

**DETERMINANTS OF BUDGET CONTROL IN PUBLIC
ORGANIZATION
A STUDY WITH REFERENCE TO SOUTHERN NATIONS,
NATIONALITIES, AND PEOPLES' REGIONAL STATE
(SNNPRS)**

**A Thesis Submitted to the Department of Accounting and Finance
to Undertake a Research in Partial Fulfillment of the Requirements
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Finance.**

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DECLARATION

I declare that this thesis is my original work and has not been submitted for examination in any other university.

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This thesis has been submitted for examination with my approval as the university advisor

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DEDICATION

I wish to dedicate this work to my wife for her support, my sons Eyosiyase Getachew and Makbel Getachew Joy who inspired me with their curiosity to my family and friends. Thank you so much for your continuous encouragement to complete my studies.

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I am deeply indebted to all those who in their own way contributed to successful completion of this study. First and foremost I thank the almighty God, to whom all knowledge, wisdom and power belong for sustaining me in good health, sound judgment and strength to move on and complete my master's studies. Special appreciation goes to my advisor for his dedication, guidance, valuable suggestion and ideas throughout the course of this thesis. Without his enormous support this study would not have been successful. Thanks to my family, close friends who always inspired me in every step to accomplish this study. I am eternally grateful for your love, encouragement and support in all my endeavors.

Abstract

The main purpose of this study was to investigate the determinants of budget control in the Southern Nations, Nationalities, and Peoples' Regional State public organizations. This investigation was focus on five purposely selected public organization that are expected to represent all other bureaus. From the total population, (watson 2001) formula was used to determine sample of respondents. The management team, the internal and external auditors, budget experts, finance officers, tax and planning experts of the selected public organization were the sources for the required data to the study through questionnaires adminstered. The STATAS soft ware was used to analyze the data using descriptive statistics, including mean, standared deviation and logistic regression used to analysis inferential output. For this study, eight independant variables were identified including budget planning process, management support, competent internal audit staff, organizational commitment, budget monitering and evaluation, information and communication, cost reduction and competency of human resource in budget department. The dependent variable is degree of budget control which was measured under Binary logistic regression. According to the logistic regression output, budget planning process, competent internal audit staff, organizational commitment and competency of human resource in budget department were contributed for the budget control in the public sector significantly and positively but budget monitoring and evaluation for the budget control was negatively and significantly related. The other variables organizational commitment were positively related with the budget control, but its contribution for the budget control were statistically insignificance at 5% level and management support also positively related with the budget control, but its contribution for the budget control were statistically insignificance at 5% level. All of these eight independent variables are making 50.93% of the contributions for budget control in the public organization. Then, the researcher recommend that public organizations should understand the contributions of these five variables collectively significant and their odd ratio were greater than one to infinity indicate the relationship between those predictors and the outcomes and add values for the budget control in the public sector offices.

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ABBREVATIONS

SNNPRS	South nation nationalities people regional state
BoFED	Bureau of finance and economic development
CIMA	Chartered Institute of management Accounting
EFY	Ethiopian fiscal year
FDRE	Federal Democratic Republic of Ethiopia
FGE	Federal Government of Ethiopia
FTA	Financial transparency and accountability
GTP	Growth and Transformation Plan
IBEX	Integrated Budget and Expenditure
IFMS	Integrated Financial management System
IIA	Internal institute of auditing
ISPPIA	International Standards for the professional Practice in Internal Audit
MoFED	Minster of finance and economic development
NPM	New Public Management
OFAG	Office of Federal Auditor general
ORAG	Office of regional auditor general
PB	Program budgeting
PBS	Program base budgeting system

PEFA	Public Expenditure and Financial Accountability
PFM	Public finance management
SAP	Structural Adjustment Programs
EBS	Estimating the Budget Sources
ESE	Experienced and Skilled Employees
APEC	audit procedures and evidence collections
CET	Cash expenditure tracking
EPBP	Effective Participation by Government
ETPF	Employee to Think about and Plan for the Future
EAB	Expenditure with Approved Budgets
WMEB	weak monitor and evaluate budget
ETB	Evaluation on Timely Basis
RDB	Reviews the Draft Budget
ODBP	Organizations Departments Budget Plans

Chapter One

1. Introduction

1.1 Background of the Study

Budget can be defined as a detailed financial statement that shows details of anticipated revenue and prepared expenditure, Yakubu (2011). Is also a forecast of expenditures and revenue for a specific period of time; usually one year. The word budget originated from a French word bougette meaning little bag. In Britain, the word was used to describe the leather bag in which then chancellor of the exchanger used to carry to the parliament the statement of governments needs and sources as describe by several thought of consensus, the budget became the document contained in the bag which represent plans of government expenses in money and submitted to legislative for approval, (Abdullahi& Angus, 2012). According to Olurankinse (2012), budget making and budget implementation involve the process of identification of public needs and the determination of the quality of goods and services to satisfied these need through the political process, by economic analysis with the overall developmental plan objective. Government prepares budget in form of public policy to serve as a driving force through which are mission could be achieved. As good as our budget is, the performance of which can be measured in terms of accomplishment is noting to right home about. Budget accomplishment is far from reality and the disparity between budget and accomplishment are so wide and kept on abating as years pass by. The government plays a leading role in shaping and development of any nation and giving there explicit important, it is necessary to provide a suitable frame work to enable the achievement of this noble-role. This is accomplished through the apparatus public administration, a field which refers to the manner in which federal, state, and local institutions with their procedural, legal, regulatory, financial, human resources and asset aspect are organized, institutionalized and managed with respect to regulatory, revenue generation, speeding and procurement functions, and the provision of such services as defense, social service, and economic infrastructures, (Kenneth, 2012). Public sector according to Olurankinse (2012) simply

refers to the part of the economy that is controlled by the government for the purpose of basic government services. These basic services that the government needs to provide is so enormous due to increase in the number of people they service. As economics will put it “human wants are unlimited, but the means to satisfy them are limited”, this therefore calls for the use of an efficient management tools that will harness the limited resources for optimal use. One of the machineries of government that can be used for this purpose is budget.

Consequently, a budget is composed of different functional budgets that could help a country for development such as agriculture, technology, tourism and other budgets (Smith & Mcgeary, 1997). Also among the essential reasons for having a budget plan are to effectively allocate resources; coordinate, render and dimension activities of the country and also for efficient communication.

Then budgetary control can be explained as the process of using budgets as control mechanism to evaluate organizations’ performance by considering deviations from budget figures to actual figures. Accordingly, budgetary control is a system that uses budgets as a controlling and planning tool. Furthermore, a budgetary control has been defined by Chartered Institute of Management Accountants (2007), as “the establishment of budgets relating the responsibilities of executives to the requirements of a policy and the continuous comparisons of actual with budgeted results, either to secure by individual action the objectives of that policy or to provide a basis for its revision”.

The advantage of using budgetary control is that top management is able to detect deviation from the plan and is able to react accordingly in order to increase efficiency throughout the activities (Venkatasivakumar 2009). Budgetary control systems are universal and have been considered an essential tool for financial planning. The purpose of budgetary control is to provide a forecast of revenues and expenditures this is achieved through constructing a model of how organization might perform financially speaking if certain strategies, events and plans are carried out (Churchill 2001).

Most organizations use budget control as the primary means of internal controls, it provides a comprehensive management platform for efficient and effective allocation of resources. Budgetary controls enable the management team to make plans for the future through implementing those plans and monitoring activities to see whether they conform to the plan, effective implementation of budgetary control is an important guarantee for the effective implementation of budget in the organization (Carr and Joseph 2000). Organizations have adopted broad budgetary control that ensures that the entire budget system is a control system, which it is the formation of a prior, during and after the whole process of control system through the budget preparation, budget evaluation, reward and punishment by monitoring of budget execution. With a narrow budgetary control, an organization can prepare a good budget as a basis for performance management and standards on a regular basis in order to compare actual performance with the budget to analyze differences in the results and take corrective measures, which mainly involves the process of budget implementation, evaluation and control (Hokal and Shaw 2002).

1.3 Research Problem

Many organizations recognize the need to have a developed and comprehensive budget control system in order to minimize budget variance and costs and it also maximize effectiveness of the organization by eliminating any theft, waste, excessive use of budget that could lead to organizations poor performance.

Most public organizations in Ethiopia have shifted focus to budgetary control as a way of enhancing effectiveness in their services (help age international training workshop in Addis Ababa 2008). But research studies indicate that budget control is not tight in many organizations and has lead rush expenditure toward the end of the budget year which has effect on the public organization (Tilahun 2010). Recognizing the role of budget and budgetary control has gained attention which has led some organizations to establish departments for implementation. This has attributed budget monitoring and project implementation committees as an integral part of the administrations to governmental organizations in Ethiopia (MoFED 2014/2015 annual report).

In Southern Nations, Nationalities, and Peoples' Regional State budget credibility and control in is low and not implemented as planned, lack of comprehensiveness of information included in budget documentation, these indicates lack of internal control and it results in misuse and misapplication of funds culminating in over expenditure. Some budget institutions (BI's) may not strictly adhere to the commitment & budgetary control system. ORAG's reports indicate that BI's spent beyond their approved budget and neglected certain part of procurement procedures. (PEFA, 2015)

Studies had been done in relation to budget globally and locally:

Globally, study by Lambe Isaac, Mary Lawal and Theresa Okoli (2015) published on the Research Journal of Finance and Accounting carried out a study in the Nigerian National petroleum Cooperation (NNPC), on a systematic review of budgeting and budgetary control in Government owned organizations to conclude that budgeting and budgetary control is an indispensable tool to any organization. When matters relating to budget and budgetary control are carefully planned and implemented by any organization (most especially government owned organizations), it can lead to decrease in cost and increase in revenue, which in turn leads to maximization of profit. The finding of the research shows that when budgets are effectively utilized most especially within the framework of predetermined and effective control, it serves as a means of achieving and coordinating organizational plans and actions.

(Carolyn et al. 2007) examined the association between effects of budgetary control on performance using a sample of large US cities Financial Bonds and found that effective level of budgetary control is significantly and positively related to bond rating. Dunk (2007) carried out a study in Europe on budgetary participation and managerial performance in non-profit making firms and concluded a positive correlation between budgetary participation and managerial performance in non-profit making organizations.

Epstein and McFarlan (2011) carried out a study in Denmark on measuring efficiency and effectiveness of a non-profitmaking organization's performance; it was found that

budgetary control was one of the important tools in achieving efficiency of in non-profit making organizations.

Nyagen'o (2014) carried out a study to identify determinants to effective budget implementation among local authorities in Kenya. The results of the study revealed that effective budgetary controlled to improved performance of local authorities.

Besides, locally, (Tilahun 2010) carried out the study on budget management and control by emphasizing on ministry of national defense by using descriptive and qualitative research approach and come up with that budget of the ministry of defense was prepared without considering reasonable cost estimation and current market price. He also revealed that there is the idle cash in the ministry of defense due to the lack of consistent purchase program which lead to rush expenditure toward the end of budget year.

Birhanu (2011) studies evaluation of budget practice of Ethiopia in comparison with two east African countries(Kenya and Uganda) focusing on budget practice and transparency by using qualitative research approach and revealed that the level of transparency with regard to full disclosure of all relevant budget information is very poor in Ethiopia, Kenya and Uganda. And he also recommends that the need to increase transparency is important in each budget cycle so as to increase citizens' participation in the budget decision.

A study by (Silas Shisho 2013), examined on the assessment of budget preparation, utilization and performance in SNNPR, Basketo special worda Special emphasis in Finance and Economic development office. The study was using both primary and secondary data that were conducted and investigated in details. The study was concluded that the budget was not performed well, because the staff members were not quaint with procurement rule and population and deliance of purchasing due to improper plan of procurement. Additionally the staff members were not settles the budget or the specific period. The researcher was recommended that, budget preparation was not consider with government expenditure. This result in ineffective budget preparation so that in order to overcome this problem budget preparation must depends on the government expenditure

programme (GEP). In order to achieve efficient ways of budget utilization the office must follow: improve a time base plan of budget, improve the officer skills by providing short term training based on their gap assessed and facilitating the pre-condition to use budget. The re-allocation of employees must be on the right place based on their skills. For example allocation of ‘IBEX-experts’ was not acquainted with the technology very well.

Abera (2014) study on budget preparation and utilization of educational finance in public secondary schools of shashemene town, oromiya region by employing descriptive survey and the study revealed that the level of transparency and accountability in budget process and effectiveness and efficiency in utilization of budget is more or less positively related.

Ketema (2015) examined assessment of budget preparation and utilization in Addis Ababa city administration health bureau and revealed that there is no accountability in budget and no market oriented cost estimation because of lack of adequate and experienced expert in the budget department.

From the review of past research, most studies have concentrated on budget preparation, practice, transparency and accountability, and budget implementation in the public sectors, but as best of the researcher knowledge, there was lack of studies directly related to determinants of budget control which is the last stage of budgeting cycle and there is a problem of linking the work plan with expenditure and purchasing of goods and services is not based on the annual action plan by sectors (Mohammed and Asfaw 2014).

Keeping this reality in mind, the writer of this paper assumed that to identify the determinants of budget control in public organization in the South Nation Nationalities People Regional State are not fully researched therefore, these and other related issues mentioned above are the reasons for the writer’s motive to focus and assess as well as to identify the determinants of budget control in public organization in the South Nation Nationalities People Regional State.

1.4 Objective of the Study

1.4.1 General objectives

The general objective of this study was to identify the determinants of budget control in public organization in the South Nation Nationalities People Regional State.

The specific objectives were:

1. To establish the effect of monitoring and evaluation on budget control in public organizations at SNNPRS.
2. To assess the effect of budget planning processes on budget control in public organization in the SNNPRS.
3. To examine the contributions of competent internal audit staff on budget control in public organization in the SNNPRS.
4. To examine the role of organizational commitment on budget control of public organization at SNNPRS.
5. To examine the contributions of management support for budget control in public organization at SNNRS.
6. To examine the result of cost reduction on budget control in public organization at SNNPRS.
7. To examine the role of information and communication on budget control in public organization at SNNPRS.
8. To examine the contributions of competent human resource in budget department on budget control in public organization at SNNPRS.

Research Questions

In order to assess the determinants of budget control in public organization with in the Southern Nation, Nationalities and Peoples' regional state the following research questions were formulated.

1. What are the effects of budget planning processes, monitoring and evaluation on budget control in public organization in the SNNPRS?
2. What are the contributions of management support and competent internal audit staff on budget control in public organization in the SNNPRS?
3. What are the role of organizational commitment, information and communication on budget control of public organization in the SNNPRS?
4. What are the results of cost reduction on budget control in public organization in the SNNPRS?
5. What are the contributions of competent human resource in budget department on budget control in public organization in the SNNPRS?

