

Capital budgeting practices in SME'S: (A study of selected enterprises of Haryana)

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Abstract

Capital budgeting is one of the most important areas of financial management. There are several techniques commonly used to evaluate capital budgeting projects namely the payback period, accounting rate of return, present value and internal rate of return and profitability index. Recent studies highlight that financial managers worldwide favour methods such as the internal rate of return (IRR) or non-discounted payback period (PP) models over the net present value (NPV), which is the model academics consider superior. In particular this research focused on to evaluate the capital budgeting practices by SME's in taking the decision for buying most important assets. This study concludes with what types of units having which type of capital budgeting practices?

Keywords: capital budgeting, Practices, procedures, Capital budgeting practices and procedures, Small and Medium size enterprises.

Introduction

Capital budgeting can be defined as the "total process of generating, evaluating, selecting and following up on capital expenditures". Hence, capital budgeting techniques would be the set of tools with which financial managers use to establish criteria for investing capital into available opportunities. A mistake in its capital budgeting process thus would cause a detrimental effect to the financial position of the company in the future. The pressure on a financial manager is understandably enormous. Therefore, depending on the needs and direction of the company, the financial manager is to apply capital budgeting techniques that would maximize the value of the company.

Capital budgeting may be defined as the decision-making process by which a firm evaluates the purchase of major fixed assets, including buildings, machinery, and equipment. It deals exclusively with major investment proposals, which are essentially long-term projects and are concerned with the allocation of firm's scarce financial resources among the available market opportunities. It is a many-sided activity which includes a search for a new and more profitable investment proposal and the making of an economic analysis to determine the profit potential of each investment proposal. Capital budgeting involves a long-term planning for making and financing proposed capital outlays. Most expenditure for long-lived assets affects a firm's operations over a period of years. They are large, permanent commitments, which influence its long-run flexibility and earning power. It is a process by which available cash and credit resources are allocated among competitive long-term investment opportunities so as to promote the greatest profitability of a company over a period of time. It refers to the total process of generating, evaluating, selecting, and following up on capital expenditure alternatives.

Review of Literature

A number of researchers in finance and accounting have examined corporate capital budgeting practices. But in spite of

the importance of small business firms, most of the literature and surveys related to capital budgeting have targeted large firms.

Anthony (2003) ^[2], in a study of the capital budgeting practices of fourteen medium to large sized companies in India found that all companies, except one, used payback. With payback and/or other techniques, about two third of the companies used IRR and about two fifth used NPV. IRR was found to be the second most popular method. The reasons for the popularity of the payback in order of significance were stated to be its simplicity to use and understand its emphasis on early recovery of investment and focus on risk.

Peterson (2005) ^[14] examined methods of evaluating investments and uncertainty in Indian companies. He collected a sample of 75 firms. His findings revealed that 33% of the firms used non-discounted methods like PBP and ARR, whereas 16% of the companies were using modern DCF techniques. Moreover, almost 50% of the companies incorporated risk by 'Adjusting the Discount rate' and 'Capital Asset Pricing Model'.

Rao's (2006) ^[15] survey of 74 companies revealed that 51% used IRR as a project appraisal criterion. Firms typically use (92% or more) multiple evaluation methods. He found that ARR and PBP were widely used as supplementary decision criteria. A few Indian firms in his survey also used none of the methods listed in the questionnaire. They were using profitability and cash flow analysis for assessing capital expenditure.

Jain and Srivastava (2006) ^[11] in a comparative study of capital budgeting practices in the Indian context observed that 25% of the sample companies invested for expansion and diversification, and firms were making regular investments for replacement and maintenance. The selected companies' preference for evaluating capital budgeting projects were PBP, due to its simplicity, easy understanding, less cost and less time, followed by NPV and IRR.

Gupta, Singhal, and Sharma (2007) ^[9] made an attempt to explore which capital budgeting technique was used by

industries in Punjab, and the influence of factors such as the size of capital budget, and the education and experience of the CEO in capital budgeting decisions. They found that majority of the sample companies still used non-discounted cash flow techniques like PBP and ARR. Only a few companies used DCF and among them negligible numbers used the NPV technique to evaluate a new project.

