# IMPACT OF INSTITUTIONAL THEORY ON SELECTION OF CAPITAL BUDGETING TECHNIQUES

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## Abstract

Capital budgeting techniques are more focused on sophisticated methods of analysis and formal planning in an effort to reach optimal decisions which helps to maintain future survival and success of the company. As the decision makers, the management has to consider the all stakeholder's interest when deciding and elaborating the capital budgeting decisions. This study was focused on how capital budgeting techniques coming into being within the selected business organization and a listed company in Sri Lanka was selected for this study. Accordingly, the influence of institutional pressures; coercive, mimetic and normative for the selection of capital budgeting techniques by the listed company has been discussed under the main research question.

Due to the qualitative nature of the study and the study was carried to find out the impact of new institutional theory on selection of capital budgeting techniques of the company, case study method was adopted and data was collected using in-depth interviews, documentary observation and participant observation.

Keywords: Capital budgeting techniques, Normative, Mimetic, Regulative

#### 1. Introduction

#### **1.1. Chapter overview**

This chapter explore the background of the study giving comprehensive understanding to the research conducted. The subsections of the chapter deliver an all-inclusive introduction to the research by having a thorough discussion of research background, research problem, objectives of the study and the significant of the study.

#### **1.2. Background of the study**

Capital budgeting decisions are critical to the future of an organization since they have a huge impact on the firm's performance and also the decisions inherent to capital budgeting are fundamental to the survival and success of the company in the long run (Koch, Mayper and Wilner 2009, Bennouna, Meredith and Marchant 2010).

Previous empirical studies have found that the decision maker must often choose among various practices, based on numerous criteria, not always having a dominant option. The manager must not only assess each option and discretion but also distinguish the importance related to each option and discretion to make the final assessment (Carmona, Iyer and Reckers 2011). It is believed that the use of various capital budgeting practices is attributable to some factors, which are: (i) ease of calculation (Pike 1996), (ii) lack of financial resources and limited use of computer technology (Hall and Millard 2010, Ryan and Ryan 2002), (iii) lack of sophistication from the management (Graham and Harvey 2001), and (iv) a demand for a lot of human resources (Lam, Wang and Lam 2007).

From this context, the main research question arises: "how capital budgeting techniques coming into being within the business organizations". Thus, there is a need for an explicit analysis of how capital budgeting techniques are selected by business organizations for their evaluations through relative case studies. In order to address this gap, case study analysis of capital budgeting decisions made by a firm in Sri Lanka was undertaken focusing on formal evaluation techniques used by those firm. The research participants comprised of capital budgeting decision makers of the selected organization.

The institutional pressures which are evident within a particular environment can significantly impact the behaviours and decisions made by firms within its environment, and subsequently drive them to conform to institutional norms set by the environment. This research employs DiMaggio and Powell's (1983) three forms of institutional pressures; coercive (regulative), mimetic, and normative, to explore this phenomenon. These three forms of pressures provide a foundation to explore how capital budgeting techniques vary across the industry. Therefore, the aim of this

research is to investigate how regulating factors (coercive), professional knowledge (normative) and practice of peer companies (mimetic) contributed towards capital budgeting decisions of a business organisation.

## **1.3. Problem statement**

As conveyed in the introduction, primary purpose of carrying out this research is to find out and evaluate the factors which influence the capital budgeting decisions of the selected business organizations and the impact of the new institutional theory on selecting capital budgeting technique of the firm.

Many methods are used to make investment decisions. The selection, however, is not subjective, lots of text books recommend to use discounted methods while others rejecting due to some limitations. Most of the studies have identified the relationship between firms' characteristics such as firms size, organizational structure, legal type of the company, debt capacity etc. However, no study was found evaluating the impact of new institutional theory on the capital budgeting decisions of a business organization. Therefore, it has been identified as a literature gap.

This case study is carried out to identify and evaluate the determinants of capital budgeting techniques of the selected Sri Lankan business organization in relation to new institutional theory rather than considering the basic firm characteristics. Hence, the problem statement for the study has been developed as follow.

"How capital budgeting techniques coming into being within the business organization?"

# **1.4. Research Questions**

Based on the above problem statement, the following research questions and objectives were developed.

- 1. How the regulatory factors have contributed towards capital budgeting techniques coming into being?
- 2. How the impact of professional knowledge has contributed towards capital budgeting techniques coming into being?
- 3. How the impact of other organizations has contributed towards capital budgeting techniques coming into being?

