A STUDY ON IMPORTANCE OF MANAGEMENT OF CAPITAL BUDGETING WITH SPECIAL REFERENCE TO SHRI AMMAN STEEL PLANT

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Abstract: A financial plan or list which has been a scripted tool or process that helps in the organising of the future expenses, reviews and activities known as the Budget. The budget has various sectors include corporate, start-ups, government and family budgets, may keen on the concept of capital budgeting that analyse the investment’s long-term return and the potential outcome of the project. Growth, risk factors, complexity and long-term implications are the chief factors that helps in finding the benefits of capital budgeting which creates measurability and accountability. This project aims at the importance of the capital budgeting that may help in expanding their workforce in new markets, investing in new equipment and products, maintaining, upgrading and renovation of the technology of the product and produce effectiveness on the decisions for investments using capital budgeting. The objective of this project work is to discuss about capital budgeting technique and evaluation of capital budgeting through discounted and non-discounted cash flow. And the methods used in this project work are payback period method, Net present value, Internal rate of return, Accounting rate of return and Profitability index.

Keywords: capital budgeting, importance techniques, cash discounted and non-discounted method.

1. Introduction

Capital budgeting is the important essential part of financial management. Capital budgeting is a required managerial tool. Financial manager is to pick out investment with satisfactory cash flows with high returns. A financial manager must be able to decide his investment is value undertaking and able to decide and identify intelligently between two or more alternatives. Capital budgeting involves the planning and control of capital budgeting outlay. It is the process of deciding whether or not to commit resources to a particular long term project whose benefits are to be grasped over a period of time. A capital budgeting is defined as the firms decision to investment of current funds professionally in the long-term assets in anticipation of an expected flow of benefits and sequence of period. The company’s investment decisions are usually contain expansion, gaining, modernization, and substitution of the long-term assets. They are the assessment of upcoming events, which are difficult to predict. It is really complex problem to estimate the upcoming cash flow of an investment. The investment decision of a company’s generally know as Capital Budgeting Decision. A Capital budgeting is also known as “Investment Decision Making”, “Capital Expenditure Decisions”, “Planning Capital Expenditure” and “Analysis of Capital Expenditure.

1.1 Objective of the Study:
1. To discuss about the capital budgeting techniques.
2. To evaluate capital budgeting proposal through non discounted cash flow methods.
3. To evaluate capital budgeting proposal through discounted cash flow methods.

1.2 Scope of the Study:
To know the investment proposals by applying capital budgeting techniques and to give suggestions for the betterment of the companies investment proposal and to maximize profit.

1.3 Limitation of the Study:
This study is based on secondary data taken from published annual reports of selected Shri Amman Steel & Allied Industries (P) Ltd at Trichy.
1. It has long term implementations which can’t be used in short term and it is used as operations of the business. A wrong decision in the early stages can affect the long-term survival of the investment of fixed assets is more than required.
2. Inadequate investment makes it difficult for the company to increase it budget and the capital.
3. Capital budgeting involves large number of fund so the decision has to be taken carefully.
4. Decisions in capital budgeting are not modifiable as it hard to locate the market for capital goods.
5. The estimation can be in respect of cash outflow and the revenues/saving and costs attached which are projects.

2. Review of Literature:
Claudio A Romano, (2015) Most theoretical and empirical studies of capital Budgeting focus on public corporations Only a limited number of studies on capital budgeting have been conducted on small-to-medium size enterprises (SMEs), and this deficiency is particularly evident in investigations into factors that influence funding decisions of family business owners. Theory indicates that there is a complex array of factors that influence SME owner- managers' financing decisions. Recent family business literature suggests that these processes are influenced by firm owners' attitudes toward the utility of debt as a form of funding as moderated by external environmental conditions (e.g., financial and market considerations).
Brian L. Betker (2015) This paper is an attempt to study the capital Budgeting of Indian Steel Industry and its determinants. The 66 sample steel companies are bearing an average debt portion of 68% in their capital budgeting means highly debt driven. Hence we tried to figure out which are the factors significantly explaining the capital budgeting. For which we have considered eight independent variables from early studies and employed correlation analysis, multiple regression and step wise regression techniques in this study to test the dependency of the debt ratio on independent variables.