1.5 Research Hypotheses

In line with the broad purpose statement, the following hypotheses are formulated for investigation. Hypotheses of the study stands on the theory are related to determinants of budget control in public organization. The results from the literature review (to be established in the next chapter) have used to establish expectations of the different determinants on budget control. Hence, based on the objective, this study tests the following hypotheses:-

H01: Budget planning process has no significant effect on budget control in public organization;

H02: Management support has no significant effect on budget control in public organizations;

H03: The competent IA staffs in the public organization have no significant effect on the budget control;

H04: organizational commitment has no significant effect on budget control in public organization;

H05: monitoring and evaluation have no significant effect on budget control in public organization;

H06: Information and communication have no significantly determines the budget control of public organization;

H07: Cost reductions have no significant effect on budget control in public organization.

H08: The competent human resources in budget department in the public organization have no significant effect on the budget control;

1.6 Significances of the studies

The researcher believes that the result of this study was the following significances. Apart from being the requirement for fulfillment of Master's Degree in Accounting and Finance, the researcher report is beneficiary in recommending relevant issue on determinants of budget control to the government, managers, employees and general public.

It is also to help management of the organization by establishing the determinants of budgetary control and their effects with in public organization, it assists the management of the organization to make better their operational effectiveness and add to the knowledge base on budget controls and serve as a driving force for financial decision making.

In addition, the findings of this study were providing more insights to the government and other policy makers in setting policies and procedures. Researchers and academicians interested in this area or other related topics can use the findings of this study to serve as a good source for further research.

1.7 The scope of the studies

Effective budget control method can be the need of all government organization. However, for the sake of effectiveness and efficiency, and to manage the limited project time and

budget, this study was limit only to know the determinants of budget control in the South Nations, Nationalities, and People regional state particular by focusing on 5 purposively selected bureaus. The criteria for choosing 5 bureaus were based on their knowledge and experience relative to the remaining other sectors about public budget during budget allocation, implementation and evaluation process. The selected bureaus are, BoFED, office of regional auditor general (ORAG), region revenue authority bureau, the region administrative council and budget and finance standing committees. The study does not cover the other regional organizations, and city administrations.

1.8 Organization of the paper

This study was divided into five chapters. The first introductory chapter, which contained the background of the study, statement of the problems, objectives of the study, research hypotheses, significance of the study, and scope of the study; the second chapter describes the detail review of related literatures with regard to budget control and the variables which determine the BC. Whereas, Chapter three introduces the research methodology, which in turn includes the choice of research, data type, sampling design, research instrument, method of data analysis and so forth. The fourth chapter is the analysis, discussions and presentation part of the research findings and finally, the last chapter describe about the conclusions and recommendations of the case study followed by the references and appendixes.

CHAPTER TWO

REVIEW OF RELATED LITREATURE

2. Introduction

This section covers the theoretical framework of the study; it discusses theories that support budget and budgetary control and variables that determine budget control as well as the definitions of concepts. To assist in identification of existing gaps in the literature, empirical literatures were also reviewed in this chapter.

2.1. Theoretical Literature Review

There are three theories that support budgetary control of organizations namely the theory of budgeting, budgetary control model and accounting theory in budgetary control as discussed below:

2.1.1. Theory of budgeting

Budgets are used by most firms and projects as future financial performance tools which enable in the evaluation of their financial viability. Organizations can prepare both long-term and short term budgets in different timeliness such as monthly, quarterly, semiannually, annually and over a wide range of years. Usually, short term budget covers a period of within a year while long-term budgets cover more than three years, in some instances an organization can have a medium term budget which covers 1-3 years. Budgets have been defined by Silva and Jayamaha (2012) as a mere collection of plans and forecasts. Budgetary control enables an organization to compare between actual and expected outcomes as regards to budgeting. According to Hirst (1987), an effective budgetary control system helps organizations in planning and providing measures on how to tackle emerging threats through establishment and safeguarding laid down controls.

Shields and Young (1993) states budgeting theory as one used to detect differences between organizational objectives and performance.

According to Scott (2005), budgeting and budgetary control processes allow for a subsequent comparison of actual results with the expected results. According to Selznick (2008), budgets has several roles which includes coding, learning, making goals explicit, contracting with external parties as well as facilitating control.

Budgets can further influence the behavior and decisions of employees by translating organizations objectives, and providing a benchmark against which to assess performance. Hancock (2009) even considered such operational planning as the backbone of management. During budget preparation procedures, consideration of alternative courses of action becomes an integral part and leads to increased rationality. A budget allows a goal, a standard of performance to be established with subsequent comparison of actual results with the created standard. It requires those involved to be forward looking rather than looking back (Scott 2005). Budgets have therefore been identified as playing a number of roles which include making goals explicit, coding learning, facilitating control, and contracting with external parties (Selznick 2008). Fisher exemplified this by “linking compensation to performance measures against the budget”, thereby making goals explicit, communicating goals and thereby coding learning and clarifying performance measures for individual employees of an organization (Goldstein 2005).

2.1.2 Budgetary Control Model

In reference to Robinson and Last (2009), budgeting system is a tool used by the firm as a framework for their spending and revenue allocation. To ensure the firm’s resources are not wasted, the organization must be able to come out with an effective budgeting system. This is important as it ensure that the outputs produced and services delivered achieve the objectives. According to this theory, a good budgeting system must be able to addresses the efficiency and effectiveness of the organization’s expenditure. A good budget is determined by the level of income of the organization (Robinson, 2009).

The organization has to put proper controls that ensure that the budget is properly maintained and allocated. A firm that is able to run its operations efficiently is able to allocate more revenues for the organization. This is achieved through cutting costs in order to increase the quality of goods and service offered by the organization. However, if an organization has lesser income they might have to find a way to fund their estimated budget by borrowing and tax restructuring (Robinson and Last, 2009).

That is why the budget is mostly regarded as the control of expenditure .As the total amount of the annual expenditure; the organization must not exceed the allocation of budget.

In some countries for example Malaysia the budgeting process is done through a political process which is mainly done in the parliament. Budget is important not only as political tools but also as a pledge between the ruling organization and the public as their commitment to satisfy the need and demand of the people. Budget also can be used an indicator of the performance of the ruling government. It is a statement of whether they are competent in administering the organization and the national resources (Sawhill and Williamson, 2001). One of the models of budgeting system is Performance Based Budgeting System. According to Robinson and Last (2009), performance-based budgeting system (PBBS) aims to improve the efficiency and effectiveness of public expenditure. Unlike other budgeting system, PBBS use the resources to ensure that it can help in achieving the expected results and outcome based on the targeted area or planning. In simple words, the PBBS is seen as managing for results (Marc Robinson and Duncan Last, 2009).

Compared to the traditional budgeting system which focuses on the amount of inputs, performance based budgeting system focused more towards the outcome. As the organization spending stretches annually, it is important to understand the nature of spending of the organizations which is always being stated in the budget. It is therefore essential for the organization to understand it s budgeting system and give priority to urgent matters that require attention. In order to find out the relationship between the budgeting system and the organizational performance, it is important for the firm to

determine the patterns of the expenditure of the organization and its performance (Phyrr, 1970).

That is why the budget is mostly regarded as the control of expenditure. The government of Ethiopia is investing public budget on social and economic infrastructure (education, health, water, road, power, communication etc...) in order to provide public services and enabling environment for private sector to invest (Mohammed and Asfaw 2014)

2.1.3 Accounting Theory in Budgetary Control

Kaplan and Norton (1996) ,accounting theory is aimed towards provision of a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices and policy development. Otley and Pollanen (2000), the purpose in developing a theory of accounting is to establish standard for judging the acceptability of accounting methods. Procedures that meet the standard should be employed in practice of accounting. Horvath (2009) argues that the accounting methods that fail to meet the standard should be rejected. Accounting theory helps in explaining and guiding management actions in identifying and locating information necessary to be used in budget preparation. The money measurement concept in accounting has contributed to a greater extent in providing yardstick for quantifying, conversion and translating various inputs in relation to materials, and machines required in the preparation of budget (Horvath and Seiter, 2009).

Theory in accounting guide in the selection of principles and roles to be applied in particular circumstance. The accounting theory in budget control has come up with different models of analysis for example cost volume profit analysis and standard costing which serve as a standard setting in budgeting. Theory has an important normative role in the evaluation of budget and control procedures to be adopted. Theory has assisted in making predictions of the likely outcome of budget action in a given set of circumstance and effect of any change in circumstances. Horngren (2002) argues that accounting theory view a firm as a separate entity in which its activities are distinct from its owners. These principles serve as an impetus to the general philosophy of budget itself as a tool for effective management (Horngren, Forster and Dater, 1997).

Budget as a tool for standard setting and performance measurement utilize several accounting concept to a greater extent. Accounting theory has developed models in which standard can be set. Management accounting theory also provides several yardsticks to be used for control. That is variance analysis. Since budget is an instrument of plan. It provides a framework of given feed back to the management on the implementation of budget. When implementing the accounting theory historical data is instrumental since this data serve as an input for making forecast. The cost accounting theory developed by Wedgwood in early 20th century which stress on cost identification, allocation and revenue maximization has provide a basic insight and blue print in budget and control in organization. The matching concept in accounting also plays a role as reference issue in budget analysis (Hopwood, 1976).

Budget Control in Ethiopia

In Ethiopia, Public sector offices are part of the public body which is partly or wholly financed by government budget and concerned with providing basic government services to the whole society which is achieved through controlling public finance and, controls are mainly in-built in the public financial management system. Public financial management includes the legal and organizational framework for supervising all phases of the budget cycle, including the preparation of the budget, internal control and audit, procurement, monitoring and reporting arrangements, and external audit. The broad objectives of public financial management are to achieve overall fiscal discipline, allocation of resources to priority needs, and efficient and effective provision of public services (MoFED 2004).

The compositions of the public sectors are varied by their function and purposes, but in most cases, they are designed in order to enable the public sectors to achieve their goals through control of budget. Because of this Ethiopian government introduce program budgeting (PB) system for the intention to bring about the effectiveness in budget control and utilization which led to show the outcomes of budget on public organization (Fenta and Abebe 2012).

Currently Ethiopian government is investing in various infrastructures like the Grand renaissance dam, railway, building of condominiums, roads and industrial parks to accelerate the growth and development of the country. To achieve these, Ethiopian government implemented the Growth and Transformation Plan (GTP). According to the base case scenario of Growth and Transformation Plan (GTP) by the end of the first GTP period EFY(2007), that total government budget will reach Ethiopian Birr (ETB) 201.1billion, up from its ETB 71.3 billion in 2003, which depends on the basic principles of budgeting and the features of budget process (Mohammed and Asfaw 2014). It was under these premises that as South Nation Nationalities people regional government is one part of regional state to achieve the growth and transformation plan by means of enhancing budget credibility and control through a repetitive cycle of planning and control and usually followed by appropriate information about actual result to the management for comparing them against the budgeted and initiating a control action is necessary; but, according to PEFA assessment report (2010) there is no complied data on types of government procurement and lack of internal control in public organization; this make researcher egg on to conduct study on determinants of budget control at South Nation Nationalities people region.

2.2 Empirical Literature Review

Joshi and Abdulla (1996) examined some aspects of budgetary control and performance valuation systems by utilizing data based on a questionnaire survey of 42 medium and large size companies located in the State of Bahrain. The study found that the conventional form of budget controllability principle was practiced to a great extent. It was concluded that bonus is affected by budget performance along with new assignments, but not salary. Kenneth OdourAdongo and Ambrose Jagongo (2013) examined that, budgetary control as a measure of financial performance of state corporations in Kenya. The study sought to investigate the relationship between budgetary controls and financial performance of state corporations in Kenya. A descriptive survey design was used to gather data from the state corporation's managers of the sampled state corporations. Purposive sampling was used to select corporate services manager, finance manager and budget officer from each corporation to

participate in the study. Findings indicate that a positive significant relationship exists between budgetary control and financial performance of state corporations. The study recommends sensitization of management and employees of state corporations on the importance of budgetary controls in enhancing financial performance, avoidance of political interference in the budgetary process and use of budgets as tools for management efficiency.

Chemweno (2009) evaluated how the firm has employed an operational budget as a management tool in Kenya. It set out to determine how operational budgeting practice is actually done, the basis of budget formulation and to what extent the budgets are used as a management and control tool. The data was collected mainly through detailed questionnaires and analyzed using descriptive statistics by way of summary statistics, tables and percentages. The study revealed that budgets are normally prepared on an annual basis. It was found that all the major Kenyan mortgage financing institutions have an operational budgeting process which they considered extremely important since it is outlined in the organizations objectives, targets, means of achievements, cost of achievement and responsibilities.

Badu (2011) conducted an investigation of budgeting and budgetary Control at Ernest Chemist Laurea. The aim of this study was to conduct research concerning the budgeting practice in Ernest Chemist, a pharmaceutical company based in Ghana, and identify the perception of the budgeting experts in the company and assess their views towards the current status of the company. This research was necessary in order to assess the possibility of solving any problem this organization may face in designing an effective budgeting and budgetary control system. A self-designed interview questionnaire was sent to a member of staff in the company to seek his views on the problems and concerns regarding budgeting and budgetary control in the organization. The results of the study indicated that the appropriate system of budgeting and budgetary control had been adopted and used to prepare the pharmacy's budgets but there were a few problems associated with ethical issues which need further investigation.

Marcormick and Hardcastle (2011) carried out a study on budgetary control and organizational performance in government parastatals in Europe. A sample of 40 government parastatals were used for establishing the relationship between budgetary control and organizational performance, secondary data was used and a period of ten years was reviewed. A regression model was used for data analysis and the results of data analysis revealed a positive relationship between budgetary control and organizational performance of government parastatals.

In their study, (Nickson and Mears 2012) examined the relationship between budgetary control and performance of state ministries in Boston Massachusetts, a sample of five ministries were examined to test the relationship between budgetary control and performance of state ministries, secondary data was used and a review of 10 years was used, a regression model was used for data analysis and a statistical positive relationship was found between budgetary control and performance of state ministries. The results of the regression analysis concluded that proper budgetary control measures led to performance of state ministries.

Fadi Baker (2013) studies the effects of tight budgetary Control on managerial behavior in the Swedish Public Sector. The objectives of the thesis is to determine the effects of tight budgetary control on managerial behavior in the Swedish Public Sector based on a sample of 62 managers from different municipalities and universities throughout Sweden by using quantitative research approach and the result of the thesis research study revealed that the majority of the local managers in the Swedish public sector actually experience tight budgetary control and the statistical test of the created hypotheses showed that the behavioral factors, both, organizational commitment and stress were respectively negatively and positively related with tight budgetary control. However, for the behavioral variables of motivation and satisfaction no significant results have been found.

2.2.1 Related empirical studies in Ethiopia

Few studies were conducted by different researchers in Ethiopia on the budget management and control, evaluation of budget practice, budget implementation, and preparation and utilization in governmental as well as in NGOs.

The following section presents the related study of the researchers locally;

Tilahun (2010) did a study on budget management and control with special emphasis on Ethiopia ministry of defense for his thesis in Addis Ababa University. The aim of the study was on the process by which military budgets are developed, implemented, recorded and monitored. The researcher targeted all budget holders in the ministry of defense for his study. The researcher concluded the following points based on his analysis.

Even if Ministry of national defense issued budget guideline, the concerned body did not move to enforce the practicability of the rule. If it were, the above summary findings would not occur.

