A REVIEW OF CAPITAL BUDGETING DECISIONS IN NAMIBIA'S STATE-OWNED ENTERPRISES

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Abstract

The objective of this discourse was to investigate the use of capital budgeting decision in Namibian State-Owned Enterprises. Firstly, to examine if Namibian SOE's are using capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions? Secondly to analyze if SOEs risk assessment methods (sensitivity analysis, scenario analysis or Monte Carlos simulation) and standards are in place pertaining to capital budgets. A computerized environment with the assistance of SPSS software was used to analyze the multivariate data obtained from structured questionnaire.

According to the survey findings; capital budgeting practices in SOE's seem to have improved in Namibia with the majority of companies using the sophisticated DCF techniques. The ensuing recommendations are made: the line ministries responsible to execute ownership control over the sample SOE's should ensure that capital budgeting methods are applied, and capital budgets should be submitted to the line Minister, in relation to section 19 (1) of the SOE's Act. Board member in terms of section 18 (1) of the SOE's Act should include capital budget decision made as part of the performance agreements that have to be signed between the Minister and each board member. On the operational level, there is a need to train state-owned enterprise management teams on the basics of capital budgeting techniques to reduce the high dependency rate of formal capital budget analysis on external consultants.

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Secondly, I am grateful to my good friend D.R Mpunwa (DBA candidate) for proof reading this thesis. Finally, I shall thank the entire management of the sampled SOE's to respond to the questionnaires and interviews.

DEDICATION

I dedicate this thesis to my family Christa (wife), Nguvitjita (daughter) and Rijandjee (daughter), relatives (the people with the blood of Katjiruru) and fellow Omingondo villagers for their all-round support during my entire academic life.

DECLARATION

I, Talaska Galaga Katjiruru hereby declare that this study is a true reflection of my own research and that this work or part thereof has not been submitted for a degree at any other institution of higher education. Wherever contributions of others are involved, every effort is made to acknowledge this clearly with due reference to the literature.

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Talaska Galaga Katjiruru Date

1 Introduction

1.1 Orientation of the proposed study

In Namibia the government is encountering financial challenges facing State-Owned Enterprises (SOE's), more specifically in the area of capital projects being financed and refinanced year after year without clear capital budgeting processes. To resolve these challenges, it has promulgated the State-Owned Enterprises Governance Act (Act 6, 2006). The act is established: "to make provision for the adequate governance of state-owned enterprises and the checking of their performance; to make endowment for the reorganization of state-owned enterprises; to institute the state-owned enterprises governance council and delineate its authorities, onuses and tasks; and to make provision for supplementary matters", (State-owned Enterprises Governance Act, 2006). Section 19 of the said act describes aspect of the Business and Financial Section 19(3) of that governance act under the subheading "Business and Financial plans"; list six items that are important for best financial performance of SOE's, irrespective the service or product provided by those SOE's. This are listed as subsections a) to f) of section 19(3).

In this study the researcher concentrates firstly on subsection (b) where the SOE's are required to submit a section of their business and financial plans constituting; "the operating budget and the capital budget of the state-owned enterprise for the subsequent financial year, with a depiction of the nature and scope of the activities to

be embarked on, encapsulating commercial strategies, pricing of products or services and personnel requirements"; secondly subsection (d) where it is articulated that; "if the state-owned enterprise anticipates to borrow money in the next financial year, a universal suggestion of the borrowing plans of the state-owned enterprise for that year". The research proposal intents to investigate current capital budgeting practices of SOE's in Namibia, with specific attention to be given to capital expenditure evaluation techniques that are normally employed in this important capital budgeting decisions.

"Good financial management and capital investment decision making are precarious to existence and long term accomplishment for firms", (Bennounna, 2010). "Sound/profitable capital budgeting decisions, inter-alia can have a salutary effect on improving financial performance", (Jain, 2012). Capital budgeting decision affects the profitability of SOE's, they have a marking bearing on its efficiency and competing positions in the various industries as they relate to fixed assets, fixed assets are the only earnings assets of a business enterprise, it is this asset which enable the firm to generate production/sales, yielding profits. It should also be noted here that substantial investments are needed for the acquisition and execution of capital budgeting decisions, hence it is detained that incorrect investment decision have potential of causing depression in the smooth functioning of even a well-run and efficient SOE. Correct and sound capital budgeting decision can fetch spectacular returns and can be instrumental in changing the fortunes of SOE's that are currently in the spotlight for all the wrong reason when it comes to financial performance, (Jain, 2012). As per sound principles of financial management, long term investments/capital

expenditure/capital budget needs of the business enterprise should be financed from permanent or long term sources of finance, (Jain & Yadav, 2005, p.38).

1.2 Background of financial performance of SOE's in Namibia

State owned enterprises are often required to make decisions whose consequences are felt over many years. Such decisions frequently involve large investments of money and have uncertain actual outcomes that have long lasting effects on state-owned enterprises.

Nonetheless the seeming virtues of capital budgets, opinions linger to be divided as they have been during the past decades about the efficacy of capital budgets in governments. In the present milieu in which some countries have budgetary surpluses and use them to condense levels of public debt, there is bantam motivation to resuscitate the debate about the prerequisite for capital budgets. A key challenge in government budgeting is to express an appropriate balance between current and capital expenditures. Poor long term investment decisions can affect the future firmness of an organization because it is often challenging for state-owned enterprises to recover money tied up in bad investments. Budgeting for government asset also remains not well –assimilated into the formal budget preparation process in many countries. Experience shows that in the nonexistence of properly systematized capital budgets, governments resort to borrowing without due consideration of the sustainability aspects, assets are incapably maintained and major projects suffer from largely poor management and performance.

India reveals that higher cost of capital and ineffectiveness in technology usage are not the important factors for reasons for failure for capital budget decisions. Issues to

do with the quality of capital projects, efficiency and the longevity of the projects become probing questions for state-owned enterprises. (Singh, 2013)

State Owned Enterprises are continually faced with the problem of deciding whether the current commitments of resources are worthwhile in terms of the present value of the expected future benefits (Birman, 2013). If the benefits are likely to accrue reasonably soon after the expenditure is made and if both the expenditure and the benefits can be measured in dollars, the analysis of the problem is more simple than if the expected benefits accrue over many years and there is considerable uncertainty as to the amount of these benefits.

The general problem is that there are several methods used to evaluate capital investments decisions, given the essence of capital investment not only for the country but, also towards creation of shareholder's wealth for individual state-owned enterprises it may be helpful to investigate these practices used to evaluate these projects.

The financial challenges facing State-Owned Enterprises can be articulated as follows, in agreement with daily print media reports on SOE's. After much toing and froing between Cabinet committees over the year, a bill was lastly tabled in the National Assembly last November", (Dertlinger, 2013).

Privatization not the answer to SOE's woes: Finance Deputy Minister Calle Schlettwein says the privatization of SOE's will not be the solution to government's headaches over their performance. Government should also encourage these

institutions to raise capital on the market. Schlettwein said another source of inefficiency can be the lack of budget constraints, (Ihuhua, 2010)

> Honorable Erkki Nghimtina has threatened to clamp down on under-performing state owned enterprises falling under his ministry. Budgetary constraints are topping the list with never-ending request for bail-outs, a phenomenon the Namibia government will no longer tolerate, (Smit, 2013).

> Poor budgeting cripple TransNamib. The financial mess that TransNamib finds itself in cannot only be attributed to poor and ignorance of policy guidelines, but started with a number of weaknesses identified during the annual preparation of its budget, (Poolman, 2013).

From the above newspaper headlines and many more similar once on a daily basis in Namibia, there is an impression that there seems to be financial performance problem in Namibia's SOE's. This is similar to India as articulated by (Jain, 2012) when they stated that "[t]here is a growing concern over poor financial performance of the central public sector enterprises (PSE's) in India".

Notwithstanding the above current state of SOE's in Namibia, it must be noted that SOE's have and will continue to play a major developmental role in the economies of the world and Namibia is no exception. "Public investment has to play a fundamental role in any pro-poor national development strategy, comprising the achievement of the millennium development goals (MDGs)", (Chang, 2007, p.6). "There is improved interest in Ireland and many other countries in the part that state-owned enterprises play in encouraging economic development" (Chang, 2013).

Chang also argues that there are respectable theoretical justifications for the existence of SOEs for the following reasons:

- **Natural Monopoly**: In industries where technological conditions dictate that there can be only one supplier, the monopoly supplier may produce at less than socially optimal level and appropriate monopoly rents. *Examples: railways, water, electricity*
- **Capital Market Failure**: Private sector investors may refuse to invest in industries that have high risk and/or long gestation period. *Examples: capital-intensive, high technology industries in developing countries, such as aircraft in Brazil or steel in the Republic of Korea* (Chang, 2013)
- **Externalities**: Private sector investors do not have the incentive to invest in industries which benefit other industries without being paid for the service. *Examples: basic inputs industries such as steel and chemicals*
- **Equity**: Profit-seeking firms in industries that furnish basic goods and services may decline to serve less profitable customers, such as underprivileged people or people existing in remote areas. *Examples: water, postal services, public transport, basic education* (Chang, 2013)

It must further be noted; "despite the theoretical justifications for SOE's and the many examples of well performing SOEs, many SOE's are not well run. Why? The most popular explanation contains two elements: the *principal-agent* problem and the *free-rider* problem, both based on the assumption of self -seeking individuals" (Chang, 2007, p.14).

The survey follows similar surveys conducted around the globe such as; Sandhl & Sjogren 2002; Kester and Chong 2001; Kester, Chong, Isa, Skully & Wang 1999. This survey is the first one of its kind in Namibia in general to focus on capital budgeting of state-owned enterprise.

1.3 Statement of the problem

According to Peterson and Fabozzi, Capital budgeting is the process of analyzing investment opportunities in long term assets which are expected to produce benefits for more than a year (Bennounna, 2010). A dominant feature of any investment analysis is discounted cash flow (DCF) methods, which take into consideration the time value of money, is regarded as theoretically correct, and comprises at least four discounting models: net present value (NPV), internal rate of return (IRR), modified internal rate of return (MIRR), and profitability index (PI), stated by Brigham and Ehrhardt (as cited in Bennouna et al. 2010, p.226).

Capital budgeting is the method by which firms govern how to invest their capital. Encapsulated in this process are the decisions to invest in new projects, re-evaluate the amount of capital currently invested in existing projects, apportion and ration capital across divisions, and attain other companies (Gervas, 2013).

State Owned Enterprises are frequently required to make decisions whose consequences are felt over many years. Such decisions frequently involve large investments of money and have uncertain actual outcomes that have long lasting effects on state-owned enterprises. Capital budgeting is a very complex and tedious process that needs to be thoroughly checked and balanced. Investment decisions involving the acquisition of long-lived assets are often referred to as capital

expenditure decisions because they require that capital (company funds) be expended to acquire additional resources.

Investment decisions are also sometimes called capital budgeting decisions. Critical to comprehending capital budgeting decisions is an appreciation of the time value of money. Time value of money says that a Namibian dollar at present is worth more than a Namibian dollar in the future. Consequently, there is always a need to change future dollars into their corresponding present value.

Namibia's SOE's has to guard against skewed priorities towards white elephant's mega projects at the expense of economically productive activities. It is always noted that an NPV greater than zero or an IRR greater than the required rate of return informs managers that an investment opportunity will increase their firm's value. Managers should use these techniques to maximize shareholder wealth. However, a manager's performance (and bonus) is often measured on short-term accounting income. Thus, there is an inherent conflict between what is good for the firm and what is good for the manager.

1.4 Objectives of the study

The whole objective of this study is to make a review of capital budgeting decisions in Namibia's state-owned enterprises with specific reference:

A. To examine if Namibian SOE's using capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions?

B. To establish the kind of risk assessment methods (sensitivity analysis, scenario analysis or Monte Carlos simulation) that state-owned enterprises are using in approval of the underlying investment risk?
C. To determine the main barriers to the successful implementation of analytical tools for investment decisions (like capital budgeting and risk assessment methods) in Namibian SOE's?
D. To establish the relationship between the use of financial investment methods and Corporate Governance of SOE's?

At the same time; with the survey results from this capital expenditures implementation analysis, the researcher is able to also find answers to the SOE's specific challenges of *principal-agent* problem and the *free-rider* problem. Because it is always said that: "given the self-seeking nature of humans, no SOE's manager has run the firm as efficiently as an owner-manager would run his own firm" (Chang, 2007, p.14).

1.5 Hypotheses

1.5.1 Hypothesis 1

There is a relationship between financial investments and corporate governance of State-Owned Enterprises in Namibia. For corporations located in countries with strong corporate financial investments $i \geq 1$weak corporate governance allows managers to follow their own goals at the shareholders' expense. Were i stands for financial investments for state owned enterprise? Current research has focused on the conflict between managers and shareholders. Where corporate governance is feeble managers pay out not as much of in dividends and preserve larger fractions of their cash flows

to follow their own goals and this cause's poor corporate investments. The other side of paying out minute dividends is investing too much. This reason leads to expect $i \leq 1$ in countries with weak corporate governance systems, corporate investments is affected.

Some companies have striking investment opportunities, good corporate governance and restricted financial resources (Tobin, 2013)however, both their leaders and their shareholders benefit from their attaining high investments rates and rapid growth. For these companies no battle between managers and shareholders over dividends and investments policies exists. Indeed, these corporations are often fledgling firms in rapidly growing industries –the kinds of companies that can agonize from asymmetric information problems thus are to be expected to under invest so that $i \geq 1$. This consideration leads to qualify our prediction (hypothesis) that for weak corporate governance systems lead to poor corporate investment.

1.5.2 Hypothesis 2

Corporate Governance has no influence on corporate investments of State-Owned Enterprises in Namibia. The findings supported by CBI/ Touch Ross 1995 directors' opinions study which suggests that Cadbury (2002) recommendations have had no positive impact on their corporate performance. The findings by Owusu (2012) states that there is no direct evidence regarding the adoption and operation of the Ghanaian code and its impact on corporate governance. This leads to the hypothesis that there no direct correlation between corporate governance and corporate investments of state owned enterprises (Cadbury, 2012).

1.6 Significance of the study

The researcher commends the Government of the Republic of Namibia for the promulgation of the state-owned enterprise governance act that regulates all SOE's and that it must strictly be adhered to. However, the question at the back of the researcher mind is to find out whether the guidelines in the SOE's governance act is indeed adhered to by Namibia's SOE's, especially the capital budgeting part thereof? The research aims at finding out whether there are practical steps taken by the SOE's governance council to monitor and evaluate the subsequent outcome of the guidelines provided in the SOE's governance act specific to capital budgets? Also despite the guidelines from the SOE' governance act; the researcher could not find any studies on SOE's capital budgeting decision making processes in Namibia. The desire to provide answers to this knowledge gap is the motivation for this research study.

1.7 Empirical study

The measuring instruments were administered to state-owned enterprises in Namibia. To ensure that there is validity and reliability, Cronbach's (coefficient of internal consistency) was employed using Statistical Package for the Social Sciences (SPSS) analysis. The names of the employees in the respective enterprises were treated as highly confidential. A detailed discussion of the empirical study was furnished in chapter five.

1.8 Limitation of the study

The research study was only limited to the findings of effective capital budgeting decision making and not necessary the overall financial performance of SOE's in Namibia. At the same time SOE's are also classified in the Namibian economy based

on different tiers, i.e. tier one, two and three respectively. The categorizing of tiers is based on the size of revenue, staff compliment and total fixed assets under the care of those specific SOE's. The SOE's in Namibia also have different functions according to the mandate obtained from their establishing legislature; the functions vary in the following different categories:

- Economic and productive
- Regulatory
- Service rendering

State-owned enterprises are frequently required to execute multiple and sporadically conflicting objectives, i.e., to attain loss-making communal policy goals (e.g. universal service obligations, constant tariffs regardless of the costs of provision) while operating commercially (Forfas, 2010, p.4). As a result of the various mandate and specific reason for the establishment of these different types of categories classifying SOE's, the study is limited to the category of economic and productive SOE's because they are the once required to at least operate economically (Forfas, 2013). These SOE's have to show financial performance

1.9 Definition of terms

Capital budgeting

Pamela and Peterson (2012:2) delineates capital budgeting as the process of recognizing and choosing investments in long-lived assets or assets expected to generate benefits over more than one year

Internal rate of Return

The internal rate of return is the discount rate at which the present value of expected cash inflows from a project equals the present value of expected cash discharges of the project. IRR is sometimes called the time adjusted rate of return.

Probability index Technique The profitability index (P.I) is the ratio of the present value of change in operating cash inflows to the present value of investment cash discharges s.

1.10 The Organization of the thesis

This research study covers the following outlines:

The beginning covers the study's introduction, issues of capital budgeting, State Owned Enterprises research objectives, research questions, significance of the research and limitation of the study. Secondly it covers the introduction to the second chapter, which include; conceptual framework, other capital budgeting theories, capital budgeting techniques and reviews of literature. Chapter three covers the research methodology, research design, population of the study, research sample, research instruments, and data analysis and research ethics. Consequently, it has an outline of the research findings; data analysis, and discussion of research objectives. At the very end it covers the research conclusion and recommendations establishing links between the study findings and the current situation before concluding with references.

2 Literature review

In this section the researcher reviews the concept of budgeting in general, followed by a review of the features relating to capital budgeting, synthesis the work of previous research on capital budgeting as obtained, ending with a brief overview of cost of capital and risk consideration, which comprise an essential part of capital budgeting.

2.1 Defining capital budgeting

Pamela and Peterson (2012:2) define capital budgeting as the process of recognizing and choosing investments in long-lived assets or assets expected to generate benefits over more than one year. Companies intermittently invest funds in assets and these assets generate income and cash flows that the firm can either plough back in more assets or pay to the owners. These assets embody the firm's capital. Pamela and Peterson (2012: 1) define capital as the firm's total assets. It encapsulates all tangible and intangible assets. The lexis capital also has come to mean funds employed to finance the firm's assets. In this sense capital encompass of notes, bonds, stock and short term financing. (Pamela and Peterson, 2013) The lexis capital structure refers to the synthesis of these diverse sources of capital used to finance a firm's assets. The company's capital investment decision may be made up of a number of diverse decisions, each referred to as a project and this project may impose the firm to increase its investment in its working capital.

"On a tactical level, budgeting elucidates its competitive priority, advantages and strategies for the future, employing cost forecast and demands limits to quantitatively

measure the feasibility of capital expansion projects", The Controller Report as cited in (Fruitticher et al. 2005). For premeditated purposes budgets provide expedient information tools and control mechanism to company leaders, as well as partitioning decisions rights with those holding unambiguous knowledge about the operation, (Fruitticher, 2013). Little, Nace & Welker argues "budgeting is one of the ultimate decision making processes in an organization. During budget formulation, officials govern the portion of organizations assets that the manager of each unit will be authorized to spend budgets often establish performance goals for the unit in terms of cost, revenue and/or productions", (Fruitticher, 2013).

Working capital is the assortment of assets needed for day to day operations that support a firm's long term investments. The investment decisions of a firm are decisions regarding firm's capital investment. Capital budgeting is unending process and before a firm think about capital budgeting it must articulate its corporate strategy. For example, Walt Disney company objective is to be the world's premier family entertainment company while Mattel manufacturer of toys such as Barbie and Disney toys, Mattel strategy turned out to be a full line toy company and grow through expansion into international toy company. How does a corporation attain its corporate strategy? By making investments in long –lived assets that are maximize owner's wealth and selecting these projects is what capital budgeting is all about.

2.2 Capital Budgeting Evaluation Techniques and Risk

The worth of a company at present is the existing worth of all its future cash influxes. These future cash influxes come from resources that are formerly in place and from

future investment opportunities. These future cash influxes are discounted at a rate that represents investor's assessments of improbability and when expected:

Worth of firm = Present value of all future cash influxes

= Present value of cash influxes from all assets in place

+ Present value of cash influxes from future investment opportunities.