Davina (2008) [7] highlighted the capital budgeting practices used by contractors in the construction industry of Hong Kong SAR, China. The study indicated that the most popular capital budgeting practices were the payback period and the accounting rate of return. Furthermore, the study also showed that NPV and IRR were not the predominant techniques for capital budgeting as claimed in the literature.

Baker (2011) [3] conducted a survey in the form of a questionnaire sent to 225 people in-charge of capital budgeting at firms listed on the Tokyo Stock Exchange, with a focus on capital budgeting practices. The study showed that Japanese firms managed their decision making by a combination of the payback period method and the net present value method, while financial managers mostly utilized multiple tools in the capital budgeting process.

Savage (2014) [16] investigated capital investment practices in the Gulf Cooperation Council markets. They found that net present value (NPV) and payback period (PBP) were the most popular capital budgeting techniques used to evaluate capital investment among Kuwait corporations included in the study, while the advanced capital budgeting techniques were showing no significant use by the Kuwaiti corporations.

The evidence from Swedish companies studied by Bierman and Smidt (2014) [4] indicated that larger companies tend to use capital budgeting methods more often when deciding on investment decisions. The choice of capital budgeting methods is also influenced by financial leverage, growth opportunities, dividend payout policies, choice of target debt ratio and degree of management ownership, foreign sales, education, and other individual characteristics of the CEOs.

Objective of the Study

The main objective of the study is to examine whether SME’s used capital budgeting techniques for their long-term capital investment decisions.

Research Methodology

The present study is based on primary data. The data was collected through a questionnaire, interviews, and observations. The primary data were the main base of the study. For this purpose, researcher undertook intensive case studies of 400 SME’s of Haryana during the year 2015-16. While selecting these units, researcher took enough care to see that these are representatives of all type of industries and all districts in Haryana. For the said purpose, researcher divided all the industries into six categories such as Garments, Auto-parts, Electronics, Metal Products, Rubber and Plastics, and Others (Table 1). It was not possible to cover all the States in India due to time and financial constraints. However, researcher believe that the findings of the study will have equal applicability for the enterprises in other States also, since there is much similarity among the SME’s with respect to size, structure, operations, and management.

Table 1: Sample Size

Name of Industry	Sample
Garments	80
Auto-parts	40
Electronics	60
Metal Products	78
Rubber and Plastics	56
Others (Machinery parts, Paper products, Chemical products, etc.)	86
Total	400

Source: Compiled by the Author

Table 2: Capital Budgeting in SME’s in Haryana

Name of Industry	Yes	%	No	%	Total
Garments	8	10.0	72	90.0	80
Auto-parts	7	17.5	33	82.5	40
Electronics	9	15.0	51	85.0	60
Metal Products	6	7.7	72	92.3	78
Rubber and Plastics	8	14.3	48	85.7	56
Others	12	14.0	74	86.0	86
Total	50	12.5	350	87.5	400

Source: Primary

Capital Budgeting in SME’s

The decisions on capital expenditure are very important for every firm, whether it is a small-scale industry or a Medium firm because its impact is more or less permanent on the well-being and economic health of the enterprise. However, in SME’s, this important technique is used by a very limited number of industries. There are various reasons for not using this important technique for taking capital decisions. Among them, the most important reasons are as follows:

1. In small firms, comparatively less amount is invested in fixed assets;
2. Most of all the decisions in SME’s are taken by the owners who do not have proper skills required for capital budgeting.
3. These firms cannot hire the services of experts for capital budgeting;
4. Required funds are not easily available for capital investments.

Due to the abovementioned reasons, in small firms, capital decisions are taken without proper exercise of capital budgeting. It may be one of the reasons for sickness in the small scale sector industries.