Unavailability of adequate and experienced manpower has added for the worsening results of plan and budget preparations disparities.

Lack of awareness of budget users about the role of plan and budget to the institution; Budget holders have various understandings during budget preparations; Budgets are prepared without considering reasonable estimations and current market prices. The researcher concluded that the causes for idle cash are mainly due to the lack of consistent purchase programs which lead to rush expenditure towards the end of the budget year. Although the nature of the institution forces to consider unforeseen situations, additional duties of budget users are not usually backed up by supplementary budgets.

Planning and Budget department does not arrange regular workshops and short term training to improve the skill of budget personnel engaged in budget holders. Apart from accountability of the specific budget users, the department takes the lion's share of

responsibility for budget preparation and implementation problems. Although much deviation has not been observed in budgetary records, the adoption of modified cash basis of accounting system has not been implemented fully.

There is no carrot-and-stick strategy. No incentive mechanism is employed for good performers, and punishment as well for poor achievements unlike what is observed in other counterparts. Audit opinions given by Office of Federal Auditor general (OFAG) are signals of the institution's weak compliance with the rules and regulations of the country.

Birhanu (2011) did a study on evaluation of budget practices of Ethiopia in comparison with two east African countries. The aim of the study was to assess similarities and differences between Ethiopia and two east African countries with respect to budget practice and procedures. The researcher concludes that the general public in Ethiopia cannot significantly involve in the country budget process and citizens have no access to monitor and evaluate the budget performance. Factors that limit citizens' participation in the budget process are limited accessibility to budget information; budget language and country population. Lack of involvement of citizens in the budget process would minimize a way of improving budget formulation, efficiency in resources allocation and better oversight of the budget process.

There is a legal stand for transparency such as the constitution however, budget information is not available for citizens in accessible, timely and clear and easy to use manner. Government has a duty to make an effort to increase budget transparency because; it allows citizens to properly assess government financial position and performance. Scarcity of budget information might decrease the level of public participation in the budget decision process. Mohammed and Asfaw (2014) publish journal article on government expenditure management and control in Ethiopia. The objectives of the article were reviewing public expenditure management and controlling of financial resources as it is crucial because society's needs and demands are unlimited whereas resources are limited in nature. Therefore, the result showed that there is a problem of linking the work plan with expenditure budget preparation. It is also revealed

that purchasing of goods and services is not based on the annual action plan by sectors. In other word, this indicated that there is a problem of budget preparation and execution. On the other hand, In relation to budget approval, the result indicated that Legislature has effective systems of check and balance on public expenditure. The test was also undertaken to check auditor's satisfaction in relation to the support they get from management to conduct their task. The test result indicated that auditors have a problem of motivation with the financial and material support to carry out audit work to achieve their objectives for the accomplishment of organizational goals. Esayas (2014) study on assessment of budget implementation and control by using qualitative type of research approach at case of Kolfekeranyo Sub-city finance and economic development bureau by using judgmental probability sampling and the author select 20 samples from total of 44 personnel found in the sub-city. The main objectives of the study was to be asses the comprehensive factor that affect budgetary implementation and control system to find potential solution to the problem at sub-city. The results of the studies shows that Even if the sub-city implements its budget effectively, variance were occurred, when compared actual results with budgeted estimation the reason for the occurrence of variance was the sub-city is not perform it activities. Performance report can be effective, especially if it is presented continuously. However, the sub-city constantly presented the performance report.

poor database for planning and budgeting, lack of incentives and lack of experienced personnel in the various departments are some of the problems the sub-city encounters in budget preparation and control, operational difficulty, low morale and delays are other problems the sub-city encounters in the budget implementation. There is active participation of all the departments in the budget preparation and implementation as every department submits their inputs into the annual budget proposals.

Yesuf (2015) carried out the study on budget and budget monitoring practice in NGOs operating in Ethiopia. The purpose of this study is to evaluate effect budget and budget monitoring practice in NGO in Ethiopia and to achieve the objectives the author used convenience sampling method for selecting 20 charity organizations. And out of 102 recommended by the manager 81 staff was taken as respondent from program of finance

and support services. Then, the finding shows that the overall budget system in the sample organization missed the participation of concerned staff, which have effect on budget monitoring and implementation.

Ketema (2015) conducted studies on assessment of budget preparation and utilization in the case of Addis Ababa City Administration Health Bureau by taking five out of seventeen budget holders was taken and ten key informants were selected from each budget holders with a total of 50 respondents. The results of qualitative analyses demonstrate that there was no accountability in budget utilization; there are no market oriented cost estimation practices. Lack of adequate and experienced budget experts is other issue that contributes to worsen the problems and also there is no evidence based evaluation mechanisms in the budget utilization at each level of the Health Bureau.

2.2.2 Budget control in organization

Roxana Stegorean and CorinaGavrea (2011) Organizations have an important role in our daily lives and therefore, successful organizations represent a key ingredient for developing nations. Thus, many economists consider organizations and institutions similar to an engine in determining the economic, social and political progress. In relation to this, budgetary control in organization involves the preparation of a budget, recording of actual achievements, ascertaining and investigating the differences between actual and budgeted performance and taking suitable remedial action so that budgeted performance may be achieved effectively (Controllers report 2001). Budgetary control is the system of controlling costs through budgets. It involves comparison of actual performance with the budgeted with the view of ascertaining whether what was planned agrees with actual performance. If deviations occur reasons for the difference are ascertained and recommendation of remedial action to match actual performance with plans is done (Coates 2005).

2.2.3 Determinants of budget control

There are several determinants to effective budget control among organizations. Then for the purpose of these study budget planning process, management support, organizational

commitment, competent internal audit, monitoring and evaluation of the budget, information and communication ,cost reduction and competent human resource in budget department are referred (Srinivasan 2005).

2.2.3.1 Budget planning processes

In order to carry out budgetary control, it is necessary to formulate a fully co-ordinate detailed plan in both financial and quantitative terms for a forthcoming period. The duration of the period is usually one year. The plan needs to be in line with the long term development strategy of the organization, although in the shorter term of a budget year, conditions may prevail which could dilute this aim. For example a depressed economy could lead to a temporary departure from the long term plans. Therefore, before formulating the budgets, the policy to be pursued during the forthcoming trading period needs to be established (Dunk et al. 2001).

In order to prepare proper budget plan, three preconditions were recommended by (Anwar S. 2007) as follows:

The preparation process has to consultative and participatory in order to ensure ownership to both the process and the approved budget;

A systematic process of prioritization of programs and expenditures, which is based on informed choices, must take place.

Planned outputs, activities, and expenditure allocations in the annual work plan and budget estimates must be realistic, and achievable

Once budgets are operating throughout an organization, it is important that feedback is made available to the managers responsible for its operation. This is often done by means of monthly budget reports. These reports contain comparisons between the budget and the actual position and throw up differences which are known technically as variances. The budget plans must be properly co-ordinate in order to eliminate bottlenecks. Individual budgets should be coordinated with one another to ensure that the

implementation process is conducted effectively in order to save time and costs (Horngren et al. 1997).

To facilitate proper planning, the management team should determine overall projections of economic growth, revenue and expenditure of the country for about 3-5 years that the organization is undertaking. The macro-economic forecast gives the forecast of Gross Domestic product based on past performance and estimates for future years, and provides baseline information in preparing the fiscal forecast. A predetermined budget of possible costs that was incurred carrying out the activities planned in a project should be made. Realistic planning of finance is key to the implementation of a project or program (Joshi and Abdulla 1996).

In Ethiopia, the federal and the member states are responsible for planning their own budget normally by the guidance of MoFED for the delivery of most basic services to the public. Then regions' budget planning processes start by estimating the budget sources. The planning stage considers the expected federal subsidy, own revenue and foreign loan and aid. Some Regional Bureaus of Finance and Economic Development (BOFEDs), prepare multi-year projections of expenditures using Macroeconomic Fiscal Framework (MEFF) Plans and Public Investment Programs (PIP).

After receiving tentative pre-ceilings on the expected federal government subsidies from MOFED in early or mid-February, Regional BOFEDs determines allocations to regional public bodies or sector bureaus (such as health, education, water, rural development, etc) for the following budget year.

Regions and Woredas develop two types of budgets: recurrent and capital budgets.

Recurrent budget is spending on items that are consumed and are repeated every budget year, such as salaries for teachers, health workers, agricultural extension workers and development assistants, offices' operational costs, medicines, books and electricity. Salaries for employees of public bodies dominate the recurrent budget.

Capital budget is spending on items that will last for several years, like buildings, roads and water points. Money is needed to build schools, health post, water points, and roads. Once constructions under the capital budget, for schools, health posts, etc., are completed, the maintenance and service provision in most cases continues to be assigned in the recurrent budget.

Finally, Regions adjust their work plans, where outcomes and required resources to achieve these outcomes are presented, to the approved budget. Thereafter, financial action plans, indicating monthly disbursement requirements, are submitted to MOFED. And planned budget are going to be disclosed on public notice for its transparency and accountability.

2.2.3.2 Management support

Budget department have a close relationship with organizations management in their day to day activities. They need good support and perception from their management to be use budget allocated wisely for the achievement of organizational objectives. Management support is expressed in terms supporting the budgeting control by fulfilling the necessary resource, finance, training, new technology and other facilities that facilitate the work of controlling budget through encouraging auditor of the organization (Mihret and Yismaw 2007).

2.2.3.3 Competent Internal Audit Staff

Adequate staffing is essential for a system to its full capability. Weakness in staffing can lead to mismanagement, error and abuse, which can negate the effect of other controls (MoFED 2004). The size of IA staff and the competency of internal audit are the critical characteristics of IA quality that can't be separated. This means at the absence of one dimension the other cannot contribute to the quality of internal auditors.

Auditors must comply with minimum continuing education requirements and professional standards published by their relevant professional organizations (IIA, 2001). In addition to the above dimension of IA quality, the competence of internal auditors can

be measured in terms of academic level, experience and the efforts of staff for continuous professional development and compliance with audit standards. Both the quantity of audit effort and the quality of professional care exercised will determine the overall quality of the internal audit work (Cohen and Sayag, 2010); (Leung and Cooper 2009); (Belay 2007).

According to (Havens 1999), the following elements are the benefits of effective auditing for public budget control:

Determine the reliability of reports on budget execution and other financial data;

Provide reliable data about program results as a basis for future adjustments in budget allocations;

Identify instances and patterns of waste and inefficiency that, if corrected, will permit more economical use of available budget resources;

Detect irregularities involving the misuse of public funds and identify related weaknesses in management controls that may imperil the integrity of the organization and the effective implementation of budgetary and other policy decisions.

To accomplish this, internal audit functions have been reformed at the federal level and rolled out to the South Nation Nationalities People Regional Government. Accordingly, the inspection department in BoFED and the audit sections in each Bureaus use the internal audit manual. The manual meets the professional standards like International Standards such as the International Standards for the Professional Practice in Internal Audit (ISPPIA) issued by the institute of internal Auditors which focuses on systemic issues. Then internal audit in South Nation Nationalities People Regional state are operational in the majority of the bureaus while at zonal and woreda level the zonal and woreda finance offices provide internal audit functions through a pool system which playing a great role in managing public budget.

2.2.3.4 Organizational commitment

Budget control can be done using a participative or top-down approach. According to (Eker 2006), there are two benefits from a psychological and cognitive perspective with managerial participation in the budgeting process. The participative approach benefits from the managers' identification and the ego-involvement with budgets objectives. Furthermore, as stated by (Buchanan 1974), organizational commitment includes involvement, identification and loyalty towards an organization. Thus, it could be assumed that if managers are able to identify themselves and be involved in the budgeting control, it should have a positive effect on their organizational commitment, as well as, towards goal achievement. However, a participative budgeting approach is related towards a decentralized structure, which implies lose control.

Organizational commitment can refer to identification, involvement and loyalty (Buchanan 1974). According to this, identification refers to the adoption of organizational goals and values by a person who is working for an organization.

Involvement refers to a person's participation in the company's activities and to act as a decision maker or to be directly involved in the organization's strategy formulation process and their objectives. Loyalty refers to the concern and commitment toward his or her organization (Buchanan 1974).

Organizational commitment has interested and attracted many researchers to examine whether employee's commitment has a positive or negative effect on performance (Mowday et al. 1979). For many years, organizational commitment has been an often used case study, as it was considered to positively influence performance (Larson & Fukami, 1984; Van Maanen 1975). Therefore it is believed that employees who are committed to their organization will perform better than employees that are less committed. Some other researchers studied and investigated employee's commitment in the private and public sector, and the results which have been found in these studies are mixed and show some differences in organizational commitment between employees in the private sector and employees in the public sector. However, employees working in the public sector are less committed than employees working in the private sector

(Gortner et al. 1987). (Hoy and Sousa 1984) found that more participation in decision-making will increase employee's loyalty in the public sector.

2.2.3.5 Budget Monitoring and evaluation

Budget monitoring and evaluation is a key determinant for effectiveness, through an evaluation and monitoring, the organization can clarify what direction the evaluation should take based on priorities, resources, time, and skills needed to accomplish the evaluation. To enhance effectiveness and transparency the management team should be actively involved in the process of monitoring and evaluation of budgetary control processes and procedures (Hancock 2009).

The process of developing an evaluation plan in cooperation with an evaluation workgroup of stakeholders will foster collaboration and a sense of shared purpose this highly contributes towards achieving an effective budgetary control (Simiyu 2002).

Budget evaluation refers to the final stage of the budget cycle when there is an assessment of whether public resources have been used appropriately and effectively. In order for this stage to actually support good governance and the effective and efficient use of public resources, *Mechanisms for monitoring and evaluation*

Periodic reporting and follow up and formats have been issued for budget monitoring through; Internal Audit, external Audit, Parliamentary control, Budget Review and Adjustments; and, Project inspection. However, the overall evaluation and monitoring of public expenditure is now affected largely through an Integrated Financial management System (IFMS). This is a computerized system which links up most of the government paying stations in (MOFED /BOFED). Therefore most payments are centralized and controlled. Hardly expenditure or commitment can be incurred without financial provision from IFMS.

Major outputs from IFMS include:

Monthly flash reports on revenue collections and expenditure; Quarterly and annually performance reports; Control of excess spending beyond approved budgets; Specific reports based on user requirements; and, In addition to IFMS there are sub-treasuries in all the regions for processing payments from decentralized government Ministries and Regions. Efforts are underway to establish sub-treasuries in all the Regions (MOFED 2004).

2.2.3.6 Information and communication

In a good organization, information system is essential to guide its operation process. Information systems produce reports, containing operational financial and compliance – related information that makes it possible to run and control an organization (COSO 1992). It should consist of accounting information system to ensure that the accounting process is valid and reliable.

Then information and communication refers to the process of identifying, capturing, and communicating of relevant information in an appropriate manner and within timeframe in order to accomplish the financial reporting objectives of the organization (Aldridre and Colbert 1994). However, effective communications should occur in a wider sense with information within the various sections of the organization (Theofanis et al. 2011). Most of the recent literature on internal control system frameworks gave concerned on information and communication as one of the internal control system components, because of their importance in influencing the working relationship within the organization at all levels (MesfinYemer 2016). Then, effective information and communication systems enable the organization to control their budget through information flow among the organization which led Management ensure there are adequate means of communicating with, and obtaining information from, external societies that may have a significant impact on achieving organizational goals (Guy et al. 1999).