## 1.5. Research Objectives

According to the research questions developed above, research objectives were determined as follows;

- 1. Identify the impact of regulative factors on capital budgeting decisions of a business organization.
- 2. Identify the impact of normative factors on capital budgeting decisions of a business organization.
- 3. Identify the impact of mimetic factors on capital budgeting decisions of a business organization.

## **1.6. Significance of the study**

With the development of competition in markets, business entities attempt to find better alternatives to employ their limited resources. As a result, Capital budgeting was able to gain the attention of many scholars during past few decades. In the same time the consequences of the capital budgeting decisions might not limited to the business entity itself, it might have a pervasive effect on the whole economy of the country (Gamsakhurdia and Maisuradze 2015).

Unlike short term operational decisions, the consequences of capital budgeting decisions might not limit to the prevailing financial year. Although these investments require a large amount of capital to be invested in the current period, the benefits will be realized in the long run which associates with many uncertainties. Therefore, the risk of failure of the investment needs to be considered in advance in order to minimize the undue consequences of making a bad decision. Capital budgeting techniques are used to evaluate the investment opportunities available to the business entities. Therefore, companies should have a strong rationale to justify the adoption of a particular capital budgeting technique in the evaluation process. This study is examined how capital budgeting techniques coming into being in business entities.

#### **1.6.1.** Theoretical Contribution

This study tries to link the institutional theory with the selection of capital budgeting techniques by business organizations through exploring how capital budgeting techniques coming into being in selected business organizations.

Although, many studies have separately conducted on both capital budgeting techniques and institutional theory, no study was found evaluating the impact of new institutional theory on capital budgeting decisions of a business organization. This gap will be addressed through this study.

#### **1.6.2.** Practical Contribution

Importance of the study for the different parties who are interested on business activities can be explained as follows.

- Management is responsible to take all the operational decisions relating to the companies. Since the shareholders cannot involve in all operational affairs, managers are given the authority to invest resources in projects which maximize the wealth of shareholders. As a result, the management is accountable to the capital budgeting decisions they made. In order to fulfil their responsibility towards the shareholders, management needs to have a good rationale to justify the capital budgeting techniques used by them.
- Potential investors are the persons who are looking for profitable investment opportunities to employ their surplus cash. Basically, investors are considering the return on their investment, security as well as the risks associated with the investment. Therefore, investors are interested on the projects carried out by the companies to ensure whether those projects are earning an adequate return. This study will be beneficial for them to judge the reasonability of the capital budgeting techniques used by firms to evaluate investments.
- This study is focused on a listed entity. Consequences of Failure or the success of a capital budgeting decision of a listed company may not limited to the entity itself. For an example, constructing a new factory might give employment opportunities to the people and the increase in profits will give a contribution to the tax income of the government. Therefore, general public is also interested about the new projects undertaken by the companies. Since this study is focusing on the rationale of using capital budgeting techniques by companies, this will provide useful information to the general public to make their judgments regarding business organizations.

#### 1.7. Limitations of the study

There are several limitations encountered in the course of carrying out the research. Due to the confidential nature of the information, the respondents were hesitant to provide responses to some of the questions. Most of the respondents with key information were considered to be out of the office most of the time while those who were available were too busy to respond to the interviews in details. This made it difficult to get the responses in good time. The researcher had to make several visits to make the interviews more effective.

Also, since this is a case study carried out based on a single business organisation, future researches may find different relationship between isomorphism under institutional theory and capital budgeting decisions of business organisations. Hence, the generalization of this research findings is difficult.

#### 2. Literature review

#### 2.1 Chapter overview

This section encompasses an exhaustive examination of literature in relation to the research scope. The main areas covered in the literature review are the need for capital budgeting techniques, different capital budgeting techniques use, theorization of the selection of capital budgeting decisions and global and local findings on capital budgeting process.

#### 2.2 Need for capital budgeting techniques

Wealth maximization is considered to be the main objective of Financial Management and in order to achieve this objective, three main decisions are taken by the management. Namely, Financing decision, Investment decision and the Dividend decision (Freeman and Hobbes 1991). The continuous existence of an organization is basically depending on the future cash flows generated through the successful investments made by the company (Mustapha and Mooi 2001, Ryan and Ryan 2002). Investment decisions can be associated with the asset replacements which are done to remain the capacity level and also it can be new additions made to expand the current capacity of the business (Taylor 1998).