Now, with the help of the Table 2, we can see that in SME’s, just 12.5% of the units were preparing capital budgets for taking long-term investment decisions. In this category, most of the units were bigger units, registered as public ltd. companies, which could afford the services of experts required for properly preparing capital budgets. The Table 2 shows that in Auto-parts industry, 17.5% of the units were preparing capital budgets for taking decisions regarding capital investments. In addition to the size of the units, the other reason for preparing capital budgets is the intense competition in the Auto-parts industry, which requires new technology to be used to survive in the market. Next, in the category is the Electronics industry, where 15.0% units were using capital budgeting techniques. The main reason for this is that new electrical equipments are coming in the market every day, which require new technology; also, for using and implementing new

technology, additional capital investments are required. Shortage of funds in small firms makes it more important that capital investment decisions are taken judiciously. In the Rubber and Plastics industry, 14.3% units, followed by the others industry (14% units), Garments industry (10% units), and (the least) the Metal Products industry (7.7% units) were using this technique for taking capital investment decisions. On the other hand, the Table 2 shows the percentages and the number of industries not preparing capital budgets. It can be observed that 87.5% of the surveyed industries were not preparing capital budgets. However, this does not mean that these units took decisions without any consideration for capital investments. The maximum numbers of units that fell in this category were those which did not invest much amount in fixed assets after starting their operations. In addition, some of the units were considering some aspects of capital budgeting before capital investments, but did not prepare proper capital budgets. In this category, the maximum percentage belonged to the Metal Products industry, where 92.3% of the units did not prepare any capital budgets. The main reason for this was their small size. In the remaining industries also, 82.5% to 90.0% of the units did not prepare any proper capital budgets.

Who Prepares Capital Budgets in SME's

The capital expenditure schemes of a business firm are largely determined by the investment decisions of the top management. The senior management must specify and clearly state the financial policy to be pursued. The policy should give general guidance about the minimum rate of return expected on capital projects. The minimum rate should reflect a realistic assessment of the firm's liquid and financial position. This will help the persons - who are responsible for the financial analysis of the project - to prepare an accurate report of the same. The analysis of the project proposal can be made by the capital expenditure sanction committee, or any other organization; it is necessary to sort out the projects at the executive level on the basis of priority. For priority purposes, projects can be classified into those (a) requiring prompt and immediate attention; these cannot be postponed, (b) which can be postponed without any loss or deterioration, (c) which can be postponed with some loss of opportunity. The personnel of this committee or any other capital expenditure budgeting organization should include an economist, management accountant, financial expert, tax expert, mathematician, and the marketing and technical executives. However, in the small firms, it is not financially viable to have all these personnel in the organization as permanent employees. However, when the need of capital budgeting arises, their services may be hired.

Table 3: Responsibility of Preparing Capital Budgets in SME's in Haryana

Name of Industry	Self/Owners		Experts		Committee Including both		Total No.
	No.	%	No.	%	No.	%	
Garments	-	-	-	-	8	100	8
Auto-parts	-	-	-	-	7	100	7
Electronics	-	-	-	-	9	100	9
Metal Products	-	-	-	-	6	100	6
Rubber and Plastics	-	-	-	-	8	100	8
Others	-	-	-	-	12	100	12
Total					50	100	50

Source: Primary Data

As explained earlier in Table 2, in SME's, only 12.5% of the industries prepared the capital budgets. The Table 3 shows that in all of these industries, capital budgets were prepared by a committee constituted for this purpose. This committee included experts and owner(s) - both were constituted when the need arose. On the other hand, in industries which were not preparing proper capital budgets for capital investments, decisions were mainly taken by the owners on the basis of their personal knowledge about the project. In some industries, experts were also consulted, but no formal capital budgeting process was exercised.

Deciding the Priority of Projects in SME's

Obviously, the SME's will not encounter as many of these reasons as the larger and more complex firms; nevertheless, managements of the smallest firms find that they, too, invest for a variety of reasons. While the classification of investments according to reasons is important, it is believed that a classification of "projects" according to priority is of greater benefit to smaller companies, since they usually have a constant capital rationing problem. In most of the SME's, there is a scarcity of funds. Therefore, grouping according to priority would assist management in allocating funds to the areas of greatest needs. Projects may be classified as (a) Not Postponable, (b) Postponable without deterioration, and (c) Postponable, but with some loss of opportunity. Such a classification system will greatly aid the management in selecting investments that will provide continuity to the firm's life. It should be pointed out that the use of this system may permit an investment that will produce lower yields in the short-run, but if the management has effectively classified projects, investment in the long run should be optimized.

