

EVALUATION OF THE CAPITAL BUDGET PLANNING PRACTICE OF CONTRACTORS IN THE CONSTRUCTION INDUSTRY

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ABSTRACT

Poor and unrealistic budgeting has been traced to the inefficiency and neck-deep poverty of contractors in the construction industry, this attributes to the economic decline of firms and capital disappearance in the industry. This research work seeks to evaluate the capital budget planning practice of contractors in the Nigerian construction industry. The research made use of questionnaires for data collection and the statistical tools employed in the analysis are frequency tables, percentages, cumulative percentages, and mean score ranking. The variables used for the evaluation include long-term capital budgets, capital budgeting manual/written procedures, formal bodies responsible for screening and reviewing projects, capital budgeting personnel and regular minimum rate of return review. The study revealed that about 50% of contractors do not make plan for long-term capital budgets and therefore cannot handle large projects. It is recommended that contractors make plan for long-term capital budgeting and devote more personnel to capital budget planning to ensure that they can handle the numerous large construction projects in the industry.

Keywords: Capital Budget, Contractors, Construction Industry, Planning processes.

Introduction

Capital budgeting is one of the key issues in corporate finance (Truong, Partington & Peat, 2006). It is an integral part of the corporate plan of an organization, which reflects the basic objectives of an organization (Osaze, 1996). One of the most important decisions to be taken by a financial manager is corporate capital budgeting (Ryan, 2002). Capital budgeting is one of the fundamental parts of the budgetary process employed as a tool for planning, controlling and allocating scarce resources among competing demands in any locality (Sekwat, 1999). Capital budgeting involves making investment decisions concerning the financing of capital projects by firms (Elumilade, Asaolu, & Ologunde 2006).

Capital budgeting is an important management process that certainly influences the long-run survival and value of a firm, because of the amounts involved are so large that managers need to carefully plan and evaluate expenditures for capital assets (Lam, K., Wang & Lam, M., 2007). Capital budgeting in a developing economy is very vital and must be approached with all sense of diligence. The rate of economic development in the third world has been relatively slow and needs to be accelerated (Elumilade, Asaolu, & Ologunde 2006). The capital investment decision is more than investment in capital assets such as fixed assets, e.g., land and buildings, plant and equipments etc.; it can include intangible fixed assets (e.g., research and development) and working capital. The capital investment decision is therefore one of the most critical and crucial decisions that any country or organization can take to achieve economic development (Osaze, 1996).

Elumilade, Asaolu & Ologunde (2006) opined that technological backwardness and poverty are the resultant effect of poor and unrealistic budgeting in African countries including. Lack of financial control and poor management have contributed significantly to the high level of insolvencies experienced in the construction industry when compared with other industry sectors (Mutti & Hughes 2002). Mutti and Hughes (2002) further suggested that models available for cash flow management and forecasting can be used as a starting point for managers in rethinking management practices.

This paper seeks to evaluate the capital budget planning practice of contractors in the Nigerian construction industry with a view to ascertaining the ability of contractors in Nigeria to meet up with the challenges of carrying out large construction works.

Theoretical Background

Insolvency in construction

Most contractors in Hong Kong are suffering from business reduction, profitability deterioration and struggling very hard to retain their financial performance (Chan, Tam & Cheung, 2005). Mutti and Hughes (2002) reveal that the number of firms in the industry and the differences in the degree of risk has been identified as the most responsible factor for the high proportion of liquidation in the construction industry. Mutti & Hughes (2002) also noted that the level of insolvencies in the construction industry is high, ranging from about 12.5% to 60% when compared with the total industries which is due to the fact that the construction industry has a large number of company leading to a greater likelihood of high failure rates.

The period of instability in financial operations have made companies retain their policy through the maintenance of sound financial structures, reflecting the proliferation of government financial regulations, backed up by the aim of a controllable and dynamic investment pursuit for the sustenance of national economy. Empirical studies emerging from established theoretical apparatus have filled up the vacuum in business procedures, which continually arouse the interest of experts in making positive contributions required to compare the financial condition and performance of various firms. It is also important to be conscious of the fact that, the idea of rigorous pursuit of firm's stabilization through debt funding unravelled the negligence of financing decision in business organizations (Elumilade, Asaolu & Ologunde 2006).

Capital Budget Planning Process

A strategic plan is the principal strategy of the firm identifying the business the firm is in and where it intends to position itself in the future. Strategic planning translates the firm's goals into specific policies and directions, self priorities, specifies the structural, strategic and tactical areas of business development and guides the planning process in the pursuit of solid objectives. A firm's vision and mission is encapsulated in its strategic planning framework (Dayananda, Irons, Harrison, Herbohn, & Rowland 2002).

