EFFECT OF SIZE AND CASH CONVERSION CYCLE ON COMPANY PROFITABILITY

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Abstract

This study aims to analyze the effect of firm size and Cash Conversion Cycle on profitability at manufacturing companies listed on the Indonesia Stock Exchange which publishes financial statements for 2013-2015. Company size and Cash Conversion Cycle become independent variable, while the dependent variable is profitability measured by ROA (Return On Asset) Sugiono (2009). Hypothesis proposed in this research is company size influence to profitability and Cash Conversion Cycle influence to profitability. This research data is obtained from company financial statements taken from Indonesia Stock Exchange. The population of this study is a manufacturing company listed on the Indonesia Stock Exchange during the year 2013 - 2015. Determination of samples using purposive sampling method and samples obtained as many as 261 companies. The hypothesis in this study was tested using multiple regression analysis. The results of the analysis show that the first hypothesis is firm size does not affect the profitability of the company. The second hypothesis is Cash Conversion Cycle effect on profitability.

Key words: Firm Size, Cash Conversion Cycle, and Profitability
1 Introduction

The growing business world today, the competition between companies, especially between similar companies will be more stringent. To maintain the survival of the company in the face of intense competition, it is necessary a handling and management of resources conducted by the management well. For the management, in addition to being required to be able to coordinate the use of resources owned by the company effectively and efficiently, is also required to be able to produce decisions that support the achievement of corporate goals in the future. The company is targeted to always be one step ahead of its competitors in order to achieve the company's goal, namely to generate profits as much as possible in order to maintain the survival.

The company accompanied by enlarging its business scale. In order to achieve these goals the company must grow in all areas to be able to follow and meet the changing market needs. Increasing the size of the company, the company is required to be wiser in managing the funds available to run the operational activities of the company.

Funds invested to run the company's operational activities are referred to as working capital. Basically working capital is a constantly rotating fund, which was initially issued to finance the day-to-day operational activities for the production process to run. The production proceeds are then sold so that the company will obtain the acquired will re-enter as a working capital investment company. This working capital turnover will continue as long as the company is still running so that the company is obliged to conduct continuous evaluation on the working capital management cycle.

Cycle of working capital must always be managed and evaluated in order to not be too small or too large in number, if the amount is too small, the company will face conditions liquid, business conditions difficult to meet its current liabilities such as employee salaries, accounts payable and others caused by Unavailability of sufficient funds to settle the short-term debts of the maturing company. If the amount of working capital is too large, then it can indicate that there is unused funds. Unused funds indirectly would reduce the profits of firms because these funds should be used in a wide variety of purposes, such as development of business and used to finance the company's short-term investments.

Short-term investment companies need to do to earn a high profit based on the effectiveness of companies in managing working capital can be measured using the ratio of working capital turnover (working capital turnover). According Munawir (2004) This ratio indicates how many times the funds that are embedded in a rotating working capital in the period or the amount of sales that can be achieved by each rupiah working capital and the sale amount automatic effect on profitability. If the ratio is greater working capital turnover, the faster turnover of working capital, which means the more effective the management of a company to capital works which will impact on improving the company's profitability and cash management company. Good cash management will have a positive impact on the company.

along with accounts receivable and inventory. These three accounts are part of the company's working capital and the amount of working capital is inseparable from the transaction motive, and speculative motives. These components of working capital ensure the continuity and liquidity of the company, so that the company's operations will run economically and efficiently. High sales results, the company will get an increasing profit. The amount of profit earned on a regular basis is one of the important factors for assessing profitability. The most important business activities for the continuity of the company's operations are maintaining the availability of working capital and the cash conversion cycle (Cash Conversion Cycle) in order to continue to provide benefits in order to maintain sustainable production.

The Cash Conversion Cycle is one of the measurements of WCM (Working Capital Management) which is the time period required by the company since the raw material purchased is paid up to the accounts receivable from the collection of collectible goods. Cash Conversion Cycle can be said
to be sufficient to reinforce short-term funding decisions, especially to find out how the company's policy in order to meet the cash gap, whether by holding back the debt or by accelerating the collection period of his receivables. CCC is used to measure how long a company can collect cash coming from a company's operating results that will ultimately affect the amount of funds needed to be deposited on current assets (current assets). This situation will certainly affect the management of assets and liabilities in the company that depends on the profitability of the company. The profitability of the company will always have a relationship with (CCC) which can show the company how long it will take to change or return the cash out used for the operational activities into cash in. Cash Conversion Cycle is an important tool in estimating how well companies perform in managing their working capital (Keown, 2010).

