

A STUDY ON CAPITAL BUDGETING: TECHNIQUES & IMPORTANCE

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ABSTRACT

Capital budgeting is an analysis of long term investment, which mainly focuses upon acquisition and improvement on fixed assets it is a part of the long-term decision taken by the top management and involves large expenditure. The capital budgeting is very important to firms future capital budgeting. The study reviewed the theory of budgeting, budgeting control theory and accounting theory.

Empirical literature was guided by the objectives. The study utilized descriptive and retrospective research designs. Both primary and secondary data were used. Primary data was collected by use of questioners, while secondary data was collected from published materials.

The budgeting process needs the involvement of different departments in the business. Planning for capital investments can be very complex, often involving many persons inside and outside of the company. Information about marketing, science, engineering, regulation, taxation, finance, production, and behavioral issues must be systematically gathered and evaluated.

Keywords: budgetary control, capital investments, budgeting process

1. INTRODUCTION

MEANING:

Capital budgeting is the process that companies use for decision making on capital project. The capital project lasts for longer time, usually more than one year.

As the project is usually large and has important impact on the long term success of the business, it is crucial for the business to make the right decision.

CAPITAL BUDGETING PROCESS:

The specific capital budgeting procedures that the manager uses depend on the manager's level in the organization and the complexities of the organization and the size of the projects. The typical steps in the capital budgeting process are as follows:

Brainstorming. Investment ideas can come from anywhere, from the top or the bottom of the organization, from any department or functional area, or from outside the company. Generating good investment ideas to consider is the most important step in the process. Project analysis. This step involves gathering the information to forecast cash flows for each project and then evaluating the project's profitability.

COMPLEXITY OF CAPITAL BUDGETING PROCESS:

The budgeting process needs the involvement of different departments in the business. Planning for capital investments can be very complex, often involving many persons inside and outside of the company.

Information about marketing, science, engineering, regulation, taxation, finance, production, and behavioral issues must be systematically gathered and evaluated.

CAPITAL BUDGETING is the process of determining whether a big expenditure is in a company's best interest. Here are the basics of capital budgeting and how it works.

FACTORS AFFECTING CAPITAL BUDGETING:

While making capital budgeting investment decision the following factors or aspects should be considered.

- The amount of investment
- Minimum rate of return on investment (k)
- Return expected from the investments. (R)
- Ranking of the investment proposals and
- Based on profitability the ranking is evaluated I.e., expected rate of return on investment.

2. REVIEW OF LITERATURE

ARTICLE: 1

Title: The Impact Of Budgeting And Budgetary Control On The Performance Of Manufacturing Company

Author: Siyanbola, Trimisiu Tunji

Source: Journal of Business Management & Social Sciences Research (JBM&SSR)

Abstract

This study, the impact of budgeting and budgetary control on the performance of manufacturing company in Nigeria, was conducted using Cadbury Nigeria Plc, as case study. Since wants are plenty while resources are limited, every organisation tends to find means by which it can get what it wants with the limited resources at its disposal. Therefore, firms seek to adopt the concept of budgeting and budgetary control to satisfy their needs at the least possible cost and at the same time fulfill their stewardship obligations to the numerous stakeholders. We adopted a descriptive research design with data gathered through questionnaire administered to respondents. Non-parametric tool of chi square was employed to analyse the data. Hypotheses were tested and analysed on a 5% level of significance and it was revealed that budgeting is a useful tool that guides firms to evaluate whether their goals and objectives are actualised. Considering the changing environment in which firms now operate, it can be concluded that budget, which is a continuous management activity, should adapt to changes in the dynamic business environment.

ARTICLE: 2

Title: A Systematic Review of Budgeting and Budgetary Control in Government Owned Organizations.

Source: Research Journal of Finance and Accounting

Author: Lambe Isaac

Budgeting and budgetary control entails the establishment of goals by the management of an organization and designing a process which serves as a framework within which an organization effectively articulates overall planned activities. The quantification of these planned activities in financial terms is known as budgeting, while the establishment of an effective mechanism to guarantee desired result is known as budgetary control. This study therefore seeks to undertake a systematic review of budgeting and budgetary control in Government owned organizations and given the importance of the foregoing, attention was focused on the Nigerian National petroleum Cooperation (NNPC). To achieve the objective of the study, primary data were obtained through the use of a well structured questionnaire administered to the respondents, while the secondary data were obtained from the annual financial statements, files, memos, tax laws and gazette of the NNPC. The findings revealed that a necessary and sufficient condition for achieving effective budgeting and budgetary control is the involvement of all relevant stakeholders in the preparation of the budget, given the established processes in government circles, while emphasizing a deliberate and faithful implementation, by all responsible officers.