In Ethiopia context, currently the government uses *Integrated Budget and Expenditures system (IBEX)* for tracking revenues and expenditures of all federal and regional budgetary institutions. This IBEX system capture the accounts module records the

financial transactions of the budgetary institutions and their aggregated monthly accounting reports and provides accounting reports for ledgers, financial statements, management reports, transactions, expenditures, and revenues. Further, at federal level MoFED has been consolidating the budget and accounting data for the entire country. This allows for the generation of regional and national consolidated report. Hence, this study also, evaluate whether the existing IBEX enhance budgeting and financial management, the extent to which the information system provide, timely quality and adequate information, and the adequacy of computers for undertaking budgeting and financial management practices. In this regard, the researcher assumes that well-functioning IBEX has a positive effect on implementing sound budgeting control practices.

2.2.3.7 Cost reduction

Budgeting and budget control represents the higher level of organization development and allows focusing on long-term results, effective use of financial resources, business, assists in making sound and timely managerial decisions. Budgeting helps to effective cost management and financial performance of the organization, allows you to compare all the planned costs and anticipated revenues for the coming period.

Cost Reduction is a systematic effort to accomplish projects by eliminating all forms of waste and unnecessary expense without impairing the generation of revenues.

Cost reduction in public organization implies the retention of essential characteristics of a quality services and thus it must be confined to permanent and genuine savings in the costs administration, evaluation and controlling by elimination of wasteful and inessential elements form the design of the output and from the techniques and practices carried out in connection therewith. In other words, the essential characteristics and techniques and quality of the services are retained through improved methods and techniques used and thereby a permanent reduction in the unit cost is achieved. This will require frequent information (accounting or otherwise) about operations in order to plan for the future, to control present activities, and to evaluate the past performance of managers, employees, and related bureaus or offices (chukwumaobara 2014).

2.2.3.8 Competence of Human Resource in Budget Department

To successfully execute its activities the organization should ensure that it has competent human resource with knowledge and skills on efficient and effective means of budgetary control processes and procedures (Horngren, 2002).

The organization should be well equipped with knowledgeable and skilled employees who are well conversant with budgetary control measures to effectively implement the budgetary control processes and allocation .Employees play an integral role in the process of planning, monitoring control and evaluation processes of budget implementation this highly contributes to monitoring budget expenditures and accountability in the use of the budget (Silva and Jayamaha, 2012).

2.3 Conceptual Framework

As discussed above the independent variables include, budget planning process, management support, competent internal audit, organizational commitment, monitoring and evaluation, information and communication, cost reduction and competence of human resource in budget department while the dependent variable is budget control in public organizations at South Nation Nationalities People regional government. It is assume that the foretaste independent variables affect budget control in the region.

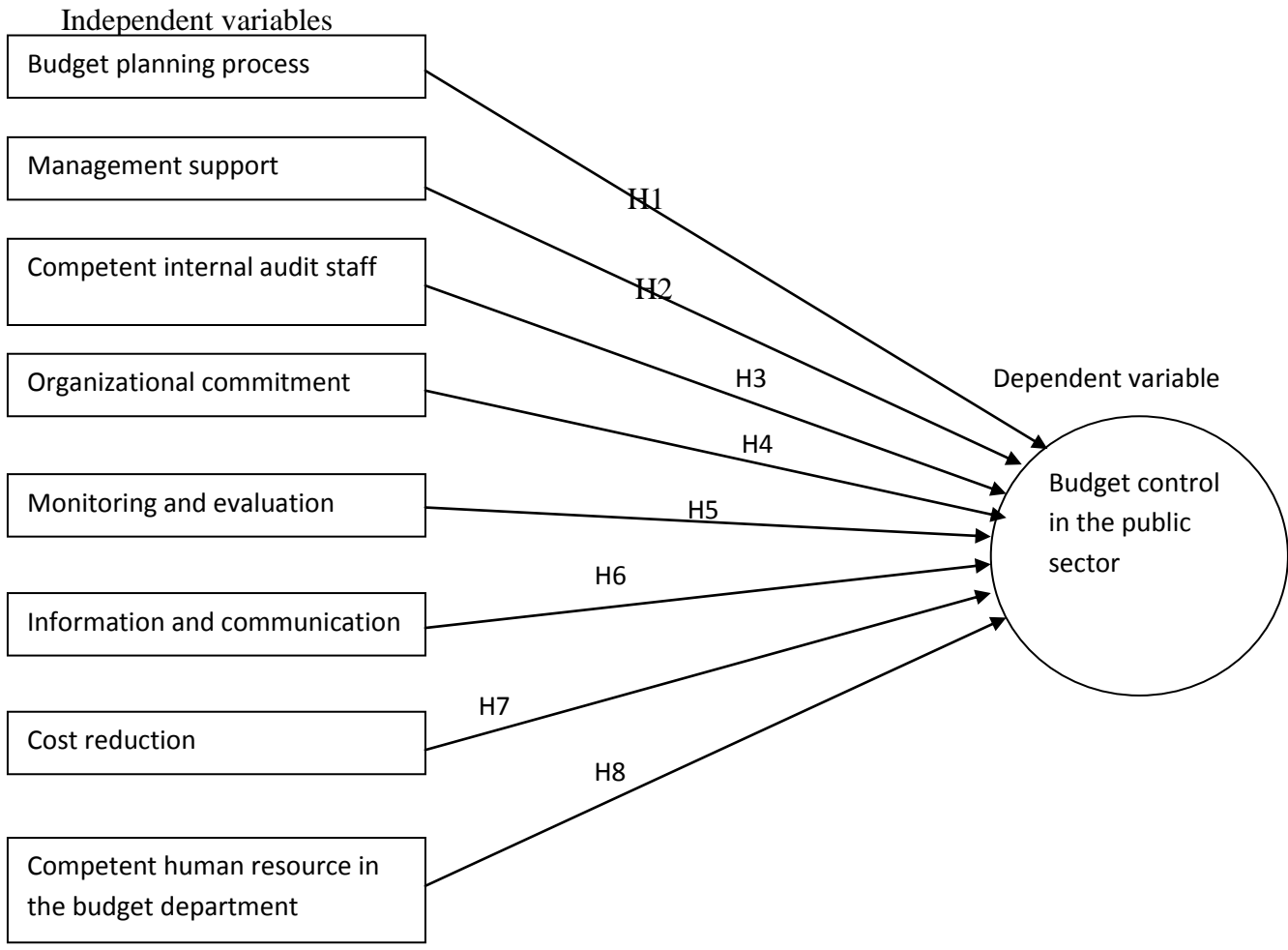


Figure-1: sources, own construction based on survey

2.4 Summary of Literature Review and Research gaps

Budgets are considered to be the core element of the control process and consequently vital part to the umbrella concept of performance measurement. Research has shown that there is no single approach to budgeting suitable for all organization for governmental or nongovernmental. Instead, the suitability of a particular approach is argued to be contingent upon characteristics of organizations including its size, strategy, structure, and also management’s perception of the uncertainty of the environment within which it operates to best link its budgetary control procedures that is planning, evaluation, monitoring and control.

Previous studies in public organizations show that there is a direct relationship between budgetary participation and performance. It is also indicated that budget preparation, budgetary control and budget implementation significantly influence budget variance.

An organization with well formulated budgetary controls easily assigns its managers the responsibility for the use of designated financial resources to achieve their assigned operational objectives and budget controls provides comparisons of actual results against budget plan (Abdullahi 2012). The government plays a leading role in shaping and development of any nation by apparatus public finance administration, a field which refers to the manner in which federal, state, and local institutions with their procedural, legal, regulatory, financial are organized, institutionalized and managed with respect to regulatory, revenue generation, speeding and procurement functions, and the provision of such services as defense, social service, and economic infrastructures (Kenneth 2012).

In case of Ethiopia as it is supported by (Tilahun 2010) who explains that even if Ministry of national defense issued budget guideline, the concerned body did not move to enforce the practicability of the rule, (OFAG) report indicate that institution weak compliance with the rules and regulations of the country, budgets are prepared without considering reasonable estimations and current market prices, and this have effect for the organization to achieve objectives. From the above literatures, little has been done in relation to budgetary control on public organizations; this is however geared to establish the determinants of budget control in public organization by the researcher.

Moreover, studies that conducted in governmental organization was to give idea on those factors that contribute to budget control and led to identify like internal control problem, lack of comprehensiveness of information included in budget documentation, poor budgetary control resulting in embezzlements, misappropriations and misapplication of funds culminating in over expenditures, and no complied data on the type and method of procurement used by bureau/offices as they are rationales of the study and what factors are important in overcoming this irregularities. Then, based on those different studies, budgetary control is used by organizations as a tool for proper management of resources in the organization and its activities.

CHAPTER THREE

RESEARCH METHODOLOGY

3. Introduction

This chapter discusses the approaches and techniques that the researcher was used when collecting data, analyzing the data and presenting the findings. These include the research design, target population, sampling and sampling techniques, data collection methods, data analyzing and model specification.

Background of the Study Area

The South Nations, Nationalities and People's Regional state is a specific region which was chosen as a specific area of this research study. The Southern Nations, Nationalities and People's Region (SNNPR) is located in the Southern and southwestern part of Ethiopia. Astronomically, it is roughly lies between 4°.43 - 8°.58 north, latitude and 34°.88- 39°.14 east, longitude. It is bordered with Kenya in south, the South Sudan in southwest, Gambella region in northwest and surrounded by Oromiya region in northwest, north and east directions. The total area of the region is estimated to be 110,931.9 Sq.Km which is shares 10% of the country. The region is a multination which consists of about 56 ethnic groups with their own distinct geographical location, language, cultures, and social identities living together. These varied ethnic groups are classified in to the Omotic, Cushetic, Nilo-Sahara and Semitic super language families. Among which Omotic and Cushetic are the most populous and diversified ones with the largest area coverage in region respectively. Based on ethnic and linguistic identities the region is at present divided into 14 zones-sub-divided in to 131 woredas and 4 special woredas and 22 town administrations. According to the 2008 E.C the regional total number of population is projected 19,534,338. The average population density of the region is 164 persons per sq. km. which makes the region one of the most populous parts of the country. The amount, duration and intensity of rainfall in the region vary considerably. It generally decreases from west and northwest to eastwards. The main dry season is shorter in southern

Ethiopia conversely the main rainy season is larger in west and south west. For the past three decades rainfall data has shown that the mean annual rainfall of the region was ranging from the lowest about 400 mm in the extreme south of DebubOmo zone to over 2200 mm in the west in sheka and kefa zone. According to south region Meteorological Agency total rainfall data, the lowest is experienced in konso and in parts of DebubeOmo zone such as weyito and Dimeka. On the other hand, the highest amount (1700-2200mm) is recorded in Bonga area of kaffa zone and yirgachefe and Bulewereda in Gedio zone. Generally, in the western part of the region, the rain occurs most of the year round while it is bimodal in the eastern and southern part of the region. Relying on the reliability of rainfall for crop production and duration of growing periods, the three seasonal patterns of rainfall in the region experienced are Bega (dec.Jan. & Feb.) Provide rain for limited part of the region, Belg (March and April) considered as little rainy season where the amount of rain fall received is relatively lower than the keremt rainfall that occurs in June. July and August However, in each of the season, the rain may last before the usual time. This has impact on growing period and reliability of rainfall.

The mean annual minimum temperature of the region in 2012/2013 vary from 10°- 16.7°c in the low land/part of kola aria sheka-tepi, konso,Amaro,Southomo and the extreme high lands /part of silte, kefa, hadiya, gurage and gedio/. However, temperature is generally high in the region with little variations among seasons. The meteorological data of year 2011/2012 indicate that the mean annual maximum temperature of the region ranges from 25.2-30.3°c in the lowland part of Debubeomo, sheka, Gamogofa,Dawerowolayita,gurage zone.

The lake side city of Hawassa, capital of SNNPRS, is situated in the Ethiopian Rift valley about 273 km south of Addis Ababa. The city lies on the Trans Africa high way from Cape Town to Cairo with a latitude and longitude of 7° 3' 35" N and 38° 28' 11" E. It has an elevation of 1708 meters above sea level. Hawassa is one of Ethiopian most attractive towns and a safe and friendly city in a beautiful setting. It is an ideal and a pleasant green city to break the north-south journey of Ethiopia. The city has many unique and exciting places to visit. One can explore the city on foot or bicycle, motor bike or vehicles.

Hawassa directs down from the beautiful St. Gabriel church to the main get of Lake Hawassa.

3.1 Research Design

Descriptive types of research were used in this study. This study describes and critically assesses factors that determine budget control in public organization at South Nation Nationalities and Peoples Regional State. Descriptive research studies are designed to obtain information, which concerns the present status of phenomenon (Saunders, Lewis, and Thornhill 2007). This approach is chosen because of the researcher would not control the variable but to describe the phenomenon that existed at the time of the study. The use of descriptive research enables the researcher to bring to light the determinants that contribute to the budget control practice. It also describes the degree to which the elements that determine budget control can affect the work of budget control in the public sector.

3.3 Target Population

The study was conducted in South Nation Nationalities Regional State by focusing on regional bureaus which are found in hawassa town. As of June 2018 the total main regional bureaus were twenty.

Due to the difficulty of covering all the total existing public bureaus, and because of the population have not equally important use of purposive sampling is more essential to obtain a typical and representative of the whole universe (Kothari, 2004). Then, researcher obliged to minimize its study area by focusing on five purposively selected public bureaus with total population of 523 that was expected to be used as a representative of other bureaus which have greater impact to influence the region's public budget and the region's overall social and economic issues. Because BoFED leads (administer) the budget process from the starting point of budget preparation to implementation including budget control, region revenue authority leads the revenue budget, ORAG leads the overall auditing work of the region, Region administrative council approved the region sectors annual budget and budget and finance affairs committees also the main

organization to monitoring and evaluate the performance of the overall budget of the region. Based on the above reasons the selected sectors were informative about the region sectors budget and have great impact to influence the region’s public budget relative to the rest of other public sectors. So the selected sectors in the sample could be expected to represent the remaining other public organization.

The selected public sectors were as follows

- Region finance and economic development bureau (BoFED),
- Office of regional auditor general (ORAG),
- Region revenue authority bureau and
- Region administrative council and budget and finance affairs committees

3.4 sample size determination

For this study to select sample size, lists of purposively selected bureaus as of June 2018 which are found in Hawassa town were used. The total numbers of population of all sectors included in the sample were 523 who were the employee of the sampled sectors. The employee of these sectors was the respondents of the study by giving relevant information through the questionnaire given by researcher.

$$n = \left[\frac{\frac{A^2}{Z^2} + \frac{P[1-P]}{N}}{R} \right]$$

Table 3.1 List of Target population of the study

Focused bureaus	Population size
BoFED	197
Regional auditor general	156
Revenue authority bureaus	46
Region administrative council	121
Budget and finance standing committee	3
Total	523

SNNPRS unpublished document from each sector HRM EFY 2010

Therefore, in order to determine the sample for the study the following formula given by (Watson 2001) that take into account the precision of the results, confidence level, degree of variability, as well as the response rate in determining the sample used for the calculation.