Yupana Wiwattanakantang (2016) This study presents empirical evidence on the determinants of the capital budgeting of non-financial firms in 1996. Empirical results imply that the tax effect, the signalling effect, and the agency costs play a role in financing decisions. Ownership structure also effects financial policy. Steel industry has significantly higher debt level. Only in Steel industry owned firms do managerial shareholdings have consistently positive influence on Steel industry leverage. Finally large shareholders affect the debt ratio negatively, implying that they may monitor the management.

Michael J. Alderson*, (2016) We investigate the relation between liquidation costs of assets and composition of capital budgeting for firms that reorganized under Chapter 11 of the Bankruptcy Code. Firms with high liquidation costs emerge from Chapter 11 with relatively low debt ratios. The debt of these firms is more likely to be public and unsecured, and to have less restrictive covenant terms; these firms are also more likely to raise new equity capital. Assets with high liquidation costs thus lead firms to choose capital budgeting’s that make financial distress less likely.

Dr. Shrabanti Pal (2017) This paper studies the determinants of capital Budgeting choice of Indian steel companies. The main objective of the firm is to explore the most important factors which influence most the choice of capital budgeting of the steel companies in India. The study is basically empirical in nature. In the present paper 37 Indian steel companies listed under National Stock Market and Bombay Stock Market constitute the sample of study. Correlation and regression analysis are used to explore the relationship between dependent variable leverage and other independent variables like tangibility, size, non-debt tax shield, growth opportunity, profitability and business risk. It is found that tangibility, non-debt tax shield, size and growth opportunity have significant effect of the leverage of the capital budgeting of the companies. The other two variables, profitability and business risk have insignificant effect on the capital budgeting of the companies.

Mohamad H. (2017) This paper attempts to examine the determinants of firms’ capital budgeting in Malaysia covering the period between 1986 to 1990. A discussion on the capital budgeting behaviour in the Malaysian financial market implies that there are similarities between developed and less developed financial markets, involving the influences of firms’ capital budgeting. Specifically, a firm's size and steel industry class play a significant role in determining a firm's capital budgeting.

Peter W. Schuhmann (2018) This study uses Hofstadder’s (2001) cultural dimensions to investigate the impact of market reception on capital budgeting. We examine the interaction of these dimensions with stock returns, our proxy for market timing. Based on our market leverage results, we find evidence that firms do engage in market timing by reducing their leverage ratios when their share prices increase. Furthermore, we find that firms in countries with high uncertainty avoidance and high power distance have lower market leverage ratios and that these cultural dimensions serve to reduce the impact of market timing. These results are consistent for developed markets but mixed for emerging markets. On a book leverage basis, the results are generally consistent but less conclusive. To the extent that culture impacts manager perception of risk and investor reception of newly issued shares, we conclude that cultural dimensions impact the degree to which a firm can modify its capital budgeting to take advantage of perceived market mispricing.

Kashan Pirzada (2018) The paper aims to examine the significant relationship amongst institutional stockholdings and firms’ performance as measured by ROA, ROE, PE, EPS and capital budgeting as measured by long term debt to capital ratio of companies listed on the Main Board of Bursa Malaysia. The results show that there is a significant relationship between the institutional stockholdings on the firms’ performance measured by EPS and PE ratio of firms listed on the Main Board of BURSA. Moreover, it is revealed that there is no significant relationship between the institutional stockholdings on firms’ capital budgeting.

Wenlian Gao (2019) This paper examines the relation between information asymmetry, capital budgeting and the cost of capital across countries, particularly focusing on how the relation is influenced by the various aspects of the institutional environment. Results show that firms with high levels of information asymmetry tend to use more debt capital but less long-term debt, possibly because of the differential impact of information asymmetry on the cost of different types of capital. Furthermore, the positive association between information asymmetry and market leverage is more pronounced in countries with developed banking sectors or with explicit bankruptcy codes, and less prominent in common-law countries and countries with sound law enforcement or with extensive disclosure practices.

L. J. Gitman and P. A. Vanderberg (2020) In spite of this, small paper business has become more sophisticated as over 27% used DCF as the primary method of analysis as compared to earlier studies. However, this conclusion may be somewhat misleading as the discount rate was not scientifically calculated. Several surveys of capital budgeting practices reveal that the IRR is preferred over the NPV as an investment decision making tool. Practitioner’s preference for the IRR is explained by the fact that IRR is treated as a display method and is more cognitively efficient.