This study is based on research conducted by (Enqvist et al., 2014) which discusses the impact of working capital management on the profitability of the business cycle with the object of research firms in Finland. The results suggest that Cash Conversion Cycle shows proof that firms can achieve higher profitability by efficiently managing inventories and billing deadlines for corporate receivables. This study also found that the effectiveness of management based on working capital is a component that has a significant effect on the profitability of the company. This research was conducted in Finland and the research was also based on research conducted in Indonesia by Suryaputra and Christiawan (2016) which discussed how the influence of working capital management, real estate listed on Indonesia Stock Exchange (BEI) year 2010-2014. The results of this study indicate that sales growth (PP) proved to have a significant effect on ROA, Working capital management proxy into cash conversion cycle, and firm size (size) is not proven to have significant effect on ROA on property and real estate firms listed in Stock Exchange Indonesia (BEI) in 2010-2014. The implications of this research support the theory of DuPont analysis.

The difference between this research and previous research is this research will discuss how CCC performance and its relation with firm size and profitability obtained by company based on financial statement of manufacturing company listed in Indonesia Stock Exchange (BEI) in reporting year 2013-2015. Based on this analysis hence researcher will get the results of the significance of all data processed then will be compared. The goal is to produce generalized results from previous studies. The researcher believes that there will be a difference of results if this study is based on the measurement of working capital proxied by Cash Conversion Cycle with the measurement variable that is firm size and profitability of the company, so that the researcher is interested to take research entitled "Influence of Size and Cash Conversion Cycle to Profitability Company"

2 Study of Literature and Hypothesis Development

2.1 Agency Theory

Jensen & Meckling (1976) describes agency relationships in agency theory that firms are nexus of contracts between investors and managers taking care of the use and control of corporate resources. This agency relationship leads to two problems: First, the occurrence of asymmetric information, where managers generally have more information about the financial position and actual company conditions. Second, the occurrence of a conflict of interest due to objective inequality, where the manager does not always act in accordance with the interests of investors.

2.2 Signalling Theory

Signals in English mean sign, or gesture. In signal theory, signal is the company's way of giving signals or omens to users of information disclosed by the company. Signal theory is a theory that shows that any organization will attempt to show a positive signal of information to users of information or stakeholders (Oliveira et al., 2006).
2.3 Company Size

Firm size is a measure of the size of an asset owned by a company in which large firms generally have large total assets (Sunarto & Budi, 2009). The size of the company can play an important role in the current world economy (Abiodun, 2013). This is seen in determining the firm's relationships with the environment outside the company, for example the growth of multinational corporations in today's economy, reflecting the importance of firm size in the business environment (Abiodun, 2013).

2.4 Cash Conversion Cycle

The ability of companies to manage their working capital is always changing. Based on the above, the company needs to measure all its effectiveness. One of the most widely used methods currently to evaluate effective corporate working capital management is to use an approach that the firm's objectives can minimize the work capital that is vulnerable to barriers ie the company has sufficient working capital to support its operations. According to Keown (2010: 245) minimum working capital can be achieved by rapidly charging cash from sales, improving inventory turnover, and lowering cash expenditures. All of these factors can be combined into a single measure called the cash conversion cycle. Gitman and Zutter (2012: 601) define the cash conversion cycle as "the length of time required for a company to convert cash invested in its operations to cash as a result of its operations". Keown (2010) argues that the cash conversion cycle (CCC) is a simple sum of the number of days of receivables (DSO) and the number of days of inventory sales (DSI) minus the number of unponeed payment days (DPOs).

2.5 Profitability

Profitability is one measure of company performance that can be measured in ratios to describe the company's ability to generate profits through all capabilities and resources of the company such as sales activities, cash, capital, number of employees, number of branches, and so forth. Profitability ratios are used to measure the effectiveness of management as a whole based on the amount of profit gained as a result of return on working capital, sales, and investments expressed as a percentage. Profitability can show how well the prospect of the company in maintaining its survival or develop its business in the future. The higher the profitability ratios of a company, the better the company will be in generating profits that indicate the prospect of the company in maintaining its survival and expanding its business the better. Companies that have bright prospects will certainly attract investors to invest in the company as well.