According to Kersyte (2011), allocation of resources to profitable projects can only be achieved through implementing a strong capital budgeting process. Every Business entity face to the common problem of scarcity of resources which cannot be eliminated. Therefore, the entities must invest their limited resources in an effective and efficient ways to achieve its ultimate objective of maximization of shareholder wealth (Nurullah and Kengatharan 2015). The choice and the implementation of processes and procedures used to evaluate this investment decision needs to be dealt with caution (Arnold and Hatzopoulos 2000). Because, an effective capital budgeting will help an organization to get the maximum use of its resources and key competencies by capturing the opportunities prevailing in the market prior to the competitors (Kersyte 2011).

Today business organizations are operating in a very turbulent environment and making a future investment with high confidence level has become an extreme hard task. Therefore, the demand for the capital budgeting techniques which can give an accurate forecasting with minimum level of default is increasing day by day (Kersyte 2011).

Different scholars have presented various definitions for Capital Budgeting Process. Segelod (1997) states that;

"Capital budgeting is as the procedures, routines, methods and techniques used to identify investment opportunities, to develop initial ideas into specific investment proposals, to evaluate and select a project and to control the investment project to assess forecast accuracy"

According to the Quirin (1967) states that;

"Capital budgeting is the process of investing money today in profitable investments which are forecasted to generate cashflows in future time periods".

Many Scholars and practitioners have stated that, future survival and the growth of the business is a result of effective capital budgeting decisions taken by the decision makers in present context. Brealey, Myers and Allen have declared that even there are financial limitations a company can be successful in operations if that company follows an effective investment policy, however a superior financial policy would go in vein if it is not supported by a good investment policy.

#### 2.3 Capital budgeting techniques used in business organizations

Capital budgeting techniques include many methods, namely Net Present Value (NPV), internal rate of return (IRR), payback period (PBP), discounted payback period (DPBP), modified IRR (MIRR) and Profitability index (PI). Some of the techniques are discussed below.

#### a) Net Present Value (NPV)

NPV is associated with the goal of maximizing the shareholders wealth; considering the timing and relevance of the cash flows. In NPV the future cash flows are discounted and the projects with positive NPV are accepted (Els 2010). If there are more than one project then that project should be accepted which has the highest NPV (Drury 2004). Correia et al. (2001) and others (Brigham, Ehrhardt 2005, Horngren, *et al.* 2003, Garisson and Noreen 2000) state the advantages of NPV as follows: time value of money is considered; all cash flows are taken; showing the risk associated with all future cash flows; and providing more reliable information than any of the other decision criteria because absolute values are used. Based on the above advantages NPV method is considered as the best method.

#### b) Pay Back Method (PB)

Pay Back Methods is considered as a simple method and it gives the accurate time of returning the invested amount. The project should be accepted if the expected payback time (PB) is equal or less than the time required by the organization (Brigham 1988). Payback gives the time period in which the initial invested amount will be recovered from the sum of subsequent year's cash inflows (Peterson and Fabozzi 2002). If the payback period of project is equal or less than the expected payback period then the project should be accepted.

#### c) Internal Rate of Return (IRR)

IRR gives the discount rate at which NPV of future cash flows is equal to the initial investment of the project. The project will be accepted when IRR exceeds project cost of capital (Brigham 1988). IRR and NPV are considered as superior than other techniques however conflicting results arise when there are mutually exclusive projects. Conflicts arises when time and cash flows of projects differ with one another. Project must be rejected if IRR is less than the required rate of return as it will give the negative NPV.

#### d) Modified Internal Rate of Return (MIRR)

MIRR considers superior than IRR as it uses weighted average cost of capital and it gives more precise results than IRR (Brigham 1988).

#### e) Profitability Index (PI)

If there are different projects to be evaluated Profitability Index is used as it gives per rupee cost of present value of benefits. Project is accepted if Profitability index is greater and equal to 1 (Brigham 1988). PI is calculated by discounting net projected future cash inflows by using the required rate of return and dividing the sum of the discounted cash inflows by the cost of the initial investment (Peterson and Fabozzi 2002).

#### 2.4 Theorizing the selection of capital budgeting decisions

The decision-making process of business organisation is subject to procedural rationality (Eisenhardt and Zbaracki 1992, Dean and Sharfman 1996). Procedural rationality is defined as the extent to which the decision process involves the collection of information relevant to the decision and the reliance upon analysis of this information in making the choice (Dean and Sharfman 1993). Decision making encompasses two main ideas. First, people in organizations have differences in interests resulting from functional, hierarchical, professional, and personal factors. Second, people in organizations try to influence the outcomes of decisions, so that their own interests will be served, and they do so by using a variety of techniques (Dean and Sharfman 1996).

