 + \beta_1 CCC it + \beta_2 AR it + \beta_3 AP it + \beta_4 IVR it + \beta_5 fat it + \beta_7 LVR it + \beta_8 + \beta_9 NPM it + \epsilon it \]
Information:

\( \beta_0 \): Constant
\( \beta_1, \beta_2, \beta_9 \): Coefficient from CCC, AR, AP, IVR, FAT, QR, LVR, FS, NPM

\( \text{ROA}_{it} \): Profit net / Total assets \( i \), year \( t \)
\( \text{CCC}_{it} \): \( \text{AR} + \text{IVR} - \text{AP} \) \( i \), year \( t \)
\( \text{AR}_{it} \): Total Receivables Trade / (Sales / 365) \( i \), year \( t \)
\( \text{AP}_{it} \): Total Debt Trade / (HPP / 365) \( i \), year \( t \)
\( \text{IVR}_{it} \): Total Inventory / (HPP / 365) \( i \), year \( t \)
\( \text{FAT}_{it} \): Sales / Total assets \( i \), year \( t \)
\( \text{LVR}_{it} \): Total debt / Total assets
\( \text{NPM}_{it} \): Profit net / Sales

RESULTS AND DISCUSSION

Hypothesis Test

Testing hypothesis done for how influence variable independent individually in _ explained variable generated dependencies _ from analysis regression.

Table 2. Analysis Results Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>std. Error</td>
<td>Betas</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.889</td>
<td>.390</td>
</tr>
<tr>
<td></td>
<td>Ln_CCC</td>
<td>-.167</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>Ln_AR</td>
<td>.100</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>Ln_AP</td>
<td>-.485</td>
<td>.070</td>
</tr>
<tr>
<td></td>
<td>Ln_IVR</td>
<td>.236</td>
<td>.082</td>
</tr>
<tr>
<td></td>
<td>Ln_FAT</td>
<td>.326</td>
<td>.049</td>
</tr>
<tr>
<td></td>
<td>Ln_LVR</td>
<td>-.084</td>
<td>.095</td>
</tr>
<tr>
<td></td>
<td>Ln_NPM</td>
<td>1.047</td>
<td>.027</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Ln_ROA

Based on results regression in table 4.9, then obtained equality regression as following:

\[
\text{ROA} = 0.889 - 0.167 \text{CCC} + 0.100 \text{AR} - 0.485 \text{AP} + 0.236 \text{IVR} + 0.326 \text{FAT} - 0.084 \text{LVR} + 1.047 \text{NPM} + e
\]

Hypothesis Testing

Influence Cycle Convert Cash (CCC) To Return on Assets

Hypothesis one in study This state there is influence negative and significant between cycle cash conversion to return to assets (ROA). Analysis results the regression in table 2 shows CCC has coefficient regression -0.167 and t - value -2.211 with level significance 0.031. results show that cycle cash conversion effect negative and significant to return on assets, then can concluded hypothesis one in study This accepted.

Research results This No support research conducted by Tauringana and Afrifa (2013) and Stephen and Elvis (2011) which proves that cycle no cash conversion have influence to return on assets and Mustafa Afeef (2011) which proves that cycle cash conversion effect positive and no significant to return on assets. Study This in line with study Raheman et al (2010), Nobanee and Alhajjar (2009), Aini
(2012), and Margaretha and Oktaviani (2016) which prove that cycle cash conversion effect negative and significant profitability.

A company can increase profit with shortened cycle fast cash conversion Possible without bother operation, because cycle short cash conversion can reduce size financing external or internal required. According to Brigham and Houston (2013:136), cycles cash conversion can shorten with way: (1) Reducing period conversion supply with processing and selling goods in a manner more fast; (2) Reducing period reception receivables with speed up billing, or (3) Extend period debt suspension with slow down payments made._

Based on testing hypothesis can is known that variable cycle cash conversion effect negative and significant to profitability (ROA) in the company automotive and components. Considerable influence between variable cycle cash conversion to company ROA show that cash and cash equivalents are used for fulfilling need transaction daily and such backup liquidity for avoid deficiencies that arise because current in and out which is not balanced (Aini, 2012).