2.6 Development of Hypotheses

2.6.1 Effect of firm size on profitability

Company size is a measure of the size of the assets owned by the company, where large companies generally have a large total assets as well (Sunarto & Budi, 2009). According to Sunarto & Budi (2009), large companies are easier to access the market and obtain external funding sources. With more and easier access to existing resources, the company can meet its needs such as buying assets, investing, obtaining loans, and so forth. Through more access to existing resources, the company's opportunity to provide more consumer needs, even has a wider market share, so the opportunity to earn even greater (Doğan, 2013). Company size has a positive relationship to profitability supported by Serrasqueiro (2009), Abiodun (2013), Doğan (2013), Ehi-Oshio, Adeyemi & Enofe (2013), and Yazdanfar (2013).

H1: Company size affects Profitability

2.6.2 Influence Cash Conversion Cycle (CCC) against Profitability

Profit is an important indicator for companies in keeping their companies competing in a competitive environment (Shosa, 2014). Profitability is the relationship between income and expenses generated by using the company's assets both current and fixed in productive activities. A company can increase profits by increasing revenues
or reducing costs (Gitman & Zutter, 2015). To generate a high profitability then needed a good working capital management and correct for the company can run well and maximize profitability (Rahimi et al., 2015). According to Gitman and Zutter (2015) one of the measurements of working capital is the Cash Conversion Cycle (CCC), which is the length of time required by a company to convert cash invested in operations to cash received as part of its operations. The Cash Conversion Cycle (CCC) comprises inventory (Days of Inventory) is the period required to convert the inventory into a sale, the receivable (Days in Account Receivable Period) is the period required for the collection of accounts receivable from the customer and the debt (Days in Account Payable Period) constitutes The period required to pay the obligations to the supplier. Measurement of working capital management in general uses the conversion cycle (CCC) is the time period between cash expenditure for resources and cash receipts from product sales. According to Shin and Soenen (1998) that there is influence between the CCC and the profitability of the company in ceteris paribus, the longer the cash conversion cycle will harm the profitability of the company. Rahimi et al. (2015) observed that there is a negative effect of the cash conversion cycle (CCC) on profitability. However, Ponsian et al. (2015) found that there is a positive effect (CCC) on profitability. Based on the description above it can be arranged hypothesis:

H2: Profitability of the company affect Cash Conversion Cycle (CCC)

2.7 Frame work

Based on the two hypotheses above, the following is the framework developed in this research:

![Diagram](image)

Figure 1

3 Research Methods

3.1 Data and Samples

The population of this study are companies listed on the Indonesia Stock Exchange (IDX) in the year 2013-2015, which is as many as 399 companies. The sample is determined by non-probability or non-random by using purposive sampling method that is choosing the sample intentionally according to the desired sample requirement.

This study uses secondary data in the form of annual financial statements listed in the Indonesia Stock Exchange (IDX) period 2013-2015. The sample used as many as 261 companies that meet the criteria specified. The criteria used to select the sample are as follows: first listed on Indonesia Stock Exchange (IDX) during the study period 2013-2015. Secondly, the required data is available in full and publishes financial statements that have been audited by independent auditors from 2013-2015. Finally, using the period of financial statements from January 1 to December 31 and the rupiah currency.

3.2 Variables and Measurement

3.2.1 Variabel Dependen

a. Profitabilitas

Profitability of companies in this study is based on Return on Assets (ROA). Where ROA is a ratio to measure the company's ability to maximize profits by using all of its assets (Butt, 2014). Calculated by the following formula:

\[ \text{ROA} = \frac{\text{Net income}}{\text{Total Assets}} \]

3.2.2 Variabel Independen

a. Firm Size

Company size is a measure of the size of an asset owned by a company in which large companies generally have a large total of assets (Sunarto & Budi, 2009). If the assets of a large company will affect the nominal current assets that will be invested for the performance of Cash Conversion Cycle (CCC). The illustration can be calculated by the following formula:

\[ \text{Firm Size} = \log \text{from total asset} \]
b. **Cash Conversion Cycle (CCC)**

Cash Conversion Cycle (CCC) is the amount of time or length of time attached to enterprise resources (Gitman, 2003). Calculated by the following formula:

\[
CCC = AAI + ACP - APP
\]

Information:
CCC = Cash conversion cycle (cash conversion cycle)
AAI = Average age of inventory (period of inventory turnover in days)
ACP = Average collection period (average period of collection of accounts receivable)
APP = Average payment period (average period of debt payments)