Traditional theory on capital budgeting presents the rules on which basis the enterprise can make an investment decision. According to this, the emphasis is on the financial evaluation and selection of the long term-investment in assets, and the development of advanced capital budgeting techniques and their application in various situations (Saaty 1994, Prueitt and Park 1997, Trigeorgis 2000, Madhani and Pankaj 2008, Angelou and Economides 2009).

Reason studies have reveals that decisions of a business are driven by factors within the business organizations as well as influence from outside factors. Following theories explain the determinants of decisions of business organizations.

#### a) Organizational Theory

In the past, many scholars viewed that business organizations are designed to effectively and efficiently transform the limited resources in to desired outputs. Moreover, these theories highlighted that the organizations are highly affected by the boundary by which they are being separated from its external environment.

However, later studies such as "Open system" theories depicted that the boundaries are no longer being able to limit the operations of organizations. Therefore, organizations are no longer isolated and the factors in the external environment were began to make a considerable impact on the decision-making process (Suchman 1995, Scott 1987). In the same time DiMaggio and Powell's (1983) have stated that although the decision makers are making decisions within the cultural and social aspects established within the organisation, those decisions are largely influenced by the factors prevailing within the external environment (Suchman 1995). According to the organizational theory, different business environments have numerous cultural and social pressures identical to them and the amount of exposure made on a particular organization from these forces will be depend on two perspectives; namely institutional theory and strategic choice (DiMaggio and Powell's 1983).

#### b) Institutional theory

Institutional theory emphasizes that decisions taken by an organization are mostly influenced by the customs, rules and practices of other entities operating within the environment. As a result, the performance of the organizations operating within an environment are appeared to be similar to each other (Barley and Tolbert 1997). This similarity between the organizations are termed as isomorphism. Isomorphism is defined as "Constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions" (DiMaggio and Powell's 1983, Hawley's 1968). Scholars have basically identified three interconnected isomorphic forces which influence the decision-making process of an entity namely, coercive, mimetic and normative. Coercive pressures indicated that the decisions of the organizations are affected by the pressures enforced from powerful entities operating in the environment. For an example, organizations have a mandatory requirement to comply with the regulations imposed by the government. Mimetic pressure declares that business organization are voluntarily tends to follow the strategies of other organizations which they believe as successful entities. Normative pressure declares that the process

of decision making is affected by the practices and beliefs of a particular profession (DiMaggio and Powell's 1983).

## c) Strategic choice

In contrast to institutional theory, Strategic choice indicates that the decisions of an organization are solely depends on the expectations and beliefs of the decision maker rather than depending on the external factors. Therefore, the ultimate outcomes of these decisions of the organizations in the same environment will be different from each other (Child 1972).

## 2.5 Conventional wisdom relevant to the Capital Budgeting Process

Capital budgeting process is a multi-faceted activity designed to help in a selection of viable and worth pursuing investment projects from many alternatives (Nurullah and Kengatharan 2015). For the survival and long-time success organizations must implement effective decision-making process as these decisions support to find company's future opportunities and develop competitive advantage (Keršytė 2011). There are several important features for capital budgeting decision making to be effective (Boquist *et al.* 1998, Adams *et al.* 2004).

- Capital budgeting should be a sequential, multiple decision process that integrates the information needed to obtain cash flow estimates into the financial analysis of the cash flows.
- It is linked to the strategy implementation therefore project proposals should be supported by relevant non-financial data and forecasts.
- It recognizes the options inherent in value-enhancing capital budgeting.
- It takes a cross-functional approach as a result of that the quality of estimates of expected cash flows and the uncertainty in cash flows are critical.

This dynamic process takes special stages and organizations use their own customized processes (Dayananda *et al.* 2002). The capital budgeting process indicates that the capital budgeting techniques are essential when selecting investment opportunities (Nurullah and Kengatharan 2015).

# 2.6 Global and local findings on capital budgeting process

## a) Evidence from global business environment

To analyse what determines the choice of capital budgeting methods in Sweden, a questionnaire was sent in 2005 and 2008 to the CFOs of all Swedish companies listed on the Stockholm Stock Exchange. Their questionnaire made clear that questions regarding capital investment referred to all nonroutine capital investments accepted or rejected at group/parent-company level. The

questionnaire consists of three main questions regarding the use of capital budgeting methods and cost-of-capital estimation techniques.