Cycle cash conversion has influence negative on coefficient regression. This means that if the company reduces every rupiah the amount of cash and cash equivalents held to reach level sale certain so level return assets (ROA) will increase. Research results show that the shorter cycle cash conversion will then increase company profitability (ROA). And conversely, increasingly long cycle cash conversion will lower company profitability (ROA). because _ That company must Keep going control their cash.

Influence Period Collection accounts receivable To Return on Assets

Hypothesis two in study This state there is influence negative and significant between period collection receivables to return to assets (ROA). Analysis results the regression in table 2 shows AR has coefficient regression 0.100 and t count value 1.391 with level significance 0.169. Results show that period collection receivables influential positive and no significant to return on assets, then can concluded hypothesis two in study This rejected.

Results study This No support research conducted _ Tauriningana and Afrifa (2013), Falope and Ajilore (2009) relationship between periods collection receivables to profitability (ROA) impact negative significant. Study This in line with research by Stephen and Elvis (2011), Nimalathasan (2010), Margaretha and Oktaviani (2016) which produced that period collection receivables influential positive and no significant to returns on assets. Stephen and Elvis (2011), Larasati and Paranoan (2012) produce that period collection receivables No influential to profitability. Period collection receivables own influence positive and no significant on the coefficient’s regression. This means that period collection receivables No influential to profitability (ROA). Results are not significant. This shows its small influence variable period collection receivables. in other words, though tall low profitability No in a manner significant influenced by period collection receivables.

Influence Period Suspension of Debt Against Return on Assets

Hypothesis three in study This state there is influence negative and significant between period suspension of debt against return to assets (ROA). Analysis results regression in table 2 shows AP has coefficient regression of -0.485 and t count value 6.911 with level significance 0.000. results show that period effect of debt suspension negative and significant to return on assets, then can concluded hypothesis three in study This accepted.
Study This No in line with research conducted _ Raheman et. al (2010) yielded that period effect of debt suspension positive No significant to profitability. Results of research conducted Nobanee and Alhajjar (2009), Mathuva (2010) yield that period effect of debt suspension positive and significant to profitability. Study This in line with study Falope & Ajilore (2009), Stephen and Elvis (2011), Mansoori and Muhammad (2012), Dewi and Wisadha (2015) influences between period suspension of debt against profitability (ROA) impact negative.

Showed that exists influence negative between variable period debt suspension on profitability in research this. Companies can maximize their advantage with a method of managing the best payment debt. In study This shows that company can lower amount time needed _ company in pay debts, so company can say own big profit. _ this _ Because company that owns big profit _ can distribute the profit in buy supply for activity the operation. Besides That, with pay more debt fast so company possible will get piece price so that company can reduce cost purchase material standard (Dewi and Wisadha, 2015).

Influence Period Conversion Supply to Return on Assets
Hypothesis four in study This state there is influence positive and significant between period conversion supply to return to assets (ROA). Analysis results the regression in table 2 shows IVR has coefficient regression 0.236 and t count value 2.883 with level significance 0.005. Results show that period conversion supplies influential positive and significant to return on assets, then can concluded hypothesis four in study This rejected.

Study This No in line with research conducted _ Tauringana and Afrifa (2013), Mansoori and Muhammad (2012) relationship between periods conversion supply to profitability impact negative. Study This in line with study Mathuva (2010), Nimalathasan (2008), Utami and Dewi (2016) produced that period conversion supply influential positive and significant to profitability (ROA).

Study This produces that period conversion supply influential positive and significant to Return on Assets. There is positive influence _ show that the taller level period conversion supply so will increase profitability company. this _ because inventory invested by the company must appropriate with need company so that cost flower decrease, reduce cost storage and maintenance in warehouse, company experience loss, so everything This will increase sales volume and profit earned _ the company will too the more grow (Utami and Dewi, 2016).