Where the explanations of the three indicators are as follows:

The period of inventory turnover in days is the length of inventory saved before sale (Sugiono, 2009). It shows how many days the inventory is inside the company. Calculated by the following formula:

\[
\text{Inventory turnover} = \text{Cost of good sold/Average Inventory}
\]

The average period of collection of accounts receivable is the amount of accounts receivable collectible, or how long it takes for the company to convert its receivables into cash (Sugiono, 2009). Calculated by the following formula:

\[
\text{Average collection period} = 360/\text{Account receivable turnover}
\]

Account receivable turnover can be calculated through:

\[
\text{Account receivable turnover} = \text{Sales/Average account receivable}
\]

The average period of payment of accounts receivable shows how long the debt is paid by the company (Sugiono, 2009). Calculated by the following formula:

\[
\text{Average payment period} = 360/\text{Account payable turnover}
\]

\[
\begin{align*}
\text{Account payable turnover} & = \text{Cost of goods sold/Average account payable} \\
\end{align*}
\]

3.2.3 **Pengujiian Hipotesis**

For hypothesis testing, this research uses multiple regression analysis. The multiple regression equation is:

Hypothesis testing using research model:

\[
PP = \alpha + \beta_1UP + \beta_2CCC + \varepsilon
\]

Information:

CCC = Cash Conversion Cycle (CCC)
\(\alpha\) = konstan
UP = Firm size
PP = Profitabilitas Company
\(\varepsilon\) = error term

4 **Result and Discussion**

Populasi yang digunakan dalam penelitian ini berjumlah 399 perusahaan manufaktur yang tercatat di IDX dari 2013-2015 (Tabel 1).

<table>
<thead>
<tr>
<th>Tabel 1. Jumlah Sampel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kriteria Sampel</td>
</tr>
<tr>
<td>Memiliki Laporan Keuangan</td>
</tr>
<tr>
<td>Dalam Maat Uang Asing</td>
</tr>
<tr>
<td>Tidak Menyertakan Informasi yang Diinginkan</td>
</tr>
<tr>
<td>Laporan keuangan yang berakhir tidak pada 31 Desember</td>
</tr>
<tr>
<td>Laporan Keuangan Tidak Koleksi (Barang)</td>
</tr>
<tr>
<td>Jumlah Sampel</td>
</tr>
</tbody>
</table>

Setelah dilakukan seleksi atas populasi untuk menentukan sampel akhir berdasarkan kriteria yang telah ditentukan, maka diperoleh 261 perusahaan sebagai sampel dengan menggunakan metode purposive sampling.

4.1 **Statistik Deskriptif**

Pada tabel 2 dijelaskan bahwa jumlah data yang digunakan dalam penelitian ini adalah 261 perusahaan. Variable Independen pada penelitian ini yaitu ukuran perusahaan dan Cash Conversion Cycle. Ukuran perusahaan diperoleh dari laporan posisi keuangan perusahaan dengan nilai rata-rata 28.1714, standar

**Tabel 2. Statistik Deskriptif**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukuran Perusahaan</td>
<td>16</td>
<td>22.4213</td>
<td>34.7097</td>
<td>22.1714</td>
<td>1.6597</td>
</tr>
<tr>
<td>Cash Conversion Cycle</td>
<td>16</td>
<td>-1.5559</td>
<td>12.5423</td>
<td>3.0200</td>
<td>1.6814</td>
</tr>
<tr>
<td>Profitabilitas</td>
<td>16</td>
<td>1.3496</td>
<td>2.2825</td>
<td>1.7750</td>
<td>0.1243</td>
</tr>
</tbody>
</table>

4.2 Hasil Pengujian Hipotesis

Pengujian hipotesis pada penelitian ini menggunakan analisis regresi berganda dan uji parsial. Sebelum analisis regresi berganda, telah dilakukan pengujian asumsi klasik yang meliputi uji normalitas, uji multikolinearitas dan uji heteroskedastisitas. Analisis regresi berganda digunakan untuk mengetahui hubungan antara variabel independen dan variabel dependen. Uji parsial digunakan untuk menguji signifikansi hubungan antara variabel X dan Y, apakah variable ukuran perusahaan dan *cash conversion cycle (ccc)* (X) benar-benar berpengaruh terhadap variabel profitabilitas (Y) secara terpisah atau parsial.