3. Research Methodology:
“A research design is the arrangement of conditions for collection and analysis data in a manner that aims to combine relevance to the researcher purpose with economy in procedure”. It constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do form writing the hypothesis and its operational implication to the final analysis of data.

3.1. Research Design
In view of the objectives of the study, an exploratory research design was adopted. Exploratory research is one which largely interprets the already available information. It lays particular emphasis on analysis and interpretation of the existing and available information and it makes use of Secondary Data.
3.2. Sources of data:
The study is based on Secondary Data. Secondary Data is the data that have been already collected by and readily available from other sources. Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all.

3.3. Tools used
Capital Budgeting Techniques
- Payback Period Method
- Net Present Value Method
- Internal Rate of Return
- Profitability Index
- Average Rate of Return

4. Data Analysis:

**TABLE NO.1 PAYBACK PERIOD METHOD**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>INITIAL INVESTMENT</th>
<th>CASH FLOW</th>
<th>PAYBACK PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>4130.40</td>
<td>6965.18</td>
<td>0.59</td>
</tr>
<tr>
<td>2017-18</td>
<td>4130.53</td>
<td>5423.43</td>
<td>0.76</td>
</tr>
<tr>
<td>2018-19</td>
<td>4130.53</td>
<td>3428.45</td>
<td>1.20</td>
</tr>
<tr>
<td>2019-20</td>
<td>4130.53</td>
<td>2115.35</td>
<td>1.95</td>
</tr>
<tr>
<td>2020-21</td>
<td>4130.53</td>
<td>2447.14</td>
<td>1.69</td>
</tr>
</tbody>
</table>

**Interpretation:**
From the above table no. 1 the Payback period for the steel company. In the year of 2016-17 payback period for 0.59 and the next year is slowly increased to 0.76, then in the year of 2018-19 payback period is increased to 1.20, next year of 2019-20 period is increased to 1.95 and it was decreased from 2020-21 is 1.69.

**TABLE NO. 2 NET PRESENT VALUE**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CASH FLOWS</th>
<th>DISCOUNTED FACTOR 10%</th>
<th>DISCOUNTED CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>6965.18</td>
<td>0.909</td>
<td>6331.34</td>
</tr>
<tr>
<td>2017-18</td>
<td>5423.43</td>
<td>0.826</td>
<td>4479.75</td>
</tr>
<tr>
<td>2018-19</td>
<td>3428.45</td>
<td>0.751</td>
<td>2574.76</td>
</tr>
<tr>
<td>2019-20</td>
<td>2115.35</td>
<td>0.683</td>
<td>1444.76</td>
</tr>
<tr>
<td>2020-21</td>
<td>2447.14</td>
<td>0.621</td>
<td>1519.67</td>
</tr>
</tbody>
</table>

**Total PV of Cash Flow**

**NPV**

12219.75

**Interpretation:**
In the year 2016-17, the present value of cash flow was 6331.34, are in the 2017. It was found that the net present positive from the year 2016-2021 was Rs.12,219.75

**TABLE NO. 3 INTERNAL RATE OF RETURN**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CASH FLOWS</th>
<th>DISCOUNTED FACTOR 90%</th>
<th>DISCOUNTED CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>6965.18</td>
<td>0.526</td>
<td>2043.68</td>
</tr>
<tr>
<td>2017-18</td>
<td>5423.43</td>
<td>0.277</td>
<td>1402.29</td>
</tr>
<tr>
<td>2018-19</td>
<td>3428.45</td>
<td>0.146</td>
<td>400.65</td>
</tr>
<tr>
<td>2019-20</td>
<td>2115.35</td>
<td>0.077</td>
<td>108.88</td>
</tr>
<tr>
<td>2020-21</td>
<td>2447.14</td>
<td>0.040</td>
<td>97.88</td>
</tr>
</tbody>
</table>

**Total PV of Cash Flow**

**NPV**

4053.38

.77.15

**Interpretation:**
From the table no. 2 and table no.3 it was found both positive and negative net present value. With the help of this IRR is calculated,
Calculations for IRR:

Positive NPV

\[ IRR = \text{Lower Rate} + \frac{\text{Difference in PV of cash inflows}}{\text{X Difference in Rate}} \]

\[ IRR = 12219.75 + \frac{(16350.28 - 4053.38)}{(90 - 10)} \]

\[ IRR = 12219.75 + \frac{12296.9}{80} \]

\[ IRR = 89.49 \]

When calculated it was found that the IRR is greater than the cost of capital.

