EFFECTS OF INVENTORY TURNOVER, TOTAL ASSET TURNOVER, FIXED ASSET TURNOVER, CURRENT RATIO AND AVERAGE COLLECTION PERIOD ON PROFITABILITY

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Abstract: The purpose of this research is to empirically examine the effect of Inventory Turnover, Total Assets Turnover, Fixed Assets Turnover, Current Ratio and Average Collection Period on profitability. Sample of this research are pharmaceutical companies listed at Indonesia Stock Exchange period 2007 – 2013. The research findings can be summarized as follow, Fixed Asset Turnover and Current Ratio affect profitability, while Inventory Turnover, Total Asset Turnover and Average Collection Period do not affect profitability.

Keywords: Profitability, gross profit margin, inventory turnover, total asset turnover, fixed asset turnover, current ratio, average collection period.

INTRODUCTION

Companies’ goal is to achieve the objective of the firms’ owners, which are its stockholders. Stockholders put their money on company with expectation that company will make them more wealthy and maximize their profit, not the vice versa. And if a business, either a small business or a bigger one, has some investors who have invested their money in the company, it is companies’ responsibilities to show investors about financial condition and development of the company. Every corporation has to report their activities, especially their financial activities, through periodically reports. Those reports are very useful information for
stakeholders like managers, regulators, creditors, owners, etc. In financial reports, there are financial statements such as income statement, balance sheet, statement of stockholders’ equity, and statement of cash flows. From these financial statements, parties that interested in the company can get a lot of information which is needed to Measure Company’s performance relatively.

One of the measures they see is companies’ profitability. Profitability is how efficient overall performance of the company. It shows us company’s ability to get profit from all operating activities. It also shows how efficient managers can make profit by using all the resources available (Innocent et al. 2013). So it is one of the important aspects that concerned firm the most. Profit and profitability are actually not the same concept because profit is how much company earned by running their operating activities by a specified period of time. But beyond that, profitability is another case. Profitability is a relative thing that Measure Company’s operating effectiveness and efficiency. Indonesia as developing country gets so many changes in various sectors. And these changes also affect many industries and their activities and it makes more and more factors can really determine of company’s performance. Thus, it will be much better if regulator and managers can understand about what factors as a determinant of profitability of their company.

**Gross Profit Margin**

Gross profit margin refers to measurement of the percentage of each sales dollar remaining after the firm has paid its goods (Gitman 2015). According to Weston and Copeland (1992) Gross profit margin is margin that influences cost policies and tells how much can be spent for operation expenses and still achieve satisfactory bottom-line profitability. Gross profit margin is measurement that based on the firm’s net sales, because sales can bring out profit (Innocent et al. 2013). From all description above, can be conclude that Gross profit margin is measurement of how much dollar company can get by deducting sales from its cost of goods sold.

**Inventory Turnover and Profitability**

According to Gitman (2015) inventory turnover is measurement of the activity or liquidity of a firm’s inventory and according to Horne and Wachowicz (1992) inventory turnover ratio is measurement to indicate the liquidity and effectiveness of the firm to manage their inventory. Low number of this ratio means big number of unused inventory, while high number of this ratio means inventory is quickly sold as firm manage their inventory efficiently. When inventory quickly sold so profit that company earns is higher. Based on description above, the hypothesis can be formulated as follows:

H1 Inventory Turnover affects Profitability

**Total Assets Turnover and Profitability**

Total asset turnover refers to measurement that indicates the efficiency which the firm uses its assets to generate sales (Gitman 2015). Total asset turnover ratio is measurement of the relative efficiency of a firm using its total assets to obtain sales (Horne and Wachowicz 1992) and according to Weston and Copeland (1992) total assets turnover Ratio is calculation of the efficiency of management of investments in each of the individual asset items. Higher of this ratio number means that company can manage their assets to generate revenue so higher profit can be earn by company. Based on description above, the hypothesis can be formulated as follows:

H2 Total Assets Turnover affects Profitability

**Fixed Asset Turnover and Profitability**

Fixed asset turnover ratio is measurement of business’ ability to use its fixed assets to generate sales. Increasing in this ratio means that company is effectively using its fixed assets. Fixed asset turnover ratio is
measurement of how effectively the firm uses its plant and equipment (Brigham 1995). Higher of this ratio number means that company can manage their fixed assets to generate revenue so higher profit can be earn by company. Based on description above, the hypothesis can be formulated as follows:
H₂ Fixed Asset Turnover affects Profitability

Current Ratio and Profitability

According to Gitman (2015) Current Ratio is a measure of firm’s ability to meet its short-term responsibilities. A value’s acceptability is different depends on what industry company operates. Current ratio is measurement that indicates the extent to which the claims of short-term creditors are covered by assets that are expected to be converted to cash corresponding to the maturity of the claims (Weston and Copeland 1992). If company have more current assets than its current liabilities, it indicates that the company have higher revenue than its cost to sale. So higher revenue, higher profit that company earn. Based on description above, the hypothesis can be formulated as follows:
H₃ Current Ratio affects Profitability