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$$n = \left[\frac{\frac{0.5[1-0.5]}{0.05*0.05} + \frac{0.5[1-0.5]}{1.96*1.96}}{0.98} \right] \frac{523}{0.98} = 226$$

Where, n = sample size required

N = number of people in the population

P = estimated variance in population, as a decimal 0.5 for 50-50

A = Precision desired, expressed as a decimal of, 0.05 for 5%

Z = Based on confidence level 1.96 for 95% confidence

R = Estimated Response rate, as decimal 0.98

Then, the sample is: 226 respondents

Table 3.2 Sample size of this research

Target population	Number	Percent	Sample
BoFED	197	37.67	85
Regional auditor general	156	29.83	67
Revenue authority bureaus	46	8.80	20
Region administrative council	121	23.13	52
Budget and finance standing committee	3	0.57	2
Total	523	100	226

Then, the researcher was distributed questionnaires to the total of 226 respondents through selecting each respondents purposively to bureau heads, finance case teams, budget experts, internal and external auditors, tax and planning officers of the sampled population based on their knowledge about budget preparation, management, qualification and experience, because they are informative and very important for this study.

3.5 Data Collection

3.5.1 Data Collection Instruments

The types of instruments used to collect data were through questionnaire. The format of the questionnaire was adopted from prior authors and literatures and prepared in relation to rationale and objectives of the study after modification (Tilahun 2010, Ketema 2015 and Demera 2017). The questionnaire was designed to have 5 point likert scale measurement which is a measurement with five response categories ranging from “Strongly disagree” to “Strongly agree” which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statement related to explanatory variables. Since they are appropriate; abide by the principles of validity, reliability, and consideration (Likert 1932).The 5 point Likert scale measurement questionnaire consists 8’s section for determinants of budget control measurements, alternative questionnaires to know the demographic profile of respondents and dichotomous questionnaire was used either the budget holders of public sector at SNNPRS control their budget through comparison of budgeted with actual or not.

The independent variables were consist of determinants of budgetary control which involves budget planning process, management support, competent internal audit, organizational commitment, monitoring and evaluation, information and communication, cost reduction and competence of human resource in budget department. These variables are used in measuring the extent of budget control.

3.6 Data Analysis methods

The researcher was using the appropriate statistical data analysis tools namely descriptive, and test statistics. Before analyzing the data, raw data was collected, clean and edit for completeness and consistency, then systematically organized to confirm if it represents the target population and to facilitate objective analysis at a later stage. The responses also screen for correctness and accuracy and then they are assign numerical values which are representing various attributes being researcher measure and the filled in Microsoft excel. The data can analysis to establish the measures of central tendency and variation that include the mean, maximum, minimum, range, frequency, and standard deviation highlighting the key findings.

The STATA was used to analyze the data obtains from primary sources. Specifically, descriptive statistics tables, percentages, bars and logistic regression were used for analysis of this study. The results were interpreted with the help of odds ratio (i.e. e^{β_i}), instead of the actual coefficient, as the interpretation of odds ratio is more intuitive. It would mean that for a unit change in the independent variable there was a corresponding change in the Odds ratio.

In order to assess the reliability and consistency of the instrument the Cronbach's Alpha (α) analysis was conducted. Then to determine the relationship among the variables and to test the research hypothesis logistic regression were expected to be used.

3.7 model specification

Binary logistic regression is one of multivariable statistical analysis which used to calculate the probability of two possible outcomes (Bagley S. C. et al. 2001). In this research the two possible outcomes are either there is presence or absence of budget control in public sectors. Then the dependent variable(Y) is code as 1(presence of budget control) and 0(absence of budget control).

Then the equation for Binary logistic regression is formulated as follows. (Guajarati 2003) gave the general expression for logistic model as

$$Li = \ln \beta_0 + \beta_i X_i + u_i, \quad i=1, 2 \dots 8$$

Where, L_i - logs of odds ratio/logit

\ln - natural logarithm

β_i - coefficient for each independent variable

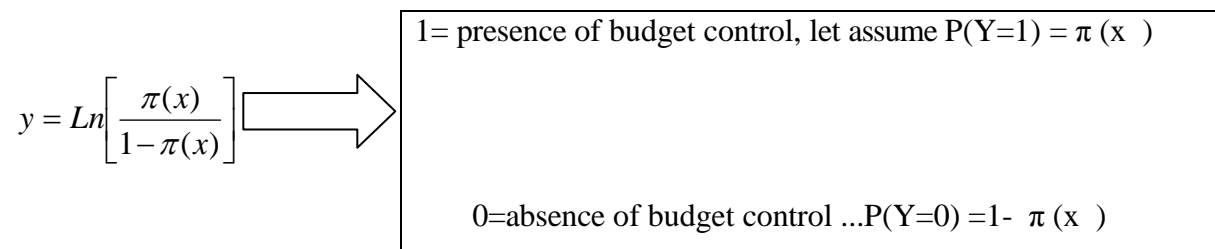
β_0 -intercept of the regression

X_i – each independent variable and U_i - error term

From this general logit model, the following are derived and applied for this specific study

$$Li = \beta_0 + \beta_1 BPP + \beta_2 MS + \beta_3 CIA + \beta_4 OC + \beta_5 BME + \beta_6 INFO + \beta_7 CR + \beta_8 CHRBD + u_i$$

Where, L_i - log of the odd ratio of budget control.



Dependent variable is the degrees of budget control in public sectors at South Nation Nationalities regional state which is measured by Binary logistic regression to identify factors that determine budget control. Logistic regression is helpful when one wants to predict categorical variables from a set of predictor variables (Pallant 2005). Then here logistic regression will be conducted to examine whether the eight variables, budget

planning process, management support, competent internal audit, organizational commitment, budget monitoring and evaluation, information and communication, cost reduction and competence of human resource in budget department significantly predict the public sectors budget controlling.

The independent variables are measure using a five point Likert scales ranging from strongly agree (5), agree (4), undecided (neutral) (3), disagree (2) to strongly disagree (1) as responses from respondents. The details are discussed below.

Budget planning process (BPP):- this was evaluated by use of a questionnaire and measured by 5 Likert scale item by defining the patterns of expenditure and revenue, prioritization of program, and macroeconomic forecast, and the weredas, city administrations and zones participation in budget planning to accomplish the region strategic objectives of the organization and delivery of most basic services through wise budget control.

Management support (MS):- this was to determine the perception of management support on budget control. This was weather management perceives budget control value adding, the extent of implementation of budget control recommendation by management and aid that management provides for training, accustoming new technology and development of budget staff. This will be measured through a five Likert scale-data.

Competent internal audit (CIA):- it measure in terms of academic level, experience, and the effort of staff for continuous professional development and compliance with audit standards. Besides, the benefits of effective auditing for public budget control will assess by identifying instances and patterns of waste and inefficiency that if correct will permit more economical use of available budget resources. This was measure through a five Likert scale-data.

Budget Monitoring and evaluation (BME):- were evaluate by using a questionnaire and 5- Likert scale item by asking of whether public resources have use appropriately and effectively by sectors through determining the comparisons between the budget

allocated and the actual position and the organization's budget deviations are reported to budget committees for evaluation on timely basis.

Organizational commitment (OC):- it determines the involvement, identification, and loyalty of employers toward budget control in the organization to achieve goals and values through participation and commitment. This was measure through a five Likert scale-type item.

Information and communication (INFO):- This was measure in terms of how public finance information is identifying, capturing, and communicating in the appropriate form and within stipulated time frame. Then this is measure by a five Likert scale-type item through assessing weather information regarding budget and budget control is disclose to the public and public sectors use similar reporting format which is easy for evaluation and control purpose.

Cost Reduction (CR) was measure by five Likert scales questionnaire to know whether government procurements and projects are cost effective and accomplished on plan which is led to budget control.

Competence of Human Resource in Budget Department (CHRBD)it measure in terms of academic level, experience, and the effort of staff members for IBEX system. This was measure through a five Likert scale-data.

3.7.1 Assumptions of Logistic Regression

Logistic regression does not require many of the principle assumptions of linear regression models that are based on ordinary least squares method—particularly regarding linearity of relationship between the dependent and independent variables, normality of the error distribution, and homoscedasticity of the errors (Tabachnick et al. 2001). Logistic regression requires large sample size, but if small sample used for the study it desirable to use bootstrap methods as suggested by different scholars (Anwar &Ng 2014).

CHAPTER FOUR

4. RESEARC FINDIGS, ANALYSIS AND INTERPRITATION

4.1. INTRODUCTION

This chapter presents analysis and findings of the study as set out in the research methodology. The study findings were presented to establish the determinants of budgetary control on governmental organization in the South Nation Nationalities regional state. The data was gathered exclusively from the questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. The discussion begins with the questionnaires' response rate followed by the descriptive statistics of the respondents related questions; like the gender, experience, profession, and level of education. The results of the reliability analysis and the logistic regression test also reported and finally the results of hypothesis testing were presented.

4.2. Descriptive Statistics

4.2.1 Response Rate

The data were collected and then analyzed in response to the problems posed in the first chapter of this study. The findings are based on the responses of those selected public sector with the help of questionnaire. 226 questionnaires were distributed and 219 returned from respondents and 7(3%) questionnaires were not returned. This represents a response rate of 97 percent. Therefore, data were analyzed based on the data collected using questionnaires from 219(97%) respondents.

4.2 Demographic Characteristics of the Respondents in the organization

In order to have clear understanding about the result of the study, it is important to be familiar with demographic characteristics of the sample respondents who are close to public budget. 219 respondents were returned the questionnaire distributed to the 226 samples, which were found in region BOFED, offices of regional auditor general, revenue authority bureau, regional administrative council and budget and finance standing committee.

Then in this sub section, variables such as sex, educational level, work experience and qualification of the respondents in the organization were analyzed. The information processed by STATA is summarized as follows.

Table 4.1 Gender of the respondents

Valid	Frequency	Percent	Valid percent	Cumulative percent
	Male	94.98	208	94.98
	Female	5.02	11	100
	Total	100	219	

(Source: STATA output, 2018)

As it can be seen in the above table there were a large number of male respondents which accounts for 208(94.98%) and 11(5.02%) of female working on public finance and budget at selected organizations in South Nation Nationalities Regional State. This enables the researcher that there is no bias in the survey instrument related to the gender of the respondents.

Table 4.2 educational level of the respondents

Valid	Frequency	Percent	Valid percent	Cumulative percent
	Diploma	0	0	0
	First degree	71.23	156	71.23
	Master degree	28.77	63	100
	Total	100	219	

(Source: STATA output, 2018)

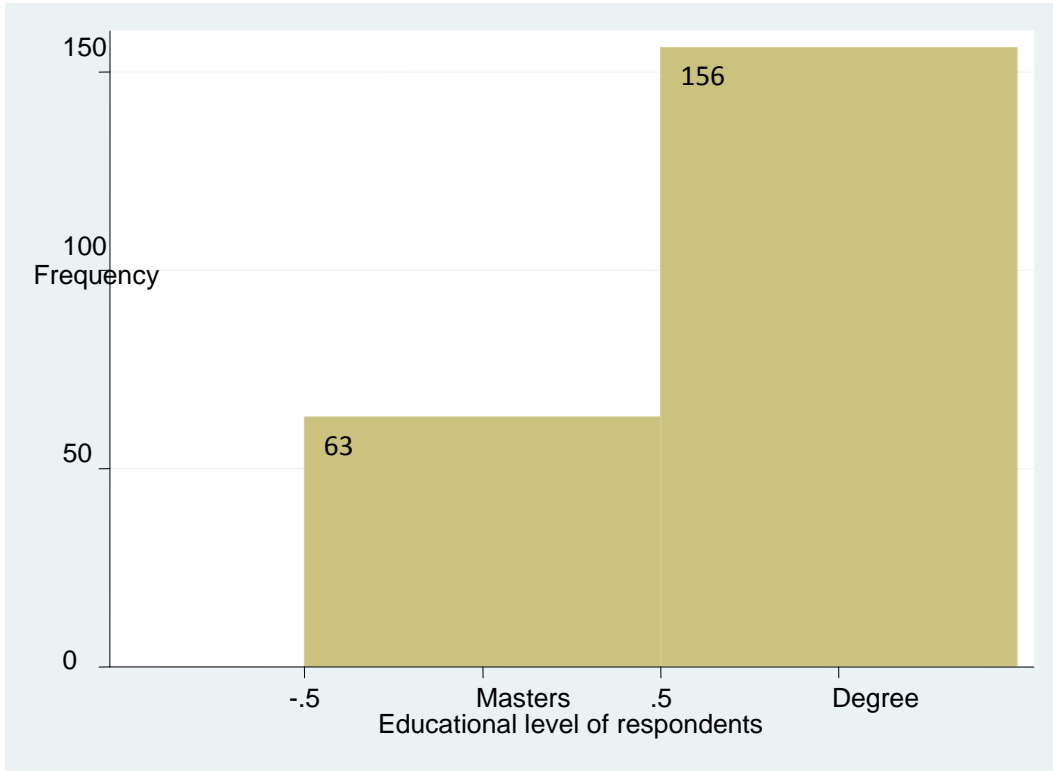


Table 4.3: Bar graph of educational level of respondents

The level of education that employees possess was another commitment of employees to competence that contributes to effectiveness of budget control. This competence is referred to as academic competence. The control system reveals that a good education level has a positively determine the effectiveness of internal control in organizations. As summarized in the above table, majority of the respondents 156(71.23%) were qualified in first degree and 63(28.77%) were master degree which is favorable and led to contribute the presence of budget control in the governmental organizations. This is an indication that the respondents are also at adequate education level to understand the concept of budgeting and budget control system.