Influence Investment Assets Still to Return on Assets
Hypothesis five in study This state there is influence positive and significant between investment assets still to return to assets (ROA). Analysis results the regression in table 2 shows FAT has coefficient regression 0.326 and t count value 6.693 with level significance 0.000. Results show that investment assets are still influential positive and significant to return on assets, then can concluded hypothesis five in study This accepted.

Research conducted _ Apriani (2007), Bramasto (2010) which produced that investment assets still No have influence to profitability. Whereas research conducted by Firmansyah (2013), Hartini (2005), Toyin and Adigbite (2014) which produced that investment assets still influential positive and significant to profitability.

According to Manullang (2005:59) that investment assets still are something form investment with _ hope company they can produce profit through the operation. According to Harapanp (2008:309) said that ratio This show how many times value assets turn when be measured of sales volume. The taller ratio This so the more ok.

Study This produce that investment assets still influential positive and significant to Return on Assets. There is positive influence _ show that the taller level investment assets still so will increase
A 0.000, that is investment assets still have high influence to profitability. Automotive and part companies on research this use assets still Already well, where assets still used company for support operation company can produce increased sales the year.

Conclusion
Based on study theoretical and analytical regression double that has done, then conclusion study This is as following: (1) Cycle cash conversion effect negative and significant to profitability (return on assets). This means that if the company reduces every rupiah the amount of cash and cash equivalents held to reach level sale certain so level return assets (ROA) will increase. Research results show that the shorter cycle cash conversion will then increase company profitability (ROA). And conversely, increasingly long cycle cash conversion will lower company profitability (ROA). because That company must Keep going control their cash. Considerable influence between variable cycle cash conversion to company ROA show that cash and cash equivalents are used for fulfilling need transaction daily and such backup liquidity for avoid deficiencies that arise Because current in and out which is not balanced (Aini, 2012). (2) Period collection receivables influential negative and no significant to profitability (return on assets). This means that period collection receivables No influential to profitability (ROA). Results are not significant. This shows its small influence variable period collection receivables. in other words, though tall low profitability No in a manner significant influenced by period collection receivables. matter This because company automotive and components has grown in a manner rapidly Where management company has capable do management in a manner effective in connection with expansion credit terms credit sale as well as billing receivables. (3) Period effect of debt suspension negative and significant to profitability (return on assets). This means a company can maximize the advantage with method manage the best payment debt. In study This shows that company can lower amount time needed company in pay debts, so company can say own big profit. this Because company that owns big profit can distribute the profit in buy supply for activity the operation. (4) Period conversion supply influential positive and significant to profitability (return on assets). There is positive influence show that the taller level period conversion supply so will increase profitability company. this because inventory invested by the company must appropriate with need company so that cost flower decrease, reduce cost storage and maintenance in warehouse, company experience loss, so everything This will increase sales volume and profit earned the company will too the more enlarge, and (5) investment assets still influential positive and significant to profitability (return on assets). There is positive influence show that the taller level investment assets still so will increase profitability company. On research This investment assets still have high influence to profitability. Company automotive and components on research This use assets still Already well, where assets still used company for support operation company can produce increased sales the year.

From the results drafting study this, researcher realize that Still Lots limitations, including: (1) In study This sample used just company automotive and components course, so the company used sample Possible No can stand for whole companies in Indonesia. (2) Period observation in study This limited to only nine years, which is only 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014. The results obtained from the study can only describe the influence of working capital and investment management assets still on profitability in a period of 9 years time. (3) Ratio profitability made size in study This only use return on assets to compare profit clean with assets up to only capable describe ability company produce profit with use the assets they have company.

Study This Still can developed with notice limitations the following research and suggestions that can made reference study Next, the suggestion is as following: (1) Research furthermore suggested For expand period observation so you can more describe How influence working capital and
investment management assets still to profitability; (2) Research furthermore suggested can add sample company from type company others No only company automotive and components. This done so you can know influence working capital and investment management assets still to profitability with scope more company wide; (3) Ratio profitability in study furthermore expected Not only use return on assets (ROA), but also use return on equity (ROE) and earnings per share (EPS). Return on equity is used for evaluating the ability of a company to produce profit with use owned equity. Earning per share is used for knowing profit per share stock.

Reference