Company size, company leverage, growth opportunities, dividend pay-out levels, industry classification (manufacturing or not), target debt ratio, proportion of foreign sales, proportion of shares owned by the management, changes over time, as well as the age, educational attainment and the tenure of the CEO were analysed in this questionnaire. According to their study, older the CEO is, he is will use Accounting Rate of Return and more educated CEOs used both IRR, discounted pay-back method. When it comes to IRR there is a positive relationship (Graham and Harvey 2001). Also, owner-managers companies will use more sophisticated methods and non-owner manager will not. Graham et al. (2005) showed that top management was willing to sacrifice long-term value just to meet accounting targets. We believe that this focus on accounting numbers is more profound in companies with low levels of management ownership, and we therefore expect that management owned companies use ARR less frequent. It shows that ownership structure influence management decisions (Warfield et al. 1995, Klassen 1997).

As per an examination about the capital budgeting decision in the hotel industry shows that there is an increase in the engagement of hotel asset managers compared to other sectors. it is notable that as asset managers, hotel operators are also taking investment decisions according hotel owners interest (Tuner et al. 2012).

Butler et al. (1993) see three distinct orientations for investment appraisals. The company can withstand in competition by implementing new projects. First one is strategically oriented investment appraisal which consider about ability of the selected project to deliver competitive advantage to the company (Lefley 2004). Porter (1998) mentioned six major barrios to enter to an industry such as economies of scale, capital requirements etc. In order to overcome such barriers, the company should undertake investment projects. Enterprises have given major importance to their competitors. They will influence the capital investment process in all enterprises and in all industries (Brakel 2004). The second point is politically-oriented investment appraisal which show that individuals who are employ strategies use their seniority (Hickson et al. 1986). Intuition-based investment appraisal shows there will be a high importance to the senior management's intuition and judgment when doing investment appraisals (Chami and Fullenkamp 2002).

## b) Evidence from Sri Lankan business environment

Pathirawasam (2016) has indicated that, out of the respondent companies, 30% were using one to three capital budgeting techniques while others are using more than three capital budgeting techniques to evaluate the feasibility of the projects. This trend can be observed in the developed

countries such as Australia, USA and Japan. In the same time, the author has identified that majority of the companies are using IRR, NPV and Payback period. Also, it was noted that the questionnaires were given to the head person in the Finance Division of these listed companies and out of the collected responses majority respondents (78%) were possessing either a degree or an equivalent professional qualification in Finance and Accounting field.

Banda and Ratnayake (2014) has also indicated that organizations are using multiple capital budgeting techniques which is a mixture of both Discounted Cash Flow and Non-Discounted Cash Flow techniques and further reveals that large organizations in Sri Lanka including conglomerates are preferring NPV and then IRR in order. Mainly the authors have tried to explore a relationship between the age, education, tenure of the CEOs of large companies and capital budgeting techniques implemented. The results revealed that CEOs who were entrusted with the task of making capital budgeting decisions were holding a first degree or postgraduate qualification relating to their respective industries. In the same time organizations were taking the support of external expertise in making highly technical investment decisions. Further, CEOs who hold Masters or MBA in Accounting and Finance, Management fields or equivalent professional qualification were preferred to use discounted cash flow capital budgeting techniques.

Majority of the listed companies evaluate their long-term investment proposals through a central review committee which comprised with top level management and Board of Directors. And also, two or more departments will share the responsibility of evaluating the capital budgeting decision. However, significant decisions which are affecting the expectations of the shareholders will be evaluated by a separate strategic business unit in majority of these large companies. And also, the study reveals that managers are using more sophisticated capital budgeting techniques since their decisions have been strictly evaluated by a separate reviewing committee (Ranaweera, Fernado, Rajini and Weerasinghe 2015).

## 3. Methodology

## 3.1 Chapter overview

This chapter provides detailed justifications about the selection of relevant research approaches and methodologies. These areas include an account of the population, sample, and data collection procedures and data analysis strategies.

## **3.2 Research Approach**

Since the study examines the relationship between the new institutional theory and the capital budgeting practices of an organisations and to evaluate the influence from the factors under institutional theory for the selection of capital budgeting techniques of business organizations, qualitative nature is adopted.

## 3.3 Population and sample of the study

Due to the qualitative nature of the research and the research was carried out to find out the impact of new institutional theory on capital budgeting techniques of the selected company, the research participants were selected purposively in order to address the research question. Hence, exact population cannot be identified.

A listed company in Sri Lanka was selected in order to address the research question. This company was selected based on the results of the pilot research conducted to evaluate the capital budgeting practices and the availability and the accessibility of the information.

## 3.4 Sources of Data

Both primary and secondary data was gathered in finding the ripostes for research objectives. The primary data was gathered to bridge the research gap in the existing literature. Primary data was gathered through interviews conducted with the selected sample of decision makers in the organisation those who are involved in making capital budgeting decisions while secondary data was gathered form the annual report, internal documents. Other than that, many academic journals and articles were used as sources of data in achieving the pre-determined objectives of research.