The aim of the financial manager is to get the best out of the value of the firm and subsequently owner's wealth. The capital budget decision for a project involves investigation: of its future cash flows, the extent of uncertainty linked with these future cash flows, the value of these future cash flows bearing in mind uncertainty.

2.2.1 Discounted cash flow methods

The discounted cash flow measures the cash influxes and discharges of a project as if they become apparent at a single point in time so that they associated in an appropriate way. The discounted cash flow methods make a distinction on the use of money has an opportunity cost –return forgone. The DCF methods explicitly and consistently weight cash flows by the time value of money; they are often well-thought-out as better methods to use for long-run decisions. Cash is invested now with the anticipation of receiving a greater amount of cash in the future. Injecting accrual concepts of accounting into DCF analysis should be circumvented as it creates confusion. There are two methods of DCF which are net present value and internal rate of return.

2.2.1.1 Net Present –Value Method

NPV is computed using the required rate of return (RRR) which is the bottommost acceptable rate of return on an investment. Gitman (2011) articulates it is the return

that the body could expect to receive elsewhere for an investment of corresponding risk. This proportion is also called the discount rate, hurdle rate or opportunity cost of capital because it typically must surpass the cost of funds as determined by the return predicted by those who provide funds.

$$NPV = \sum_{t=1}^{n} \frac{CF_t}{(1+k)^t} - CF_0$$

$$= \sum_{t=1}^{n} (CF_t \, x \, PVFIT_t) - CF_0$$

Where:

t = time of cash flow ; k = discount rate; CF = Net cash flow; PVIF = Present value interest factor

The computation of NPV is as follows: Net present value of cash inflows –initial investments. When working with IRR, the RRR is used as a point of contrast. Since the cost of capital and the RRR are profoundly the same concept (Peterson, Pamela and Fabozzi 2013:65) alludes that but from divergent perspectives the terms are used interchanging ably in capital budgeting.

Given the irrevocable nature of a capital budgeting decision and its repercussions for the growth, profitability and above all, even the continued existence of the firm, the adoption of theoretically correct and sound evaluation techniques assumes paramount significance (Jain & Yadav, 2010, p.41). “One of the pillars of finance theory is that the worth of an asset or investment is identical to the discounted present value of its future cash flows. The NPV rule states that if the present value of the projects future cash flow surpasses the cost of the project, then the firm should accept the project. If

the NPV is negative, the firm should reject the project. Only project with positive net present value are tolerable. Why? Because the return from these projects surpasses the cost of capital. Bhimani, Horngren, Datar and Rajan (2012:414) articulate "Managers favor projects with higher NPVs to projects with lower NPVs, if all other things remain ceteris paribus". When integrating inflation into the net present value they are two internal consistent approaches which are nominal approach which predict cash inflows and outflows in nominal monetary units and use nominal rates as the required rate of return. Peterson, Pamela and Fabozzi 2013:66) states that real approach predicts cash inflows and outflows in real monetary units and use real rate as the required rate of return.

2.2.1.2 Internal Rate of Return

Gitman (2013) defines the internal rate of return as the discount rate at which the present value of anticipated cash influxes from a project matches the present value of expected cash discharge of the project. IRR is sometimes called the time adjusted rate of return. (Gitman, 2013) As in the NPV method, the sources of cash flows and the accounting treatment of individual cash flows are extraneous to the IRR calculations. When a decision has to be made the ensuing conditions is used if IRR is bigger than cost of capital accept the project. If the IRR is of a smaller amount than the cost of capital reject the project. The IRR can be computed as follows:

$$\$0 = \sum_{t=1}^{n} \frac{CF_t}{(1+IRR)^t} - CF_0$$

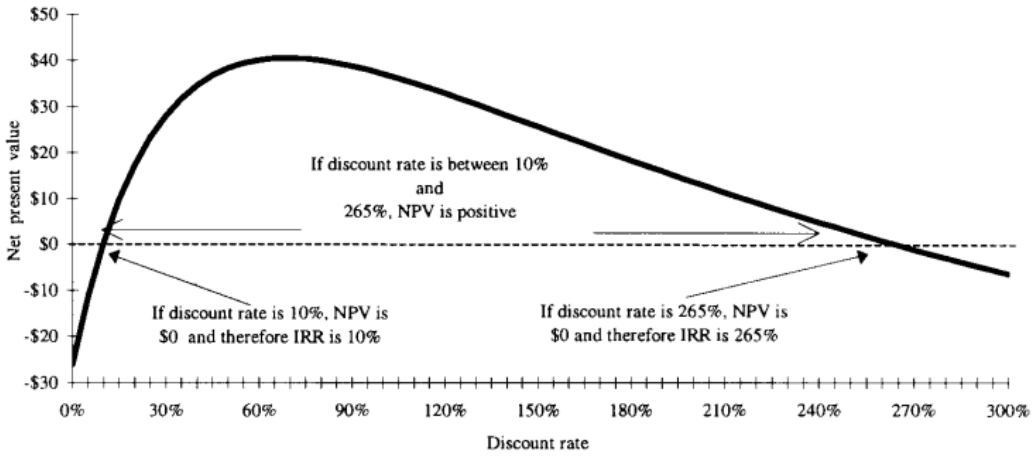
$$\sum_{t=1}^{n} \frac{CF_t}{(1+IRR)^t} = CF_0$$

The appropriate discount rate should be the opportunity rate of return as measured by the firms weighted average cost of capital (WACC). Whilst financial theory has endorsed discounted cash flows (DCF) methods in relation to such naive methods as payback and accounting rate of return, there may be conflict between the DCF method of NPV and the IRR.

Multiple Internal rates of return

The archetypal project usually encompasses not only one large negative cash flow initially followed by series of future positive flows. But, that is not continuously the case in most of the times. If a company is involved in a project that uses environmentally sensitive chemicals. It may cost a great deal to sell them, which will cause a negative cash flow at the end of the project (Gitman, 2013).

Figure 2. Multiple internal rates of return



Source CIMA (2013)

As can be comprehended from the figure above that where the NPV of these cash flows are made known for discount rates from 0% to 300%. The IRR is the discount rates

from 0% to 300 %. The IRR is the discount rate that attracts the NPV to be zero. The present value deviates from negative to positive or from positive to negative at 265%. Manifold elucidations yield on a series of cash flows take place whenever there is more than one change from + to – or from – to +. There are also two conceivable solutions for IRR, one for each sign change.

Furthermore, whilst academics have long promoted the use of NPV, owing to the deficiency of IRR, until recently, firms have preferred to use IRR as a primary method to evaluate capital projects" (Correia & Cramer, 2008, p.33). According to Bennouna et al. 2010 "accepting DCF and NPV precisely, is only the first step towards effective capital budgeting, it is crucial to ensure that capital expenditure techniques are appropriately exploited which include the following:

Cash flow estimation, Discount rate, multiple discount rate and risk, Risk analysis methods, emerging approaches – real options, Administrative procedures (Bennounna, 2010)

"Cost of capital constitutes a vital part of capital budgeting in that it makes available a yardstick to measure the worth of investment study and, thus executes the role of accept/reject criteria. The accept/reject rule requires that a business enterprise avail of only such investment opportunities as promise a rate of return higher than cost of capital. Contrariwise the enterprise would be well instructed to reject projects whose rate of return are less than the cost of capital. The cost of capital thus, offers a rational mechanism for making best investment decision" (Jain & Yadav, 2010, p.43). According to Chang, the argument is that, being part of the government, SOE's are able to secure superfluous finances if they make losses and get rescued with public

money if they are exposed with bankruptcy. In this way, it is further argued; SOE's can act as if the limits to their budgets are malleable, or "soft" (Chang, 2010, p.15). Even though many SOE's do get bailed out by the state in this way, there is also a facet of cost of capital to conclude in the form of opportunity cost lost due to the budget allocation to duplicated efforts of wrong capital budgeting decisions as well as the cost of capital the governments incurs in raising funds on the capital markets to bail out those SOE's.

2.2.1.3 Payback Period

The payback period is universally used to calculate planned investments. The payback period is the amount of time needed for the firm to convalesce its initial investment in a project as computed from cash influxes. (Gitman, 2013) In the case of annuity, the payback can be found by allotting the initial investment by the annual cash inflow. For an assorted stream of cash influxes, the yearly cash influxes must be accrued until the initial investments is recovered. The payback is well-thought-out to be the ingenuous capital budgeting technique because it does not unambiguously reckon the time value for money. When a payback is used to give and take decisions, the decision criteria is that if the payback is less than the maximum acceptable payback period accepts the project. If the payback is greater than the maximum acceptable payback period rejects the project (Gitman, 2013).

The length of maximum acceptance is set by management. This value is set intuitively on the basis of a number of factors comprising of the type of a project, the perceived risk of the project and the supposed relationship between the payback period and the share value. The main challenge of the payback is that the suitable payback period is

purely a subjective determined number. It cannot be quantified in light of the wealth maximization objective because it is not grounded on discounting cash flows to decide whether they add to the firm's value. The second challenge is that this tactic fails to take into account the time factor in the value of money (Gitman, 2013).

2.2.1.4 Profitability index technique

The profitability index (P.I) is the ratio of the present value of variation in operating cash influxes to the present value of investment cash discharges:

$$P1 = \frac{\textit{Present value of the change in operating cash inflows}}{\textit{present value of the investment cash outflows}}$$

As a substitute the difference between the two present values as in the present value NPV calculation, PI is the proportion of the two present values. Consequently, PI is a deviation of NPV. By creation if the NPV is zero, P1 is one. The profitability index elucidates how much worth we attain for each dollar capitalized. If the PI is more than one, we get more than $1 for each $1 capitalized. If the P1 is less than one, we get less than $1 for each $1 capitalized. Consequently, a project that rises owners' wealth has a P1 greater than one. Rebuffing or accepting investments having PI 's greater than 1 .0 is unswerving with rejecting or accepting investments whose NPV is greater than $0.

2.2.1.5 Accounting rate of return

The accounting officer should be able to compute the accounting rate of return (ARR) of a project. There are abundant ways of writing the ARR formula. Whichever the accounting officer selects, be sure to use the same one throughout the calculation. It may be that the question explicitly tells you to use a certain ARR formula:

$$ARR = \frac{Estimated\ average\ profits\ \ x\ 100\%}{Estimated\ average\ investment}$$

To calculate the worthiness of the average investment you must first sum the initial investment cost to the residual value. Many financial managers make the mistake of thinking that the average investment is calculated by taking the residual value from the initial cost (CIMA, 2014).

2.2.1.6 Average rate of return

The rate of return on an investment that is computed by taking the total cash influx over the life of the investment and dividing it by the duration in the life of the investment. (CIMA, 2014) The average rate of return does not assurance that the cash influxes are the same in a given year; it simply assurances that the return averages out to the average rate of return.

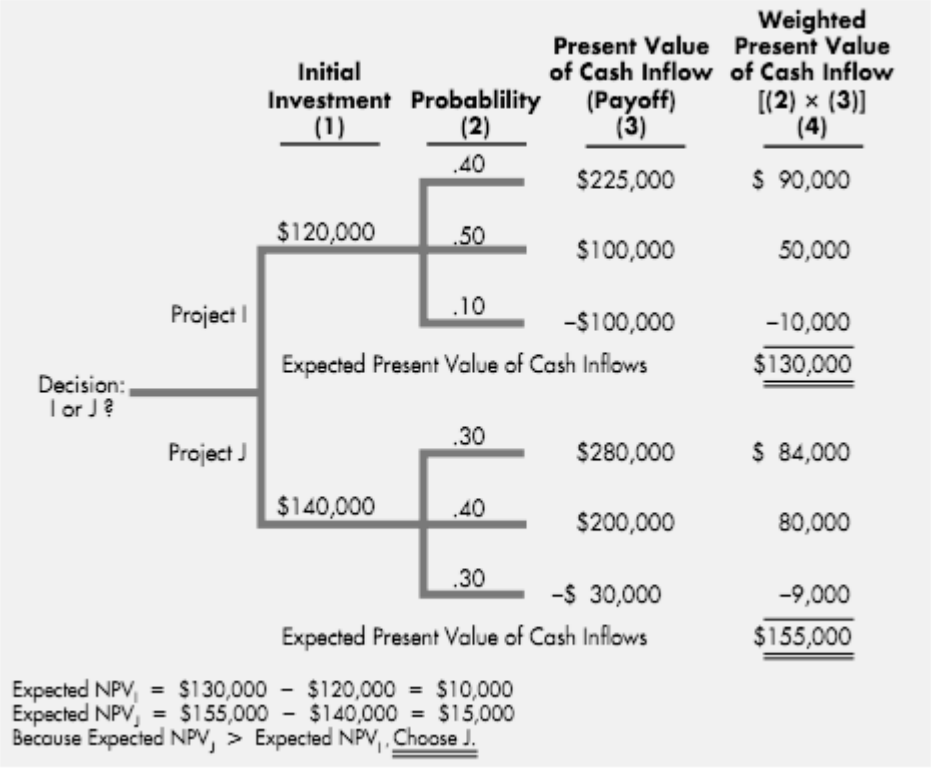
2.2.1.7 Capital budgeting decisions and Hurdle rates

Each financial manager is dependent on expertise and by and large limitations of managerial and organizational capital within the company face an opportunity set of unconventional projects (Mancosa, 2015). Taking a project today may proscribe taking another eye-catching project in the future. In that scenario deciding against a positive NPV may be profitable and the question is when a manager should accept a project. The prospect to attain a project in future is just an option and there is no tree cutting example vis-à-vis that option. To value a project, it is perilous to use an exact approximation of cost of capital. A company that has real options should be able to approximation the cost of capital for it to make precise options.

2.2.1.8 Decision Trees

Beasley and Brigham (2005) articulates "decision trees are an interactive approach that uses diagrams to map the numerous investment decisions alternatives and payoffs along with their likelihoods of occurrence". Their names are an etymology to the branches of trees as illustrated in the figure below. Decision trees depend on estimates of the probabilities related to the outcomes of competing courses of action. The payouts of each course of action are weighted by the associated probability, the weighted payouts are summed and the expected value of each course of action is then determined. (Beasley, 2014) The alternative that provides the highest value is preferred. When a state-owned enterprise wishes to choose between viable projects I and J the decision tree can be computed as follows:

Figure 2.1 Decision tree for SOEs in the selection of a viable projection



Source (Gitman, 2013)

Project J will be selected because it has higher NPV of 15 000 unlike project that has lower NPV of $10 000.

2.2.1.9 Capital Rationing

"Firms commonly operate under capital rationing –they have more accepted independent projects than they can fund. Most firms operate under capital rationing". (Brealey , Myers & Framclin, , 2014). By and large firms attempt to ghettoize and select the best acceptable projects subject to capital expenditure budget set by management. Research has found that management internally implements capital expenditure restrictions to circumvent what it deems to be inconsistent levels of new financing, particularly debt. (Beasley, 2014)The objective of capital rationing is to handpick the group of projects that offers the highest commonly net present value and does not require more dollars than are budgeted. As an essential capital rationing the unsurpassed of any mutually exclusive projects must be selected and placed in the group of independent projects. (Beasley, 2014)

2.2.2 Risk measurement methods

2.2.2.1 Sensitivity Analysis

Investments are one of the central factors of economic growth. In market economy, a vital condition for continuous viability and development of enterprises is the efficacy of capital invested in projects. The decision to finance certain project is determined by the goals which the company has set to itself. One of the methods in sensitivity analysis is to show the extent the viability of a project is predisposed by variations in major quantifiable variables. Sensitivity analysis judge the risks by recognizing the variables

that most influence a project's net benefits and quantifying the degree of their influence. Sensitivity analysis assists a manager to emphasis on those decisions that are most sensitive and affluences the manager's mind about those decisions which are not so delicate. (Horngren, 2015)

Due to the application of sensitivity analysis (SA) it is conceivable to indicate those variables to which NPV is most profound and the extent to which these variables may change before the investments results in a negative NPV. Sensitivity analysis helps out to find out why a project may fail. Subsequently, it is necessary to review any critical variables to assess whether there is a strong possibility of events occurrence leading to negative NPV. (Horngren, 2015) Sensitivity analysis helps identify the "what If" question. Generating answers to what if questions were help assess how well a study was stand up to scrutiny. Sensitivity analysis assists in identifying the worthiness of a project. Brealey, Myers and Framclin (2006) despite the preceding advantages of sensitivity analysis the major hitches for sensitivity analysis is that it does not take into account the probabilities of events occurring. The next disadvantage of sensitivity analysis is that it does not take into account the correlation among variables. In practice all variables affect the results of the project and at the same time impair or improve NPV resulting value (E.F, Besly and Brigham, 2013).

2.2.2.2 Scenario Analysis

Bigham and Davies (2012) states "Scenario analysis is a behavioral method similar to sensitivity analysis but wider in scope. It assesses the impact on the firm's return of concurrent changes in a number of variables such as cash influxes, cash discharges s and the cost of capital." The state owned enterprise could assess the impact on the

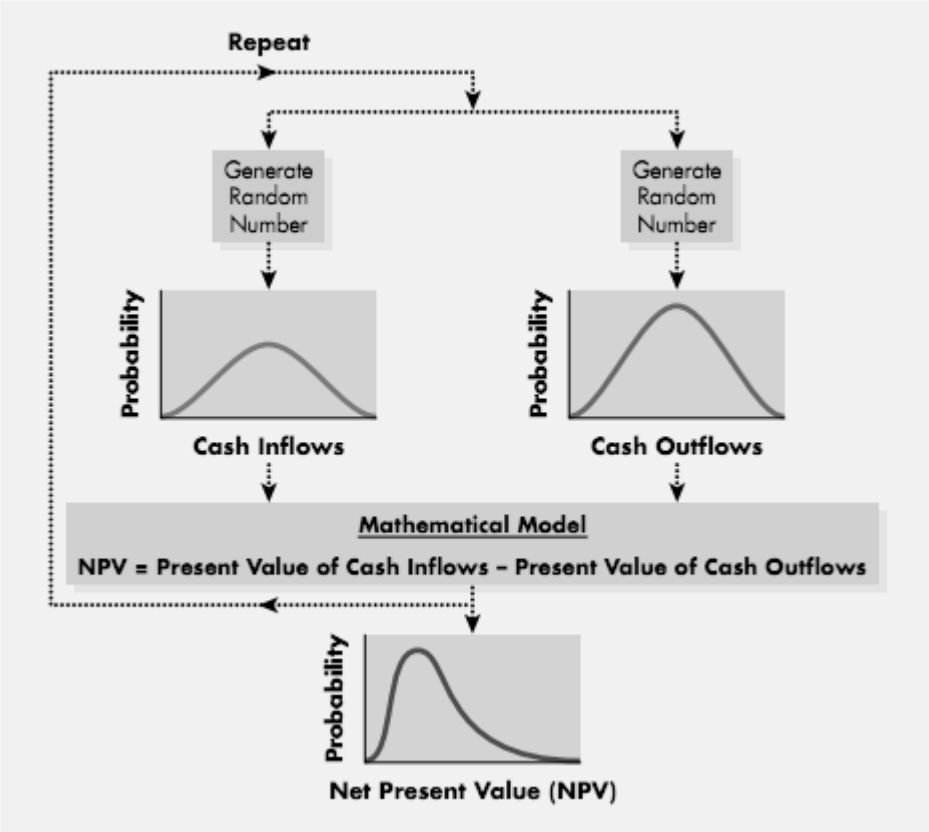
firm's return of concurrent changes in a number of variables such as cash influxes, cash discharges s and the cost of capital. The state-owned enterprise could appraise the impact of both inflation and low inflation on a project's NPV. The decision maker can use these estimates to analyze the risk involved the rate of inflation. The Capital budgeting process is the effective handling of risk which is a significant but multifaceted task. (Lumby S and Jones, C, 2013) Since the element of insecurity in estimates of future cash flows, economic life of project and cost of capital cannot be completely eliminated, each firm is expected to be familiar with and explicitly deal with risk, (Jain & Yadav, 2010: 44). "The Irish and global economy has changed ominously since the creation of many of their SOE's. In the absence of regular reviews, there are risks that SOE's can drift from their founding goals or that individual SOE's goals may not reflect current national economic development needs" (Forfas, 2007:4). Namibia being a new born Republic in 1990 is no exception to the changes of its own economy as well as the global economy, consequently, greater risk consideration was including Namibia's economy specific risk and the global economy risk affecting the researchable SOE's and market risks are specific to the sample SOE's.