Strategic planning has always been one of the most crucial functions in any organization. An essential element in a company's overall strategy is its financial plan, which should be designed to ensure the provision of adequate finance for the company's needs. Budgeting is a fundamental part of planning. Annual budget forms a vital part of any corporate plan and financial control cannot be exercised without budgets (Dayananda et al., 2002).

Capital budgeting is a systematic decision process whose goal is to ensure that resources are allocated within an organization in such a manner so as to guarantee the long-term economic survival and growth of that organization (Chandan, 1984). More specifically, the capital budgeting process identifies prospective investments, selects investments based on some decision criteria, and plans for the implementation and financing of the selected investments. Therefore, a capital budget is a plan for future investments and as such it is similar to the methodology of life-cycle cost analysis. With specific reference to buildings, capital budgeting evaluates the impact of facilities on the ability of the enterprise to meet its long-term goals and objectives.

Capital budgeting procedure is based on firm's perception of planning for financial increment due to successful market performance, customers' satisfaction and retention, capacity to launch new products or possibility of improving old ones (Elumilade, Asaolu & Ologunde 2006). Bodernhorn (1959) advocates that difficulties emanate from capital

budgeting. Bodernhorn notes the obstacle of making decision in budgeting of capital and observes that the formulation of such decision is centred on the available investment opportunities that will make firm to accept or reject a project.

According to Dayananda et al., (2002), capital budgeting is a multi-faceted activity and the critical nature of capital planning requires a systematic approach to investment decision making. However, the classification of capital budgeting as part of the strategic planning process suggests that it is difficult to formalize a methodology that can be applied in all cases. The several sequential stages in the capital budgeting process are depicted in the form of a highly simplified flow chart as shown in figure 1.

Capital Budget Planning Practice

According to Lam *et al.*, (2001), the planning and administrative aspects of capital budgeting should cover:

Long-term capital budgets

It is one of the core corporate strategies to be incorporated in a company's business plan usually covering between three – five years review of the investments and financial prospects of the firm.

Capital budgeting manual/written procedures

It involves companies or organizations having an existing up-to-date systematic capital budgeting manual or written procedures.

Formal bodies responsible for screening and reviewing projects

It involves identifying potential projects and screening them to ensure they measure up to the corporate policy and objectives (short or long term), resource availability, technical and financial feasibility of the organization.

Capital budgeting personnel

This involves devoting a full time staff member exclusively for capital budgeting. For instance in large organizations, project/contract managers are responsible for project finance and general managers for capital budgeting while in small organizations, the manager performs the two responsibilities.

Regular minimum rate of return

This involves a regular review of the minimum rate of return require from implemented projects by the firm.

Research Methodology

The data for the study was collected through the administration of well structured questionnaires to contractors in Lagos State, Nigeria. The state was chosen as a result of large concentration of construction taken place in the locality and also most organizations in the other states of the federation have their head office located in Lagos state. The total population for this study included all registered contractors with the Federation of Construction Industry (FOCI) practicing within Lagos state of Nigeria from which a sizeable number was selected to serve as a good representation of the population under study. The population consisted of 108 contractors registered with FOCI practicing within Lagos State. Of this number, 70 contractors were selected and questionnaires sent out to them using the non-probability sampling. 52 questionnaires were returned indicating a return rate of 74.3%.

The data was analyzed using the calculation of descriptive statistics to present the frequencies and mean of responses to questions with fixed responses to determine the characteristic information of respondents, capital budget planning process and capital budget control measures. The medium of presenting the findings of the research is the use of tables.

Results and Discussion

Findings are discussed on the capital budget planning practices of contractors in the Nigerian Construction Industry as revealed by literatures. Meanwhile, only 52 of the 70 questionnaires administered were retrieved and used for the data analysis, representing 74% of the expected responses.

The table 1 shows the characteristic information of respondent organization indicating the size of the firm through the number of employees, the registration category and the nature of construction works executed by the respondent firms.

Table 2 shows the capital budget planning process which covers areas such as long-term capital budgets, up-to-date capital budgeting manual or written procedures, formal bodies responsible for screening and reviewing projects, capital budgeting personnel and regular review of minimum acceptable rate of return (Lam et al., 2001).

The result of contractor's long term capital budget indicates that more than half of the contracting firms that responded to the survey had 'a capital budget which looks beyond 2 years'.

The result of the availability of an up-to date capital budgeting manual reveals that only about 30.8% of contractors have an up-to-date capital budgeting manual which is in use. The level of staff governing administrative operating procedures among contractors shows that about 69.2% of respondents had a formal system governing administrative procedures.

From the survey, it shows that 65.4% of the respondents have formal bodies responsible for screening and reviewing of their projects signifying the level of importance attached to screening and reviewing of projects by contractors in the Nigerian Construction Industry. It is also worthy of note that over 90% of respondents devote at least a unit of the organization to capital budgeting because of the perception that the personnel strength devoted to capital budgeting may influence the achievement of organization policies and goals.

