IMPACT OF ROI ON CAPITAL EMPLOYED: A STUDY OF AUTOMOBILE INDUSTRY

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INTRODUCTION

Profit is the overall objective of any business enterprise and return on investment (ROI) plays an important role in any firm’s profitability. At present every firm has been facing neck to neck competition in their operational and financial decisions. The role of return on investment (ROI) has been realized by most of the firm in the world as a basic tool for divisional performance evaluation to throw light on its performance by way of choosing investment centre. When a concern buys new fixed assets or when it spends money to increase the value of its existing fixed assets, this expenditure is called capital expenditure or capital investment. Fixed assets can be tangible fixed assets such as land, buildings, plant and machinery or intangible fixed assets such as brands, goodwill, patents and copyrights. Any capital investment decision involves a lot of planning or pros and cons of any expenditure which are determined prior to make that expenditure.
Importance of Capital Budgeting Decision

Capital budgeting decisions are crucial to a firm's success for several reasons. First, capital expenditures typically require large outlays of funds. Second, firms must ascertain the best way to raise and repay these funds. Third, most capital budgeting decisions require a long-term commitment. Finally, timing of capital budgeting decisions is important. When large amounts of funds are raised, firms must pay close attention to the financial markets because the cost of capital is directly related to the current interest rate. Moreover, capital budgeting may also define or constrain future strategic decisions because these decisions often require the acquisition of costly assets that have long economic lives and limited marketability or liquidity. Thus, firms often make long-term commitments that are not quickly or easily reversible. The long-lived assets and future operating and strategic decisions combine to make sound capital budgeting decisions. It is crucial to decision-makers to understand how to evaluate projects correctly so that they can make a great concern on which project to accept or reject. The other important aspect of capital expenditure is the hurdle rate which also known as the minimum acceptable rate of return or MARR. The hurdle rate means least amount of return which must be generated by a selected capital investment. No firm would like to invest in any capital expenditure which would not give the desired return or reduce the present return. The firm would at least maintain the current return or increase it. Therefore, any firm would not make such investment which has an expected lower return than the current return on investment.

Capital Investment Decisions

Capital investment refers to projects whose results would be available only after a period of time. The investment in these projects are quite heavy and to be made immediately, but the return will be available only after a year. The first step in the process of capital budgeting is to assemble a list of the proposed new investments, together with the data necessary to appraise them. Although practices may be vary firm to firm. Proposals dealing with assets acquisition are frequently grouped according to the following some categories:

Replacement Project

1. Safety and Environmental Projects
2. Cost reduction Projects
3. Expansion Projects
4. Dependent and Independent

**Capital Budgeting Process**

Capital budgeting is a complex process as it involves decisions to the investment of current funds for the benefit to be achieved in the future and the future is always uncertain. A capital budgeting process may involve a number of steps depending upon the size of the concern, nature of project, their numbers, complexities and diversities etc. Capital budgeting decisions of a firm have an all-inclusive influence of the entire spectrum of entrepreneurial activities. Hence, they require a complex combination and knowledge of various disciplines for their effective administration, such as economics, finance, mathematics, economic forecasting, project techniques and techniques of financial control. A manager of finance must keep in mind the three dimensions of Capital budgeting programme— policy, plan and program. For typical investment proposals of a large corporation, the distinctive stages in the capital budgeting process can be shown as highly simplified flow charts.
Objective of the Study

- The main objective of the study is to test ROI consideration in capital budgeting decisions taken by the Indian automobile companies.
- To search out know that which method of capital budgeting is being used mostly by the Indian automobile companies.
- To examine the process of finalized rate of return.