2.2.2.3 Simulations

The process of generating random numbers and using the probability distribution for cash inflows and cash discharges s enables the financial manager to govern values for each of these variables. Although the gross cash inflows and cash discharges s are simulated in the figure below urbane simulations include sales volume, sales price, raw materials cost, labor cost. Maintenance expense and so on. One of the most popular simulation models is Monte Carlo simulation models.

From the distribution of returns, the decision maker can conclude not only the expected value of the return but also the probability of attaining or surpassing a given return. The use of computers makes the simulation approach feasible. The output of simulation provides a tremendous basis for decision making because it enables the decision maker to review a continuum of risk return trade-offs rather than a single – point estimate.

Figure 2.2 Simulations for NPV



Source Gitman (1997)

2.2.2.4 General risk premium

A return to recompense the investor for assuming differentiated company-wide risk (Gitman, 2013). The weighted average cost of capital (WACC) is to a lesser amount

of the risk-free rate is the general risk premium". The WACC is evaluated by weighting the standard company dues and equity costs by the distinctive company debt and equity capital percentages, and then totaling the weighted costs. If one were evaluating companies, the WACC would be the discount rate since it replicates the market's expected yields from the stock and debt of a company (Gitman, 2013).

2.2.2.5 Specific risk premium

A return that recompenses the investor for presupposes the unique risks interconnected with a specific investment. The discount rate less the WACC is the Investment-specific risk premium. Investors demand a premium beyond the WACC to pay off for this individual investment risk. (Mancosa, 2015) For certain high-risk investments, this premium can be quite high.

2.2.2.6 Risk adjusted discounting rates

A general approach for risk adjustment encompasses the use of risk adjusted discount rates (RADRs). This approach uses this formula below for NPV calculation and then adjust the risk

$$NPV = \sum_{t=1}^{n} \frac{CF_t}{(1+k)^t} - CF_0$$

$$= \sum_{t=1}^{n} (CF_t \, x \, PVFIT_t) - CF_0$$

The risk adjusted discount rate (RADR) is the proportion of return that must be acknowledged on a given project to recompense the firm's owners satisfactorily that is to preserve or improve the firm's share price (Lumby S and Jones, C, 2013). Financial managers, for that reason, assess the total risk of a project and use it to

regulate the risk adjusted discount rate the formulae for risk adjusted discount rate (RADRs) can be computed as follows:

$$NPV = \sum_{t=1}^{n} \frac{CF_t}{(1 + RADR)^t} - CF_0$$

RADRs fame stems from the fact that they are unswerving with the general disposition of financial decision makers toward rates of return and they are straightforwardly estimated and applied (Gitman, 2013). The first reason is noticeably a matter of personal favorite, but the second is grounded on the computational expediency. State-owned enterprise should create a number of risk classes with an RADR assigned to each. Each project is then instinctively placed in the appropriate risk class and associated RADRs. The employment of divisional costs of capital and accompanying risk classes expedites state-owned enterprise to integrate incongruous levels of divisional risk into the capital budgeting process and differentiate differences in the levels of individual risks.

Innumerable studies have been accompanied in the USA regarding the techniques and procedures used in evaluating risk in capital investment decisions (Bennounna, 2010). 71% of their respondents unequivocally considered risk and uncertainty. It was found that 42.7% of these respondents adjusted for risk by accruing the lowest rate of return or the cost of capital (Gitman, 2013). The major concern of the risk adjusted rate can be idiosyncratic as risk cannot be quantified properly. In a similar study conducted by Jog & Strivastava in Canada 1991, the employment of idiosyncratic, disparaging and non-standard procedures in the estimation of cash flows, risk analysis and estimation of appropriate cost of capital or discount rate was found to be relatively high.

Approximately a quarter of those participants did not have a proper risk analysis procedure in place (Jog & Srivastava , 2014).

2.2.2.7 Return required for the Project's Market Risk

When defining the premium for bearing the market risk this is done by stipulating the premium for bearing the arithmetic mean amount of risk for the market as a whole. Then employing the measure of market risk, fine tune this to reveal the market risk of the assets. The market risk premium for the market as a whole is the variance between the average expected market return, $\boldsymbol{r_m}$ and the risk-free rate of interest $\boldsymbol{r_f}$

If a state –owned enterprise acquired a resource whose market risk was identical as that of the place where buyers and sellers meet as unabridged the expected yield of $\boldsymbol{r_{m\ -r_f}}$ *to pay compensation state owned enterprise for market risk.* (Beasley, 2014) *The market risk premium can be attuned of the specific project by multiplying it by that project's asset beta* $\boldsymbol{\beta_{asset}}$ *:* $\boldsymbol{Compensation\ for\ market\ risk =}$ $\boldsymbol{\beta_{asset}(\ r_{m\ -r_f})}$ *This is the supplementary return essential to recompense for the project's market risk. The* $\boldsymbol{\beta_{asset}}$ *fine tunes the risk premium for the market as a whole to show the market risk of an exact project. When the risk premium is added back to the cost of capital becomes;*

$\boldsymbol{Cost\ of\ capital = r_f + \beta_{asset}((\ r_{m\ -r_f})}$ (Beasley, 2014)

2.3 Real options

A significant challenge for state-owned enterprise is dealing with risk. The old-fashioned methods of evaluating projects are being challenged by an unconventional approach that applies option pricing methods to real assets denoted to as real options

valuation (ROV). The interest in ROV emanates from the fact that the out-of-date methods do not envisage directly the options manageable in many investments projects.

Contemplate the typical options intrinsic in an investment opportunity 1) most every project has an option to intemperance though there may be constrictions that affect the option 2) many projects in state owned enterprise have the option to expand and 3) many projects in state-owned enterprise have a choice to defer investment, putting off the main investment expenses to some future date (Forfas, 2013). So how to reflect these options within the background of the traditional methods? One method is to use sensitivity analysis or simulations analysis. (Bennounna, 2010) Another tactic is the use of decision tree analysis correlating probabilities to each of the possible results for an event and mapping out the conceivable outcomes and the value of the investment opportunity linked with these different outcomes (Birman, 2013). The rudimentary idea of ROV is to contemplate that the price of a project goes beyond its assessment as measured by the net present value.

$$\boldsymbol{The\ strategic\ NPV = Static\ NPV + Value\ of\ the\ option}$$

2.4 Models used in capital budgeting and Investments

2.4.1 Portfolio theory and capital budgeting

Every financial manager of a business will reckon the total risk of the business prudently and endeavor to manage the risk in such a way that shareholders obtain the best advantage. From an investment analysis point of view, investors reckon the most effective way of investing funds. Brealy, Myers and Framclin (2006) says “It is well

known that placing all one's funds in one investment only is riskier than thinning out the funds. This is known as *diversification* and the different investments, into which one diversifies is known as a portfolio of investments".

The portfolio theory has been developed further in current years. The theory holds that rational investors all hold a portfolio rather than investing in a single investment. The effect of this is that risk is less through holding a portfolio. Portfolio theory categorizes two types of risk: *systematic* and *unsystematic* risk. Systematic (market, non-diversifiable, nonspecific) risk relates to the economy and the stock market as a whole. Share prices by and large are subject to fluctuations. Any investor who invests in these markets must thus be subject to this risk as it cannot be eradicated through diversification. Unsystematic (specific, diversifiable) risk relates to specific investments. This risk can be abolished through investing in a portfolio. Quite simply, it is based on the principle that some companies will achieve more when others do desperately and vice versa. The differences between company risks can be eliminated, but the overall market risk cannot and everyone has to dance to its tune, at least in the short run period (Brealey , Myers & Framclin, , 2014).

Portfolio analysis is expedient for diversifying through the firm's investment decisions. Applied to selection of investment proposals, portfolio theory has a number of precincts. Probabilities of different outcomes must be estimated: fairly easy for (e.g.) machine replacement; more difficult for (e.g.) new product development. Shareholder preferences between risk and return may be problematic to know and personal taxes may impact. "Portfolio theory is based on the idea of managers evaluating the applicable probabilities and deciding the combination of activities for the business. Managers have their job security to consider, while the shareholder can

easily buy and sell securities." (Beasley, 2014). Managers may, therefore, be more risk averse than shareholders, and this may distort managers' investment decisions. Projects may be of such a size that they are not easy to divide in harmony with recommended diversification principles. The theory undertakes there are constant returns to scale, in other words that the percentage returns provided by a project are the same however much is invested in it. In practice, there are may be economies of scale received from making a larger investment in a single project. Other facets of risk not covered by the theory may need to be well-thought-out, e.g. Bankruptcy costs.

The portfolio approach to capital budgeting solve some challenges. The major contribution includes procedures to consider a project and to measure a risk formally. In portfolio model the decision to invest in an asset is partially a function of the asset's impact on the expected return of the firm. The investment decision is also a function of the variance of the expected return. The potential investment and the co-variance between the expected return and the expected returns to the other assets of the firm. The challenge with the portfolio investment is that it focuses on the rates of return and the risk associated with rates of return so that the lumpiness of the project and economies of scale are not considered in investment decisions. One popular extension of portfolio theory, the capital asset pricing model is an equilibrium model. The critique of the CAPM is that the capital pricing model may not be useful in capital budgeting.

2.4.2 Capital Asset Pricing Model

The CAPM was propounded by Harry Markowitz in 1962, and this work was answerable for his winning the Nobel Prize some years later. Based on the natural

stability between risk and return of any given investment, Markowitz organized a theory for asset description. In 1958, James Tobin protracted Markowitz's work by totaling a risk-free asset to the analysis. This made it conceivable to influence or deleverage portfolios on the efficient frontier.

In 1964, Sharpe chivalrous the CAPM. This makes robust suppositions that lead to thought-provoking conclusions. Merely does the market portfolio place itself on the efficient frontier, nonetheless, it is essentially Tobin's super-efficient portfolio. According to CAPM, all investors should clutch the market portfolio, weighted or de-leveraged with locations in the risk-free asset. CAPM also familiarize with beta and related an asset's expected return to its beta.

The broad-spectrum idea behind *CAPM* is that investors need to be remunerated in two ways: time value of money and risk. The time value of money is revealed by the risk-free (rf) level in the formula and reimburses the investors for placing money in any investment over a period of time. The other half of the formula embodies risk and analyzes the amount of reimbursement the investor needs for taking on supplementary risk. This is scheduled by taking a risk portion (beta) that recounts to the yields of the asset to the market over a period and to the market premium *(Rm-rf).*

The CAPM asserts that the expected return of a security or portfolio generations the rate on a risk-free security plus a risk premium. The security market line plots the outcomes of the CAPM for all diverse risks (betas). In the structure of things, Bill Sharpe made his first big innovation by demonstrating how the market must charge securities in relation to their asset category. The derivation isn't precisely a walk in the

park, but the result is a simple undeviating correlation known as the Capital Asset Pricing Model.

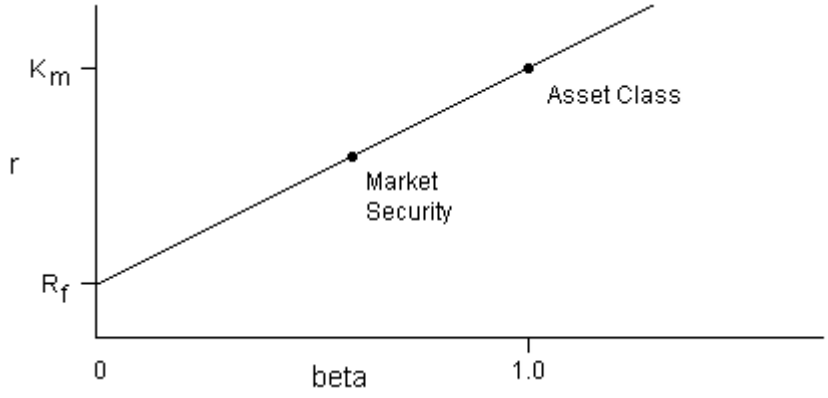
The **beta** assesses the volatility of the returns of the share relative to the overall market, which has a beta of 1. A corporation with a beta greater than one is more volatile (risky) than the average, while a beta of lower than 1 shows less volatility. The beta of a company requires geometric calculation of the covariance of the share relative to that of the market as a whole. A number of investment analysts offer the service of computing and providing company betas. The SML supports to compute the reward-to-risk ratio for any security relative to the overall market's. Consequently:

Individual security's = *Market's securities (portfolio)*

Reward-to-risk ratio *Reward-to-risk ratio*

Beta measures the volatility of the security, comparative to the asset class. The equation is stating that investors necessitate higher levels of predictable returns to reimburse them for higher expected risk. You can contemplate the formula as forecasting a security's performance as a function of beta: CAPM says that if you identify a security's beta then you recognize the worth of r that investors anticipate it to have. See figure 4 below.

Figure2.3 Market security and asset class linearity



Source CIMA (2012)

2.4.3 Top down theory of capital budgeting

The capital budgeting process has been described as a combination of bottom up procedures where lower units solicit capital from strategic apex and top down procedures where headquarters use their discretion to apportion capital downstream. (E.F, Besly and Brigham, 2013). An extensive literature has examined the incentive and information considerations that can emerge in bottom –up capital allocation processes (Harris and Raviv 2010; Bernard et al 2012). In pragmatics top-down methods are expected to be appropriate even in settings in which the strategic apex receive request for funds from operational managers. By accumulating the information contained in such request, the strategic apex end up accomplishing broader information which supports the firm determine its overall investment expenditures. The pivotal role is that communication between top management and operations is very indispensable in capital budgeting because the information conveyed by investment choices can have a significant influence on the stakeholder choices.

2.4.4 Arbitrage Pricing Theory

The arbitrage pricing theory is an equilibrium theory of expected returns for securities concerning few suppositions about investor preferences (Jones, 2014). It seems to be more universal than the CPM with less limitation. The significant difference between CAPM and the APT is that the APT is not censoriously dependent on core market portfolios as does the CAPM. Jones (2011:236) expounds that the APT is based on the regulation of one price which articulates that two otherwise undistinguishable assets cannot sell at different prices. Jones (2011:237) expounds on the differences and similarities between CAPM and APT as follows: unlike CAPM, APT does not take responsibility on a single period investment horizon, borrowing and lending at the rate of return on the risk free asset. APT like CAPM undertakes that investors have homogenous beliefs. Investors are risk averse utility maximizes, markets are perfect and returns are engendered by a factor model. A factor model is used to show fundamental risk factors that affect realized respected returns of securities. (Jones, 2014) These factors are not company factors but simply broad economic factors which by definition represent an element of surprise in the risk factor. The APT model is represented as follows$R_{I=\ E(R_I)+B_I F_I+\ B_2+}$ _____

Where $R_{I=the\ \ actual\ random\ rate\ of\ retun\ on\ security\ \ i\ in\ any\ given\ period\ \ t}$

$$f = the\ deviation\ of\ a\ systematic\ factor\ f\ \ from\ its\ expected\ value$$

$$B_{I=sensitivity\ \ of\ security\ i\ to\ facttor}$$

$$E\ (\ R_{I)=the\ expected\ return\ on}$$

$$e_{i=random\ error\ term\ unique\ to\ security}$$

2.5 Good Corporate Governance

The Cadbury Committee's report delineated corporate governance as 'the structure by which corporations are directed and controlled'. The Cadbury Committee further expounded on this definition 'Boards of directors are accountable for the governance of their corporation. (Cadbury, 2012) The shareholders' role in governance is to engage the directors and the auditors and to satisfy themselves that a suitable governance structure is in place. The role of the board encapsulates setting up the corporation's strategic aims, furnishing the leadership to put them into effect, supervising the administration of the business and reporting to shareholders on their stewardship. (Cadbury, 2012) The board's actions should respect laws, procedures and the shareholders in general meeting.' Good corporate governance assists to preclude corporate scandals, fraud, and potential civil and criminal liability of the organization.

A good corporate governance image boosts the reputation of the corporation and makes it more eye-catching to customers, investors, stakeholders, and contributors." With the dawn of the twenty-first century, corporate governance has accomplished heightened essence and attention in government policy circles, academia, and the popular press throughout much of the universe. Various reasons elucidate its current prominence (Gee, 2013). The new century's financial indignities affecting major American firms, such as Enron, WorldCom and Arthur Andersen, and the resulting loss of buoyancy on the investing public in the stock market led to melodramatic declines in share prices and significant financial losses to millions of individual

investors. Both the public and the experts have recognized botched corporate governance as a principal cause of the scandals.

Corporate finance law deals with the way in which a corporation raises money for its business operations and how the corporation deals with its finances. By assessment, corporate governance concentrates mainly on the systems by which companies are directed and controlled (Pollard, 2014). It is the gathering of law and practices, embedded in fiduciary duties and their application, that controls the conduct of those in control of a corporation, and the means through which a plethora of nations furnish a legal basis for corporations while preserving, to some extent, authority to control abuses of these business corporations. Issues involved in the law and study of corporate governance encapsulates formation and dissolution of corporations, financing, structures such as board of directors and shareholders, the essence of the corporate constitution, duties and responsibilities of those controlling corporations, the importance of company meetings, protection of minorities within companies, and insider trading and its essence in corporate governance. (Couldridge, 2014)

2.5.1 Corporate Governance Theories

Early company law was based on the stewardship theory. Directors were trusted to trail their fiduciary duties to the corporation. They were anticipated to act as stewards of shareholders' interests and place these interests above their own. Over the years a divergent theory emerged called the agency theory. This school of thought holds that given the chance, directors will follow their own interests and cannot be anticipated to adopt a stewardship viewpoint unless appropriate checks and balances are put in place (Hampel, 2012). The recent annihilation in shareholder value of Enron, WorldCom,

Allied Irish Bank, and in South Africa, Leisure Net and Regal Bank disasters, would influence many that the agency theory is perchance the more suitable one in respect of the behavior of directors, and. senior executive management. Professor J. Lorsch, Director of Research, Harvard Business School, was interrogated at the International Conference on Corporate Governance (2003) if the disparaging greed related to "a few rotten apples in the barrel?" His retorted by articulating that it was not simply a few bad apples but that the barrel itself was rotten! Agency theory has been throw down the gauntlet by what has become known as stakeholder theory. This theory claims that the organization should serve the wider interests of investors and not just the stakeholders (Couldridge, 2014).

Stakeholders encapsulate employees, customers, SOEs suppliers, communities and creditors. It is contended that they all affect the long-term success of the business and must be taken into account in the decision-making of the business. The Hampel Committee (1998) in the UK discharged the stakeholder notion. "Directors are accountable for relations with stakeholders, but are responsible to the shareholders." In the researcher's personal experience this is the foreseeable wisdom in boardrooms in the UK and USA.