Table 4.4 Job experience of the respondents

		Frequency	Percent	Cumulative percent
Valid	1-3 years	5	2.28	2.28
	4-6 years	26	13.24	15.53
	7-8 years	58	26.458	42.01
	Above 8 years	127	57.99	100
	Total	219	100	

(Source: STATA output, 2018)

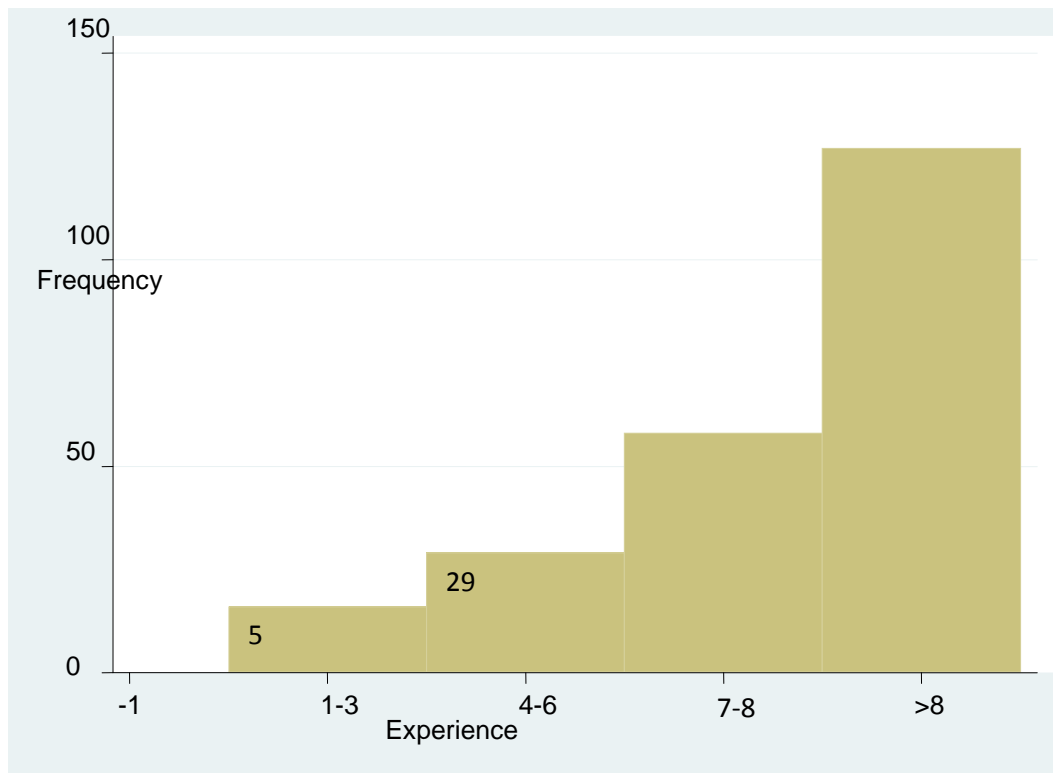


Table 4.5 Bar graph of job experience of the respondents

Experience is one of the competences to understand controlling activities in organization. Experience also referred to as professional competence which comes through practice. In

the literature it is indicated that commitment to this competence by employees is one part of effective control system.

Then purpose of the above table is to assess the experience of the workers with the organization. Accordingly, in public finance sector, the highest share which is 2.28% goes to those who had experience within the organization for 1-3 years, the next highest percentage of the workers 13.24%, was those who worked 4-6 years in the organization, a bit lower and 26.458% and 57.99% was those who have experience of 7-8 years and above 8 years with the organization respectively. Hence the more experienced employees are the more they understand about the public budget control they execute; the researcher uses the information in the above table to identify such issue whether the workers in the selected sector in the South Nation Nationalities regional and people regional state have the comparable experience.

4.3 Reliability Analysis

To measure the consistency of the questionnaire particularly the Likert-type scale, the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Field 2009; Cohen and Sayag 2010) and according to Cronbach's (1951), a reliability value (α) greater than 0.600 is also acceptable.

Based on appendix 15, the value for Cronbach's Alpha (α) was 0.7024 for all variables used in this research. When these calculated reliability values are greater than 0.700, and compared with the minimum value of alpha 0.600 advocated by Cronbach's (1951), then the responses generated for all of the variables" used in this research were reliable enough for data analysis.

4.4 Determinants of budget control

The determinants of effective budget control in public organization were asked positively using likert scale through which respondent shown their level of agreement. The

identified variables expected to improve the budget control. The respondent were asked to indicated their level of agreement with the factors on the following measurements scale such as 1=strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, and 5= strongly agree. Their responses organized in the following manner.

From logistic regression the determinants of budget control are, Budget planning process which explained by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan (EBS), Competent internal audit staff which is explained by the completion of audit procedures and evidence collection on time (APEC)& Regional BOFED and ORAG auditors reconcile expenditure with approved budgets (EAB) ,Competence of human resource in budget department which explained by the region office/sector should be well equipped with experienced and skilled employees (ESE), cost reduction which is explained by Cash expenditure tracking (CET)&Cost effective procurement(CEP), organizational commitment which is explained by budget force managers and employee to think about plan for the future(ETPF), budget monitoring and evaluation which is explained by weak monitor and evaluate budget through continuous comparison of actual with budgeted(WMEB) and organization's budget deviations are reported to budget committees for evaluation on timely basis(ETB).

From the result of regression weak monitor and evaluate budget through continuous comparison of actual with budgeted WMEB has negative impact on budget control; whereas others such as organization's budget deviations are reported to budget committees for evaluation on timely basis ETB, budget force managers and employee to think about plan for the future ETPF, the completion of audit procedures and evidence collection on time APEC, Regional BOFED and ORAG auditors reconcile expenditure with approved budgets EAB, the region office/sector should be well equipped with experienced and skilled employees ESE, and estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan EBS have positive impact on budget control.

4.4.1 Budget planning processes

According to (Anwar S. 2007), to prepare proper budget plan, three preconditions were recommended as follows:

The budget preparation and planning process has to consultative and participatory in order to ensure ownership to both the process and the approved budget;

A systematic process of prioritization of programs and expenditures, which is based on informed choices, must take place and planned outputs, activities, and expenditure allocations in the annual work plan and budget estimates must be realistic, and achievable. The respondents' response in relation to this and budget control was interpreted as follows.

Table 4.6: Budget planning process

		N	Min	max	mean	Std. deviation
1	There are effective participation by the government body in the process of budget planning which help for budget control(EPBP)	219	1	5	3.81	0.96
2	During budget planning, through prioritization of program and macroeconomic forecast budget of the region is controlled (PPMFB)	219	2	5	3.70	0.68
3	As our Region budget planning processes start by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan and aid it open a road for budget control (EBS)	219	2	5	4.13	0.76
4	BOFED reviews the draft budget which submitted by zonal, woredas and city administrations on strategic documents of the region and then passes to the regional cabinet for approval which are help for controlling purpose(RDB)	219	2	5	3.95	0.70
5	The sectors have a long term and short term budget plan (SLBP)	219	2	5	3.76	0.60
6	Organizations departments prepare budget plans prior to the budget year which help for wise control(ODBP)	219	2	5	3.70	0.64

7	The annual budget process in the region is documented with tasks, responsibility assignment and deadlines are clearly stated (ABP)	219	2	5	3.80	0.68
8	As your region offices utilizes the approved budget based on its plan there is presence of budget control(UAB)	219	2	5	3.77	0.63
9	The current budget preparation, utilization and control of your region offices are sufficient (CBPUC)	219	1	5	2.94	0.98
10	Planning and budget department have a means to take corrective action on the weaknesses of budget preparation, utilization and control(CA)	219	2	4	3.56	0.67
11	Most organization in the region has link the work plan with expenditure budget preparation which is important for control (WPE)	219	2	4	3.67	0.49
12	The budget originate at the lowest levels of management and is refined and coordinated at the higher level(BOLLM)	219	1	4	3.25	0.76

(STATA Results and Own Computation, 2019)

As indicated in above table the mean value of the response computed based on Likert scale indicated the average agreement of respondents on existence and practice of each element of budget planning process. The overall mean of the budget planning process can be approximated to 3.67 which indicate not as such conformity in practices of budget control; then there be a need for progress. The highest mean 4.13 indicates that majority of respondents agreed that the region budget planning processes start by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan and aid, but there is no a road for controlling, rather mere planning. The result of the survey in line with the current budget preparation, utilization and control of the South Nation nationalities region offices are sufficient is indicated by mean value of 2.94. This means majority of the respondents were neutral and disagree that budget planning process is not contributed enough for the presence of budget control.

As indicated in the table above, Planning and budget department have a means to take corrective action on the weaknesses of budget preparation, utilization and control is not strongly determine the budget control. The majority of respondents was responding

neutral and disagree and the mean value was 3.56 and it could be below the overall mean value of 3.67.

From the table it is also indicated that there is a doubt by the respondents; the current budget preparation, utilization and control of your region offices are sufficient (mean 2.94) and this element also indicated the highest standard deviation (0.98). Finally the mean value 3.56 was below the result of the overall mean value of 3.67 it implies that majority of respondents were not agreed that, Planning and budget department have a means to take corrective action on the weaknesses of budget preparation, utilization and control. Then the finding indicates that much as planning alone does not necessarily bring into effect a proposed course of action, so also is budgetary propositions which must have effective control for it to remain relevant.

4.1.3 Management support

Management support for employees whose their work is related to public finance is expressed in terms of supporting the budgeting process by fulfilling the necessary resource, finance, training, new technology and other facilities that facilitate the work of controlling budget through encouraging auditor, accountants, budget and finance department, tax officers and planners in the region. The result of the survey indicated in the table below shows that the degree of agreement ranged from 1 to 5 by respondents in all criteria's of management support for budget control.

Table 4.7: Management support

		N	Min	max	mean	Std. deviation
13	The office/sector supports an employee who's their position is related to government budget to providing training in order to improve your skill and the field if needed (ES)	219	2	5	3.86	0.78
14	The office/sector supports me to introduce myself with new technology, policy or procedures when it is necessary (INT)	219	2	5	3.82	0.57
15	Auditors, accountants, budget and finance department, tax officers and planners in the region have got financial and material support to carry out their work to achieve their objectives for the accomplishment of organizational goals through public budget control(FMS)	219	1	4	3.22	0.73

The overall mean of the management support can be approximated to 3.63 and the highest mean (3.86) indicated on table above confirm the lowest score 2 and the highest 5 indicates that majority of respondents agree that the office/sectors support employees who's their position is related to government budget by providing training in order to improve their skill and update with the field. As indicated on the table also that majority agree that the office/sector supports employees through accustoming with new technology, policy or procedures. Based on the above table also indicates that, management support is effectively determine the budget control in public sectors.

4.1.4Competent internal audit staff

According to (Havens 1999), the benefits of effective auditing for public budget control are determining the reliability of reports on budget execution and other financial data, Provide reliable data about program results as a basis for future adjustments in budget allocations, identify instances and patterns of waste and inefficiency that, if corrected, will permit more economical use of available budget resources, and detect irregularities involving the misuse of public funds and identify related weaknesses in management controls that may put at risk the integrity of the organization and the effective

implementation of budgetary and other policy decisions. The survey result and analysis on this issue therefore; is presented as follows.

Table 4.8: competent internal audit staff

		N	Min	max	mean	Std. deviation
16	In the region office/sector there are sufficient skilled internal auditors to control public budget. Most of them have certification in auditing and accounting (SSIA)	219	1	5	3.46	0.89
17	The audit procedures and evidence collections are completed on time, since skilled internal auditors are employed for controlling budget(APEC)	219	1	5	3.18	0.86
18	The work of internal audit is performed with technology that uses computerized data tools and specific IA software(UCDT)	219	1	5	3.13	0.97
19	Regional BOFED and ORAG auditors reconcile expenditure with approved budgets and make sure that there have been no financial irregularities which led the effective implementation of budgetary and other policy decisions(EAB)	219	1	5	3.19	1.05

(STATA Results and Own Computation, 2018)

The overall mean of competent internal audit staff for the four questions could be estimated to 3.24 which are good. The highest mean (4.07 and 4.06) indicated on table confirm that majority of respondents agree that the audit procedures and evidence collections are completed on time, since skilled internal auditors are employed and the work of internal audit is performed with technology that uses computerized data tools and specific IA software respectively contribute to budget control in the sectors. And also in the above table, the region office/sector there was sufficient skilled internal auditors to control public budget. Most of them have certification in auditing and accounting its mean value was 3.46 indicates that the presence of skilled internal audit employee with suitable certification run a great roll in the public budget control.

4.1.5 Organizational commitment

Buchanan (1974) assumed that if managers and employees are able to identify themselves and involved in budget control, it has positive effect on their organizational commitment toward achieving the goals. Then according to this, organizational commitment is the adoption of organizational goals and values by person who is working for organization by participation in the organizations’ activities and to act as a decision maker or to be directly involved in the organization’s strategy formulation process and public finance management to realize their objectives. Based on the framework of organizational commitment, the survey result and interpretation as presented below.

Table 4.9: Organizational commitment

		N	Min	max	mean	Std. deviation
20	Your region office/sector management committed toward budget control for the achievement of government objective(MCTB)	219	2	5	3.50	0.64
21	Each employee and management in our region involve during budget planning and control because there is incentive for good achiever in effective use of budget(IPA)	219	1	5	3.26	.95
22	Employees in our organization are committed toward public budget control, because the budget allocated is for construction of infrastructure (road, hospital and schools...) (CIS)	219	1	5	3.4	0.94
23	Budget force managers and employee to think about and plan for the future(ETPF)	219	2	5	3.82	0.69

(STATA Results and Own Computation, 2018)

As indicated in above table the mean value of the response computed based on Likert scale indicated the average agreement of respondents on existence and practice of each element of organizational commitment toward budget control is 3.49 for the four questions which are good, but need improvement.

The highest mean (3.82) indicated on table confirm that majority of respondents agree that the employees in the organization are committed toward public budget control, because budget force managers and employee to think about and plan for the future. Then the table indicate that the organizational commitment more or less determine budget control and public sector management committed toward budget control for the achievement of government objective(mean3.50).

4.1.6 Budget monitoring and evaluation

Budget monitoring and evaluation is a key determinant for effectiveness, through an evaluation and monitoring, the organization can clarify what direction the evaluation should take based on priorities, resources, time, and skills needed to achieve the evaluation. To enhance effectiveness and transparency the management team should be actively involved in the process of monitoring and evaluation of budgetary control processes and procedures (Hancock 2009).

Then the survey result and analysis related to budget monitoring and evaluation in public sector at South Nation Nationalities regional state is presented as follows

Table 4.10: Budget monitoring and evaluation

		N	Min	max	Mean	Std. deviation
24	The region budget and finance standing committee hold budget conferences and meetings regularly to review performance of sectors budget(BFSC)	219	3	5	3.77	0.60
25	The organization's budget deviations are reported to budget to committees for evaluation on timely basis(ETB).	219	1	5	3.68	0.82
26	There is a regular follow up on budget plans by the budget committee and departmental heads(RF)	219	2	5	3.65	0.67
27	In the region, sectors are weak monitor and evaluate budget through continuous comparison of actual with budgeted and if variance take corrective action(WMEB)	219	2	5	3.77	0.57
28	BOFED of the region pursue and bolster the budget utilization of the sectors through establishing mechanisms of budget control(MBC)	219	2	5	3.84	0.67

29	Our region use budget control as primary means of internal control for efficient and effective allocation of resource(PMIC)	219	2	5	3.52	0.70
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(STATA Results and Own Computation, 2018)

From the above table, the overall means of the budget monitoring and evaluation for the six questions can be estimated to 3.705 which are good.

The highest standard deviation of the response was showed in question number 30 which is the organization’s budget deviations are reported to budget committees for evaluation on timely basis.

The highest mean (3.84) indicated on table above confirm that majority of respondents agree that BOFED of the region pursue and bolster the budget utilization of the sectors through establishing mechanisms of budget control. Subsequently mean of 3.77 indicated on the table also show majority agree that, in the region, sectors are monitor and evaluate budget through comparison of actual with budgeted and if variance, take corrective action; this led to presence of budget control. Then the above table indicates that, the budget monitoring and evaluation by the region finance and standing committee, BOFED and organizations determining the budget control in public sectors.