Hypothesis of the study  To achieve the above objectives following hypothesis have been taken in research:

- ROI plays no role in the process of capital budgeting decision making
- There is no significant relationship between ROI and Capital Investment

Research Methodology  To work out the above hypothesis the researcher followed a two-way path as follows:

- The study is based on the primary and secondary data. An exploratory research has been designed to carry out the study. First of all the sample of 10 automobile sector companies were selected on the basis of convenient random sampling. Data regarding capital expenditure and respective return on investment (ROI) have been taken out for the period of five years i.e. from 2010 – 2014. The average capital employed and average return on investment (ROI) worked out for five years of the selected companies. To know the dependency of capital budgeting decision on ROI t-test was applied and relationship between ROI and capital budgeting decision were worked out with the help of correlation analysis.
- To examine second hypothesis a structured questionnaire was prepared. The researcher interviewed the CEO/CFO’s of the selected companies, either on phone or online or by personally meeting with them. The discussions were analyzed to find the views of the CEOs and CFOs on various issues of the problems.
Limitation of Study

The research is limited up to randomly selected 10 Indian automobile companies. This limited sample size is adopted due to the Time and Financial Constraints. However, the researcher has done justification to the research by obtaining and analyzing the data with authentication and validation.

Data Analysis

The following table shows the relationship between capital employed, ROI, its Growth and correlation of top 10 Indian automobile companies.

<table>
<thead>
<tr>
<th>Year</th>
<th>Tata Motor</th>
<th>Mahindra &amp; Mahindra</th>
<th>Maruti Limited</th>
<th>Ashok Leyland</th>
<th>Bajaj Auto Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROI</td>
<td>CE</td>
<td>ROI</td>
<td>CE</td>
<td>ROI</td>
</tr>
<tr>
<td>2010</td>
<td>14.28</td>
<td>33068.65</td>
<td>27.70</td>
<td>10950.71</td>
<td>31.95</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>10.62</td>
<td>35190.18</td>
<td>27.50</td>
<td>13588.35</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>7.20</td>
<td>32122.76</td>
<td>23.85</td>
<td>16443.91</td>
</tr>
<tr>
<td></td>
<td>2013</td>
<td>4.39</td>
<td>31080.16</td>
<td>25.42</td>
<td>19303.20</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>0.89</td>
<td>30936.89</td>
<td>22.28</td>
<td>22521.86</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>-93.77</td>
<td>-6.45</td>
<td>-19.57</td>
<td>105.67</td>
<td>-43.88</td>
</tr>
</tbody>
</table>
| r    | 0.74       | -0.88                | -0.66          | -0.79          | -0.63            | ROI- Return on Investment (in %), CE- Capital Employed (in Cr. ₹)
Tata motors shows negative growth rate (-6.45) of capital Expenditure/employed. In this concern return on investment is also shows negative growth rate. Rest of the four companies registered negative return on investment while all the companies have positive growth rate in capital employed for last five years. The value of coefficient of correlation (r) is positive 0.74 in Tata Motor while all the other four companies have negative coefficient of correlation i.e. -0.88 in Mahindra & Mahindra, -0.66 in Maruti Limited, -0.79 in Ashok Leyland, and -0.63 in Bajaj Auto Limited.

Table: 2- Relationship Between Capital Employed, ROI, its Growth rate and Correlation

<table>
<thead>
<tr>
<th>Year</th>
<th>Hero Honda</th>
<th>TVS Motor</th>
<th>Force Motors Ltd.</th>
<th>Sundaram Clayton's</th>
<th>Swaraj Mazda</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROI</td>
<td>CE</td>
<td>ROI</td>
<td>CE</td>
<td>ROI</td>
</tr>
<tr>
<td>2010</td>
<td>75.07</td>
<td>3683.80</td>
<td>19.85</td>
<td>1983.24</td>
<td>15.82</td>
</tr>
<tr>
<td>2011</td>
<td>52.13</td>
<td>4709.55</td>
<td>19.08</td>
<td>1692.04</td>
<td>26.06</td>
</tr>
<tr>
<td>2012</td>
<td>49.83</td>
<td>5547.48</td>
<td>22.64</td>
<td>1795.32</td>
<td>7.12</td>
</tr>
<tr>
<td>2013</td>
<td>48.57</td>
<td>5470.97</td>
<td>17.59</td>
<td>1860.72</td>
<td>2.29</td>
</tr>
<tr>
<td>2014</td>
<td>51.41</td>
<td>5568.32</td>
<td>20.27</td>
<td>2035.54</td>
<td>5.76</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>-31.52</td>
<td>51.16</td>
<td>2.12</td>
<td>2.64</td>
<td>-63.59</td>
</tr>
<tr>
<td>r</td>
<td>-0.93</td>
<td>0.02</td>
<td>-0.88</td>
<td>-0.68</td>
<td>-0.27</td>
</tr>
</tbody>
</table>