German and Japanese governance structures are more aligned with stakeholder theory. The two extreme and opposite models cannot fully elucidate the convolution of corporate reality (Pollard, 2014). They call for a new methodology to the comprehension of corporate customs to assist the search for effective and efficient SOEs governance. Their work is real in indicating that neither stakeholder nor agency theory flawlessly aligns with the complication and reality of the current, modem

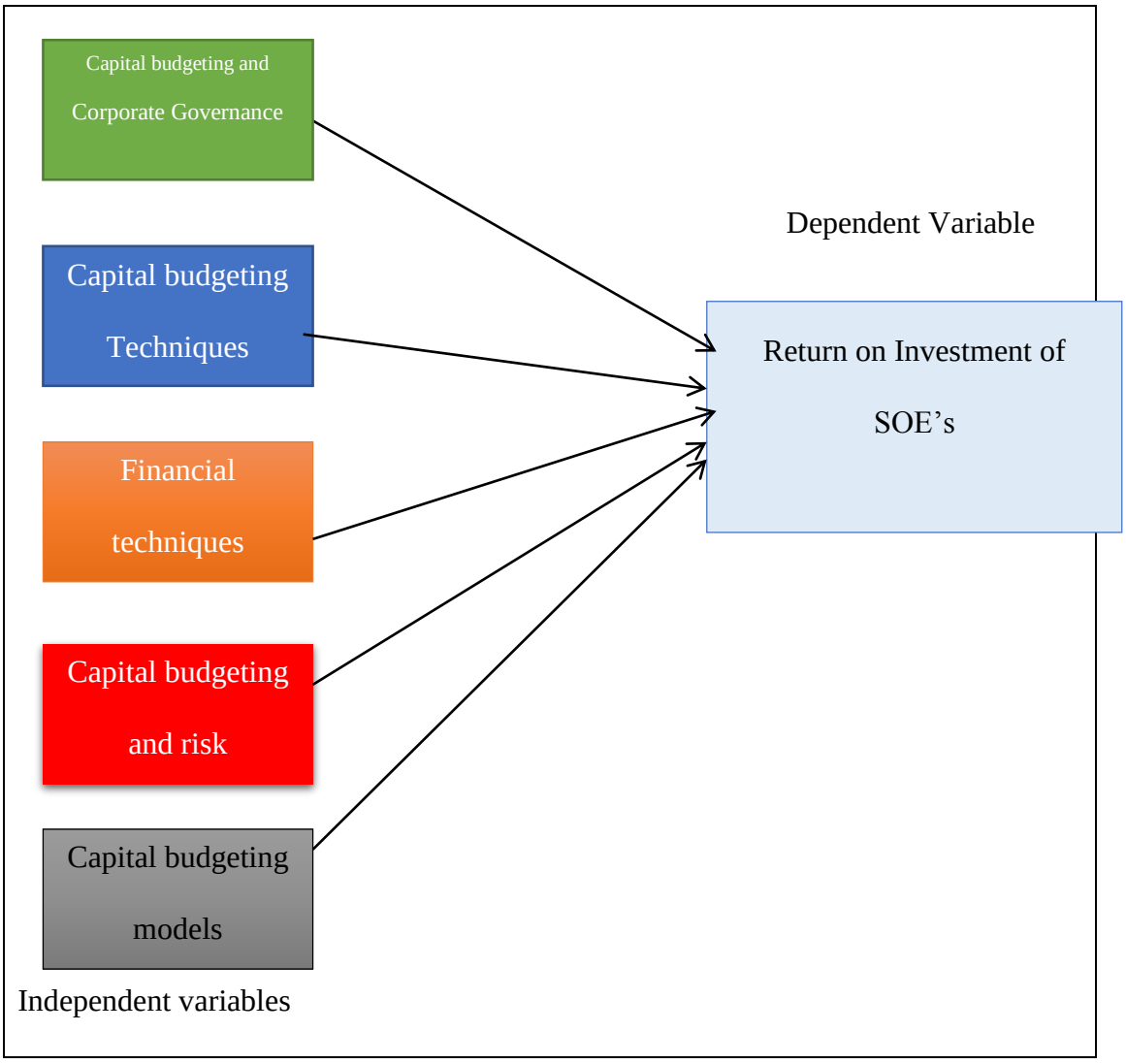
corporation. They do not suggest an approach that can virtually deal with the many challenges recognized but call for radical research.

(King, 2013) dealt with this essential issue as follows: In governance terms one is answerable at common law and by statute to the corporation if a director, and one is accountable to the stakeholders recognized as relevant to the business of the corporation. The stakeholder concept of being answerable to all genuine stakeholders must be prohibited for the simple reason that to ask boards to be answerable to everyone would result in them being accountable to no one. The contemporary approach is for the board to recognize its stakeholders, embracing its shareowners and to consent policies as to how the correlation with those stakeholders should be advanced and managed in the interests of the corporation (King, 2013). King (2002) agrees with the Hampel Committee (1998) that the board is not answerable to all stakeholders, but does not merely accept agency theory where the board is responsible for shareholders alone. Instead King follows corporate law and articulates that the board is responsible for the corporation and responsible to recognized stakeholders. This attitude was called the "Inclusive Approach" and positions the corporate to embark on "triple bottom line reporting." This reporting make sure that the corporate swells its focus from only "bottom line reporting" to "triple bottom line reporting." This change squeezes the economic, social and environmental features of the company's activities. In other words, the financial and nonfinancial features of a company' business, the effect on the habitat of the product or the services generated by corporate and the values, ethics and reciprocal correlation with stakeholders.

2.6 Conceptual framework

Is a scheme of concepts which a researcher will operationalize in the study in order to achieve the set objectives?

Figure 2.4 Theoretical framework



Source, Adapted from Pamela and Peterson (2012:3)

The conceptual framework of this study is comprised of two variable namely independent variables and dependent variable. Salkind (2012 p.24) articulates that a dependent variable epitomizes the extent that reflects the results of a research study.

A dependent variable is assessed to appreciate whether the treatment or manipulation of the independent variable had an outcome (Salkind, 2013). The dependent variable of this research is state owned enterprise in Namibia. The state owned enterprises are those companies whose major stakeholders are the government of Namibian. In total they are 74 state-owned enterprises in Namibia. (Salkind, 2013) A stakeholder is a persona or a corporation that has an interest in the running or managing of an enterprise. The majority of the parastatal' s in Namibia has not being performing well in terms of profitability and imposes a lot of operational risk in the way they are conducting their business.

The researcher seeks to examine if Namibian SOEs using capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions. The independent variables emanating from the study are variables such as capital budgeting techniques. The capital budgeting techniques are the employment of NPV, IRR, profitability index, payback period and hurdle rate. One of the pillars of finance theory is that the value of an asset or investment is equal to the discounted present value of its future cash flows. The NPV is a capital budgeting techniques which takes into cognizance the time value of money through discounting rates. The NPV rule states that if the present value of the projects future cash flow exceeds the cost of the project, then the firm should accept the project. If the NPV is negative, the firm should reject the project. Only project with positive net present value are tolerable. This variable is very important in that it tells whether the investment will increase the state owned enterprise‘s value. The NPV variable considers all the cash flows in the state-owned enterprise projects. It is very essential variables because it considers the riskiness of future cash flows.

Another variable for this study is the payback period which is a capital budgeting technique. The payback period for state-owned enterprises is very easy to compute and a crude measure of liquidity, however the variables tend to ignore the time value of money. The payback period ignores the riskiness of future cash flows. Within the capital budgeting techniques, the research also focuses on the internal rate of return variables.

The internal rate of return reckons the time value for money and takes into consideration all cash streams and the riskiness of all future cash streams. It may not give maximizing decision when choosing projects with capital rationing. Another variable under capital budgeting techniques is the profitability index which takes into consideration all cash flows and regards the riskiness of future cash flows. It is useful in classification and choosing projects when the capital is rationing.

The other objective is to establish the kind of risk assessment methods (sensitivity analysis, scenario analysis or Monte Carlos simulation) state-owned enterprises is using in approval of the underlying investment risk. The genuineness of life is that businesses do not function in a vacuum where there is no risk. Risk in business, or any doings of life for that matter, is something everyone who assumes to do business must be ready to come across. Risk is a theory that connotes a potential deleterious impact to an asset or some unique of value that may emanate from some present process or imminent event. In everyday usage, "risk" is recurrently used synonymously with the possibility of a loss or threat.

2.7 Summary

Assets embody the firm's capital which the firm's total assets. It encapsulates all tangible and intangible assets. These assets include physical assets such as land, buildings, equipment and machinery as well as assets that signify property rights such as accounts receivable, securities, patents and copyrights. The lexis capital also has come to mean funds employed to finance the firm's assets. In this sense capital comprise of notes, bonds, stock and short term financing. The value of a firm now is the present value of all its imminent cash flows. These imminent cash flows come from assets that are previously in place and from imminent investment opportunities. Capital budgeting techniques encompass of Payback, IRR, NPV, ARR, IRR, profitability index all these are significant capital budgeting techniques. The NPV takes into thoughtfulness the time value of money while the payback is not so much concerned about the future riskiness of cash flow. The authenticity of life is that businesses do not operate in a vacuum where there is no risk.

3 Research Methodology

3.1 Introduction

This chapter describes the research method used; the selection of the sample, data collection and data analysis, the purpose of the study is a review of capital budgeting decision in Namibia's SOE's?

3.2 Research design

The descriptive research method was used, since it was an attempt to provide a complete and accurate description of the situation. The researcher followed the quantitative design research method, taking the format of a survey research through a structured questionnaire. The survey method was applied to collect information to generate insights in order to answer the research question that reviews capital budgeting decisions in Namibia SOEs. Due to a large number of SOEs and institutions dealing with capital budgeting decisions, the survey method was useful in identifying a small sample of those SOEs that can review capital budgeting decisions. The main focus was on a broader understanding of current problems capital budgeting in Namibia. The survey method enabled the researcher to collect data that could be useful in identifying the importance of the availability of capital and skills in reviewing capital budgeting decisions. Collective views from different stakeholders also assisted in explicating capital budgeting techniques. Chief financial officers of SOEs were interviewed in order to gather information on their operations. Questionnaires were distributed to other stakeholders. A Pearson Bivariate correlation analysis was used to test the hypothesis. Findings from this quantitative research method was applied at the data analysis section of this research paper. However, qualitative nature of data obtained was used as secondary information to the rest of this research study.

3.3 Population

A population list of all SOE's in Namibia was obtained from Government Notice No.5213 published 31 May 2013, categorizing those SOE's according to their different tier's and establishment objectives. The list contains more than 74 SOE's in either one of the following category: economic and productive, regulatory and service rendering.

3.4 Research Sample

The research did not cover all the State-Owned Enterprises but only twenty-six parastatals were selected. Twenty-six (26) SOE's were in the category economic and productive. All twenty-six (26) SOE's from the economic and productive category formed part of our purposefully selected sample. Economic and productive SOE's are required to implement sound capital budgeting decision to be able to function economically. In other words, the SOE's that were considered are the ones that show's certain characteristics and qualities that the researcher is specifically interested in

The study only made a review of capital budgeting methods of state –owned enterprises. The research made use of multiple data sources to enhance data credibility. These were the entity`s documentation: Annual reports, and Questionnaires. Research was conducted using the time series regression analysis which is a statistical tool for the investigation of relationships between variables over time.

Table 3.1 Research sample

State-owned enterprise	Targeted group	Number of samples
Chief financial officers	74	26
Total	74	26

Source Author Thesis (2013)

The first questionnaires drawn up were focused and forwarded to the chief financial officers and accounts that were purposively selected.

3.5 Research Instrument

The data will be gathered through a structured questionnaire with questions covering the research questions subdivided into sub-categories. This standardized form or questionnaire to record all responses is needed for proper record keeping and to help with the data analysis. The cogency and dependability of the data collected and response rate achieved will depend to a large extent on the design of the questions. 'If one decides to collect data by asking questions, a standardized form or questionnaire to record all responses is needed' (Stead and Stewich, 2014).

3.6 Research Procedure

A structured questionnaire was delivered to the chief financial officers (CFO's) of the twenty-six (26) purposefully selected SOE's. Names and contact detailed of those CFO's was obtained via personal visit to the SOE's headquarters in Windhoek where applicable. The questionnaire was circulated via personal deliveries to the respondents at least three weeks before the collection date in order to give enough time to the

respondents to give informed data. Some managers were very busy and they were incapable to decide how long it would take them to complete the questionnaire. In those incidences telephone follow-up was done.

3.7 Data analysis

Due to the quantitative design of the data that was obtained through a structured questionnaire, the researcher used computerized environment with the assistance of the SPSS software to analyze the data, to describe the key structures of our data (Stead and Stewich, 2014). The analysis was aimed at discovering whether SOE's follow conceptually correct basis of computing cost of capital, with the aim to detect whether the techniques used in this SOE's are consistent with finance theory. (Jain, 2012) Descriptive statistics provided summaries about the sample that is made, in the form of simple to understand histograms, bar diagrams and pie charts representing frequencies of the various ranges of scores or values of a quantity. Furthermore, a correlation analysis was drawn between the performance of SOE's investments and the use of capital budgeting and risk assessment methods for investment decisions.

3.8 Data Collection

3.8.1 Primary data

Primary data was assembled by designing a self-administered questionnaire (see appendix A), that had to be distributed amongst the selected respondents in the twenty-six state owned enterprises. Structured questionnaires method was used; the reason for standardization is to minimize the occurrence of prejudices. Respondents were requested to choose the right answer from multiple-choice questions as well as answering the short open-ended questions. The right to seclusion of respondents was

taken into consideration. Respondents had the right to choose to be known or to remain unidentified in responding to questions. All information received was confidentially treated. The data collection was done through completion of structured questionnaires by the sample respondents. A questionnaire is an instrument delivered to a plethora of people in order to collect statistical information (Schindler, 2014). The questionnaire addressed capital budgeting techniques also enshrined in International Monetary Fund (IMF) and Organization Economic Commonwealth Development (OECD) discourses.

The questionnaires were designed for key informants from the enterprises on areas not adequately addressed by other data sources. These were designed to collect data from the Chief Financial officers and accountants. There are 26 active respondents from the entity who participated in this research due to sensitivity of the investigation of relationships between variables over time.

The questionnaires addressed issues of how they rate themselves with respect to capital budgeting techniques, and addressing the questions on their awareness of any of those principles and guidelines. It also addressed the challenges they are facing, and if there are any objectives and targets they failed to meet in the previous years. If there were targets, which the corporations found difficult to meet, the questionnaire requested reasons to be provided. The questionnaire asked the participants to give suggested solutions to the problems their corporations may be facing on capital budgeting

3.8.2 Secondary data

The study used Annual report of respondent on State-Owned Enterprises as well as interviews to collect appropriate data. Moreover, the researcher also employed prior studies and weigh it against existing data in order to furnish conclusions and competent

recommendations. The secondary sources of data came from published articles from journals, books, internet, theses and related studies on business, organizational administration, corporate governance, investments and capital budgeting. Attaining secondary data are more appropriate to use because they are already summarized and organized. Furthermore, analysis and interpretation are done more straightforwardly. As much as annual reports are limited in that they are secondary data, their purpose of providing audited information about a company's business and financial operations makes annual reports a reliable research tool. It provides the year's activities, financial statement and an outlook for the future (Rice, 2014). A good yearly report can be an influential way to give an account of how assets and powers were used and what was attained in contrast to what was strategic, and to endorse better comprehension and debate on how to advance future performance. By doing so, it has the latent to create greater public conviction and assurance in the work of an entity (Treasury, 2013).

The researcher examined audited Annual Reports for the period of 2008-2012, being observant for trends and several other apprehensions rose above. Annual Reports provided information on the financial performance of the enterprise as well as their position. It also reveals how an entity is governed. The findings of the study also looked on what the enterprise reported about itself through its website apart from the Annual Reports. Journal articles were used and secondary data was collected by extensive review from the library books. It was noted that some state-owned enterprises did not submit their financial statements to parliament as required by the House of Assembly to do. The research was able to use the internet in order to collect some of the data.

3.9 Method of Analysis

The descriptive method of data analysis was applied in the study:

Step 1:

The statistics was structured and arranged, by preparing the questionnaires for analysis.

Step 2:

Statistics were read through, to attain a general sense of the data and to reflect on its overall meaning. Example: What general ideas are respondent saying? What are their suggestions about the ideas? What is the overall impression of the global depth, trustworthiness and use of the information?

Step 3:

A systematic process was applied to generate a description of the setting as well as the categories for analysis. This analysis is useful in designing detailed descriptions.

Step 4:

This step illustrates how the description and categories were symbolized in order to express the findings of the analysis.

Step 5:

The concluding step in data analysis involved making an interpretation or meaning of the information. All responses received from the different respondents were arranged and carefully compared and analyzed

3.10 Ethical considerations

All information was treated confidentially and the anonymity of respondent guaranteed. The information gathered from the participation in this project was used for no other reason than the purpose of this study. The researcher functioned under a code of ethics that forbids him to distribute or use information otherwise. Thus respondent appeared to be honest with their responses, and ensured the success of this project.

3.10.1 Respect for anonymity and confidentiality

The issue of confidentiality and anonymity is closely connected with the rights of beneficence, respect for dignity and fidelity (Salkind, 2013). Anonymity was cosseted when the subjects identified couldn't be linked with personal responses. Individuals were free to give and deny as much information as they wished to the person they choose. The researcher bore in mind that all psychological and social implications that are in contravention with confidentially were not taken in consideration.

3.10.2 Respect for privacy

Invasion of privacy takes place when private information such as beliefs, attitudes, opinions and records is disseminated to others without the patents knowledge or consent (Schindler, 2014). Whenever subjects repudiate to report on delicate information they regard it as intrusion of privacy. The researcher respected clients who didn't want to divulge their age, income, marital status and other issues which they regarded as intimate. The researcher took into cognizance the fact that an invasion into privacy may create loss of dignity, friendship, or employment, feelings of apprehension or guilt mortification or shame.

3.10.3 Informed consent

Another significant issue in student research involved human intervention to guarantee that potential participants fully understood what they were being expected to do and that they were informed if there were any potential unenthusiastic consequences of such participation (Salkind, 2013). The most valuable way that the researcher used to efficiently address informed consent was through the use of information sheet which was provided to all those people who were invited to participate. Participants were given the invitation appropriately in advance to permit them to prudently consider whether they would participate.

3.11 Summary

The research did not cover all the public enterprises, but took a sample of a population for the study. A questionnaire was used for collecting primary data. Annual reports of the company and sample companies were used for collecting and gathering of secondary data. Other sources such as journal articles, books and internet search were also used for gathering appropriate secondary data.

4 Analysis and discussion

4.1 Introduction

This chapter presents the discussion and analysis of data collected through the structured questionnaires articulated in chapter three from respondents namely CFO's of state-owned enterprises that participated in the research study. The researcher also uses basic, descriptive and inferential statistics. Basic statistics includes the use of frequency tables, graphic presentation and others. Descriptive statistics includes the use of mean, standard deviation, median and mode. Inferential statistics is also a set of approaches, but it is used to make conclusions or corollaries about physiognomies of population based on data from a sample.

4.2 Empirical Findings and Analysis of data

The following objectives were used in order to analyze the data collected from the state-owned enterprise: To examine if Namibian SOE's are using capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions? To establish the kind of risk assessment methods (sensitivity analysis, scenario analysis or Monte Carlos simulation) state-owned enterprises are using in approval of the underlying investment risk? To determine the main barriers to the successful implementation of analytical tools for investment decisions (like capital budgeting and risk assessment methods) in Namibian SOE's. To establish the relationship between the use of financial investment methods and Corporate Governance of SOE's.

4.2.1 Findings on descriptive statistics

The descriptive statistics describe the variables employed in this study; it enumerates the characteristics of the random variables. The variables employed in the research

were from 1 to 21 questions. The descriptive statistics used in the table was to assess the mean, standard deviation, minimum, maximum and variance. The data analyzed in the study was comprised of multivariate which is a measurement made on the many variables in the study. The measures of central tendency encapsulate the mean. While measures of dispersion consisted of the standard deviation. The mean for the capital budgeting techniques were as follows: scale 1–always, scale 2=sometimes, 3=often and 4 never. The overall highest mean is 15.00 which denote the most popular capital budgeting techniques in use for state-owned enterprises in Namibia are the Benefit /cost ratio 23%, Net Present Value 23%, Internal Rate of Return (23%). The least used capital budgeting techniques by state-owned enterprises are the Average Rate of Return (8%) and the Payback period (8%).