4.1.7 Information and communication

In organization, effective information and communication systems enable the organization to control their budget through information flowing down to (werdas), across, and up (regions) the organization by using similar reporting format which led Management ensure there are adequate means of communicating with, and obtaining information from, external societies that may have a significant impact on achieving organizational goals (Guy et al. 1999). Then the response computed based on Likert scale indicated below show the issues based on the agreement of respondents on information and communication.

Table 4.11: Information and communication

		N	Min	max	mean	Std. deviation
30	Communication helps to evaluate how well guidelines and policies of the sectors/offices budget control system are working and being implemented(CEE)	219	2	5	3.98	0.60
31	Our region use integrated budget expenditure (IBEX) system till to wereda finance and economic development office for controlling public budget(IBEXS)	219	2	5	4.03	0.76
32	Budget related information, communicated to all societies through FTA by disclosing on public board notice and other medias like radio, newspaper and different magazines(FTA)	219	2	5	3.78	0.57
33	Transactions related to budget transfer are promptly (on time) recorded and classified to provide reliable information which is help for controlling(TRBT)	219	1	5	3.55	0.76
34	Our region use similar reporting format among sectors in order to control budget(RF)	219	2	5	3.62	0.67

(STATA Results and Own Computation, 2018)

As summarized in above table the minimum response to higher mean to information and communication is 1 and the maximum is 5. The respondents agreed that the Communication helps to evaluate how well guidelines and policies of the sectors/offices budget control system are working and being implemented and the integrated budget expenditure (IBEX) system till to werda finance and economic development office determine the presence public budget control with over all mean for five point Likert scale question was 3.792 which is good.

4.1.8 Cost reduction

Cost reduction in public organization implies the preservation of essential characteristics of quality services, a systematic effort to accomplish projects by eliminating all forms of waste and unnecessary expense without impairing the generation of revenues. In other

words, the essential characteristics and techniques and quality of the services are retained through improved methods and techniques used and thereby a permanent reduction in the unit cost is achieved which led to controlling public budget. In relation to the issue, the survey result and interpretation as presented below

Table 4.12: Cost reduction

		N	Min	max	mean	Std. deviation
35	The cost of activities and functions of the organizations are constantly reviewed by the executive committee which led the presence of budget control(CAF)	219	2	5	3.82	0.55
36	The execution of its projects within the stipulated deadline by eliminating all forms of waste and unnecessary expense by the region led to budget control(EPSDL)	219	2	5	3.68	0.77
37	Cost effective procurement, thus surplus revenue through reducing operational costs led to the presence of budget control in the region(CEP)	219	2	5	3.43	0.69
38	Saving unnecessary expenditure (cost) and benefit paid to employee in the region control the organization budget(SUE)	219	2	5	3.52	0.67
39	Cutting costs in order to increase the quality service offered by the organizations to the public put proper control on budget(CC)	219	1	5	3.45	0.80
40	Cash expenditure tracking and reduces operational costs led to the presence of budget control in the region(CET)	219	1	5	3.6	0.96

(STATA Results and Own Computation, 2018)

As indicated in above table the mean value of the response computed based on Likert scale indicated the average agreement of respondents on each element of cost reduction toward budget control is 3.58 which are good.

The highest mean (3.82) indicated on table confirm that majority of respondents agree that the cost of activities and functions of the organizations are constantly reviewed by

the executive committee which led the presence of budget control in the region. Then the above table also indicates that the execution of its projects within the stipulated deadline by eliminating all forms of waste and unnecessary expense by the region led to budget control (3.68). In addition to that the cash expenditure tracking and reducing operational costs led to the presences of budget control in the region (3.60).

Table 4.13: goodness of fit

Variables	Chi2		Gamma
	p-value1	p-value2	
EBS	0.000	0.000	0.4136
APEC	0.000	0.000	0.6350
CET	0.000	0.000	0.6853
ETPF	0.000	0.000	0.5627
EAB	0.000	0.000	0.6671
ETB	0.000	0.000	0.4396
WMEB	0.000	0.000	0.2732

From table 13.1 χ^2 (chi-square) $Pr < 0.05$ (at 95% confidence). The importance of goodness of fit test was to determine whether sample data were consistent with a hypothesized distribution. Here both chi2 are significant. Therefore, there is some relationship between budget planning process which is explained by as a question form, as our Region budget planning processes start by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan and aid it open a road for budget control (EBS) and budget control. Gamma (0.4136) shows that there is positive relation between budget planning process and budget control. With regard to competent internal audit staff which is explained as a question form, the audit procedures and evidence collections are completed on time, since skilled internal auditors are employed for controlling budget (APEC) both chi2 ($Pr < 0.05$ at 95% confidence) are significant and which shows that there is some relationship between competent internal audit staff and budget control. Gamma (0.6350) shows that there is a strong positive relation between internal audit staff and budget control. Also Regional BOFED and ORAG auditors reconcile expenditure with approved budgets and make sure that there

have been no financial irregularities which led the effective implementation of budgetary and other policy decisions(EAB) which explains competent internal audit staff shows there is relation between related with budget control (Pr< 0.05 at 95% confidence). Gamma (0.6671) shows that there is a strong positive relationship between in competent internal audit staff and budget control. With regard to cost reduction which is explained by as a question form, Cash expenditure tracking and reduces operational costs led to the presence of budget control in the region (CET). Both chi2 (Pr< 0.05 at 95% confidence) are significant which shows that there is some relationship between cost reduction and budget control. Gamma (0.6853) shows that there is a strong positive relation between cost reduction and budget control. According to organizational commitment is mentioned as a question form Budget force managers and employee to think about and plan for the future (ETPF) both chi2 (Pr< 0.05 at 95% confidence) are significant which shows that there is some relationship between organizational commitment and budget control. Gamma (0.5627) shows that there is positive relationship between organizational commitment and budget control. According to budget monitoring and evaluation which is explained by as a question form, the organization's budget deviations are reported to budget to committees for evaluation on timely basis(ETB).Both chi2 (Pr< 0.05 at 95% confidence) are significant which shows that there is some relationship between budget monitoring and evaluation and budget control. Gamma (0.4396) shows that there is weak positive relationship between budget monitoring and evaluation and budget control. Also there is a question form, in the region, sectors are weak monitor and evaluate budget through continuous comparison of actual with budgeted and if variance take corrective action(WMEB) in addition to the organization's budget deviations are reported to budget to committees for evaluation on timely basis(ETB)to explain budget monitoring and evaluation. Both chi2 (Pr< 0.05 at 95% confidence) are significant which shows that there is some relationship between budget monitoring and evaluation and budget control. Gamma (0.2732) shows that there is weak positive relationship between budget monitoring and evaluation and budget control.

Table 4.14: logistic regression and marginal effects

Logistic regression result				Marginal Effects After Logit			
Variable	Coef.	Z	P> Z	$\frac{dx}{dy}$	Z	P> Z	X
EBS	1.594267*	2.35	0.026	.22324	2.23	0.026	3.70332
ESE	.906431***	2.81	0.005	.1269246	2.88	0.004	3.60731
APEC	.6960499*	2.25	0.025	.0974656	2.07	0.038	3.46119
CET	1.192227***	3.37	0.001	.24151	3.14	0.002	3.45205
EPBP	-.4464486	-1.34	0.180	-.0625147	-1.37	0.170	3.81735
ETPF	.9064469**	2.41	0.016	.1269268	2.54	0.011	3.40183
EAB	1.018175***	2.88	0.004	.1475717	3.15	0.002	3.13699
MEB	1.568828***	-2.92	0.004	-.2196778	-3.09	0.002	3.6347
VAR25	.9348891**	2.00	0.046	.1309095	2.03	0.042	3.77169
RDB	-.0167123	-0.05	0.964	-.0023402	-0.05	0.964	4.13242
ODBP	-.1929375	-0.48	0.632	-.0270164	-0.48	0.633	3.94977
_CONS	-21.98355	-4.52	0.000	-	-	-	-

Note ***, **, * are 1%, 5% and 10% significance level respectively, VAR25= ETB

$$Li = \beta_0 + \beta_1 BPP + \beta_2 MS + \beta_3 CIA + \beta_4 OC + \beta_5 BME + \beta_6 INFO + \beta_7 CR + \beta_8 CHRBD + ui$$

$$Li = -21.98355 + 1.594267EBS + 0.906431ESE + 0.6960499APEC + 1.192227CET - 0.4464486EPBP + 0.9064469ETPF + 1.018175EAB + 1.568828MEB + 0.9348891ETB - 0.0167123RDB - 0.1929375ODBP$$

Budget planning process: Since the study dependant variable is dummy variable which is qualitative, interpretation is from marginal effect because the probability distribution is between zero and one.

From logistic regression result in table 4.14 budget planning process which is explained as question form our Region budget planning processes start by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan and aid it open a road for budget control (EBS) or estimating budget source in budget planning process increases the probability of budget control by 22.32% at 5% significance level. Based on descriptive statistics table in appendix 1 from the total number of respondents 62.56% of respondents agree, it indicates that majority of respondents agreed that the region budget planning processes start by estimating the budget sources by considering

the expected federal subsidy, own revenue, foreign loan and aid, but there is no a road for controlling, rather mere planning.

From logistic regression the determinants of budget control are, Budget planning process which explained by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan EBS, Competent internal audit staff which is explained by the completion of audit procedures and evidence collection on time APEC & Regional BOFED and ORAG auditors reconcile expenditure with approved budgets EAB ,Competence of human resource in budget department which explained by the region office/sector should be well equipped with experienced and skilled employees (ESE), cost reduction which is explained by Cash expenditure tracking CET &Cost effective procurement CEP, organizational commitment which is explained by budget force managers and employee to think about plan for the future ETPF, budget monitoring and evaluation which is explained by weak monitor and evaluate budget through continuous comparison of actual with budgeted WMEB and organization's budget deviations are reported to budget committees for evaluation on timely basis ETB.

From the result of regression weak monitor and evaluate budget through continuous comparison of actual with budgeted WMEB has negative impact on budget control; whereas others such as organization's budget deviations are reported to budget committees for evaluation on timely basis ETB, budget force managers and employee to think about plan for the future ETPF, the completion of audit procedures and evidence collection on time APEC, Regional BOFED and ORAG auditors reconcile expenditure with approved budgets EAB, the region office/sector should be well equipped with experienced and skilled employees ESE, and estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan EBS have positive impact on budget control.

4.1.9 Competent internal audit staff

According to Competent internal audit staff which is explained by as a question form the audit procedures and evidence collections are completed on time, since skilled internal auditors are employed for controlling budget (APEC) and Regional BOFED and ORAG

auditors reconcile expenditure with approved budgets and make sure that there have been no financial irregularities which led the effective implementation of budgetary and other policy decisions (EAB). When effective implementation of budgetary and other policy decisions (EAB) increase the probability of budget control also increase by 14.75% at significance level of 1%. When audit procedures and evidence collection (APEC) increases, the probability of budget control also increase by 97.46% at a significance level of 5%.

The on time completion of the collection of audit procedures and evidence increases the probability of budget control also increase by 97.46% at significance level of 5%.

4.1.10 Competence of Human Resource in budget department

With regard to Competence of Human Resource in budget department which is explained as a question the region office/sector should be well equipped with experienced and skilled employees who are well familiar with budgetary control. Most of them have certification in accounting and related fields (ESE) experience and skilled employee, when experienced and skilled employee increases, the probability of budget control increases by 12.69% at a significance level of 1%.

4.1.11 Organizational commitment

According to organizational commitment which is explained by as a question Budget force managers and employee to think about and plan for the future (ETPF), when ETPF increases the probability of budget control increase by 25.92% at confidence level of 5%.

4.1.12 Budget Monitoring and Evaluation

According to Budget Monitoring and Evaluation which is explained by as a question The organization's budget deviations are reported to budget committees for evaluation on timely basis(ETB) and In the region, sectors are weak monitor and evaluate budget through continuous comparison of actual with budgeted and if variance take corrective action(WMEB). When evaluation on timely basis (ETB) increases the probability of budget control increases by 13.09% at 1% significance level and also when in the region

sectors monitoring and evaluation of budget can be weak the probability of budget control decreases by 21.96% at 5% significance level.

CHAPTER FIVE

5. SUMMARIES, CONCLUSION AND RECOMMENDATION

5.1. Summary of Major Findings

This research was established to know the existence of budgetary controls in the South Nation Nationalities Regional state public offices, and also to identify the determinants of budgetary controls. To accomplish these studies five organizations were sampled using judgmental sampling by the researcher based on their propinquity and informative to public finance and budget.

From the total of 226 questionnaires distributed to sampled respondents, 219 questionnaires were collected and analyzed using STATA by using descriptive statistics and binary logistic regression analysis was employed in the research to investigate the determinants of budgetary controls in the South Nation Nationalities regional state. The various variables affecting budgetary controls; budget planning processes, management support, organizational commitment, competent internal audit staff, budget monitoring and evaluation, information and communication, cost reduction and competency of human resource in budget department were examined individually and compared to budget controls, mean were used based on the likert scale used of 1 to 5 and analyzed using percentages.

According to the logistic regression output all the predictors were positively contributed for the budget control functions in the South Nation Nationalities regional state public sector offices except budget monitoring and evaluation. Therefore, the public sector office should give attention to use these determinant variables to make their service delivery effective, efficient and economical throughout their offices. Moreover the, competent internal audit's staff, budget monitoring and evaluation, organizational commitment, competency of human resource in budget department, budget planning process and budget monitoring and evaluation were the major determinants of budget control in the public sector. However, information and communication, cost reduction

and management support were not significantly determining the budget control of public sectors.

This study finds that the composite measure of information and communication, cost reduction, competent internal audit staff, management support, budget monitoring and evaluation, organizational commitment, budget planning processes and competency of human resource in budget department for 50.93% (pseudo $R^2 = 0.5093$) variance for the budget control in the public sector offices. That means, the impact of these eight independent variables contributed for the dependent variable budget control were 50.93%, and the remaining 49.07% were other variables that are not included in this study.

Thus, the conclusions and recommendations are drawn from the findings of the study specifically related to the competent internal audit's staff, budget monitoring and evaluation, organizational commitment, competency of human resource in budget department, budget planning process and budget monitoring and evaluation given to the budget control activities in the public organization at South Nation Nationalities Regional state.

Conclusion

Due to its important role it plays for the overall management system, budget control is the major mechanism to ensure sound organizations' governance. The existences of effective budget control in the office links with internal control management system, improves organizational efficiency and effectiveness, reduce information asymmetry during decision making, and ensures internal reliability of financial reporting process. By taking this aspect into consideration, this study was identified factors that determine the budget control in the public sector offices and then analyzed the organizational dimensions in which the public organization should carry out to enhance the budget controlling activities. And also by testing of the proposed hypotheses showed relations of these independent variables with the budget control, the following conclusions were drawn.

