Impact of Current and Non-Current Assets on the Profitability of Pharmaceutical Companies of Pakistan

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Abstract

This research study examined the impact of current and non-current assets on the profitability of pharmaceutical companies of Pakistan. For this study 9 years data was collected from the annual financial statements of six pharmaceutical companies listed in Karachi Stock Exchange over a period of 2010 to 2018. The profitability was measured by ROA. Current and non-current assets were taken as independent variables. The regression analysis was used and the result showed that current assets have a significant positive impact with the return on assets while the fixed assets have a significant negative impact on profitability of pharmaceutical companies of Pakistan.

Keywords: Current Assets, Non-Current Assets, Profitability, Return on Assets, Pakistan.

Introduction

Pharmaceutical companies of Pakistan play a vital role in the economic growth of the country (Husain, 2011) and it is the most organized sector in Pakistan (Memon, 2009). So it is important to know about the impact of current and non-current assets on the...
profitability of pharmaceutical companies in Pakistan. Current and noncurrent assets (Fixed assets) play a very important role in the success of a business organization. It has a direct impact on the profitability of the business organizations. On the basis of convertability into cash, total assets are classified into current and noncurrent assets (Singh & Pandey, 2008). Assets are those things which we purchase today and it gives us benefits in the future (Peterson, 2002). (Herrick, 1944) defined current assets as “Assets which can be converted into cash within a short period, such as a year”. Inyiama, Ugbor, and Nnenna collected 10 years data of 6 companies listed in nigeria stock exchange and analysed the data. They find out that noncurrent assets of the firms in nigeria has a positive affect on profit while current assets has a positive week affect on profitability. (Kusuma, Santosa, & Handayani, 2018) examined that there is no significant effect of current assets on profitiblity. (Mwangi, Makau, & Kosimbei, 2014) studied the effect of working capital on the profitability of nonfinancial firms in Kenya. They have collected the data of 42 nonfinancial firms over a period of 2006 to 2012. The regression result showed that there is a positive relation of current assets with the return on assets and return on equity. (Svettana & Aaro, 2012) collected data over a period of 2001 to 2009 of 8074 companies in european union and regression analysis was used to find the relation between dependent and independent variable. The result showed that there is a positive strong relation between investment in fixed assets and return on assets.

Problem of statement

To examine impact of current and non-current assets on the profitability of Pharmaceutical Companies listed in Karachi Stock Exchange of Pakistan.

Purpose of the study

The purpose of this study is to examine the impact of current and non-current assets on the profitability of Pharmaceutical Companies listed in Karachi Stock Exchange of Pakistan and also identify the significant relationship between dependent and independent variables. Current Assets and Non-Current Assets were used as independent variables and Profitability was taken as dependent variable.

Significance of the study

This research study was done in order to know about the impact of current and non-current assets on the profitability of pharmaceutical companies in Pakistan. This research study would be helpful to the policy maker of pharmaceutical companies. It would be also helpful to the other researcher, students and decision maker who want to know about the impact of current and non-current assets on the profitability of pharmaceutical companies.

Literature review

Eljelly (2004) Studied the relationship between liquidity and profitability of the firms in Saudi Arabia. He measured liquidity by current ratio and used regression analysis. He found that there is a negative relation between profitability and current ratio. Chowdhury and Amin (2007) They collected the data of pharmaceutical companies from 2000 to 2004
listed in Dhaka Stock Exchange and examined that there is a positive relation between current assets and firm performance.

Vishnani and Shah (2007) studied the impact of working capital on corporate performance and found that if the amount of current assets increase it will increase liquidity but will put negative effect on the profitability of the firm. Niresh (2012) studied the impact of working capital on the profitability of companies listed in Colombo Stock Exchange in Sri Lanka. He has collected the data of 30 companies over a period of 2008 to 2011. He used the regression analysis and found that current assets have a positive impact on return on equity.

Okwo, Okelue, and Nweze (2012) examined the impact of investment in noncurrent assets on the profitability of firms in Nigeria. They collected data of four firms over a period of 1995 to 2009. The result showed that there is no impact of investment in fixed assets on profitability. Iqbal and Mati (2012) examined the “relationship between noncurrent assets and firm profitability”. For this purpose, they collected the data of 10 years of firms listed in Karachi Stock Exchange. They used regression analysis and concluded that there is a relation between firm’s profitability and noncurrent assets.

Alavinasab and Davoudi (2013) examined 147 companies listed in Tehran Stock Exchange over a period of 2005 to 2009 and found a significant relation between current ratio and profitability. Cyril and Ogbonna (2013) studied the impact of noncurrent assets on the profitability of cement companies in Nigeria. They collected the data over a period of 2004 to 2013. The result revealed that there is impact of noncurrent assets on return on assets but not significant. Tufail and Khan (2013) collected data from 117 textile companies in Pakistan over a period of 2005 to 2010 and used regression analysis and found a positive correlation of current assets with return on assets.

Korankye and Adarquah (2013) studied the impact of working capital on profitability of firms and collected data from 2004 to 2011 of the listed companies in Ghana. They used the regression analysis and found that current assets have a positive and significant impact on profitability. Olatunji and Adegbite (2014) examined the impact of investment in fixed assets and found out that there is a positive and strong effect of fixed assets on the profitability of Nigerian banking sector.

Abata (2014) studied assets quality of banks in Nigeria. He collected data of 15 years over a period of 1999-2013. He used the regression tool and found out that assets quality has statistically influence on the performance of banks in Nigeria. Salman, Folajin, and Oriowo (2014) collected the data of the companies listed in Nigerian Stock Exchange from 2005 to 2013 and found that there is a negative and significant impact of current to total assets on Return on Assets.

Rehman, Khan, and Khokhar (2015) collected 5 years data from the annual financial statements of 99 listed firms in Tadawal. They found that there is a positive relation between current ratio and return on assets. Sudiyatno, Puspitasari, and Sudarsi (2017) collected data from 2010 to 2013 of manufacturing firms which are listed in Indonesia stock exchange. Their result showed that current assets have a significant and positive
impact on firm performance in Indonesia. LYDIA (2018) found a significant positive correlation between profitability and fixed assets management.

**Research methodology**

*Method of data collection*

The data was collected from the annual financial statements of Pharmaceutical Companies of Pakistan.

*Sample size*

The data was collected from six pharmaceutical companies listed in KSE (Karachi Stock Exchange) from 2010 to 2018.

*Selection of variables*

Three variables were used in this study to find out the impact of current and non-current assets on profitability. Two variables were used as independent and one variable was used as dependent.

**Dependent variable**

ROA is the dependent variable used for measuring the profitability and was taken as Net profit after tax / Total Assets.

**Independent variable**

Current assets and non-current assets were taken as the independent variables. Current assets was measured by current assets / total assets and non-currents was measured by fixed assets / total assets.

**Hypothesis of the study**

The hypothesis of this research study are given below:

Hypothesis 1 ($H_0$): Current assets have no significant negative impact on profitability of pharmaceutical companies of Pakistan.

Hypothesis 2 ($H_1$): Current assets have a significant negative impact on profitability of pharmaceutical companies of Pakistan.

Hypothesis 3 ($H_0$): Fixed assets have no significant negative impact on profitability of pharmaceutical companies of Pakistan.

Hypothesis 4 ($H_0$): Fixed assets have a significant negative impact on profitability of pharmaceutical companies of Pakistan.
Statistical model

Models for this research study are given below which were used to test the hypothesis

**Model 1**

\[
\text{ROA} = \alpha + \beta \text{CA} + \varepsilon
\]

**Model 2**

\[
\text{ROA} = \alpha + \beta \text{FA} + \varepsilon
\]

ROA→ represents Return on Assets used to measure profitability

CA → represent current assets and was taken as current assets to total assets

FA → represents fixed assets and was taken as fixed assets to total assets

\(\varepsilon\) → is the error term

\(\alpha\) → is constant

\(\beta\)→ is the regression coefficient

Data analysis

The data were analyzed through SPSS software to get the result. To examine the impact of current and non-current assets on ROA regression analysis were used.

Table 1 descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>54</td>
<td>-.13</td>
<td>.24</td>
<td>.1126</td>
<td>.07941</td>
<td>.006</td>
</tr>
<tr>
<td>CA</td>
<td>54</td>
<td>.47</td>
<td>.78</td>
<td>.6454</td>
<td>.08842</td>
<td>.008</td>
</tr>
<tr>
<td>FA</td>
<td>54</td>
<td>.22</td>
<td>.53</td>
<td>.3546</td>
<td>.08843</td>
<td>.008</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed by author and data collected from 2010-2018

Table 1 shows the descriptive statistics for all the variables used in this study. The total number of observation are 54. The mean of ROA is .1126 and its standard deviation is .07941. The mean of CA (current assets) is .6454 and its standard deviation is .08842 and the mean of FA (fixed assets) is .3546 and its standard deviation is .08843.

Table 2 model summary of model 1

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.480(^a)</td>
<td>.230</td>
<td>.216</td>
<td>.07033</td>
</tr>
</tbody>
</table>

\(\text{a. Predictors: (Constant), CA}\)

Source: Developed by author and data collected from 2010-2018
Table 2 shows the model summary of model 1. R Square value is .230 it means that 23% variation in ROA is explained by CA (current assets).

Table 3 for model 1 anova

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.077</td>
<td>1</td>
<td>.077</td>
<td>15.574</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.257</td>
<td>52</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.334</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CA
b. Dependent Variable: ROA

Table 3 shows the validity of a regression model 1. The value of F is 15.574 and sig. value is 0.000 which is less than 0.05, which represents that the regression model 1 is statistically significant and the model 1 is valid.

Table 4 for model 1 coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.166</td>
<td>.071</td>
<td>-2.328</td>
</tr>
<tr>
<td></td>
<td>CA</td>
<td>.431</td>
<td>.109</td>
<td>.480</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

Table 4 shows the summarized result of the regression model 1. The result shows that CA(current assets) is significant and the coefficient is 0.431. This shows the positive relationship with the ROA which means that when the current assets increases the ROA will be increases by 0.431.

Table 5 model summary of model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>.480</td>
<td>.230</td>
<td>.216</td>
<td>.07033</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FA

Table 5 shows the model summary of model 2. Adjusted R Square value is 0.216 and R Square value is 0.230 it means that 23% variation in ROA is explained by FA (fixed assets).
Table 6 for model 2 anova

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.077</td>
<td>1</td>
<td>.077</td>
<td>15.574</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>.257</td>
<td>52</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.334</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FA
b. Dependent Variable: ROA

Table 6 tells us the validity of the model 2. The value of F is 15.574 and Sig. value is 0.000 which is less than 0.05, which shows that the regression model 2 is statistically significant and the model 2 is also valid.

Table 6 for model 2 coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>.265</td>
<td>.040</td>
<td>6.652</td>
<td>.000</td>
</tr>
<tr>
<td>2 FA</td>
<td>-.431</td>
<td>.109</td>
<td>-.480</td>
<td>-3.946</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROA

Table 7 shows the summarized result of the regression model 2. The result shows that FA (fixed assets) is statistically significant and the coefficient is -0.431. This shows the negative relation with the ROA (Return on Assets) which means that when the fixed assets increase the ROA will be decrease by 0.431.

Conclusion

This research study examined the impact of current and non-current assets on the profitability of pharmaceutical companies of Pakistan. For this study, 9 years data was collected from the annual financial statements of six pharmaceutical companies listed in Karachi Stock Exchange over a period of 2010 to 2018. The profitability was measured by ROA and taken as net profit to total assets. Current and non-current assets are the independent variables. Current assets were measured by current assets to total assets and non-current assets were measured by fixed assets to total assets. The analysis showed that current assets have a positive significant relationship with the return on assets and hence the hypothesis that current assets have no significant negative impact on profitability of pharmaceutical companies of Pakistan is accepted. When the current assets of pharmaceutical companies increases their profitability will be increases and when the current assets decreases the profitability will be decreases. Also, the result showed that fixed assets have a significant negative relation with the return on assets and hence the
hypothesis that fixed assets have a significant negative impact on profitability of pharmaceutical companies of Pakistan is accepted.

**Limitation and recommendation**

In this research study 9 years was taken and it is only limited to the pharmaceutical sector of Pakistan. Data was collected from only six companies from 2010 to 2018. Profitability was only measured by ROA. Two variables were used as independent variable. It is recommended to include all firms listed in Karachi Stock Exchange and include other variables to examine their impact on profitability.

**References**