Table 2 revealed that half (i.e. 50%) of respondents review their minimum acceptable rate of return yearly. It was also observed that the minimum acceptable rate of return by respondents ranges from 6% to 25%.

Table 3 shows the basic factors to be considered in planning for long capital budgets. It is revealed from the table that sufficient foresight is the most important factor to be considered when planning for long capital budgets.

Capital budgeting control measures

Lam et al., (2001) reveals that capital budgeting control and evaluation entails the following: (a) pre-operational control (i.e. evaluation of projects due to cost overrun) (b) monitoring of project performance, and (c) post-completion audits.

The survey reveals that majority of contractors (i.e. about 88.5% of respondents) will reconsider an investment whose estimated costs will likely exceed the budgeted costs while about 11.5% will reject such offer. None of the respondents volunteered to accept such proposal. This confirms that the reconsideration of cost overruns was very popular in contracting firms irrespective of the size of the firm.

Table 5 indicates the importance place on monitoring project performance by contractors. The result shows clearly that project performance monitoring is a very high and common phenomenon among contracting firms. This is regarded as one of the cost control systems used in the construction industry, particularly for controlling small projects so as to provide feedback information for similar projects in the future. Firms place high importance on the benefits of the post-completion audits as indicated in table 6.

Conclusion

Following the evaluation of capital budget planning process among contractors, the study shows that one of the most important planning process is the horizon of contractor's capital budget and the personnel strength devoted to capital budgeting revealing that the horizon of a contractor's capital budget and personnel strength devoted to capital budgeting determines the extent of firm's financial growth and its ability to handle large construction projects.

From the foregoing, about 50% of contractors do not have the ability to handle large construction projects, hence, it is recommended that contractors make plan for long-term capital budgets and devote more personnel to capital budget planning to ensure that they can handle the numerous large construction projects in the industry.

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Appendix

Table 1: Characteristic information of respondent organization

	Size	Frequency	Percentage
Number of employees	Less than 50	20	38.5
	51 – 150	20	38.5
	Above 150	12	23.1
	Total	52	100.0
Registration Category	Category A	8	15.4
	Category B	24	46.2
	Category C	7	13.5
	Category D	7	13.5
	Category E	6	11.5
	Total	52	100.0
Nature of Construction Work	Building	18	34.6
	Civil engineering	8	15.4
	Heavy/Industrial engineering	2	3.8
	Building/Civil engineering	24	46.2
	Total	52	100.0

Table 2: Capital Budget Planning Processes

		Frequency	Percentage
Horizon of contractor's capital budget	Not applicable	14	26.9
	1 – 2 years	10	19.2
	3 – 5 years	24	46.2
	6 - 10 years	4	7.7
	Above 10 years	0	0.0
	Total	52	100.0
Availability of up-to-date capital budgeting manual	Not available	14	26.9
	Available but not defined	14	26.9
	Available but obsolete	0	0.0
	Available but not in use	8	15.4
	Available and in use	16	30.8
	Total	52	100.0
Level of staff governing administrative operating procedures	Highly formal	8	15.4
	Formal	28	53.8
	Slightly formal	8	15.4
	Informal	6	11.5
	Not available	2	3.8
	Total	52	100.0
Level of screening and reviewing of projects	Highly formal	20	38.5
	Formal	14	26.9
	Slightly formal	14	26.9
	Informal	2	3.8
	Not available	2	3.8
	Total	52	100.0
Personnel strength devoted to capital budgeting	None	4	7.7
	A unit	12	23.1
	A department	24	46.2
	A section	12	23.1

	Total	52	100.0
Review of minimum acceptable rate of return	Monthly	4	7.7
	Bi-annually	2	3.8
	Yearly	26	50.0
	Biennially	2	3.8
	Dependent on project	18	34.6
	Total	52	100.0
Minimum acceptable rate of return on investments	Less than 5%	0	0.0
	6 – 10%	14	26.9
	11 – 15%	18	34.6
	16 – 20%	12	23.1
	21 – 25%	8	15.4
	26 – 30%	0	0.0
	Total	52	100.0

Table 3: Factors considered in planning for long capital budgets

Factors	N	Mean	Standard deviation	Rank
Sufficient foresight	52	4.27	1.07	1
Thorough prediction	52	4.15	0.87	2
Inflation	52	4.00	1.09	4
Risk	52	4.12	1.06	3

Table 4: Evaluation of projects due to cost overrun

	Frequency	Percentage
Accept	0	0.0
Reconsider	46	88.5
Reject	6	11.5
Total	52	100

Table 5: Monitoring of project performance

Project performance	N	Mean	Standard deviation	Rank
Productivity of labour	52	4.77	0.58	1
Productivity of plant	52	4.54	0.90	3
Usage of materials	52	4.46	1.02	4
Inflow of project cash flow	52	4.73	0.45	2
Outflow of project cash flow	52	4.27	0.91	5