Table 4: Priority of the Projects: Fixed or Not in SME's in Haryana

Name of Industry	Yes		No		Total No.
	No.	%	No.	%	
Garments	7	87.5	1	12.5	8
Auto-parts	6	85.7	1	14.3	7
Electronics	7	77.8	2	22.2	9
Metal Products	4	66.7	2	33.3	6
Rubber and Plastics	6	75.0	2	25.0	8
Others	10	83.3	2	16.7	12
Total	40	80.0	10	20.0	50

Source: Primary Data

The Table 4 shows that in SME's, which was preparing capital budgets, 80% of the industries fixed the priority of the projects on the basis of the category - postponable or not postponable projects. In this category, the maximum percentage is of the Garments industry (87.5% units), followed by the Auto-parts industry (85.7% units), others industry (83.3% units), Electronics industry (77.8% units), Rubber & Plastics industry (75.0% units), and the least was in the Metal Products industry (66.7% units). The reason put forth by the industries classified into the group of non-fixing priority was that they considered only one project at a time to take a decision - whether it would be profitable or not. Only 20% industries that fell in this category were preparing capital budgets without fixing a priority among various available projects for capital

investments. The reason given by these industries was that they considered only one project at a time to decide whether or not it would be profitable. The maximum number of units adopting such a strategy were in the Metal Products industry (33.3% units), followed by the Rubber & Plastics industry (25% units), Electronics industry (22.2% units), and 12.5% - 16.7% units in rest of the industries, which were not fixing any priority of the projects while taking capital investment decisions.

Projects Evaluation in SME’s

A number of alternative capital expenditure proposals compete for allocation of funds. The main task is to rank the different proposals, delineate the funds for each, and then take the decision. The problem of ranking different proposals depends upon the availability of systematic statistical data. The management accountant uses his/her judgment and skills to analyze this data and on the basis of such analysis, he/she often tenders his/her opinion to the top management. There are various methods of project evaluation that have been

developed on several bases. These methods can be grouped into the following two categories:

- 1) Traditional Methods: (a) payback period, and (b) average rate of return,
- 2) Time-Adjusted Methods: (a) net present value, (b) internal rate of return, and (c) cost-benefit ratio or profitability index.

It should be realized that different firms may use different methods. Which method is appropriate for a particular purpose of the firm will depend upon the circumstances. A large company may use more than one technique to appraise each of its investment projects, while a small firm may contend with using only one technique which involves minimum funds and time. However, to avoid confusion, the same method or same methods should be used uniformly for every project undertaken by the firm. Though these appraisal techniques will help the managements in making decisions objectively, but they must still exercise their common sense and judgment while taking the decisions.

Table 5: Project Evaluation Method Used by SME’s in Haryana

Name of Industry	Traditional ARR Method		Methods PBP Method		Total		Other Method		Total No.
	No.	%	No.	%	No.	%	No.	%	
Garments	3	37.5	5	62.5	8	100	-	-	8
Auto-parts	1	14.3	6	85.7	7	100	-	-	7
Electronics	2	22.2	7	77.8	9	100	-	-	9
Metal Products	1	16.7	5	83.7	6	100	-	-	6
Rubber and Plastics	2	25.0	6	75.0	8	100	-	-	8
Others	4	33.3	8	66.7	12	100	-	-	12
Total	13	26.0	37	74.0	50	100	-	-	50

Source: Primary Data

The Table 5 shows the methods of project evaluation used by SME’s. It is clear from the table that all the industries in the small-scale sector - who were preparing capital budgets - were using traditional methods for appraisal of the projects. As discussed earlier, in the traditional methods category, there are two methods - the payback method and the average rate of return method. In the SME’s, the payback method is the most popular method for evaluating proposed capital expenditure. That is why 74% of the sample industries were using this technique while making capital budgets for evaluation of projects. In the Auto-parts industry, 85.7% units followed by the Metal Products industry (83.7% units), Electronics industry (77.8% units), Rubber and Plastics industry (75% units), Others industry (66.7% units), and 62.5% units in the Garments industry were using this method for project evaluation. The main reason of using this method by most of the industries in the SME’s is its simplicity to understand and use the same. In time-adjusted methods, there are tedious calculations, which are difficult to comprehend.