**TABLE NO.4**

**PROFITABILITY INDEX**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NET CASH FLOW</th>
<th>INITIAL INVESTMENT</th>
<th>PROFITABILITY INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>6965.18</td>
<td>4130.40</td>
<td>1.69</td>
</tr>
<tr>
<td>2017-18</td>
<td>5423.43</td>
<td>4130.53</td>
<td>1.31</td>
</tr>
<tr>
<td>2018-19</td>
<td>3428.45</td>
<td>4130.53</td>
<td>0.83</td>
</tr>
<tr>
<td>2019-20</td>
<td>2115.35</td>
<td>4130.53</td>
<td>0.51</td>
</tr>
<tr>
<td>2020-21</td>
<td>2447.14</td>
<td>4130.53</td>
<td>0.59</td>
</tr>
</tbody>
</table>

**Interpretation:**
From the above table no.4 the profitability index for the steel company. In the year of 2016-17 profitability index for 1.69 and the next year is slowly decreased to 1.31, then in the year of 2018-19 profitability index is decreased to 0.83, next year of 2019-20 period is decreased to 0.51 and it was decreased from 2020-21 is 0.59.

**TABLE NO.5**

**AVERAGE RATE OF RETURN**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AVERAGE PROFIT</th>
<th>AVERAGE INVESTMENT</th>
<th>ARR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>5087.15</td>
<td>683.23</td>
<td>7.45</td>
</tr>
<tr>
<td>2017-18</td>
<td>4293.32</td>
<td>684.54</td>
<td>6.27</td>
</tr>
<tr>
<td>2018-19</td>
<td>2926.12</td>
<td>701.65</td>
<td>4.17</td>
</tr>
<tr>
<td>2019-20</td>
<td>2393.41</td>
<td>719.28</td>
<td>3.33</td>
</tr>
<tr>
<td>2020-21</td>
<td>2354.58</td>
<td>819.63</td>
<td>2.87</td>
</tr>
</tbody>
</table>

**INTERPRETATION:**
From the above table no.5 the ARR for the steel company. In the year of 2016-17 ARR for 7.45 and the next year is slowly decreased to 6.27, then in the year of 2018-19 ARR is decreased to 4.17, next year of 2019-20 rate of return is decreased to 3.33 and it was decreased from 2020-21 is 2.87.

**FINDINGS**
From the above table no.1 the Payback period for the steel company. In the year of 2016-17 payback period for 0.59 and the next year is slowly increased to 0.76, then in the year of 2018-19 payback period is increased to 1.20, next year of 2019-20 period...
is increased to 1.95 and it was decreased from 2020-21 is 1.69.
In the year 2016-17, the present value of cash flow was 6331.34, are in the 2017. It was found that the net present positive from the year 2016-2021 was Rs.12,219.75.
From the table no. 2 and table no.3 it was found both positive and negative net present value. With the help of this IRR is calculated. When calculated it was found that the IRR is greater than the cost of capital.
From the above table no.4 the profitability index for the steel company. In the year of 2016-17 profitability index for 1.69 and the next year isslowly decreased to 1.31. then in the year of 2018-19 profitability index is decreased to 0.83, next year of 2019-20 period is decreased to 0.51 and it was decreased from 2020-21 is 0.59.
From the above table no.5 the ARR for the steel company. In the year of 2016-17 ARR for 7.45 and the next year isslowly decreased to 6.27. then in the year of 2018-19 ARR is decreased to 4.17, next year of 2019-20 rate of return is decreased to 3.33 and it was decreased from 2020-21 is 2.87.

CONCLUSIONS
There are different kinds of techniques used for capital budgeting purposes. For NPV is considered as famous technique purpose that is applied by firms, especially when it comes to make decision for long-term period projects. Further, discounted payback method is also very demanding because it helps to know the minimum period for certain investment.

REFERENCES