The standard deviation is a measure of variability of sample data, it shows how data is dispersed from the central tendency (Mpunwa, 2013). Chebyshev rule articulates the lesser the standard deviation the greater the percentage measures are close to the mean. The mean for the variables was 15.0 and the maximum variable was 23.0. The standard deviation for variables 1 was as follows 5.04:

Table 4.1 Descriptive Statistics for Variables 1,8,10,11,12,13 and 14

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00001	17	7.00	23.00	15.0000	5.04975
VAR00008	0				
VAR00010	0				
VAR00011	1	1.00	1.00	1.0000	.
VAR00012	1	2.00	2.00	2.0000	.
VAR00013	1	3.00	3.00	3.0000	.
VAR00014	1	4.00	4.00	4.0000	.
Valid N (list wise)	0				

4.2.2 Cumulative frequency for variables 14 capital asset size

The variable for the number of capital projects and its average size denoted that the cumulative frequency was 50.0, 66.7, 83.3 and 100. Frequency distribution is the organizing of raw data in table form using classes and frequencies. The cumulative frequency is employed to define the number of observations that lie above a specific value. The cumulative frequency for variables 19 was 66.7, 83.3 and 100.

Table 4.2 Cumulative Frequency for variable 14 question 1

VAR00014

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	50.0	50.0	50.0
	1`	1	16.7	16.7	66.7
	2	1	16.7	16.7	83.3
	500mill-750mill	1	16.7	16.7	100.0
	Total	6	100.0	100.0	

Table 4.3 Cumulative Frequency for variable 19 question 5

VAR00019

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	66.7	66.7	66.7
	3	1	16.7	16.7	83.3
	IRR	1	16.7	16.7	100.0
	Total	6	100.0	100.0	

4.2.3 Findings on measuring the relationship between variables

The correlation measures the relationship between variables or the strong point of the link between the variables. A plethora of variables used in the study are as follows: Question 4,7,8,11,16 (See Appendix A). The degree of correlation between these variables was measured using Pearson as follows:

$$r = \frac{n\Sigma XY - \Sigma X\Sigma Y}{\sqrt{(n\Sigma X^2 - (\Sigma X)^2)(n\Sigma y^2 - (\Sigma y)^2}}$$

Where X and Y represents pairs of data for two variables X and Y. n= the number of pairs of data used in the analysis. In this study n=26. The correlation coefficient ranges from -1 and +1. When r =+1 it denotes that the variables are perfectly positively correlated. When r = -1 denotes that the variables are perfectly negatively correlated. The variables -521, -464, -272 on Pearson correlation for significance 0.01 two tailed testing describes that there are perfectly negatively correlated. When r is equal to zero it denotes that the variables are uncorrelated variables 8, 10, and 11 these results are 0 which means these variables are uncorrelated.

Table 4.4 Correlations

		VAR00001	VAR00008	VAR00010	VAR00011	VAR00012	VAR00013	VAR00014
VAR00001	Pearson Correlation	1	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	17	0	0	0	0	0	0
VAR00008	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	0	0	0	0
VAR00010	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	0	0	0	0
VAR00011	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	1	1	1	1
VAR00012	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	1	1	1	1
VAR00013	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]
	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	1	1	1	1
VAR00014	Pearson Correlation	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]	.[a]

	Sig. (2-tailed)	.	.	.	.	.	.	.
	N	0	0	0	1	1	1	1

a. Cannot be computed because at least one of the variables is constant.

4.2.4 Summary of case processing Findings

In the table 2e below the variables in this study in total, are 24 the assets size for this project which were big that's is above N$ 750 million comprising of Nampower, Meat Corporation, Development Bank of Namibia and Nampost. Meat Corporation, has a plethora of projects per annum less than N$ 100. Million. They have formal capital projects analysis procedures in place. Meat Corporation, employs the payback period and another unspecified capital budgeting technique. At Meat Corporation, the risk adjustment procedures which are prevalent are sensitivity analysis and scenario analysis but they are deficient of Monte Carlo simulation. From the whole study, it was noted that only Nampower indicated using all the risk adjustment procedure including Monte Carlo simulation.

The capital budgeting decision makers for Meat Corporation is the board, and this was the case for 80% of the respondents and the formal project analysis is done both by a financial officer and most it's a team decision for all SOE's. The project acceptance rate for Meat Corporation is above 50 % of all projects analyzed, this was true for all respondents. Nampost despite having asset size, above N$ 750 million; the number of capital projects and its average size are only between N$ 1 Million-N$ 100million. The budgeting techniques in use at Nampost are the payback period and Benefit cost ratio, this was true to all respondents with the addition of the Net Present Value method

joining the top three techniques in use. Nampost employs formal risk analysis, sensitivity analysis and scenario analysis. The capital decision makers at Nampost are done by team decision makers unlike the board decisions made at most of the SOE's.

Those state-owned enterprises with asset size between N$ 1million and N$ 100million included New Era, National Housing Enterprise and Agricultural Bank. Despite having a small asset size, the respondents indicated that Agricultural Bank have an average size of formally analyzed capital projects between N$500- N$750 million, they also have standard capital project analysis procedures in place. The capital budgeting technique at in use at Agricultural Bank is the internal rate of return. The corporate only employs formal risk analysis but does not have risk adjusted discount rate, sensitivity analysis, scenario analysis and Monte Carlo simulation. The respondents from Agricultural Bank stated that good corporate governance leads to good corporate investment. This can assist the corporation to make actual resolutions and empower the company to achieve its goals.

Unlike Agricultural Bank, the National Housing Enterprise have the same asset size but, the number of capital projects and its average size is small within N$300 000 N$500 000. National Housing Enterprise employs different capital budgeting techniques which are: average rate of return, payback period and Benefit Cost Ratio. New Era's asset size is between 1-100million which is constant to the number of capital projects and its average size. The major difference between New Era and Meat Corporation is that New Era employs NPV while Meat Corporation uses payback and unspecified capital budgeting technique. The state owned enterprises have been grouped into different variables with a small percentage of zero on its variables and

large percentages of 100 as indicated in the case processing summary for all variables in the table below

Table 4.5 Case Processing Sum for SOEs

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
VAR00001 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	17	70.8%	7	29.2%	24	100.0%
VAR00003 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%
VAR00004 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%
VAR00005 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%
VAR00006 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%

VAR00007 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%
VAR00008 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	0	.0%	24	100.0%	24	100.0%
VAR00010 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	0	.0%	24	100.0%	24	100.0%
VAR00011 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	1	4.2%	23	95.8%	24	100.0%
VAR00013 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	1	4.2%	23	95.8%	24	100.0%
VAR00012 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	1	4.2%	23	95.8%	24	100.0%

VAR00014 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	1	4.2%	23	95.8%	24	100.0%
VAR00002 * VAR00015 * VAR00016 * VAR00017 * VAR00018 * VAR00019 * VAR00020 * VAR00021 * VAR00022 * VAR00023 * VAR00009	24	100.0%	0	.0%	24	100.0%

a. Limited to first 100 cases.

4.2.5 Findings on Demographic physiognomies of state-owned enterprises

In analyzing the data from the questionnaires it was found that although the majority of questions only have one logical answer, the respondents carefully chose more than one answer. In order to apply an unswerving approach in data capturing, the first answer given to specific question was reckoned as the participant's answer.

The firms surveyed for this study were identified as being state-owned enterprise. A 21 question survey questionnaire was self-administered to the state-owned enterprise see exhibit below of the state-owned enterprise which participated in this study. Twenty 26 questionnaire were delivered to the purposefully selected SOE's, and the response rates of the questionnaire were 38%.

4.2.6 Capital project size

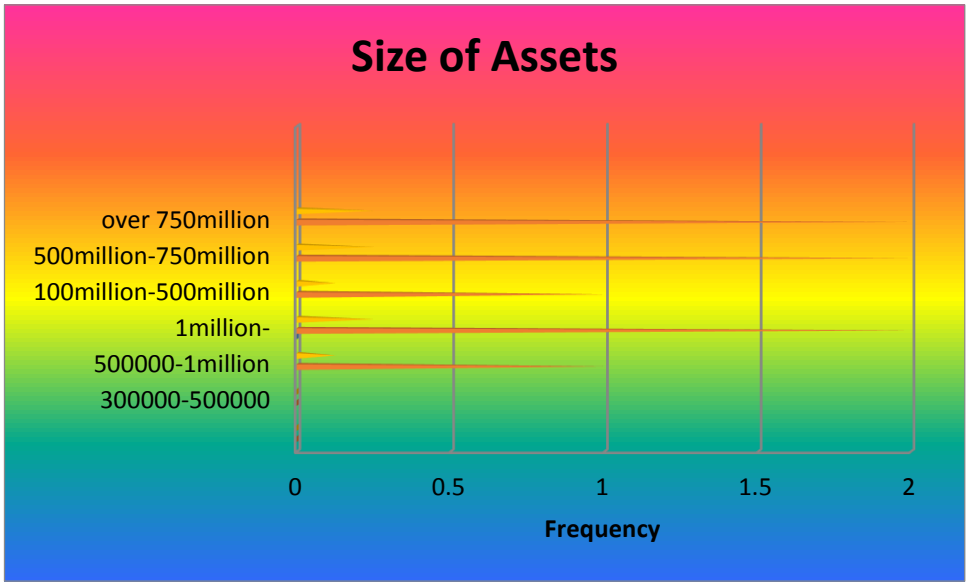
Measured by total assets, state-owned in this study are quite large as shown in the Table 3 below:

Table 4.6 Size of Assets

Size of Assets	Percentage
Less than N$ 300 000	
N$ 300 000 –N$ 500 000	
More than N$ 500 000 –N$ 1 million	12.5%
Above N$ 1 million – N$ 100 million	25%
Above N$ 100million – N$ 500 million	12.5%
N$ 500million – N$ 750 million	25%
Over N$ 750 million	25%

The majority of the state-owned enterprise fall within N$500-N$750million and over N$750 million in terms of the size of the assets. This denotes that stated owned enterprises in this study are large. Thirteen percent of the companies fall within the N$500 00 –N$ 1million, N$1-N$100 million and N$100-N$500million. Twenty-five percent of the state-owned enterprises fall within the bracket of above N$1million – N$100million and above N$500-over N$750 million. The frequency of state owned enterprise that have assets above N$500 000 – N$1million and N$100million – N$500million is one while the majority of state-owned surveyed enterprise with a frequency of two have size of assets worth N$ 500-N$ 750million and cumulative frequency of participants is eleven See figure below and table

Figure 4. Frequency of the size of assets for SOEs



4.2.7 Findings Capital projects average size formally analyzed.

Table 4.7 Capital projects and size

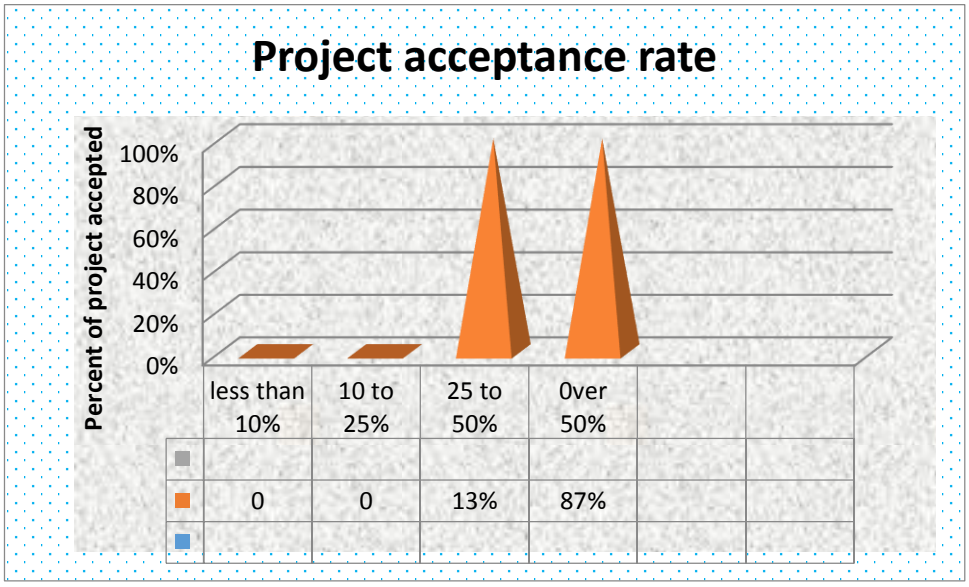
Size of Project	Frequency	Cumulative	Percentage	No projects
Less than N$ 300 000	1	1	9	15
N$ 300 000 –N$ 500 000	2	3	18	12
More than N$ 500 000 –N$	1	4	9	5
Above N$ 1 million – N$ 100	3	7	27	7.3
Above N$ 100million – N$	2	9	18	379
N$ 500million – N$ 750	1	10	9	1
Over N$ 750 million	1	11	9	1

Source Author Thesis (2014)

To determine the extent of the capital budgeting in the sample, the respondents were asked the number of capital projects and its average size that they formally analyze in the state owned enterprise per annum. Twenty-seven percent of the respondents are above N$ 1 million to N$100 million, followed by state-owned enterprise with assets

above N$100million to N$500 million. Two of the state-owned enterprise falls within the assets range of N$ 300-N$500 million and have twelve projects done. The majority of the projects were 379 which had eighteen percent and cumulative frequency of nine. The majority of the capital projects falls above N$100million-N$500 million. These results support the notion that this segment of the state-owned enterprise are on a growth stage. The table below presents the project acceptance rate of those projects that are formally analyzed. None of the state-owned reported had an acceptance rate of less than 25%. Thirteen percent (13%) of the state-owned enterprise in Namibia accept project within the 25 to 50% while eighty-seven percent (87%) of the state owned enterprise acceptance rate is over 50%. This high acceptance rate can be due to the high growth rate of the State-Owned Enterprises in Namibia. Atkinson and Le Brato (1997) measured the acceptance rate. They found that 57% of the firms accepted over 50% of their capital budgeting projects.

Figure 4.1 Project Acceptance rate



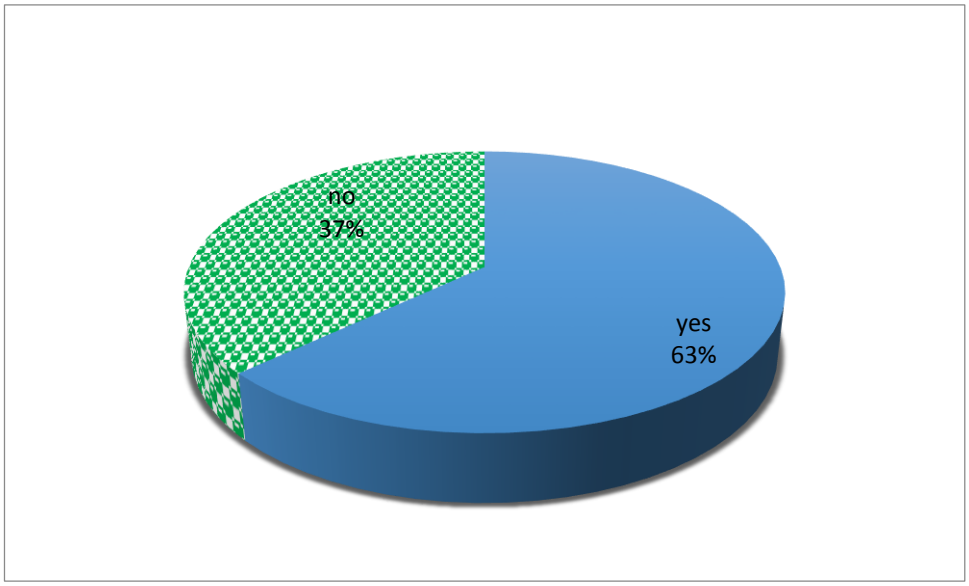
Source Author Thesis (2014)

4.2.8 Findings on Formal capital projects analysis procedures

Capital budgeting analysis procedures is a process of evaluating how to invest in capital assets; that is assets that provide cash flow benefits for more than one year (CIMA, 2014). The very popular approach for looking at present values for projects is discounted cash flows (Bennounna, 2010). The entire decision has to be looked at and assess the variables and outcomes with an analytical hierarchy. Multiple attitude decision model (MADM) encapsulate capital projects and each feature in the decision needs to be considered inversely.

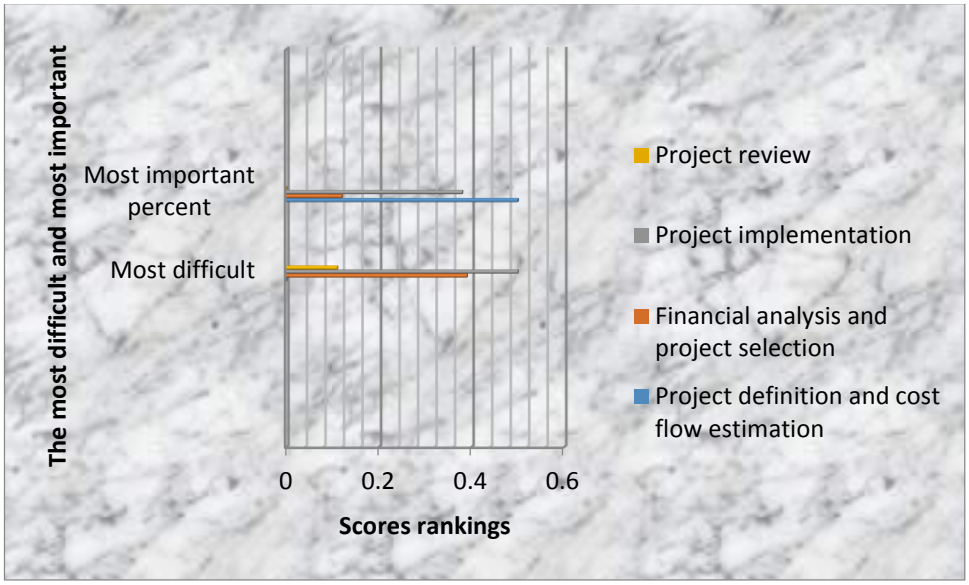
One of the most important steps in capital budgeting is to follow up and equate your estimates to actual results. This post analysis or review can assist recognize predisposition and boo-boos within the overall process. A formal tracking system of capital projects also keeps everyone honest. Different methods for evaluating capital projects prevalent in most state-owned enterprise is the use of a mix of economic criteria that adheres to principles of financial management namely the use of Net Present Value, Modified Internal rate of return, payback period and Benefit Cost Ratio. The findings of the research indicate that sixty-three percent of the surveyed participants stated that there are formal capital projects analysis procedures in their state-owned enterprises while the minority of thirty-seven percent articulated that there are no project analysis standards in the state-owned enterprises. The figure below shows the presence of formal capital projects for state owned enterprises.

Figure 4.2 Presence of formal capital for capital projects for SOEs



The survey instrument requested that the responding State Owned Enterprise choose the most multifaceted and the most substantial stage of the capital budgeting. As far as the most important stage in the capital budget process was concerned for state-owned enterprise, 50% of the state-owned enterprises specified that project definition and cash flow estimation was the most important. Thirty-eight percent (38%) of the state-owned enterprise articulated that project implementation was the most important. Twelve percent (12%) of the respondents indicated financial analysis and project selection to be the most important stages in capital budgeting process. As far as the most difficult part of the capital budgeting process is concerned, 50% state-owned enterprises indicated project implementation is the most difficult part of the capital budgeting process. Thirty-nine 39% percent of the participants articulated the most difficult part of the capital budgeting process is the financial analysis and project selection. Eleven percent (11%) of the respondents stated project review is the most difficult part of the budgeting process. See figure below:

Figure 4.3 The most important and most difficult stages of capital budgeting



4.2.9 Findings on lack of Control on Operating Expenses:

Poor corporate performance leads to poor corporate governance.