Average Collection Period and Profitability

According to Gitman (2015 Average collection period is measurement that useful to evaluating credit and collection policies and according Brigham (1995) average collection period is the number of days sales remain with debtors. This mean that longer collection period indicates costumer’s balance may become uncollectible and can make a company unprofitable. Based description above, the hypothesis can be formulated as follows:
H₅ Average Collection Period affects Profitability

RESEARCH METHODS

Sampling techniques used is non-probability purposive sampling method, which means that any companies in my population that meets all several criteria are taken to be research sample. The sample of this research is pharmaceutical companies that listed in Indonesia Stock Exchange from 2007 to 2013. The sampel that meet the criteria are 8 companies (56 data). The sample selection based on the criteria presented in the table below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of pharmaceutical firms listed at IDX from 2007 to 2013</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>Pharmaceutical firms which publish financial statement in Indonesia Rupiah (IDR) currency</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Pharmaceutical firms continuously publish the annual financial from 2007 to 2013</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Pharmaceutical companies that have complete data for dependent and independent variable from 2007 to 2013</td>
<td>8</td>
</tr>
</tbody>
</table>

Total data used as samples: 56

Gross Profit Margin (GPM) is a ratio measures how much dollar company can get by deducting sales from its cost of goods sold. The formulation of Gross Profit Margin (Innocent et al. 2013) as follow:
Inventory Turnover (ITR) refers to how efficient company holds its inventory. Inventory turnover ratio formula (Gitman 2015) as follow:

$$\text{Inventory Turnover (ITR)} = \frac{\text{Cost of Goods Sold}}{(\text{Beginning Inventories} + \text{Ending Inventories})/2}$$

Total Assets Turnover (TATR) is ratio of how efficient a company manages its total assets to get revenue. Total Asset Turnover Ratio formula (Gitman 2015: 123) as follow:

$$\text{TATR} = \frac{\text{Sales}}{\text{Total Assets}}$$

Fixed Assets Turnover (FATR) measurement of company’s efficiency to generate sales by using its fixed assets. Fixed Asset Turnover Ratio formula (Weston and Copeland 1992) as follow:

$$\text{FATR} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

Current Ratio (CR) is measurement of a company’s ability to manage their current assets and current liabilities. Current Ratio formula (Gitman 2015) as follow:

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

Average Collection Period (ACP) is number of days debtors pay for goods. Average Collection Period formula (Innocent et al. 2013) as follow:

$$\text{Average Collection Period} = \frac{\text{Sales}}{(\text{Beginning AR} + \text{Ending AR})/2}$$

**RESEARCH RESULT**

Based on table 2, the description is as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPM</td>
<td>0.481637</td>
<td>0.677364</td>
<td>0.225488</td>
<td>0.144035</td>
</tr>
<tr>
<td>ITR</td>
<td>100.8045</td>
<td>187.4982</td>
<td>55.54211</td>
<td>32.30476</td>
</tr>
<tr>
<td>TATR</td>
<td>1.349813</td>
<td>1.940187</td>
<td>0.905809</td>
<td>0.297307</td>
</tr>
<tr>
<td>FATR</td>
<td>5.223353</td>
<td>12.23715</td>
<td>1.437292</td>
<td>2.378646</td>
</tr>
<tr>
<td>CR</td>
<td>3.476673</td>
<td>7.773666</td>
<td>1.265221</td>
<td>1.567300</td>
</tr>
<tr>
<td>ACP</td>
<td>58.75965</td>
<td>127.0756</td>
<td>31.14255</td>
<td>24.56260</td>
</tr>
</tbody>
</table>

Hypothesis testing result show at tabel 3 below
### Tabel 3 Hypothesis Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITR</td>
<td>-0.000348</td>
<td>-1.124571</td>
<td>0.2665</td>
</tr>
<tr>
<td>TATR</td>
<td>-0.039356</td>
<td>-1.214197</td>
<td>0.2307</td>
</tr>
<tr>
<td>FATR</td>
<td>-0.008020</td>
<td>-3.205266</td>
<td>0.0024</td>
</tr>
<tr>
<td>CR</td>
<td>0.019633</td>
<td>4.421183</td>
<td>0.0001</td>
</tr>
<tr>
<td>ACP</td>
<td>0.000299</td>
<td>0.566302</td>
<td>0.5739</td>
</tr>
<tr>
<td>C</td>
<td>0.432953</td>
<td>8.135239</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Based on table 3, the conclusion of the research is as follows, Inventory Turnover does not affect the profitability. Total Asset Turnover does not affect profitability. Fixed Asset Turnover affects the profitability. Current Ratio affects the profitability. Average Collection Period does not affect the profitability.

### CONCLUSION, LIMITATION AND RECOMMENDATION

The conclusion of the research is as follows, Inventory Turnover, Total Asset Turnover and Average Collection Period do not affect the profitability. While Fixed Asset Turnover, Current Ratio affects the profitability. The research has limitations such as, only five independent variables that affect profitability, which still many variables that may affect profitability. This research may not reflecting the full condition of the companies because the period taken is from 2007 to 2013. Only one industry that chosen to be object in this research. Based on research findings, these are recommendations for the next research related to profitability, add more independent variables that affect profitability, take longer research period and add more industries to be studied.

### REFERENCES:


