An Analytical Study on the Determinants of Profitability on Manufacturing Industry Listed in GCC Stock Exchange

Dr. Jeena Ann John
College of Administrative and Financial Services, AMA International University

Abstract: This paper focus on the determinants of the profitability on the selected manufacturing companies listed in the GulfBASE.COM. The data consist of 7 manufacturing companies. Pearson correlation, mean, standard deviations are certain statistical methods used to analyze the selected variables. As the result of the study NPR and EPS does have strongly positive correlation. The NPR could be one of the dependable satisfactory profit margin indicator that could help the share holders to analyze the financial performance of the organization. This study is useful for the academicians and research scholars.

Keywords: NPR, EPS & Gross Profit margin

1. Introduction

1.1 Profitability – Meaning and Importance

The prime motive of the business venture is to earn substantial profit that could survive in the market for a longer run. Profit could be defined as “the amount earned by the company each year”. The term Profitability could be defined as accounting profit or economic profit, in which it could provide the validity of the business and prospective for along period existence. The method of measuring the profitability is done by comparing the revenue and the expenses attained during the financial year of the business. A business with higher profit could reward its owner with larger return on the investment. The current and the past profitability of the business could also be considered as a reliable data for the managers to analyze the future performance of the organization.

Profit margin is the amount of profit the organization earns from the total sales. Higher profit margin reflected from the profit attained from sales. Profitability ratio is one of the most important ratios used by the business to understand the financial position. Certain indicators are used to analyze the profitability margin.

- **Gross Profit Margin:** it is used to measure the organizations efficiency in utilizing the raw material and relative assets to generate profit. Higher GPM percentage is considered to be more favorable for the business.
- **Net Profit Margin:** it is referred to as the company’s profit margin or companies’ profitability. It is easy for the investors to analyze on the financial position.

1.2 How to determine the profitability of the business

As per certain researchers and their study determines that the main goal of the enterprises is to earn profit.

- Assessing the company’s revenue, the money that arrives to the business by different methods
- Assessing the company’s profitability by using certain indicators.

Comparing the net profit of the enterprise by tracking yearly financial records.
Identifying the companies expenses, the organization consumes costs to run the business activity
Capital structure, firm size, returns on investment are certain addition factor which could be considered by the business to determine the profitability of the business.

1.3 Overview of manufacturing sector and its impact towards countries economy

The Arabian peninsula or GCC consists of Saudi Arabia, Kuwait, Bahrain, UAE, Sultanate of Oman and Yemen. The main sources of manufacturing products are petrochemical, cement, metals, Fiberglass, laboratory equipments etc. Over the past decades the level of manufacturing and its share is increasing in the GCC economics. In the study done by Mouawwa Al Awad (2010) “The role of manufacturing in promoting sustainable economic growth in the GCC”, it is concluded that for a longer run the manufacturing sectors contribute strongly to the growth of the country’s economy than shorter run. More over it could be also seen that GCC countries may join effort in launching large and efficient manufacturing projects to shorten the competition.

In the article “Challenges to the long term profitability of manufacturing sector in Qatar”, reviewed By Mohamed bin Faisal bin Qassim al-Thani(2014) stated that in recent years manufacturing sector in Qatar has grown rapidly due to the financial support of the government towards infrastructural projects and also strong demand for the products. Qatar has a lot of valuable resources like aluminum, plastics, lands, sands for cement which are locally produced and sold, at the same time the firms also import certain raw material such micro silica, fly ash etc. to support the quality of the products. It could be judged that the advantages of manufacturing locally rather importing overweight’s certain disadvantages of the countries manufacturing sector.
Smaller to larger manufacturing sector across GCC is consistently important for the sustainable growth of the economy.

### 1.4 Objective of the Study

The primary objective is to study on the determinants of profitability affecting the manufacturing industry. To attain the concerned below objectives the organization profitability is compared and recognized:

- Analyze which indicator is best for measuring the profitability of the manufacturing industry.
- Investigate on which of these variables such as capital structure, Profitability ratios, ROA, ROE could determine on the profitability of the manufacturing industry.
- Understand on the overall financial position of the manufacturing industry listed in GCC Stock exchange.

### 1.5 Hypothesis

H1: there is positive relation between capital structure and Profitability (ROA)
H0: there is no positive relation between capital structure and Profitability (ROA)
H2: there is positive relation between capital structure and Profitability (ROE)
H0: there is no positive relation between capital structure and Profitability (ROE)
H3: there is positive relation between NPR and Profitability (ROA)
H0: there is no positive relation between NPR and Profitability (ROA)
H4: there is positive relation between NPR and Profitability (ROE)
H0: there is no positive relation between NPR and Profitability (ROE)
H5: there is positive relation between NPR and EPS
H0: there is no positive relation between NPR and EPS
H6: there is positive relation between EPS and Profitability (ROA)
H0: there is no positive relation between EPS and Profitability (ROA)

### 1.6 Scope of the Study

The scope of the study is done on the manufacturing companies listed on the Gulfbase.com- GCC stock market. 7 larger companies are selected for the study purpose:

1. Qatar Industrial Manufacturing - QIMD
2. National Metal Manufacturing and Casting co. - NMMCC
3. Gulf Glass Manufacturing co. – GGMCC
4. Kuwait Building Material And Manufacturing co. – KBMMC
5. Abrasive Manufacturing co.- ABMI
7. Kuwait Gypsum Manufacturing & Trading co.

### 1.7 Limitation of the Study

The study is done on the basis of the financial reports which was attained for the stock exchanges and in less than two companies the complete results was difficult to attain. The sample size consisted of 7 manufacturing companies listed under the stock exchange was considered to measure and compare the profitability.

### 2. Review of the Literature

As per the study done by N.Sivathaasan, R.Tharanika, M.Sinthuja&V.Hanitha(2013) “Factors determining Profitability: A Study of Selected Manufacturing Companies listed Colombo Stock Exchange in Sri Lanka”, examined relationship between factors and profitability of selected manufacturing companies of 5 years which was listed in Colombo stock exchange. The factors considered for the study is firm size, capital structure, growth rate and working capital. Multi regression analysis was the statistical tool used to analyze the collected dates. The result concludes that ROA and ROE is significant at level of 5% and it has impact on the profitability. The variable “capital structure” is the highly influential factor which affects the profitability.

According to Miroslawa Szewczyk and Krzysztof Lobos (2013) “Determinants of Profitability of Manufacturers of Mushroom Compost in Poland”. In this study six biggest manufacturers where considered as sample for this study. it is observed that ROA variables is highly influenced by the cost of sales to sales ratio. Descriptive analysis, Multiple regression and correlation are the three different statistical tool used to analyze the data. In descriptive analysis mean and the standard deviation are used for analysis and the result projected difference in ROA variability. The result of the correlation analysis shows that there is strongly negative influence between cost of sales to sales ratio and profitability . The regression analysis also concluded that ROA of the mushroom industry is highly influenced by cost of sales to sales ratio. The higher cost of sales to sales ratio will achieve lower ROA. The firm with lower ROA is the weakest firm and they should use certain tools like controlling and budgeting to improve the performance.

As determined in the study done by Nishanthini A. and Nimalathasan B. (2013) “Determinants of profitability : A case study of listed manufacturing companies in Sri Lanka”, stated that manufacturing industry is less satisfactory. The selected samples are analyzed by using certain indicators such as GPR (gross profit ratio), NPR (net profit ratio), OPR (operating profit ratio), ROI (return on investment) and ROC (Return on capital employed). It is concluded that selected manufacturing companies has different rankings analyzed with the indicator and suggestion done by Walker (1974), that the return on investment is the best indicator to measure the profitability of the companies.
3. Research Methodology

The stock exchange of GCC consists of more than 100 companies segmented under 16 business sectors, 7 listed public sector manufacturing companies are considered for the study. We reference to the previous research, it could be seen that Titman and Wessels (1988) used average 3 years data, Rajan and Zingales (1995) adopted 5 years data and N.Sivathaasan, R.Tharanika, M.Sinthuja&V.Hanitha(2013) used 5 years data to get accurate results. For this study necessary data’s are collected from the annual report of the companies, listed in GulfBase.com and Asmainfo.com for the consecutive year 2009, 2010, 2011, 2012 and 2013.

Statistical Tool
a) Correlation of co-efficiency
\[ r = \frac{\sum (x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum (x_i - \overline{x})^2 \sum (y_i - \overline{y})^2}} \]

b) Mean
c) Standard deviation

Measures
Secondary data are used measure the related profitability. Gross profit ratio (GPR), Net profit ratio (NPR), Return on asset (ROA) and Return on Equity (ROE) are certain indicators used in measuring the profitability. The result will be presented in table by calculating the total, mean and SD

4. Analysis and interpretation

Profitability ratios are one of the indicators to measure the company’s ability to increase revenue from sales, asset and equity. It is the comparison to the income statements which interprets the company’s ability to generate profit for the financial year. Profitability ratio can be divided in two types like margin ratio and its return ratio. In this study Margin ratio: gross profit and net profit, Return ratio: ROA and ROE

Table 2: Gross profit ratio of selected organization

<table>
<thead>
<tr>
<th>Specification/year</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>QIMD</td>
<td>20.83</td>
<td>19.13</td>
<td>20.44</td>
<td>25.01</td>
<td>27.79</td>
<td>113.2</td>
<td>22.64</td>
<td>3.625</td>
</tr>
<tr>
<td>NMMCC</td>
<td>11.52</td>
<td>8.84</td>
<td>9.44</td>
<td>13.84</td>
<td>13.75</td>
<td>57.37</td>
<td>11.474</td>
<td>2.332</td>
</tr>
<tr>
<td>GGMCC</td>
<td>29.45</td>
<td>32.63</td>
<td>34.07</td>
<td>55.95</td>
<td>40.43</td>
<td>172.53</td>
<td>34.506</td>
<td>4.075</td>
</tr>
<tr>
<td>KBMMCC</td>
<td>30.98</td>
<td>26.21</td>
<td>24.41</td>
<td>30.36</td>
<td>32.18</td>
<td>144.14</td>
<td>28.828</td>
<td>3.338</td>
</tr>
<tr>
<td>ABMI</td>
<td>N/A</td>
<td>6.82</td>
<td>14.86</td>
<td>27.82</td>
<td>18.82</td>
<td>68.32</td>
<td>13.664</td>
<td>10.746</td>
</tr>
<tr>
<td>SPM</td>
<td>22.15</td>
<td>26.13</td>
<td>25.22</td>
<td>28.85</td>
<td>33.38</td>
<td>135.73</td>
<td>27.146</td>
<td>4.226</td>
</tr>
<tr>
<td>GYPSUM</td>
<td>12.25</td>
<td>27.36</td>
<td>22.54</td>
<td>32.52</td>
<td>37.3</td>
<td>131.97</td>
<td>26.394</td>
<td>9.647</td>
</tr>
</tbody>
</table>

From the above analytical table it could be interpreted that the companies having higher Gross profit ratio determines the purchasing efficiency of the enterprise and it is a positive sign of good management. It could also be implies that the cost of production could be relatively low. Even though there is heavy competition in the market, organizations like GGMCC, SPM, and GYPSUM are able to maintain a higher percentage compared to other organizations. In certain case there is lower profitability ratio which is not a good sign of efficient management.

The capital structure ratio should be reduced to increase the net profit margin. Every firm are concerned with the net profit of the business activity. From the above table 5. It shows the final result of the profit after the sales. According to the table the NPR of QIMD, NMMCC and GYPSUM was on gradual increase between 2009 -2010. Due to certain economic condition the organization was able to maintain a satisfactory level of performance even though there is decrease in NPR after 2011. Nishanthini A. and Nimalathasan B. (2013) mentioned in their study that according to Mohin(1970) the standard norm of profit margin is between 4%-6%.

Table 3: Net profit ratio of selected organization

<table>
<thead>
<tr>
<th>Specification/year</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>QIMD</td>
<td>58.04</td>
<td>58.95</td>
<td>63.25</td>
<td>68.1</td>
<td>76.96</td>
<td>396.8</td>
<td>59.36</td>
<td>7.284</td>
</tr>
<tr>
<td>NMMCC</td>
<td>2.81</td>
<td>1.47</td>
<td>0.88</td>
<td>5.26</td>
<td>4.87</td>
<td>15.29</td>
<td>3.058</td>
<td>1.96</td>
</tr>
<tr>
<td>GGMCC</td>
<td>17.87</td>
<td>22.86</td>
<td>22.65</td>
<td>23.76</td>
<td>26.94</td>
<td>114.08</td>
<td>22.816</td>
<td>3.255</td>
</tr>
<tr>
<td>KBMMCC</td>
<td>14.53</td>
<td>11.71</td>
<td>6.68</td>
<td>9.3</td>
<td>17.74</td>
<td>59.96</td>
<td>11.992</td>
<td>4.33</td>
</tr>
<tr>
<td>SPM</td>
<td>3.86</td>
<td>12.86</td>
<td>12.02</td>
<td>15.25</td>
<td>16.85</td>
<td>60.84</td>
<td>12.168</td>
<td>5.023</td>
</tr>
<tr>
<td>GYPSUM</td>
<td>N/A</td>
<td>14.49</td>
<td>10.45</td>
<td>25.9</td>
<td>25.45</td>
<td>76.29</td>
<td>15.258</td>
<td>7.802</td>
</tr>
</tbody>
</table>