4.3 Hasil Uji F (Simultan)

Pembuktian hipotesis secara simultan untuk mengetahui pengaruh semua variabel independen yang digunakan dalam model regresi secara bersama-sama terhadap variabel dependen yang diuji pada tingkat signifikansi 5%. Jika nilai *probability F* lebih kecil dari 0,05 maka hipotesis tidak dapat ditolak. Berikut hasil uji signifikasi simultan variabel dependen *intellectual capital* dan manajemen laba yang dapat dilihat pada tabel 4.

**Tabel 3. Uji Signifikansi Simultan (Uji Statistik F)**

Pada tabel 3 menunjukkan uji statistik F memiliki nilai *probability* sebesar 0.000 < 0.05 jadi dapat disimpulkan bahwa seluruh variabel independen yaitu ukuran perusahaan dan *cash conversion cycle* secara simultan mempengaruhi yaitu profitabilitas.

4.4 Hasil Uji t (Parsial)

Pembuktian hipotesis secara parsial bertujuan untuk menguji pengaruh dari variabel independen yaitu ukuran perusahaan dan *cash conversion cycle (ccc)* terhadap variabel dependen yaitu profitabilitas. Berikut hasil uji yang dapat dilihat pada tabel 4. Uji Signifikansi Parameter Individual (Uji Statistik t).

**Tabel 4. Uji Signifikansi Parameter Individual (Uji Statistik t)**

Berdasarkan pada data diatas hasil uji t (parsial) sebagai berikut:

variabel *Cash Conversion Cycle* (X2) berpengaruh terhadap profitabilitas, sedangkan ukuran perusahaan (X1) tidak berpengaruh terhadap profitabilitas. Hal tersebut dapat dilihat dari nilai probabilitas yang dihasilkan variabel *Cash Conversion Cycle* (X2) sebesar 0,000 yang lebih kecil dari 0,05 dan nilai probabilitas yang dihasilkan variabel ukuran perusahaan (X1) sebesar 0.638 yang lebih besar dari 0,05.
Table 5. Kesimpulan Hipotesis

<table>
<thead>
<tr>
<th>Hipotesis</th>
<th>Sig.</th>
<th>T</th>
<th>Hasil</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 : Ukuran perusahaan berpengaruh terhadap profitabilitas</td>
<td>0.638</td>
<td>0.471</td>
<td>Tidak terdukung</td>
</tr>
<tr>
<td>H2 : Cash Conversion Cycle berpengaruh terhadap profitabilitas</td>
<td>0.034**</td>
<td>1.802</td>
<td>Terdukung</td>
</tr>
</tbody>
</table>

*Signifikansi pada level 5%

4.5 Pembahasan Penelitian

Penelitian ini bertujuan untuk meneliti pengaruh ukuran perusahaan dan cash conversion cycle (ccc) (X) terhadap variabel profitabilitas (Y).

1. Pengaruh ukuran perusahaan terhadap profitabilitas


2. Pengaruh Cash Conversion Cycle terhadap Profitabilitas


Hasil ini tidak konsisten dengan Arengbeyen (2013) yang menguji pengaruh modal kerja terhadap profitabilitas hasilnya bahwa tidak terdapat pengaruh antara modal kerja terhadap profitabilitas perusahaan.

5. Simpulan dan Saran

5.1 Simpulan

Berdasarkan hasil penelitian mengenai ukuran perusahaan dan cash conversion cycle terhadap profitabilitas perusahaan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2013-2015. Dari dua hipotesis yang dijabarkan satu hipotesis terdukung dan satu hipotesis tidak terdukung. Kesimpulan dari penelitian ini adalah sebagai berikut:

a. Ukuran perusahaan tidak berpengaruh terhadap profitabilitas perusahaan dikarenakan besar atau kecilnya perusahaan tidak hanya tergantung pada ukuran perusahaan
b. Cash Conversion Cycle berpengaruh terhadap profitabilitas perusahaan dikarenakan

5.2 Keterbatasan dan Saran


Berdasarkan keterbatasan yang terdapat dalam penelitian ini, maka penulis mengusulkan beberapa saran untuk penelitian sejenis selanjutnya, yaitu: pertama, Penelitian selanjutnya sebaiknya menambah jumlah sampel dan periode sampel sehingga jumlah sampel akan bertambah lebih banyak...
dari sebelumnya. Kedua, Penelitian selanjutnya sebaiknya menambahkan variabel-variabel independen lainnya seperti umur perusahaan, leverage, dan sebagainya.

**Daftar Pustaka**