ARTICLE: 3

Title: Analysis of the Effectiveness of Budgetary Control Techniques on Organizational Performance at DaraSalaam Bank

Author: Mohamed, Ifrah Ahmed

Source: School of Business and Economics

Abstract

This study examined how budgetary control can impact on the performance of Dara-salaam Bank. The objectives were to find out how responsibility accounting influences organizational performance, to determine whether variance cost analysis affects organizational performance and to establish how zero based budgeting affects organizational performance. The study reviewed the theory of budgeting, budgeting control theory and accounting theory. Empirical literature was guided by the objectives. The study utilized descriptive and retrospective research designs. Both primary and secondary data were used. Primary data was collected by use of questioners, while secondary data was collected from published materials. The researcher carried out a census study of the 70 staff of Dara-salaam Bank in Hargeisa Somaliland. Ethical considerations of this study were ensured Confidentiality on the part of respondents and to set clear researchers purpose to all respondents.

RESEARCH GAP:

To examine relationships between their own operation and those of other departments in a way to control resources; communicate plans to various responsibility center managers, motivate managers to strive to achieve budget goals, evaluating the performance of managers, provide visibility into the company's performance and for Accountability. In this context a study is made to know the budgetary practices of selected Indian companies

OBJECTIVES:

The study on "capital budgeting in Ultra tech Cement Ltd– A case study" is based on the following objectives.

1. To evaluate the capital budgeting practices relating to various projects of Ultra tech Cement Ltd.
2. To Assess the long term requirements of funds and plan for application of internal resources and debt servicing.
3. To Assess the effectiveness of long term investment decisions of organisation.
4. To offer conclusion derived from the study and give suitable suggestions for the efficient utilization of capital expenditure decisions.

3. RESEARCH METHODOLOGY

Need For The Study

Capital Budgeting means planning for capital assets. Capital Budgeting decisions are vital to an organization as to include the decision as to:

- Whether or not funds should be invested in long term projects such as settings of an industry, purchase of plant and machinery etc.,
- Analyze the proposals for expansion or creating additions capacities.
- To decide the replacement of permanent assets such as building and equipments.
- To make financial analysis of various proposals regarding capital investment so as to choose the best out of many alternative proposals.

Scope Of The Study:

The efficient allocation of capital is the most important financial function in the modern times. It involves decision to commit the firm's, since they stand the long- term assets such decision are of considerable importance to the firm since they send to determine its value and size by influencing its growth, probability and growth.

The scope of the study is limited to collecting the financial data of Ultra tech Cement Ltd for four years and budgeted figures of each year.

Methodology

4. DATA COLLECTION

PRIMARY DATA:

The primary data is the data which is collected, by interviewing directly with the organizations concerned executives. This is the direct information gathered from the organization.

SECONDARY DATA:

The secondary data is the data which is gathered from publications and websites.

HYPOTHESIS OF THE STUDY:

H0 There is no relationship between organization performance and budgetary control..

H1- There are no hindrance related with budget and budgetary control.

LIMITATIONS OF THE STUDY

1. The study is limited to Ultra tech Cement Ltd only.
2. The study is limited to certain projects of Ultra tech Cement Ltd only.
3. Period of the study is restricted to five years only.
4. The present study cannot be used for inter firm comparison.
5. Limited span of time is a major limitation for this project.

5. DATA ANALYSIS & INTERPRETATION

1. PAY BACK PERIOD METHOD:

Difference in cash flows

PBP = Actual (Base) year + -----

Next year cash flows

(Rs. In crores)

SI .NO	YEAR	CASH INFLOW	CUMULATIVE CASH FLOWWS
1	2018-2019	7188.91	7188.91
2	2019-2020	6959.35	14148.26
3	2020-2021	6254.32	20405.98
4	2021-2022	5857.72	26263.70
5	2022-2023	5639.78	31903.48

The above table shows that, the initial investment RS.12547.56 Cr... lies between second year with 15203.50 Cr

PBP = 1 + -----

20405.26

= 1 + 0.69

= 1.69 year

Payback period (PBP) = 1.69 year.

ACCEPT-REJECT CRITERION:

PBP can be used as a criterion to accept or reject an investment proposal. A proposal whose actual payback period is more than what is pre-determined by the management.

PBP thus, is useful for the management to accept the investment decision on the ULTRATECH CEMENT LTD and also to assist the management to know that the initial investment is recovered in 1.69 years.

2. ACCOUNTING OR AVERAGE RATE OF RETURN METHOD:

(Rs. In Cr....)