On the other hand, in the remaining 26% SME’s, the average rate of return method was used for project evaluation. In this category, the maximum percentage was in the Garments industry (37.5% units), followed by the others industry (33.3% units), Rubber and Plastics industry (25.0 % units), Electronics industry (22.2 % units), Metal Products industry (16.7 % units), and the Auto-parts industry, where 14.3% of the units were using this method. This method is also simple to understand and is easy to calculate. It is also regarded useful because it takes into consideration all the profits expected over

the project life (in contrast to the payback period method, which ignores all cash flows beyond the payback period).

The Post-Audit in SME’s

An important aspect of the capital budgeting process is the post-audit, which involves (a) comparing actual results with those predicted by the project's sponsors, and (b) explaining why any differences occurred. The post audit is not a simple process, and a number of factors can cause complications. Because of these difficulties, some firms tend to play down the importance of the post-audit. However, the post-audit is regarded as one of the most important elements in a good capital budgeting system

The Post-audit is not very common in small firms, which are using capital budgeting techniques for long-term investment decisions. The Table 6 shows that only 6% of the industries preparing capital budgets were using post-audit techniques to compare the actual results with those predicted by the project's sponsors as it requires the operating divisions to send a monthly report for the first six months after a project goes into operation, and a quarterly report thereafter, until the project's results are up-to the expectations. From then on, reports on the project are reviewed on a regular basis like those of other operations.

Table 6: Post - Audit of Projects in SME's in Haryana

Name of Industry	Yes		No		Total No.
	No.	%	No.	%	
Garments	1	12.5	7	87.5	8
Auto-parts	1	14.3	6	85.7	7
Electronics	-		9	100.0	9
Metal Products	-		6	100.0	6
Rubber and Plastics	-		8	100.0	8
Others	1	8.3	11	91.7	12
Total	3	6.0	47	94.0	50

Source: Primary Data

All this requires sufficient amount of funds to be spent on the subject matter expert, which is not possible in SME's. Hence, it was observed that only 14.5% units in the Auto-parts industry, 12.5% units in the Garments industry, and 8.3% units in the Others industry were conducting a post audit of projects. In Electronics, Metal Products, and Rubber & Plastics industries, not even a single unit was carrying out the post audit of the projects.

Suggestions

During the study, I observed that many of the business owners and decision-makers did not have formal business training or education, and their small firms had incomplete management teams. Thus, formal capital budgeting activity was limited. Hence, it is recommended that the key to improving the processes would be by ensure that proper training for these decision makers is available.

Capital budgeting decisions are vital to a firm's financial wellbeing and are among the most important decisions that owners or managers of the firms must take. Hence, every firm must take the opinion of the experts before making capital investments.

Conclusion

It was observed in this paper that in the SME's, only 12.5% units, mainly large units, registered as private/public limited companies prepared capital budgets for taking long-term investment decisions. However, this does not imply that in the remaining units, capital investment decisions were taken without any consideration. Most of the surveyed units (after starting the business) did not make much investment in fixed assets. And the remaining units considered some aspects of capital budgeting, but did not prepare (technically) proper capital budgets. It was also observed that in the SME's capital budgets were prepared by the experts and owner (s) both. In 80% of the SME's, which prepared capital budgets, the priority of the projects was fixed on the basis of the category - postponable and not postponable projects. For evaluation of projects in the SME's, the traditional methods - PBP and ARR were used. Three fourth units used the PBP method, and the remaining one fourth units used the ARR method for evaluating capital budgeting projects. The main reason of preference for these non-discounted cash flow techniques is their simplicity to understand and apply them. An important aspect of the capital budgeting process is the post-audit. But due to shortage of funds in SME's, only 6% of the surveyed units, which prepared capital budgets, were using post-audit techniques to compare the actual results with those predicted by the project's sponsor(s).

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