## 3.5 . Data Collection

Data collection was primarily done through the interviews conducted with selected sample of decision makers in the organisation those who are involved in making capital budgeting decisions. Certain interviews were standardized interviews whereas certain interviews were semi structured and unstructured. Thus, it has been combined various types of interviews in gathering data for the

study. It is notable that standardized interviews allow an easy comparison of the answers, as opposed to non-standardized ones. The prepared questions served as a guide during the interviews. Nevertheless, it was adjusted to the way the interviewees were responding.

The interview method was the main method of data collection. During the pilot phase, interviews were conducted over the telephone and during the in-depth field study phase, face-to-face interviews were conducted.

No	Date	Description	Duration				
Pilot Phase							
Face-to-Face Interviews							
1	15 <sup>th</sup> March 2018	Business Analyst	1hr				
Field Study Phase							
Face-to-Face Interviews - Sri Lanka							
2	18 <sup>th</sup> June 2018	Finance Manager	1 hr				
3	18 <sup>th</sup> June 2018	Head of Corporate Finance	1 hr 30Min				
4	18 <sup>th</sup> June 2018	Finance Director	1 hr				

Table 3.1: Interviews Conducted During the Pilot Phase and In-depth Field Study Phase

Also following documentary reviews were also carried out to gather further data on company's practices in capital budgeting process.

• Annual report

• Investment policy manual

• Organisational chart

# 3.6 Data Analysis Strategies

The data gathered through Interviews and questionnaire will be transcribed and extracted to identify the determinants of capital budgeting decisions of business organisations. This study would hence use thematic analysis to analyse data.

# 4. Results and discussion

## 4.1 Chapter overview

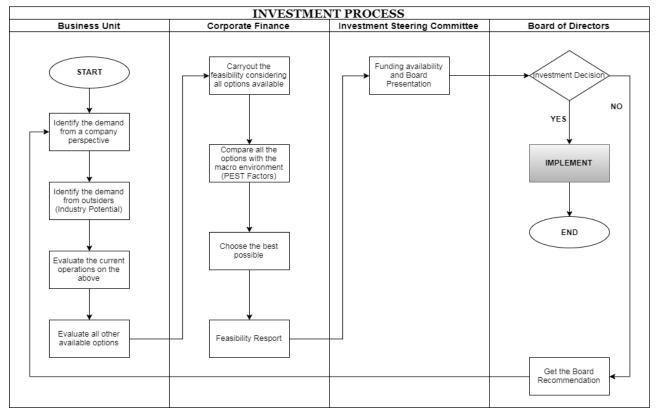
This chapter includes a discussion on findings of the interviews conducted with a few employees within the selected business organisation comprised of capital budgeting decision makers of that organization.

## 4.2 Results and discussion

## Summary of Capital Budgeting Process of the company

Based on the responses given by the participants following capital budgeting process and practices of the company were identified.

## **Figure 4.1: Investment Process**



Source: Investment policy manual

Investment policy of the company is prepared by the holding company which is a common policy for the whole group. The prime objective of investment policy is to ensure that the investments undertaken by the subsidiaries of the holding company will enhance the group value. The responsibility pertaining to the evaluation and recommendation of the investment decision will rest with the department head/business Unit Head. However, the final decision pertaining to any investment will be taken by the Board of Directors.

A feasibility study is carried out for all the investments and NPV, Payback and IRR is calculated and these evaluations is carried out by the Corporate Finance Division of the company. According to the responses given by the interviewees, management tend to use discounted capital budgeting techniques over non-discounted techniques.

Based on the interviewees' responses, company uses capital budgeting techniques such as NPV, Payback and also IRR for the purpose of project evaluation. However, payback method is considered as secondary method of evaluation as it gives basically the number of years required to recover the initial outlay. Any investment which has a Net Present Value of >=0 at the current cost of capital should be considered and evaluated using a decision tree. The best option should be communicated and lists down the other in a descending order. Final decision heavily depends on the NPV of the projects under consideration however, this decision is always supported by one or more techniques.

The investment steering committee evaluates the project appraisal decisions of Corporate Finance and present their recommendation to the board. The investment steering committee consist of Chief Financial Officer, Group Treasurer and Head of Corporate Finance. The ultimate decision on the investment will be taken by the Board.