An obvious feebleness would be a lack of control on the operating expenses which leads to excess corporate expenditure. The Hardap chief regional officer pocketed N$200 000 travel and subsistence allowance in just term 10 months, and when she was asked she articulated that those who blabbermouth on her job they should apply for top paying jobs (Namibian 13 September 2013). The operating expenses for Trans Namibia were N$588108 in 2008, NWR 365 350, Air Namibia $N 720 14217, National arts Council $N 101 9711. High operating expenses, which are not controlled, and coupled income generating expenses, leads to poor corporate performance. The expenses losses for Trans Namibia 2008 were $N -253774, Air Namibia 2006 losses $N 221200, National Arts Council losses for 2010 $N -1116229.00. Lack of sensible control and deficiency of suitable technical knowledge in strategic roles a case in point, poor

financial management will lead to poor corporate performance. A rapid deficiency for staff involved in accounting or control may suggest inadequate resourcing and will make control straining because of lack of continuity. The findings of other researchers (Cadbury, 2012)articulate poor corporate performance is due to poor corporate governance.

Table 4.8 Control on the operating expense

	2006	**2007**	**2008**	**2010**	
Trans Namibia operating expenses			588 108	408596	
Trans Namib losses			(253774)	65672	
NWR operating expenses		365 350	148873 078		
Air Namibia operating expenses	72014217				
National Arts Council				1019711	
TransNamib losses			253774	65672	
NWR losses		-17584558			
Air Namibia losses	-22 1200				
National Arts losses				1116229	

4.2.10 Research objective A

To examine if Namibian SOE's are using capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions.

Time Value of Money *("TVM")* is a significant concept in financial management. *TVM* is based on the concept that a *Namibian dollar* that you have today is worth more

than the promise or expectation that you will receive a Namibia dollar in the future. Money that you hold today is value more because you can invest it and earn interest. After all, you should receive some recompense for preceding spending. A case in point, you can capitalize your Namibian dollar for one year at a 6% annual interest rate and accumulate N$1.06 at the expiration of the year. You can say that the ***future value*** of the *Namibian dollar* is N$1.06 given a 6% ***interest rate*** and a one-year ***duration*** it follows that the ***present value*** of the N$1.06 you expect to receive in one year is only N$1.00. The Research Objective A of this study was to examine if Namibian SOE's are employing capital budgeting methods (like IRR, NPV, payback period etc.) for investment decisions.

The choices presented in the survey instrument were indistinguishable to the options supplied by Ester and Geller 1981 study and Schmidgall and Damitio in their 1990 study. Brealey & Myers (2003) elucidate that managers make capital budgeting decisions based on the supposition that the primary goal of the business is to take full advantage of the shareholder's wealth. This postulation means that a business will invest in projects that will make a positive net present value. This perception is advocated by much empirical work (Graham & Harvey, 2015) and many others explain why DCF techniques have been prevailing techniques for evaluating capital budgeting decisions predominantly in large more structured business (Graham & Harvey, 2015). On the other hand, empirical work (Graham & Harvey, 2015) established that due to limited managerial skills, non-complicated techniques such as payback methods continue to govern capital budgeting decision making in smaller

corporates. The respondents in this study were asked what the capital budgeting techniques in use are in the state-owned enterprise. The results are shown below:

Figure 4.4 Capital budgeting techniques in Use

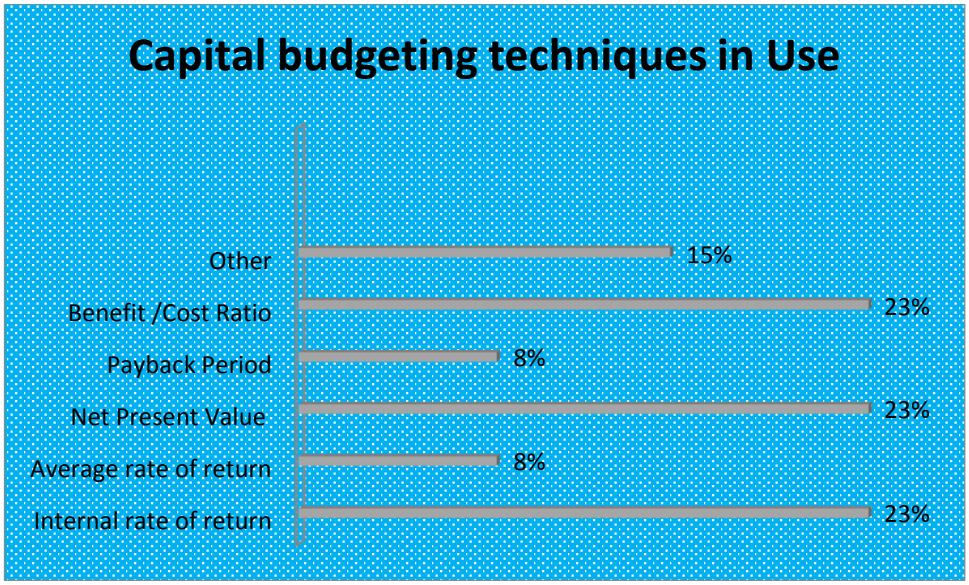


Figure10: Source Author Thesis (2014) Capital budgeting techniques in Use for SOE's

The most popular capital budgeting techniques in use for state-owned enterprises in Namibia are the Benefit /cost ratio 23%, Net Present Value 23%, internal rate of return (23%). The least used capital budgeting techniques by state-owned enterprises are the average rate of return (8%) and the payback period (8%). In South Africa another study, Parry and Firer (1990: 55) also found that the IRR was the most popular (43%) followed by the ROI (32%). NPV was reported as being a primary technique by only 10% of their respondents. A United Kingdom study by Pike (Lumby 1991:491) showed similar results with the IRR being consistently popular than the NPV. A study by Le Brato and Atkinson (2011) showed that the popular primary budgeting

techniques were the complicated or discounted cash flow methods such as NPV 29% and internal rate of return 57%. See figure below:

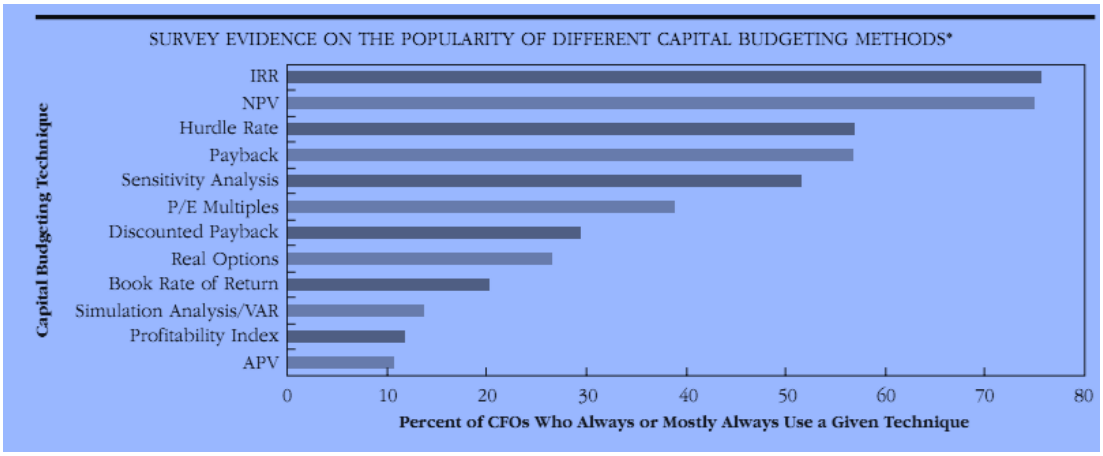
Table 4.9 Primary and Secondary Capital budgeting techniques in Use

Primary and Secondary Capital-Budgeting Techniques in Use	Primary Number	Primary Percent	Secondary Number	Secondary Percent
Internal Rate of Return	4	57%	1	17%
Average Rate of Return	0	0%	0	0%
Net Present Value	2	29%	2	33%
Payback Period	1	14%	3	50%
Benefit/Cost Ratio	0	0%	0	0%
Other	0	0%	0	0%
No Capital-Budgeting Techniques Used	0	0%	0	0%
Total Responses	7	100%	6	100%

Source LeBruto and Atkinson (2011)

As in table six above there are numerous elements that can enter into the Time Value of Money - that magical notion that permits you to quantify your goals in *N$* amounts - as well as five "variables" that interact in any given situation. A key perception of TVM is that only amount of money or a sequence of identical, consistently-spaced disbursements or receipts assured in the future can be altered to a corresponding worth today. Contrariwise, you can control the value to which a single sum or a sequences of future payments will produce to at some future date (Atkinson, 2014).

Figure 4.5 Survey evidence on the popularity of different capital budgeting methods



CFOs (2014)

As shown above most respondents cited Net Present value and internal rate as their most recurrently used capital budgeting methods 74.9 of CFOs or almost constantly used IRR. Companies that recompense dividend tend to have higher leverage ratios than non-dividend payers, were also ominously more probable to use NPV and IRR than companies that do not pay dividend.

4.2.11 Research objective B:

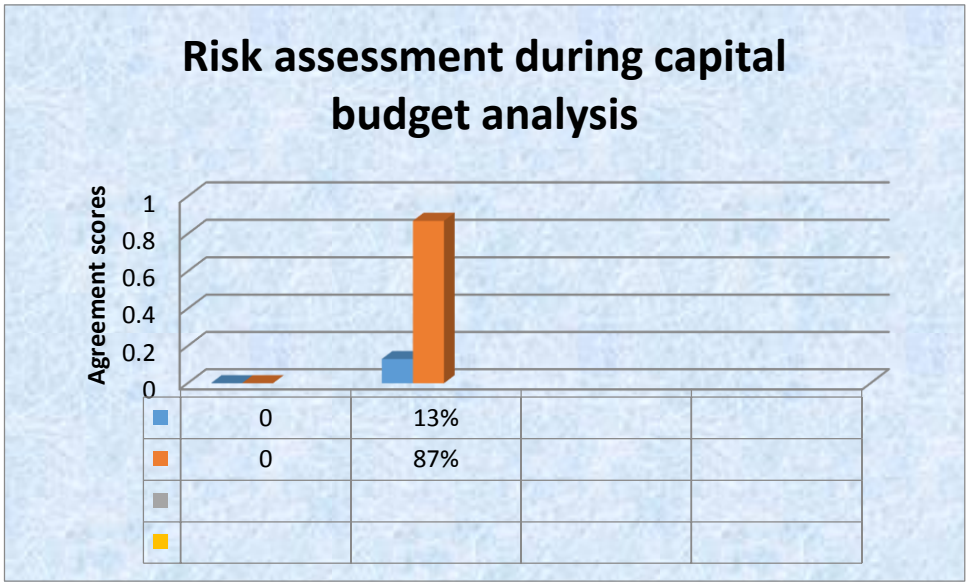
*To establish the kind of risk assessment methods (sensitivity analysis, scenario analysis or Monte Carlos simulation) are state-owned enterprises using in approval of the underlying investment risk***?**

Portfolio theory identifies two types of risk: *systematic* and *unsystematic* risk. Systematic (market, non-diversifiable, nonspecific) risk relates to the economy and the stock market as a whole. Share prices generally are subject to fluctuations. Any investor who invests in these markets must thus be subject to this risk as it cannot be eliminated through diversification. Unsystematic (specific, diversifiable) risk relates to specific

investments. This risk can be eliminated through investing in a portfolio. Quite simply, it is based on the principle that some companies will perform well when others do badly and vice versa. The differences between company risks can be eliminated but the overall market risk cannot and everyone has to dance to its tune, at least in the short run period.

The veracity of life is that corporation do not function in an unadulterated world where there is no risk. Risk in corporation, or any activity of life for that matter, is something every person who assumes to do business must be ready to encounter. Risk is a conception that denotes a potential negative bearing to an asset or some distinctive of worth that may emanate from some current process or future event. In ordinary usage, "risk" is frequently used synonymously with the likelihood of a loss or threat. Risk does not constantly only refer to the evasion of negative outcomes. In finance, risk is only a portion of the variance of possible outcomes. Insurance is a classic instance of an investment that mitigate risk - the buyer pays a guaranteed amount, and is secure from a potential large loss. The survey respondents were asked if they are conducting risk assessment during capital budgeting process. The results were as follows: The state-owned enterprises in Namibia indicated they carry out risk assessment during capital budgeting. Thirteen percent 13% of the respondents indicated they do not conduct risk assessment during capital budgeting while eighty seven percent (87%) of the state-owned indicated they conduct risk assessment for capital budgeting. See figure below:

Figure 4.6 Risk assessment during capital budget analysis



Source Author Thesis (2014)

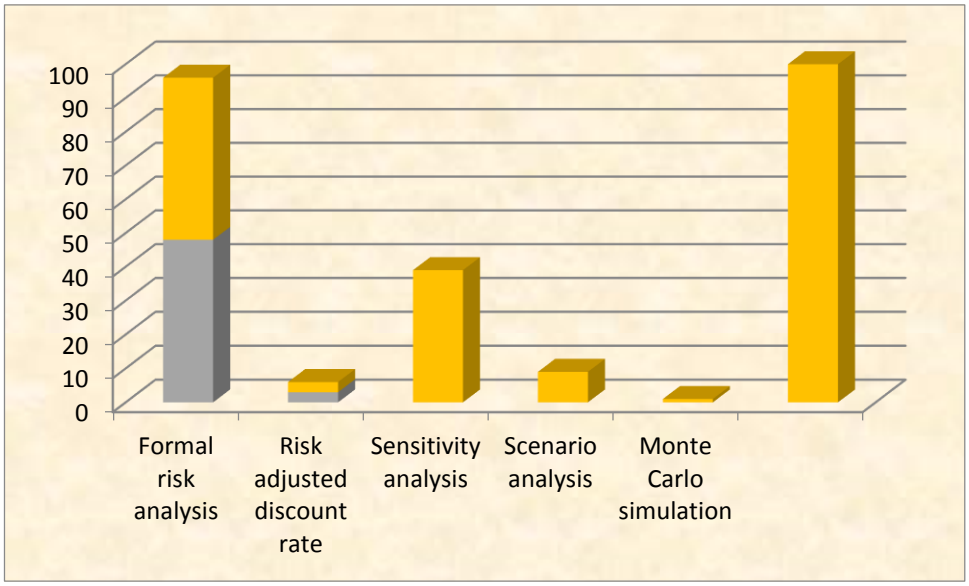
Commonly speaking, Risk Management is the process of assessing, or assessing risk and emerging strategies to manage it (Hilma, 2014). Strategies encompass reassigning the risk to another party, circumventing the risk, plummeting the negative outcome of the risk, and accommodating some or all of the significances of a precise risk. Out-of-date risk management stresses on risks restricting from corporeal or lawful causes (e.g. natural catastrophes or fires, misfortunes, death, and litigations). Financial risk management, on the other hand, stresses on risks that can be accomplished employed traded financial instruments. In ideal risk management, a ranking process is tracked whereby the risks with the maximum loss and the utmost probability of happening are handled first, and risks with lower probability of occurrences and lower loss are handled later. In pragmatics the process can be very multifarious, and harmonizing risks with a high chance of manifestation but lower loss versus a risk with high loss but lower probability of manifestation can often be exploited.

Intangible risk management pinpoints a new type of risk - a risk that has a 100% chance of happening but is unnoticed by the organization due to a deficiency of identification ability. For case in point, knowledge risk occurs when deficient knowledge is applied. Relationship risk occurs when relationship maladroitness occurs. Process-engagement risk occurs when operational maladroitness occurs. These risks unswervingly lessen the proficiency of knowledge workers, lessening cost efficacy, profitability, service, quality, standing, brand worth, and earnings quality. Intangible risk management consents risk management to generate instantaneous charge from the identification and lessening of risks that reduce productivity (Hilma, 2014).

Risk management also faces complications apportioning resources. This is the notion of opportunity cost. Resources spent on risk management could have been expended on more profitable activities. Again, best risk management minimizes spending while make the most of the reduction of the negative special effects of risks.

Sensitivity analysis and scenario analysis are two approaches for dealing with project risk to arrest the variability of cash influxes and NPV are sensitivity analysis and scenario analysis. Gitman 2012: 359 Sensitivity analyses is an interactive approach that uses many conceivable values for a given variable such as cash influxes to assess that variable impact on the firm return measured by NPV. These techniques are frequently handy in generating feet for variability of return in response to changes in a key variable. Scenario analysis is a behavioural approach similar to sensitivity analysis but greater in scope (Horngren, 2015). It assesses the impact on the firm’s return of immediate changes in a number of variables such as cash influx, cash discharges and cost of capital.

Figure 4.7 Namibia State owned risk adjustment procedures



Source Author Thesis (2014)

Forty-eight percent of state-owned enterprise is conducting formal risk analysis. Three percent of the state-owned enterprise in Namibia carries out risk adjusted discount rate. Thirty-nine (39%) of the respondents carry out sensitivity analysis while 9% of state owned enterprise conduct scenario analysis. Only one (1%) percent of the respondents indicated that they are employing Monte Carlo Simulation. Monte Carlo Simulation is a skill used to recognize the impact of risk and indecision in financial, project management, cost and other forecasting models. In Monte Carlo simulation a random variable is particular for each task based on the range of approximations. This model is based on this random variable. A study conducted by Hall (2012) indicate 46.2 % regarded project definition and cash flow analysis estimation as the most risk, Financial analysis and project selection was considered to be 24.6 % risky while project implementation was regarded to be 29.2 % risky.

According to Graham and Harvey (2013) companies with highly leveraged were also more likely to use sensitivity and simulation analysis in part to analyze in part to assess the probability of financial distress. Companies whose CEO have MBAs were more expected to use IRR and NPV and to be proficient than companies whose CEOs have no MBAs. Other than NPV and IRR the payback period was the most recurrently used capital budgeting technique (56% always or almost used it; see figure above). Monte Carlo Simulation model has a plethora of advantages which are very flexible in which there is no limit to the analysis. Monte Carlo simulation method can be generally extended and developed as required. It is very stress-free to be comprehended by those who don't have mathematics background. The disadvantages of Monte Carlo simulation: solutions are not precise but hinge on the number of recurrent runs used to generate the output statistics. The Monte Carlo simulation usually requires a computer and the calculations can take much longer than analytical models.

Table 4.10 Highest risk in capital budgeting

ITEM	HIGHEST RISK
Project definition and cash flow estimation	46.20
Financial analysis and project selection	24.60
Project implementation	29.20
Project review	0.00
	100%

Source Hall (2012: 19)

Operating risk rises from the fauna of the operating activities of the firm. The type of industry often defines the general cost structure of a firm (proportions of fixed and variable costs, capital- or labor- intensive production processes) and/or the pattern of sales revenue. (Hall, 2014). The total costs of production are customarily divided into fixed and variable costs and the capacity of operating risks are based on the section of fixed costs to total production costs. Fixed costs can act as a "lever", whereby a small change in sales revenue can be magnified into a larger change in profits. The financial manager of a company can use methods such as Cost-Volume-Profit (CVP) analysis to assess the operating risk of the firm. However, a comparison between companies in the same industry on the basis of CVP analysis shows that differences exist. This indicates that management has some degree of control over the cost structure of the company (Hall, 2014).

Financial risk rises from the degree to which a firm trust on debt to finance its operations. When a firm borrows, it is liable for the interest payments of debt. Whilst operating risk refers to the proportions of the firm's fixed total production costs, financial risk is essentially illustrated by the proportion of debt capital to the total capital of the corporation. Interest payments can be thought of as the firm's fixed cost of finance. Financial risk is entirely under the control of the firm's management (Hall, 2014).

This is the risk that a corporation or individual will be incapable to pay the contractual interest or principal on its debt responsibilities. This type of risk is of unambiguous concern to financiers who hold bond's within their portfolio. Government bonds, predominantly those bestowed by the Federal government, have the minimum amount of failure to pay risk and minimum amount of returns while corporate bonds tend to have the uppermost amount of failure to pay risk nevertheless, also the higher interest

rates. Bonds with lower chances of default are well-thought-out to be “investment category,” and bonds with higher likelihoods are well-thought-out to be junk bonds.

Country Risk this symbolizes to the risk that a nation state won't be able to pay for its financial onuses. When a country is defaulting it can hurt the demonstration of all other pecuniary instruments in that nation as well as other states it has connotations with. Country risk spread over to stocks, bonds, mutual funds, options and futures that are bestowed within a specific country. This type of risk is most recurrently seen in unindustrialized markets or countries that have a simple deficit. When investing in foreign countries you must replicate the fact those currency exchange rates can alter the price of the asset as well. Foreign exchange risk spread over to all financial instruments that are in exchange other than your local currency.