It could be determined by dividing the total income to total asset. The higher ROA is the impact of efficient utilizing of the available resource and less capital investment. It is the product of common ratio like profit margin and asset turn over. ROA do have certain limitations, it cannot determine the financial mode of the asset and secondly the asset is standardized. A negative return on asset (ROA) means the organization is investing huge amount of capital for the production and receiving less income, it could be accompanied by higher level of debts.

Table 4: ROA of selected organization

<table>
<thead>
<tr>
<th>Specification/year</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>Total</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>QIMD</td>
<td>12.33</td>
<td>13.58</td>
<td>14.36</td>
<td>15.03</td>
<td>12.21</td>
<td>67.51</td>
<td>13.502</td>
<td>1.236</td>
</tr>
<tr>
<td>NMMCC</td>
<td>2.2</td>
<td>1.16</td>
<td>0.61</td>
<td>3.24</td>
<td>3.21</td>
<td>10.42</td>
<td>2.084</td>
<td>1.187</td>
</tr>
<tr>
<td>GGMCC</td>
<td>11.71</td>
<td>15.31</td>
<td>15.97</td>
<td>19.67</td>
<td>19.92</td>
<td>82.58</td>
<td>16.516</td>
<td>3.405</td>
</tr>
<tr>
<td>KBMMCC</td>
<td>9.03</td>
<td>6.34</td>
<td>2.88</td>
<td>2.99</td>
<td>10.45</td>
<td>31.69</td>
<td>6.338</td>
<td>3.439</td>
</tr>
<tr>
<td>SPM</td>
<td>1.79</td>
<td>5.5</td>
<td>5.8</td>
<td>8.13</td>
<td>6.84</td>
<td>28.06</td>
<td>5.612</td>
<td>2.371</td>
</tr>
<tr>
<td>GYPSUM</td>
<td>-0.02</td>
<td>5.75</td>
<td>3.5</td>
<td>7.11</td>
<td>9.24</td>
<td>25.58</td>
<td>5.116</td>
<td>3.548</td>
</tr>
</tbody>
</table>

From the above analytical table it could be interpreted that the companies having higher Gross profit ratio determines the purchasing efficiency of the enterprise and it is a positive sign of good management. It could also be implies that the cost of production could be relatively low. Even though there is heavy competition in the market, organizations like GGMCC, SPM, and GYPSUM are able to maintain a higher percentage compared to other organization. In certain case there is lower profitability ratio which is not a good sign of efficient management.

Freeman, Ohlsonand Penman (1982) determines that if the ROE is higher the future earning of the business will
decrease and vice versa. It is a measuring tool to analyze the total returns the organization earned from the money invested for the business activity. It is also known as the returns of net worth. The ROE should be equal to 1 (risk-free interest) if the ROE is less than 1, the organization should not invest more. From the above table 5 the ROE increase between 2009-2010 for QIMD and SPM. The ROE for NMMCC, KBMMC, GYPSUM has a sharp decline between 2009-2013.

5. Findings and Suggestion

- Gross profit ratio mostly determines on the purchasing efficiency of the enterprise. Higher gross profit interprets good sales and low cost on production.
- Net profit ratio is one of the highly influential profitable margin ratio indicator that could determine the financial position of the firm and could easily communicate to the share holders.
- It is easier for the larger fixed asset firms to obtain long term debts. It could be also interpreted that higher sales do have a comparative advantages in obtaining short terms funds.
- Change in the capital structure mix has a positive impact on the asset and also on the returns of the share holder
- The returns earned by the share holders are at secure rates.

6. Conclusion

From this study determinants of profitability the best indicator to analyze the profitability of the manufacturing industry is by assessing the NPM. It gives a wider view on the total profit attained by the business. Factors like capital structure, firm size, asset, debts do have more influence on the net profit. The NPM could have a moderate impact on the ROA and ROE and Stronger positive impact on EPS. ROA, ROE AND EPS are certain measures the investors use to understand on the financial position and invest for the organization. Even though there is consistent decrease on the performance between 2009-2012 of overall manufacturing industry, companies like QIMD, GGMC, KBMMC, SPM is satisfactory.

References