- ROI- Return on Investment (in %), CE- Capital Employed (in Cr. ₹)

Hero Honda, TVS motor, force motor limited and Swaraj Mazda all the concerns have positive growth rate of capital expenditure/ employed while only Sundaram Clayton’s has negative growth in capital employed. In case of ROI Hero Honda and force motors ltd. has registered negative growth rate while rest of the three concerns have positive growth rate of ROI. In respect only TVS motors has positive coefficient of correlation while rest of four companies have negative coefficient of correlation.
As a result we can say return on investment (ROI) plays a crucial role in capital investment in any concern. Usually when ROI decreases the entrepreneurs try to increase capital employed (CE) to cover-up optimum level of ROI. For further confirmation we have been applying t-test on capital investment and ROI. In the result of t-test table value i.e. 1.8 is less than the calculated value i.e. 2.657. Its mean our null hypothiese have been rejected.

Thus, the above analysis prove the main hypothesis that the capital expenditures are driven by return on investment. For the further confirmation of the hypothesis, the researcher thought to collect the opinion of the decision makers like CEO/CFO’s of the sample companies. For this purpose, a questionnaire has been structured and it is to take personal interview of CEO/CFO’s of the sample companies. Researcher faced very much difficulty to got time from CEO/CFO’s of the selected companies for personal interviews. Then researcher used electronic technology for data collection of rest of the companies which was not possible to visit for personal interview. However, total 10 Indian automobile companies included in the study. Out of 10, only 08 Indian automobile companies were giving response of questionnaire.

**Findings and Conclusion** On the basis of analysis and responses of CEO’s and CFO’s of the selected companies the following findings and conclusions have been derived:

- Maximisation of shareholders wealth is the primary objective of the every firm or companies.
- There are lot of differences between capital budgeting process in Government sector and corporate sector.
- Every company has realised that ROI is an important factor in capital budgeting decisions.
- Before taking capital investment decisions every company has assured that the hurdle rate must be higher than cost of capital.
- All the selected companies very much cautious about the current and future rate of investment.
- Most (04 out of 08) of the Indian automobile companies like to use NPV as a method of capital budgeting.
- NPV and IRR are most (07 out of 08) popular methods of capital budgeting in large and heavy capital investment companies but PBP (01 out of 08) is much more popular in small-scale industry.
It’s not necessary that the company uses only one capital budgeting method in all the time. They can use some other methods of capital budgeting on the basis of requirement for particular capital investment.

At the end, we can summarize that every firm’s management wishes to increase their profitability, economic conditions, value of the share holders and value of the firms etc. For this purpose management has to take very effective and resourceful decisions regarding long–term investments. Capital expenditure decision is the most important part of long term investment decisions. Management should be very cautious to take efficient and effective capital investment decisions, with following the proper processes. Because if they able to take such kind of effective capital investment decisions, it will increase their ROI. Once firm grow its ROI; it means management gets all the above mentioned variables. It clearly indicates that the capital investment is a crucial part of management decisions and ROI plays a very important role to take capital expenditure decisions.

Suggestions: Keeping in view of the above findings and conclusions following suggestions have been arise.

- ROI is an important variable to examine Capital Expenditure Decision.
- Before fixing the capital budgeting method every company have to calculate risk associate with concern methods.
- NPV is a more suitable method for capital budgeting.
- Globalisation is opening the door for the capital investment in India and account of which there is a scope to compare the capital investment practices in foreign companies Vs. Indian companies.

REFERENCES