#### Theorizing the selection of capital budgeting techniques of the company

#### A. Coercive Isomorphism

Based on the findings of the case study, influence of the holding company on the capital budgeting decisions the selected entity is prominent. Holding company prepares the investment policy to the whole group in order to enhance the group value. And the majority of the interviewees highlighted that the company always ensures that their investments decisions are inline with the group policy including capital budgeting techniques uses for project evaluation. This can be identified as coercive (regulative) pressure where the parent company influence to the decisions of subsidiary company.

Research carried out by Pathirawasam (2016) reveals that the capital budgeting decisions taken by listed companies in Sri Lanka are influenced by the institutional pressures. All the listed companies in Sri Lanka are subject to the listing rules imposed by the Securities Exchange Commission (SEC). For an example, listed companies need to be comply with the Code of Best Practice on Corporate Governance and failure to do so will results in taking disciplinary actions against the company such

as fines, transferring to default board of Colombo Stock Exchange. According to the provisions of the code, companies need to have a strong risk management system including control mechanisms to mitigate the possible risks and Board has been held responsible for the effective and efficient utilization of shareholders' funds. This can be identified as a Coercive pressure imposed on the decision makers which force them to select and apply a particular capital budgeting technique. According to the findings of the study, NPV is the highest preferable capital budgeting technique among the respondents. Since NPV express the absolute return made over the investment, it clearly indicates the value addition made by the investment. This will help the decision makers (management) to justify their accountability towards the shareholders and the regulatory bodies. Failure to discharge their responsibilities might results in punishments such as deductions in bonus, demotions, terminations etc.

## B. Normative Isomorphism

Through interviews and documentary reviews, qualifications of the decision makers/top management of the company were identified in order to examine the influences of normative isomorphism over selection of capital budgeting decisions.

Collected data about qualifications and experience of the management are summarised below.

	Chairman	СЕО	Managing Director	Finance Director
Bachelor degree				√
MBA			$\checkmark$	
Non-MBA Master's				
Above Master's degree				
Professional Qualification (Specify)				ACA, ACMA
Other (Specify)	Reading for PhD			

Table 4.1: Educational qualifications of the management

Source: Primary Data

According to the data gathered, almost all the members in the top management have degree qualification as their basic level of educational qualification. Also, some of the members having Local or international MBA qualification with their first degree.

The study expected to find out the association between demographic variables and the use of capital budgeting techniques. The result shows that the management personnel with higher qualifications are tend to use discounted capital budgeting techniques such as NPV and IRR. This association can be concluded as pressures from normative isomorphism where practices and beliefs of a particular profession influence the selection of capital budgeting techniques.

Apart from the above observations, most of the respondents from middle level management were also tend to use discounted capital budgeting techniques who possessing either a degree or an equivalent professional qualification in Finance and Accounting field. This fact indicates that the practices, norms and believes of a particular group such as professional body might influence the selection and implementation of a particular capital budgeting technique in a company.

The results are consistent with the study of Banda and Ratnayake (2014) relating to the capital budgeting of large organizations in Sri Lanka. The study revealed that CEO's, CFO's with MBA or Masters in Finance, Accounting or Management field or with professional qualifications tend to use discounted cash flow techniques. Further research findings have showed that there is an association between the level of educational qualification and the use of NPV and IRR. The researches have concluded that this is mainly due to postgraduate qualification of executives of the organization. Because recently almost all the executives tend to have postgraduate qualifications in accounting, finance or management related subjects.

#### C. Mimetic Isomorphism

As indicated above in the capital budgeting process of the company, it uses more than one technique in evaluating investment projects. This can be identified as pressures from industry or peer companies which is referred to mimetic isomorphism that business organizations are voluntarily tend to follow the strategies of other organizations which they believe as successful entities.

This was also revealed in the study by Pathirawasam (2016) and has indicated that irrespective of being an effective capital budgeting technique, majority of the companies are using Payback as a secondary capital budgeting technique. This indicates a herd behaviour in which companies are following a same technique which is not superior irrespective of applying another effective technique. According to Pathirawasam (2016), most of the listed companies in Sri Lanka are using Payback due to the convenience in understanding and computation. These kinds of practices

employed by listed companies indicate that mimetic pressures are also influencing capital budgeting techniques of Sri Lankan companies.

#### 5. Summary and conclusion

### 5.1 Chapter overview

This section provides the overall summery of the study carried out on impact of institutional theory on selection of capital budgeting techniques and the conclusion.

#### 5.2 Summary

The objectives of the research were to identify the impact of regulative factors, Normative and mimetic factors on capital budgeting decisions of a business organization. The research was carried out adopting case study method and one of the leading listed company in Sri Lanka was subjected to this study. To achieve the objectives, research participants were selected based on their involvement in decision making in capital budgeting of the company. Interviews, documentary observation and participant observation were used to collect data and data was analysed to identify the relationship between isomorphisms under institutional theory and capital budgeting techniques of the selected listed company.