Every financial manager of a business will consider the total risk of the business carefully and attempt to manage the risk in such a way that shareholders receive the best advantage. From an investment analysis point of view, investors consider the most effective way of investing funds. It is well known that placing all one's funds in one investment only is more risky than spreading the funds. This is known as *diversification* and the different investments, into which one diversifies is known as a portfolio of investments.

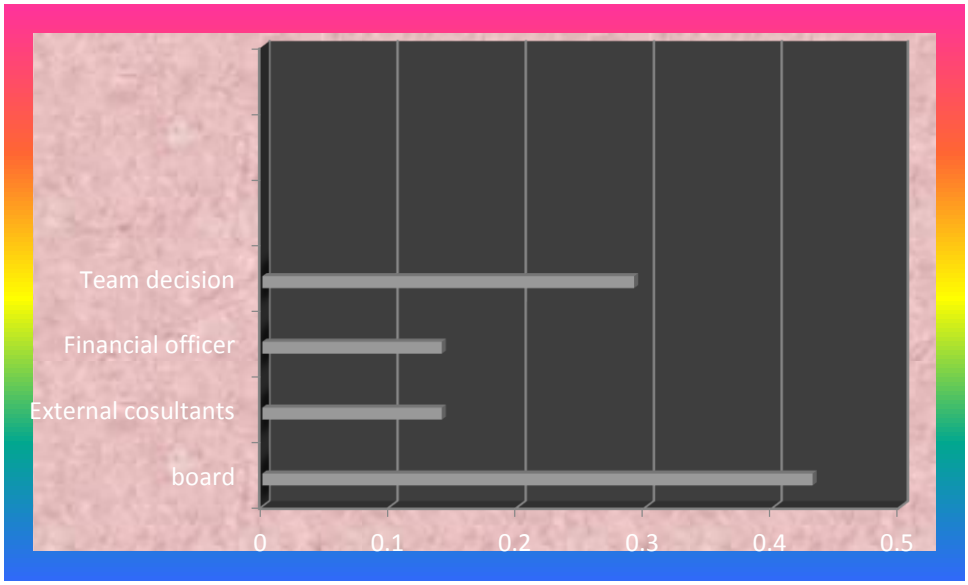
4.2.12 Research objective C:

To determine the main barriers to the successful implementation of analytical tools for investment decisions (like capital budgeting and risk assessment methods) in Namibian SOE’s.

Critical success factors are the assistance of internationally experienced experts, the reliability of incentives and the criteria applied for capital budgeting. Expert's assistance is essential for making capital budgeting decision become a success. Expert's assistance to sub-borrowers is necessary to make sure that projects developers are able to meet the requirements. Reliability of incentives is necessary for planning of project investment.

The surveyed of state-owned enterprise indicated that the capital decision makers are mainly the board who constitute 43% followed by team decision makers 29% , external consultants who make up 14% and the financial officer 14%. See figure below

Figure 4.8 Capital decision makers in SOEs



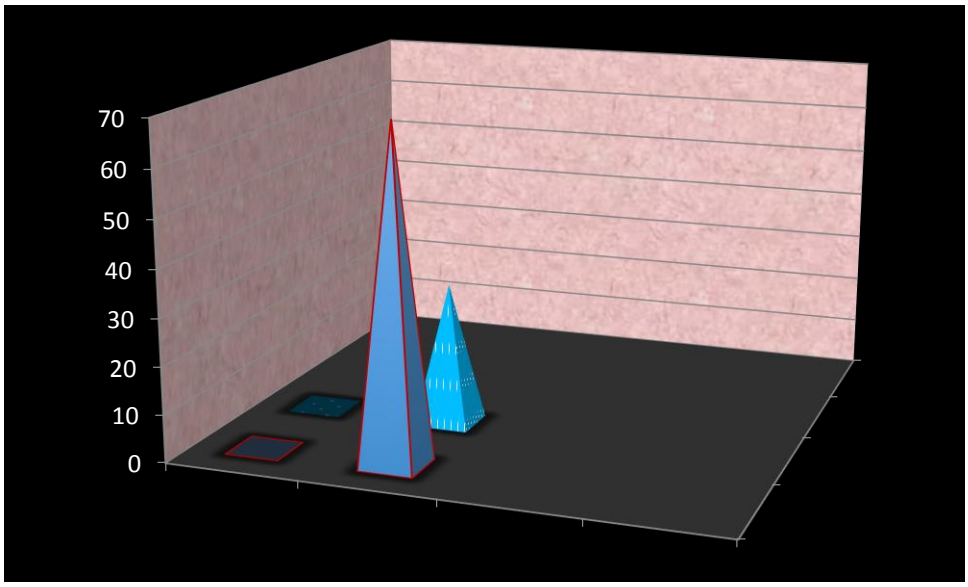
According to the author's analysis of barriers in penetration of real options to capital budgeting process of state-owned enterprises. Causation can be seen general and individual barriers in order of their importance.

Table 4.11 Barrier in real options implementation

Order	Barrier in real option ‘s Implementation
1	Project implementation difficulties
2	Method complexity
3	Difficulty interpretation
4	Distrust in intangible values
5	Lack of complex software solution
6	Other

As a foremost obstacle towards option execution is the project implementation complications. State-owned enterprises feel that implementation options to their financial valuation system are not an easy task and require more effort than any other metric. Once the process is set challenges to do with method complexity, difficulty interpretation, distrust in intangible values, lack of complex software and others. Fifty-four percent (54%) state-owned enterprises articulated they don’t have standard procedures in place if capital projects outcome are not as expected. While ten percent (10%) indicated that they have standard procedures in place and the remaining 36% were not sure. See figure below

Figure 4.9 The absence of standard operating capital projects outcomes for SOEs



Source Author Thesis (2014)

The capital budgeting techniques preferred in USA and UK can be shown as below: The most preferred methods are IRR 55% in UK and 56% in USA while the most used method in Namibia by state-owned enterprise is IRR 23%, Benefit cost ration 23% and NPV 23%. The payback method constitutes 8% by state owned enterprise while in USA 69% and UK 39%. The level of literacy in the interpretation of these capital budgeting techniques is of paramount importance taking into cognizance the level of understanding of the state-owned enterprises (Maher M and Anderson, 2014). Not most of the top management of state-owned enterprises in Namibia have an MBA to interpret the capital budgeting methods. Developed countries have high income. Knowledge based market economy which is both innovative and provides a unique excellence of life to all populace.

Table 4.12 Most preferred capital budgeting methods in England and USA

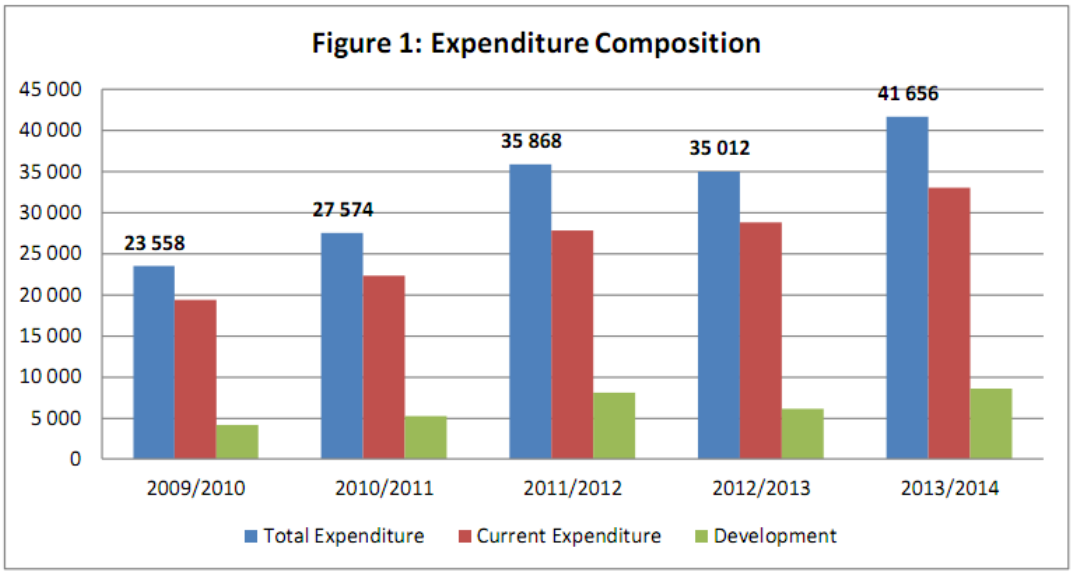
Method	UK	USA
IRR	55%	56%
NPV	52%	41%
Discounted Payback	54%	65%
Discounted cash flow	5%	3%
Payback Period	69%	39%
Accounting rate of return	20%	19%

Source Hall (2012: 19)

Budget allocations remain undoubtedly the most used source of capital for development in Namibia. Government budget allocation is central to the pace of capital accumulation in the economy. Building productive, competitive and functional human resources for economic growth. Developing knowledge based economy. Capitalize on productive expenditures and diminishes unproductive ones. Education and Health are fundamental. Education has high positive externalities lowers fertility, reinforces national capacity. Emphasis on primary and secondary education on a better impact. Educating women impacts positively on health and educating of children. It provides geographical balance. Characteristically pro-poor expenditures are primary education, primary health care, rural roads, basic services of water and sewerage. The four largest spending ministries in Namibia are Education, Finance, Health and

Defense which is in total accounted for over 51% of the total government expenditure in 2011/2012.

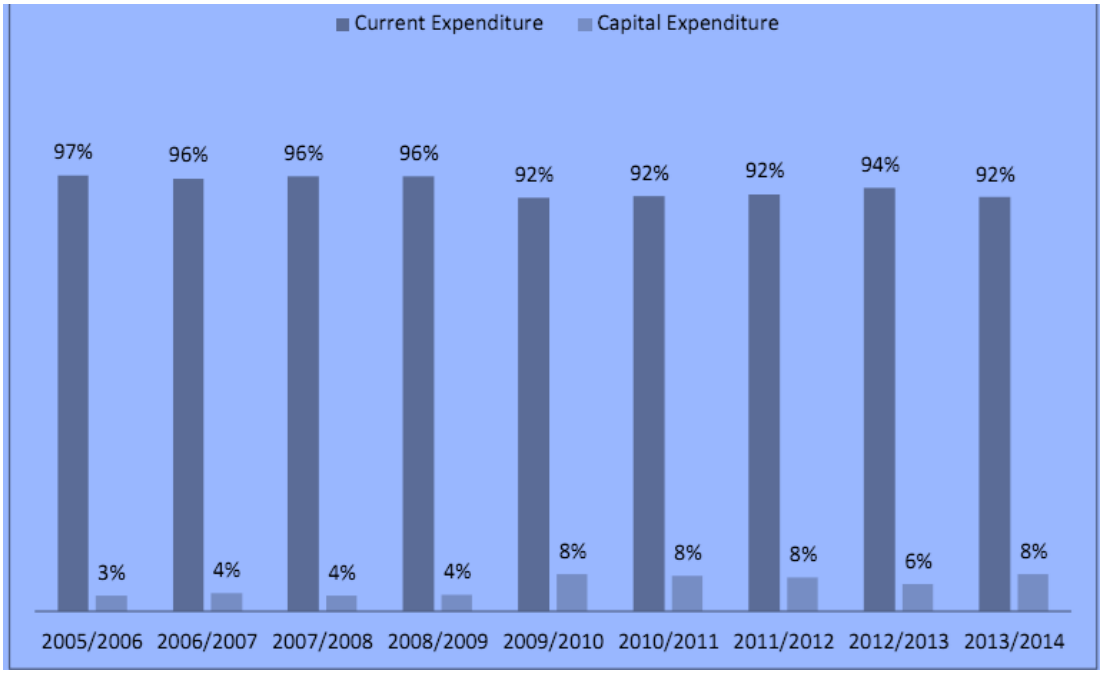
Figure 4.10 Expenditure allocation for Namibian government



Source Ministry of Finance (2014)

Improving education is one of the significances government has set itself to attain over the upcoming years and government knows that for underprivileged and unemployment to be condensed a country needs educated and skilled people. The unemployment rate in Namibia is high which about 27% is. Although education obtains more allocation which is the national wealth is expends more than 90% of its budget on consumption or current expenditure and disbursements are very little, less than 10% on capital expenditure this stills elucidate why there is high deficiency of schools, hostels, text books, school desks in Namibia. See figure below

Figure 4.11 Allocations of capital Expenditure in Education is very little



Ministry of Finance (2013)

Over the past 20 years the government to a certain extent has made strides on promoting equity education between the black and white. However, it should be noted that increasing government expenditure has not rendered the economy to significant job creation and economic growth as Namibia still positions among countries with maximum unemployment, maximum income inequality at 0.6 and rising poverty. If government expenses could not end unemployment rising form 37% in 2000 to 51% in 2008 there is an immense need for the government to boost manufacturing companies in the country. TIPEEG is designed at solving unemployment, inequality and poverty by unravelling employment opportunities in diverse sectors of Namibian economy. TIPEEG growth supports employment creation in agriculture, tourism, transport and housing & sanitation. TIPEEG has to some extent fostered employment however it is very weak in its current form and does not have tangible employment

created by allocation of resources. A disjointed policy and all fingers and thumbs decision making in government can lead to replication of effort, misuse of financial resources, misuse of time and incongruous outcomes.

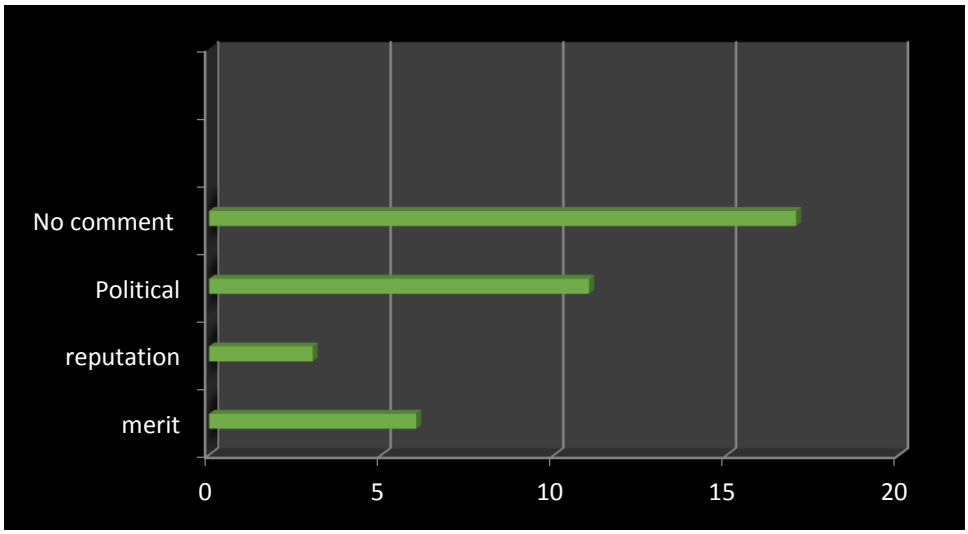
4.2.13 Research objective D:

To establish the relationship between the use of financial investment methods and Corporate Governance of SOE's.

4.2.13.1 Rights of shareholders to organizational performance

Appointment of Suitable members to serve on NWR Board of directors

Figure 4.12 Appointment of Suitable members to serve NWR board of directors



Sources Hilma (2013)

Hilma (2013) stated that fifty-four percent of the participants declined to make a comment concerning the appointment of suitable members to serve on the board, while 29% indicated that the appointment of board members was political. Only 16% indicated that the selection of suitable members was based on merit. The researcher observed that the current board 2013-2015 is comprised of 50% Vambo tribe, 25%

Herero and 25% Zambezi. The majority of the board members are women (63%) and all board members are Namibians. Carter (2002:11) articulates that board diversity can be defined as a variety in the composition of the board. Observable diversity includes race, ethnic background, nationality; gender and age while less visible diversity comprises educational functional, occupational background, industry experience and organizational membership (Kang et al 2007:4). Some of the benefits of board multiplicity encapsulates creativity and diverse perspectives access to resources and connections, career motivations in effect problem solving (Carter, 2015) . Women hold few board seats in Japan, Europe, Australia and Canada is estimated as 0.4%, 8.0%, 8.7% and 10.6 percent respectively. A study emphasizes that companies with higher % age of directors with industry experience have higher anomalous returns better checking lower risk of distress (Papalconstantinou 2007:30).

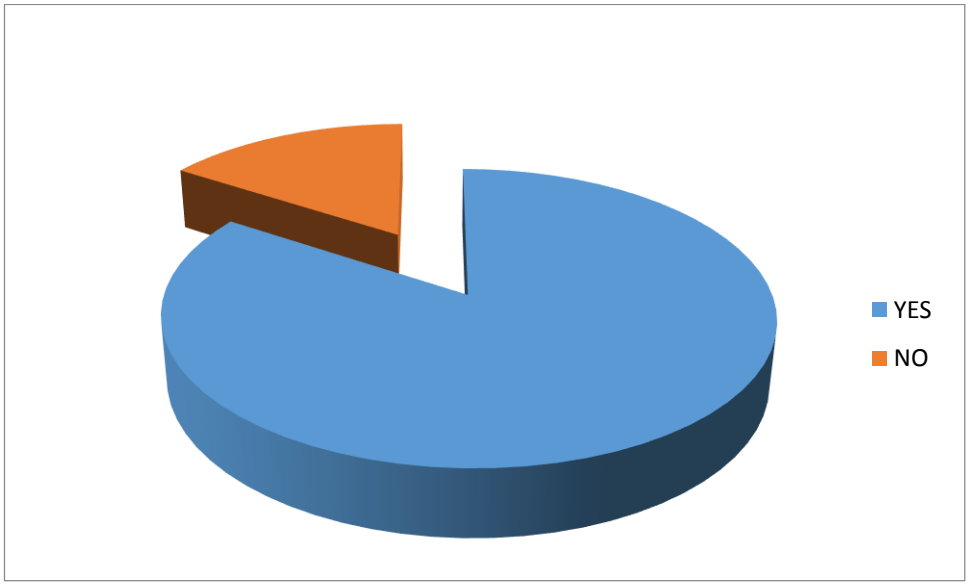
The findings by Hilma (2013) indicate that the procedure for appointing suitable candidate to serve on the board must be revisited and appointment must be done on merit. One hundred percent of the respondents articulated that the shareholders right of sharing the profits is being breached, because the company is experiencing interminable losses for the past years up to date. The researcher observed that some of the decisions made by the corporate board do conflict with the operations of the organizations because the majority of the board members lack proper training on corporate governance and ethics. The corporate governance framework should guard shareholders' rights. Basic shareholder rights embrace the right to 1) secure methods of ownership registration; 2) express or transfer shares; 3) obtain appropriate

information on the corporation on appropriate and regular basis; 4) participate and vote in general shareholder meetings.