YEARS	EARNINGS AFTER TAX (EAT)
2018-2019	7188.91
2019-2020	6959.35
2020-2021	6254.32
2021-2022	5857.72
2022-2023	5639.78
TOTAL	31903.48

Average annual EAT'S

ARR = ----- x 100

Average investment

Total amount

Average Annual EAT'S = -----

No of years

31903.48

= ----- = 6380.69

5

Average investment =3832.05

3832.05

ARR = ----- X 100 = 60.05 %

6380.69

Average Rate of Return = 60.05 %

ACCEPT-REJECT critters method allows ULTRATECH CEMENT LTD to fix a minimum rate of return. Any project expected to give a return below it will be straight away rejected. The average rate of return is as good as 60.05 % of ULTRATECH CEMENT LTD depicts the prospects of management efficiency.

TIME ADJUSTED (OR) DISCOUNTED CASH FLOW METHOD

YEARS	CFAT'S	PVIF @ 10%	PV'S
2018-2019	7188.91	0.909	6534.71
2019-2020	6959.35	0.826	5748.42
2020-2021	6254.32	0.751	4696.99
2021-2022	5857.72	0.683	4000.82
2022-2023	5639.78	0.620	3496.66
TOTAL:			24477.62
LESS: Initial Investment:			12547.56
NPV:			11930.06

ACCEPT-REJECT CRITERION:

The accept -reject decision of NPV is very simple. If the NPV is positive then the project should be accepted and if NPV is negative then the project should be rejected

i.e .If $NPV > 0$ (ACCEPT)and

$NPV < 0$ (REJECT)

Hence in the case of **ULTRA TECH CEMENT LTD Limited** project it is visible that the positive NPV shows the acceptance and importance of the project.

INTERNAL RATE OF RETURN METHOD: (IRR)

STATEMENT OF SHOWING CALCULATION NPV @88%,89%,90% UNDER IRR METHOD

(Rs corers)

YEARS	Annual CFA Ts	Discount Rate-88%		Discount Rate-89%		Discount Rate-90%	
		PVF	PV	PVF	PV	PVF	PV
2018-2019	7188.91	0.531	3817.31	0.529	3802.93	0.526	3781.36
2019-2020	6959.35	0.2921	2032.82	0.2799	1947.92	0.277	1927.74
2020-2021	6254.32	0.1579	987.55	0.1481	926.26	0.145	906.87
2021-2022	5857.72	0.0858	502.59	0.0783	458.65	0.076	445.18
2022-2023	5639.78	0.0461	259.99	0.0414	233.48	0.04	225.59
			7600.28		7369.26		7286.76

From the above calculations the following can be observed.

PV Of net cash flows at 88% is: 7600.28cr

PV Of net cash flows at 89% is: 7369.26 cr

ACCEPT-REJECT CRITERION:

IRR is the maximum rate of interest, which an organization can afford to pay on capital, invested in, is accepted if IRR exceeds the cutoff rates and rejected if it is below the cutoff rate.

The cutoff rate of ULTRATECH CEMENT LTD is 10%, which is less than the IRR i.e. > 80% hence the acceptance of ULTRATECH CEMENT LTD is quite a good investment decision taken by management.

3. PROFITABILITY INDEX: (BCR OR PI)

Present value of cash inflows

Profitability index = -----

Initial Investment

YEARS	CFAT'S	PVIF @ 10%	PV'S
2018-2019	7188.91	0.909	6534.71
2019-2020	6959.35	0.826	5748.42
2020-2021	6254.32	0.751	4696.99
2021-2022	5857.72	0.683	4000.82
2022-2023	5639.78	0.62	3496.66
TOTAL:			24477.62

24477.62

= ----- = 1.95

12547.56

Hence PI = 1.95 years.

ACCEPT-REJECT CRITERION:

There is a slight difference between present value index method and profitability index method. Under profitability index method the present value of cash inflows and cash outflows are taken as accept-reject decision.

I.e. the accept reject criterion is:

If Profitability Index > 1 (ACCEPT).

Profitability Index < 1 (REJECT).

The acceptance of by the management is evaluated through Profitability Index method of as the PI > 1 (i.e. 1.95 years)

6. CONCLUSION

- The budgeting exercise in ULTRATECH CEMENT LTD also covers the long term capital budgets, including annual planning and provides long term plan for application of internal resources and debt servicing translated in to the corporate plan.
- The scope of capital budgeting also includes expenditure on plant betterment, and renovation, balancing equipment, capital additions and commissioning expenses on trial runs generating units.
- To establish a close link between physical progress and monetary outlay and to provide the basis for plan allocation and budgetary support by the government.

7. REFERENCES

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