Through the study it was revealed that selection of capital budgeting techniques for project evaluation is mostly driven by the top management of the company and the influence of parent company is also a key determinant. These decisions are steered by the other factors such as qualifications of the management and their experience (normative), regulatory factors and practices of peer companies in the industry (mimetic). These evidences were demonstrated by using empirical studies on capital budgeting practices of similar companies.

### 5.3 Conclusion

Results of this study are consistent with some empirical studies such as Pathirawasam (2016), Banda and Ratnayake (2014) thus, a conclusion can be drawn as there is an impact of institutional isomorphisms to the capital budgeting decisions of the company.

The future success of a business largely depends on the investment decisions as capital expenditures can be very large and have a significant impact on the firm's financial performance. Companies should have a strong rationale to justify the adoption of a particular capital budgeting technique in the evaluation process.

This study was examined how capital budgeting techniques coming into being in business entities by investigating how regulating factors, professional knowledge and peer companies contributed towards the selection of capital budgeting techniques. Furthermore, the research was conducted in such a way to identify the influence of capital budgeting decisions to the Business Entities, Potential investors and to the whole society.

## 5.4 Recommendation for further research

This study was primarily carried out focusing on a single entity (listed company) in Sri Lanka due to time constraint. It is recommended that research be carried out to evaluate the impact of institutional pressures (Normative, Mimetic and Regulative) on selection of capital budgeting technique using extended sample size. Also, research need to be undertaken to theorize the impact of relevant factors affecting capital budgeting decisions of a business organization using other theoretical frameworks.

#### References

Freeman, M and Hobbes, G 1991, 'Capital budgeting: theory versus practice', Australian Accountant, Vol. 61, no. 8, pp. 36-41.

Mustapha, MZ and Mooi, STL 2001, 'Firm performance and degree of sophistication of capital budgeting practice: some Malaysian evidence', *Proceedings of The Asia Pacific Management Conference*, pp. 279-290.

Taylor III, LL 1998, 'A comparison of capital budgeting models: local versus global viewpoints', *Business Process Management Journal*, Vol. 4, no. 4, pp.306-321.

Nurullah, M and Kengatharan, L 2015, 'Capital budgeting practices: evidence from Sri Lanka', *Journal of Advances in Management Research*, Vol. 12, no. 1, pp.55-82.

Arnold, GC and Hatzopoulos, PD 2000, 'The theory-practice gap in capital budgeting: evidence from the United Kingdom,' *Journal of Business Finance and Accounting*, Vol. 27, no. 5-6, pp. 603-626.

Segelod, E 1998, 'Capital budgeting in a fast-changing world', *Long Range Planning*, Vol.31, no.4, pp. 529–541.

DiMaggio, PJ and Powell, WW 1983, 'The iron cage revised: institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, Vol.48, no.8, pp.973-986.

Keršytė, A 2011, 'Capital budgeting process: theoretical aspects', *Economics and Management*, 16.

Dayananda, D 2008, 'Capital budgeting', New York: Cambridge University Press.

Block, s 1997, 'Capital budgeting techniques used by small business firms in the 1990S', *The Engineering Economist*, 42(4), pp.289-302.

Maroyi, V 2012, 'A survey of capital budgeting techniques used by listed mining companies in South Africa', *African journal of business management*, 6(32).

Lingesiya, K 2017, 'Do Firms' Characteristics Make a Difference of the Choice of Capital budgeting Practices? Evidence from Sri Lanka', *Asian Journal of Finance & Accounting*, Vol. 9, no. 2.

Klammer, T 1973, 'The Association of Capital Budgeting Techniques with Firm Performance', *The Accounting Review*, Vol. 48, No. 2, pp. 353-364.

Chami, R. and Fullenkamp, C. 2002, 'Trust as a Means of Improving Corporate Governance and Efficiency', IMF Working Papers, 02(33), p.1.

Turner, M. and Guilding, C. 2012, 'Factors affecting biasing of capital budgeting cash flow forecasts: evidence from the hotel industry', *Accounting and Business Research*, 42(5), pp.519-545.

Daunfeldt, S. and Hartwig, F. 2014, 'What Determines the Use of Capital Budgeting Methods? Evidence from Swedish Listed Companies', *Journal of Finance and Economics*, 2(4), pp.101-112.

Graham, J. and Harvey, C. 2001, 'The Theory and Practice of Corporate Finance: Evidence from the Field', *SSRN Electronic Journal*.