The equitable treatment of shareholders and independence of mind

Freedom for executive to execute their responsibilities

Figure 4.13 Treatment of shareholders and indepence of mind



Source Hilma (2013)

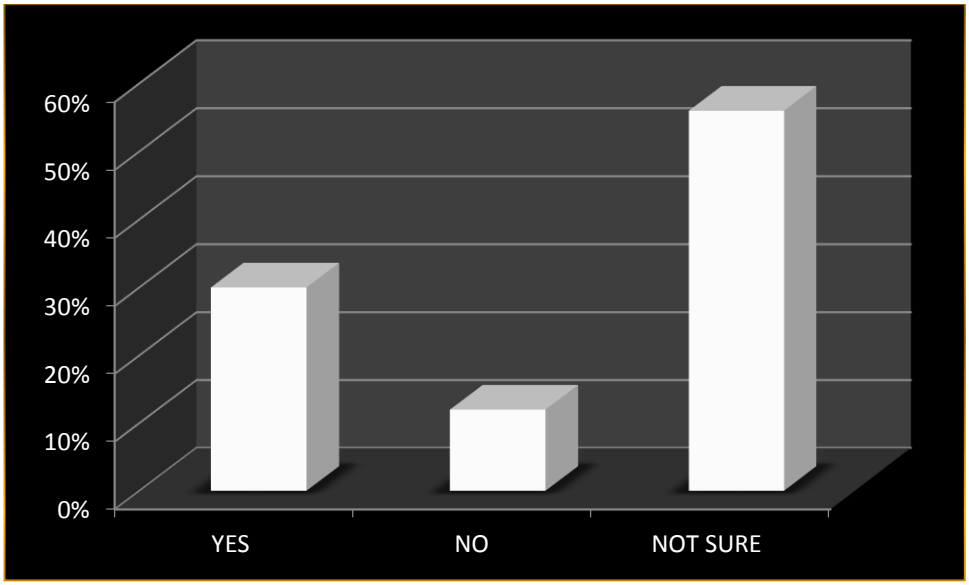
Hilma (2013) states that Eight four (84%) of the participants articulated that shareholders give board members and executive management freedom to execute their responsibilities without fear. While 16% of the respondents indicated that they are not given the freedom to execute their responsibilities without fear. Consequently, the 16% of the participants are being subjected to the use of fear and threats in order to make biased decisions. Independence of mind is that state of cognizance that permits the endowment of an opinion without being pretentious by influences that give and take proficient judgment, allowing an individual to act with truthfulness and exercise

detachment and specialized judgment CIMA (2011:416). Independence in appearance is the circumvention of facts and situations that are so momentous that a rational and knowledgeable third party having information of all appropriate information including any safeguards applied would reasonably determine a firm's or a member of the assurance team's integrity, impartiality or professional skepticism had been compromised.

4.2.13.2 Disclosure and transparency

Hilma (2013) states Ninety-nine 99% of the respondents articulated that NWR company has an internal audit function, sixty-one percent emphasized that the audit and finance committee members were technically proficient and able to assess the company compliance. The majority of the respondents (56%) were not sure concerning the transparent financial reporting of company data while 12 % of the population indicated that the financial reporting was absolutely not transparent. Thirty percent (30%) of the populace asserted that the financial transparency of NWR was perfect.

Figure 4.14 NWR Financial data transparency



Source Hilma (2013)

OECD (2009) philosophies of corporate governance highlight that release should include, but not be restricted to, substantial information on: The financial and operating outcomes of the company, company objectives, and key share ownership and filled by election rights, members of the board and key executives, and their salary. Material calculable risk factors, material challenges concerning workforces and other shareholders, governance structures and policies.

4.2.13.3 The responsibilities of the board

Hilma (2013) states that fifty-one percent of the respondents stated that NWR is not self-sustaining in terms of finance. Seventy-nine percent of the respondents articulated that the company has not paid dividend during its inception while the remaining 21 % were not sure. The respondents rated the corporate board as follows see figure below: 10% said there is poor corporate governance, 46% articulated that the corporate governance at NWR was average, 44% indicated that NWR has good corporate governance. The researcher observed that the corporate governance summary should endorse the strategic guidance of the company and the operative monitoring of management by the board, and the board's responsibility to the company and the shareholders. The researchers observed that the board members should act on a fully sensible basis, in virtuous, with due conscientiousness and care, and in the paramount interest of the company and the shareholders. Where board decisions may distress diverse shareholder groups inversely, the board should treat all shareholders justifiably. NWR corporate governance Board Ratings

Figure 4.15 NWR corporate governance Board Ratings

Source Hilma (2013)

The OECD (2014) states that the board should be selecting, compensating, observing and, when necessary, replacing significant administrators and supervising succession planning, reviewing key administrative and board compensation, and make certain a formal and translucent board nomination process. Among other things the researcher observed that the board should be monitoring and managing latent conflicts of interest of administration, board members and stakeholders, together with misuse of corporate assets and abuse in related party transactions. Confirming the integrity of the corporation's accounting and financial reporting systems, plus the independent audit, and that apposite system of control are in place, in particular, systems for monitoring risk, financial control, and passivity with the law (OECD, 2014). Monitoring the efficacy of the governance practices under which it operates and making changes as needed.

4.3 HYPOTHESIS TESTING

In order to answer the hypothesis, the researcher used the surveyed question; Are there other non-financial criteria used in major investment decision? The results of the sample are indicated below: Pearson Bivariate Correlation Analysis

Table 4.13 Sample

	Entire sample N=26						
	ID	Tenure	CDO	BS	TA	SOE	INDUSTRY
ID	1	0.21	0.24	0.12	0.28	0.4	0
Tenure		1	-0.0	0.12	0.17	0.1	0.
CDO			1	0.14	0.22	0.23	0.02
BS				1	0.87	-0.0	0.23
TA					1	0.0	0.23
SOE						1	0.04
Industry							1

Table 9: Source Author Thesis (2014) Pearson Correlation Analysis

R^2=0.234, Test Sig =0.00 (referring to Question 21 on Appendix A)

Regression equation ID =-1.34 +0.016 Tenure +0.40 CDO + 0.169 BS + 0.426 + 0.280 SOE +0.002 Industry

Table 4.14 Pearson correlation analysis

	Entire sample N=26						
	B	STD error	Beta	t	Sig	Tolerance	VIF
ID	1.46	0.4	0	-3.7	0.0		
Tenure	0.01	1	-0.0	1.4	0.17	0.9	1.07
CDO	0.45	0.0	1	2.2	0.22	0.8	1.1
BS	0.158	0.2	0,2	1.3	0.87	-0.90	1.102
TA	0.573	0.1	0.1	2.2	1	0.849	1.1
SOE	0.293	0.25	0.25	3.6	0.0	0.833	1.2
Industry							1.0

	SE	PB	NEP	EI	BEM	INDUSTRY
SE	1	0.17	0.22	0.09	0.27	0.365
PB		1	-0.080	0.11	0.202	0.118
NEP			1	-0.108	0.12	0.172
EI				1	0.003	-0.012
BEM					1	0.184
INDUSTRY						1

Source (Author, 2014)

R^2=0.025, Test Sig =0.00 (referring to Question 21 on Appendix A)

Regression equation ID =-1.463 +0.00PB +0.459 NEP + 0.58 BE

EI = 0.293

Key ID = major investment decision SE –Safety of employees

Tenure – Director

CDO- Director Duality

BS –Board size

TA –Total Assets

SOE –State owned enterprise

PB –Public benefit

NEP – maintain existing programs

EI- Environmental impact

BEM- Black economic empowerment

Correlation 0.01 (2 tailed test)

The overall outcomes show that investment decision for state-owned is positively interrelated to the CEO contract, the CEO duality, board size, total assets and firm performance. In the state-owned enterprise investment decision of state –owned enterprise is positively interconnected to the CEO duality, total assets and firm performance. There is an association between financial investments and corporate governance of state-owned enterprises in Namibia. For corporations located in states with robust corporate financial investments$i \geq 1$; weak corporate governance permits managers to track their own goals at the shareholders' expense. The hypothesis is accepted. The findings of this research support the findings of Bohren et al (2011) who found that good corporate governance mechanisms improve the proficiency of capital apportionment within firms and lax underinvestment's generates under investment rather than overinvestment. Chang et al (2011) who found that corporate governance mechanisms distress investment decisions of the firm. Ruiz –Porns and Lopez –Mateo (2011) who found that the separation of ownership inspires investment decisions and cash flow really impact on investment of the firm. Ownership and control structures significantly the firm's investment decisions (Aldright, 2014).

4.4 Summary

The majority of the state-owned enterprise fall within N$500-N$750million and over N$750 million in terms of the size of the assets. This denotes that stated owned enterprises in this study are large. Thirteen percent of the companies fall within the N$500 000 –N$ 1million, N$100-N$500 million and N$100-N$500million. Twenty-five percent of the state-owned enterprises fall within the bracket of above N$1million –N$100million and above N$500-over N$750 million. Twenty-seven percent of the respondents are above N$ 1 million to N$100 million, followed by state-owned enterprise with assets above N$100million to N$500 million. Two of the state-owned enterprise falls within the assets range of N$ 300 000-N$500 000 and have twelve projects done. As far as the most essential stage in the capital budget was concerned state-owned enterprise, 50% of the state-owned enterprises pointed out that project definition and cash flow estimation was the most important. Thirty-eight percent (38%) of the state-owned enterprise articulated that project implementation was the most important. Twelve percent (12%) of the respondents indicated financial analysis and project selection to be the most important stages in capital budgeting process. As far as the most difficult part of the capital budgeting process is concerned the 50% state-owned enterprises indicated project implementation is the most difficult part of the capital budgeting process. Thirty-nine 39% percent of the respondents indicated the most challenging part of the capital budgeting is the financial enquiry and project selection.

5 Conclusion and recommendations

5.1 Introduction

The universal objective of this study is to investigate the use of capital budgeting decisions in Namibian State-Owned Enterprises. This chapter discusses the conclusion taking into consideration the objectives, literature study, research questions as the critical point of this study. Included are the recommendations derived from the conclusions.

5.2 Conclusion

Basing on the preceding findings and analysis, it can be concluded that in most of the respondents; capital budgeting practices in State-Owned Enterprises seem to have improved in Namibia with the majority of companies using sophisticated discounted cash flow (DCF) techniques. The majority of the state-owned enterprise fall within N$500-N$750million and over N$750 million. This denotes that stated owned enterprises in this study are large.

The majority of the capital projects falls above $N100million-N$500 million. These results support the notion that this segment of the state-owned enterprises are on a growth stage. As far as the most significant phase in the capital budget process was concerned for state-owned enterprise, half of the State-Owned Enterprises pointed out that project definition and cash flow approximation was the most significant. While one third of the State-Owned Enterprises articulated that project implementation was the most important. The other respondents indicated financial analysis and project selection to be the most important stages in capital budgeting.

The majority of the State-Owned Enterprises indicated project implementation is the most challenging part of the capital budgeting. The minority of the respondents showed the most challenging part of the capital budgeting process are the financial analysis and project selection. The least of the respondents stated project review as the most difficult part of capital budgeting processes.

The most popular capital budgeting techniques in use for state-owned enterprises in Namibia are the Benefit /cost ratio, Net Present Value, internal rate of return. The least used capital budgeting techniques by state-owned enterprises are the average rate of return and the payback period.

In tandem with finance theory the survey exposes that the sample SOE's are risk averse. To assess risk, forty-eight percent of state-owned enterprise is conducting formal risk analysis. Three percent of the state-owned enterprise in Namibia carries out risk adjusted discount rate. The minority of the respondents carry out sensitivity analysis while lesser number of state owned enterprise conduct scenario analysis. Only one of the participants pointed out they are employing Monte Carlo Simulation. Monte Carlo Simulation is a skill used to appreciate the impact of risk and ambiguity in financial, project management, cost and other forecasting models. The variable for the number of capital projects and its average size denoted that the cumulative frequency was 50.0, 66.7, 83.3 and 100.

The findings of this research support a study done by Bohren et al (2011) that found that good corporate governance mechanisms improve the efficiency of capital allocation within firms, and lax underinvestment's produces under investment rather than overinvestment. Furthermore, Chang et al (2011) could be cited who found that

corporate governance mechanisms affect investment decisions of the firm. The separation of ownership encourages investment decisions and cash flow positively impact on investment of the firm (Markowitz, 2015). Aldiright et al (2010) who found that ownership and control structures significantly the firm's investment decisions.

As a main obstacle towards option execution is the project implementation complications. State-owned enterprises feel that implementation options to their financial valuation system are not an easy task and require more effort than any other metric. Once the process is set challenges to do with method complexity, difficulty interpretation, distrust in intangible values, lack of complex software and others. The majority of State-Owned Enterprises articulated they don't have standard procedures in place if capital projects outcome is not as expected. A few indicated that they have standard procedures in place and the remaining were not sure.

In general, those SOE's that are big with capital asset sizes of over N$ 100 million have capital project analyzed annually in correlation with their assets sizes. They have formal capital project analysis procedures in place. This large SOE's seems to be a risk averse the most using some form of risk assessment procedures. However, only one of this large SOE's are using Monte Carlo simulations for risk assessment. Capital budget decision makers in 80% of all the correspondents are indicated to be the board; however, formal analysis are mostly done by external consultants Project acceptance rate of all analyzed project is above 50% for the sample SOE's.

On the other side of the coin, those SOE's with asset sizes of less than N$ 100 million, does not have a project in correlation with their assets sizes; some indicated more

others indicated fewer figures. The small SOE's indicated no knowledge of any form of risk assessment procedures.

5.3 Recommendations

Considering preceding conclusions of the study, the following recommendations are made: The line ministries responsible to execute ownership control over the sample SOE's should ensure that capital budgets are indeed done and submitted to the line Minister. In relations to section 19 (1) of the SOE Act this capital budgets should form part of the Business and Financial Plans to the portfolio Minister. Board member in relation to section 18 (1) of the SOE's Act should include capital budget decision made as part of the performance agreements that have to be signed between the Minister and each board member, to help with the monitoring and assessments of the individual performance of the board members. On the operational level, there is need to train state-owned enterprise management teams on the basics of capital budgeting techniques to reduce the high dependency rate of formal capital budget analysis on external consultants. Finance teams should be more risk sensitive and start using more complex risk assessment procedures like Monte Carlo Simulation and Scenario Analysis. It is suggested that SOE's should put in place standard operating capital budgeting procedures to be employed in the evaluation of all capital projects and their respective outcomes. It is also commended that SOE's should develop good corporate governance mechanisms to improve on the efficient capital allocation. Efficient allocation of resources of SOE's to capital projects should be done to allow infrastructural development. It is recommended that there should be incessant training for financial staff on capital budgeting techniques.

5.4 Areas of further Research

It is recommended, further research should focus on the following: What is the role of the hurdle rate in behavioral capital budgeting in SOE's. What is the hypothesis of one unique discount rate for financing and investing for appropriate capital budgeting? Why is it that the government allocates large amount of money in education but still the demand for schools is very high, and there is a shortage of schools in Windhoek in particular and the whole country in general.

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Appendices

Appendix A

SURVEY QUESTIONNAIRE

The Chief Financial Officer/Finance Manger

State Owned Enterprise

Introduction

I would like to thank you for taking the time to participate in this survey. This survey is part of my master's research program in Finance which I am pursuing at the Namibian Business School at the University of Namibia. This survey will take approximately 20 minutes to complete. Completed questionnaires should be sent to Talaska Galaga Katjiruru via e-mail to email address talaskakatjiruru@ovi.com , or please call cell phone number +264811274609 and I will be glad to pick it up from your place.

Purpose of the study: Is review of capital budgeting decision in Namibia's SOE's?

Confidentiality: Be assured that your responses will not be distributed to third parties and no names will be used in the report.

Personal plea: It will be highly appreciated if you support my research by completing the questionnaire at least by **20 December 2013**.

Yours faithfully,

Talaska Galaga Katjiruru (MBA Student – UNAM)

1) What is the asset size of your state owned enterprise?

Size of Assets	**Tick appropriate**
Less than N$ 300 000	
N$ 300 000 –N$ 500 000	
More than N$ 500 000 –N$ 1 million	
Above N$ 1 million – N$ 100 million	
Above N$ 100million – N$ 500 million	
N$ 500million – N$ 750 million	
Over N$ 750 million	

2) What is the number of capital projects and its average size that you formally analyze in your state owned enterprise per annum?

Size of Projects	**Tick appropriate**	**Indicate number**
Less than N$ 300 000		
N$ 300 000 –N$ 500 000		
More than N$ 500 000 –N$ 1 million		
Above N$ 1 million – N$ 100 million		
Above N$ 100million – N$ 500 million		
N$ 500million – N$ 750 million		
Over N$ 750 million		

3) Are there formal capital projects analysis procedures (standards) in place in your organization?

	Tick appropriate
Yes	
No	

4) What are the capital budgeting techniques in use in your state owned enterprise, tick appropriate?

Capital budgeting techniques in use	**Use**
Internal rate of return	
Average rate of return	
Net Present Value	
Payback period	
Benefit/Cost Ratio	
Other	

5) Rate the importance of the capital budgeting techniques in use by your institution, rank accordingly? Scale: 1= always; 2 = sometimes; 3 = often; 4 = never

Capital budgeting techniques in use	**Rank**
Internal rate of return	
Average rate of return	
Net Present Value	
Payback period	
Benefit/Cost Ratio	
Other	

6) Are there other non-financial criteria used in major investment decisions, rank accordingly? Scale: 1= always; 2 = sometimes; 3 = often; 4 = never

Item	**Rank**
Safety of employees	
Public benefit	
Necessity of maintaining existing programs (e.g. NDP4)	
Environmental Impact	
Black economic empowerment	

If others – please mention below!

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7) Do you do any risk assessments during capital budget analysis?

	Tick appropriate
Yes	
No	

8) What risk adjustment procedure do you use if any?

Risk adjustment procedure	**Tick Appropriate**
Formal risk analysis	
Risk adjusted discount rate	
Sensitivity analysis	
Scenario Analysis	
Monte Carlo Simulation	

9) What are the most difficult and the most important stages of the capital budgeting process, rank accordingly? Scale: 1= most difficult; 2 = difficult ; 3 = important ; 4 = most important

The most difficult and the most important stages of the capital budgeting process	**Rank**
1) Project definition and Cash flow estimation	
2) Financial analysis and project selection	
3) Project implementation	
4) Project review	
Both 1 &2	
Both 2&3	
Both 2 &4	
Both 3 &4	

10) Who are the capital budgeting decision makers in your organization?

Decision maker	**Tick appropriate**
Board	
External consultant	
Financial officer	
Team decision	
Other	

11) Capital budgeting analysis is mostly done by?

Analysis mostly done by	**Tick appropriate**
Board	
External consultant	
Financial officer	
Team decision	
Other	

12) What is the project acceptance rate of those projects that are formally analyzed by your organization?

Percent of projects accepted	**Tick appropriate**	**Indicate Number**
Less than 10%		
10 to 25%		
25 to 50%		
Over 50%		

13) Are you steadily monitoring the outcome of investment projects?

	Tick appropriate
Yes	
No	

14) What happens if cash flow outcomes are not in line with projected targets? Meaning project outcomes are failing to reach the targets? Are the standard procedures in place?

	Tick appropriate
Yes	
No	

15) What are the reporting lines if a project fails to reach the targeted outcome?

Report to	**Tick appropriate**
Report to the CEO	
Report to the Board	
Report to the Line Ministry	
Other	

16) Do you have standard procedures in place if capital projects outcome re not as expected?

	Tick appropriate
Yes	
No	

17) Are exist strategies and exit point defined and exit losses calculated before an investment is done?

	Tick appropriate
Yes	
No	

18) Defined your exit strategy in cases of projected outcome are not in line with your targets?

---

19) Does your organization have any public reporting procedure on outcome of your capital budgeting process?

	Tick appropriate
Yes	
No	

20) Do you publish your investment and corporate risks within your annual report

	Tick appropriate
Yes	
No	

21) Explain why good corporate governance can leads to good corporate investment?

Appendix B

Source Author Thesis 2014 **Participating List of SOE's in the study**

TransNamib Holdings Ltd
Air Namibia
August 26 Holdings (Pty) Ltd
Meat Corporation of Namibia
Telecom Namibia
Namibia Wild Life Resort
Namibia Post
Namibia Ports Authority
Namibia Agronomic Board
Agricultural Bank of Namibia
Development Bank of Namibia
Namibia Airports Company
Namibia Development Corporation
Namibia Institute of Pathology
Namibia Water Corporation
National Housing Enterprise
Namibia National Reinsurance corporation
New Era Publication Company
Offshore Development Company
Star Protection Services
Windhoek Machine Fabrik

Namibia Power Corporation
Roads Contractor Company
Road Fund Administration
Luderitz Waterfront Limited
Zambezi Waterfront Limited