According to the respondents response the budget control of public organization increase, when the budget planning process is well organized and prepare effectively by estimating the region budget source by considering the expected federal subsidy, own revenue, foreign loan and aid. Also effective participation of the government body during planning process is a positive effect on budget control because the government bodies are a decision maker and if they participate effectively in the budget planning process they help in the implementation of the allocated budget for the purpose of its predetermined plan. The region public organizations departments also prepare their budget plans prior to the budget year may have a significant impact on achieving organizational budget control by eliminating wastes, accomplishment of the government procurements plan and public projects on prescribed time. The logistic regression analysis (shown on table 4.14) shows strong contributions of these variables for the budget control. Therefore, the overall effect of the information competent internal audit's staff, budget monitoring and evaluation, organizational commitment, competency of human resource in budget department, budget planning process and budget monitoring and evaluation are very important for the budget control. In addition, the logistic regression result also depicts all the independent variables have a positive sign of coefficients except monitoring and evaluation (shown on table 4.1.4) with budget control in the public sector offices at South Nation Nationalities regional state. However, the organizational commitment, information communication and cost reduction were statistically not significant enough to contribute for the budget control in the public organization. As the research proved that the existence of competent internal audit's staff, organizational commitment, competency of human resource in budget department, and budget planning process and budget monitoring and evaluation were the major determinants of BC in the public sector, the BOFED were recommended to design, provide and continually training on budget guideline for each public sector office; and also the BOFED recommended to support the finance department works by increasing the number and quality of certified auditors by funding the certification fees and also by facilitating the way for certification in cooperation with universities and concerned bodies.

Finally, organizations need to investigate other factors that contribute to better budgetary controls, like employees motivation and invest more in staff capacity building in order to enhance their performance.

Recommendations

After the research findings and achieved results with regard to the main objective of this study to identify the major determinants of budget control in the public sector offices, the researcher provides the following recommendations to the public sector offices, the offices of regional auditors, the BOFED , region revenue authority and the budget and finance standing committee.

The findings of this research proved that the competent internal audit's staff, organizational commitment, competency of human resource in budget department, and budget planning process and budget monitoring and evaluation statistically significant and positively related with the budget control except budget monitoring and evaluation in the public organization. Thus, the public sector offices should support more for the budget control functions by facilitating the IA works, regular review and evaluation, training new technology like IBEX soft ware and workable manuals in line with office policies and guidelines and also need to develop a clear policy on budget control processes.

The budget and planning officers, internal auditors and project coordinator of the public sector office should recommended to maintain and improve their effective contribution for the budget control in their office, by improving their professional certification in line with organizational guidelines and by introducing themselves with modern technologies like IBEX software that improve their BC function for their office.

As the research proved that the existence of the competent internal audit's staff, organizational commitment, competency of human resource in budget department, and budget planning process were the major determinants of budget control in the public sector, the BOFED were recommended to design, provide and continually training on

budget guideline for each public sector office; and also the BOFED recommended to support the finance department works by increasing the number and quality of certified auditors and professional human resources in budget department by funding the certification fees and also by facilitating the way for certification in cooperation with universities and concerned bodies.

The region public organization also motivating the employees by giving continuous capacity building in order to increase their performance and contribute to the organizations budgetary control work.

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Appendix

Appendix 1 Questioners

Questionnaire Administered to office heads, BoFED experts, planning officers, tax experts, auditors and Regional administrative council of the region

Objective of the Questionnaire

Budget control in public organization is a part of overall system of responsibility through continuous comparison between actual and budget results in organization which are intended to either secure, through action of managers, or to even provide a basis for policy making.

Therefore, the purpose of this research is to assess and identify determinants of budget control in public organization at South Nation Nationalities and Peoples Regional state the added contribution to the sectors.

In line with this, you are kindly requested to give your response to your personal profile and statement related with the budget planning process, the management support, the competent internal audit staff, the organizational commitment, monitoring and evaluation, information and communication, cost reduction and competency of human resource in budget department as provided in the table below.

A. The personal profiles:

General Instruction: please indicate your choice by putting “√ ” mark in the bracket.

1. Sex/Gender/: Male (_____) Female (_____)
2. Level of education: Diploma (____), Bachelor's Degree (____), Master's Degree (____) or others
3. Job experience on finance sector: 1-3(____), 4-6(____), 7-8(____) and above 8 Year (____)
4. Your field of study: Accounting(____), Management(____), Economics (____), Others ____

B. Budget control in public organization

5. The experience in continuous comparison of budgeted with actual by budget holders in South nation nationalities people regional government organization for the purpose of controlling public budget is most likely?

Present (_____)

Absent (_____)

C. The questionnaire items to determinants of budget control

Please tick the following statements by indicating the level of agreement that you agree or disagree with the activities below: The values of scales are:-

5= strongly agree, 4= Agree, 3=Neutral, 2=Disagree and 1=strongly disagree

A	Budget planning process	Scale				
1	There are effective participation by the government body in the process of budget planning which help for budget control(EPBP)	5()	4()	3()	2()	1()
2	During budget planning, through prioritization of program and macroeconomic forecast budget of the region is controlled (PPMFB)	5()	4()	3()	2()	1()
3	As our Region budget planning processes start by estimating the budget sources by considering the expected federal subsidy, own revenue, foreign loan and aid it open a road for budget control (EBS)	5()	4()	3()	2()	1()
4	BOFED reviews the draft budget which submitted by zonal, woredas and city administrations on strategic documents of the region and then passes to the regional cabinet for approval which are help for controlling purpose(RDB)	5()	4()	3()	2()	1()
5	The sectors have a long term and short term budget plan (SLBP)	5()	4()	3()	2()	1()
6	Organizations departments prepare budget plans prior to the budget year which help for wise control(ODBP)	5()	4()	3()	2()	1()
7	The annual budget process in the region is documented with tasks, responsibility assignment and deadlines are clearly stated (ABP)	5()	4()	3()	2()	1()
8	As your region offices utilizes the approved budget based on its plan there is presence of budget control(UAB)	5()	4()	3()	2()	1()
9	The current budget preparation, utilization and control of your region offices are sufficient (CBPUC)	5()	4()	3()	2()	1()
10	Planning and budget department have a means to take corrective action on	5()	4()	3()	2()	1()

	the weaknesses of budget preparation, utilization and control(CA)					
11	Most organization in the region has link the work plan with expenditure budget preparation which is important for control (WPE)	5()	4()	3()	2()	1()
12	The budget originate at the lowest levels of management and is refined and coordinated at the higher level(BOLLM)	5()	4()	3()	2()	1()
B. Management support		Scales				
13	The office/sector supports an employee who's their position is related to government budget to providing training in order to improve your skill and the field if needed (ES)	5()	4()	3()	2()	1()
14	The office/sector supports me to introduce myself with new technology, policy or procedures when it is necessary (INT)	5()	4()	3()	2()	1()
15	Auditors, accountants, budget and finance department, tax officers and planners in the region have got financial and material support to carry out their work to achieve their objectives for the accomplishment of organizational goals through public budget control(FMS)	5()	4()	3()	2()	1()
c. Competent internal audit staff		Scales				
16	In the region office/sector there are sufficient skilled internal auditors to control public budget. Most of them have certification in auditing and accounting (SSIA)	5()	4()	3()	2()	1()
17	The audit procedures and evidence collections are completed on time, since skilled internal auditors are employed for controlling budget(APEC)	5()	4()	3()	2()	1()
18	The work of internal audit is performed with technology that uses computerized data tools and specific IA software(UCDT)	5()	4()	3()	2()	1()
19	Regional BOFED and ORAG auditors reconcile expenditure with approved budgets and make sure that there have been no financial irregularities which led the effective implementation of budgetary and other policy decisions(EAB)	5()	4()	3()	2()	1()
D. Organizational commitment		Scales				
20	Your region office/sector management committed toward budget control for the achievement of government objective(MCTB)	5()	4()	3()	2()	1()

21	Each employee and management in our region involve during budget planning and control because there is incentive for good achiever in effective use of budget(IPA)	5()	4()	3()	2()	1()
22	Employees in our organization are committed toward public budget control, because the budget allocated is for construction of infrastructure (road, hospital and schools...) (CIS)	5()	4()	3()	2()	1()
23	Budget force managers and employee to think about and plan for the future(ETPF)	5()	4()	3()	2()	1()
E. Budget Monitoring and Evaluation		Scales				
24	The region budget and finance standing committee hold budget conferences and meetings regularly to review performance of sectors budget(BFSC)	5()	4()	3()	2()	1()
25	The organization's budget deviations are reported to budget to committees for evaluation on timely basis(ETB).	5()	4()	3()	2()	1()
26	There is a regular follow up on budget plans by the budget committee and departmental heads(RF)	5()	4()	3()	2()	1()
27	In the region, sectors areweak monitor and evaluate budget through continuous comparison of actual with budgeted and if variance take corrective action(WMEB)	5()	4()	3()	2()	1()
28	BOFED of the region pursue and bolster the budget utilization of the sectors through establishing mechanisms of budget control(MBC)	5()	4()	3()	2()	1()
29	Our region use budget control as primary means of internal control for efficient and effective allocation of resource(PMIC)	5()	4()	3()	2()	1()
F. Information and Communication System		Scales				
30	Communication helps to evaluate how well guidelines and policies of the sectors/offices budget control system are working and being implemented(CEE)	5()	4()	3()	2()	1()
31	Our region use integrated budget expenditure (IBEX) system till to wereda finance and economic development office for controlling public budget(IBEXS)	5()	4()	3()	2()	1()
32	Budget related information, communicated to all societies through FTA by	5()	4()	3()	2()	1()

	disclosing on public board notice and other medias like radio, newspaper and different magazines(FTA)					
33	Transactions related to budget transfer are promptly (on time) recorded and classified to provide reliable information which is help for controlling(TRBT)	5()	4()	3()	2()	1()
34	Our region use similar reporting format among sectors in order to control budget(RF)	5()	4()	3()	2()	1()
G. Cost reduction		Scales				
35	The cost of activities and functions of the organizations are constantly reviewed by the executive committee which led the presence of budget control(CAF)	5()	4()	3()	2()	1()
36	The execution of its projects within the stipulated deadline by eliminating all forms of waste and unnecessary expense by the region led to budget control(EPSDL)	5()	4()	3()	2()	1()
37	Cost effective procurement, thus surplus revenue through reducing operational costs led to the presence of budget control in the region(CEP)	5()	4()	3()	2()	1()
38	Saving unnecessary expenditure (cost) and benefit paid to employee in the region control the organization budget(SUE)	5()	4()	3()	2()	1()
39	Cutting costs in order to increase the quality service offered by the organizations to the public put proper control on budget(CC)	5()	4()	3()	2()	1()
40	Cash expenditure tracking and reduces operational costs led to the presence of budget control in the region(CET)	5()	4()	3()	2()	1()
H. Competence of Human Resource in budget department		Scales				
41	The region office/sector shouldbe wellequippedwithexperiencedandskilled employees whoarewellfamiliarwithbudgetarycontrol. Most of them have certification in accounting and related fields(ESE)	5()	4()	3()	2()	1()
42	Our region offices have adequate number of professionals (budget officers) who prepare plan and budget(ANP)	5()	4()	3()	2()	1()
43	The effort of employees in budget department to use IBEX system in the budget implementation and control(EE)	5()	4()	3()	2()	1()

Thank you once again

Table: Appendix 1 summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
var1	219	109.9635	63.39934	1	219
var2	219	3.817352	.9594868	1	5
var3	219	3.703196	.6830442	2	5
var4	219	4.13242	.763742	2	5
var5	219	3.949772	.6921827	2	5
var6	219	3.69863	.5985824	2	5
var7	219	3.826484	.640407	2	5
var8	219	3.803653	.6858907	2	5
var9	219	3.771689	.6374565	2	5
var10	219	2.940639	.9773309	1	5
var11	219	3.561644	.6770071	2	4
var12	219	3.671233	.489939	2	4
var13	219	3.255708	.7653037	1	4
var14	219	3.863014	.7836939	2	5
var15	219	3.821918	.5749144	2	5
var16	219	3.223744	.7295736	1	4
var17	219	3.461187	.8893356	1	5
var18	219	3.187215	.8602437	1	5
var19	219	3.136986	.9765376	1	5
var20	219	3.196347	1.059161	1	5
var21	219	3.502283	.6380477	2	5
var22	219	3.260274	.9534206	1	5
var23	219	3.401826	.9449025	1	5
var24	219	3.826484	.6953528	2	5
var25	219	3.771689	.6003992	3	5
var26	219	3.680365	.8284659	1	5
var27	219	3.652968	.6760163	2	5
var28	219	3.771689	.5770237	2	5
var29	219	3.840183	.6752723	2	5
var30	219	3.52968	.7056687	2	5
var31	219	3.986301	.6018279	2	5
var32	219	4.031963	.7318954	2	5
var33	219	3.789954	.5760427	2	5
var34	219	3.557078	.7663704	1	5
var35	219	3.621005	.6757374	2	5
var36	219	3.821918	.5504577	2	5
var37	219	3.680365	.7711113	2	5
var38	219	3.438356	.6970377	2	5
var39	219	3.525114	.6793544	2	5
var40	219	3.452055	.8020804	1	5
var41	219	3.607306	.9583728	1	5
var42	219	3.835616	.6975784	2	5
var43	219	3.228311	.7739582	1	5
var44	219	2.922374	.8450622	1	5
var45	219	.7123288	.4537141	0	1
var46	219	.9497717	.2189161	0	1
var47	219	1.890411	1.119817	1	4
var48	219	2.401826	.8032025	0	3
var49	219	.7077626	.4558328	0	1

Table: Appendix 2 Gender

```
. tab gender
```

gender	Freq.	Percent	Cum.
feme1	11	5.02	5.02
male	208	94.98	100.00
Total	219	100.00	

Table: Appendix 3 Educational level of respondents

```
. tab EL
```

Educational level of respondents	Freq.	Percent	Cum.
masters	63	28.77	28.77
BA Degree	156	71.23	100.00
Total	219	100.00	

Table: Appendix 4 Work experience of respondents

. tab experience

experience	Freq.	Percent	Cum.
1-3	5	2.28	2.28
4-6	29	13.24	15.53
7-8	58	26.48	42.01
>8	127	57.99	100.00
Total	219	100.00	

Table appendix 5 Estimating budget source (EBS)

. tab EBS

EBS	Freq.	Percent	Cum.
2	13	5.94	5.94
3	54	24.66	30.59
4	137	62.56	93.15
5	15	6.85	100.00
Total	219	100.00	

Table: Appendix 6 Estimating budget source and budget control (EBS)

```
. tab EBS BC,col row nokey chi2 lrchi2 V exact gamma taub
```

Enumerating sample-space combinations:

```
stage 4: enumerations = 1
stage 3: enumerations = 14
stage 2: enumerations = 175
stage 1: enumerations = 0
```

EBS	Budget control		Total
	0	1	
2	13	0	13
	100.00	0.00	100.00
	20.31	0.00	5.94
3	16	38	54
	29.63	70.37	100.00
	25.00	24.52	24.66
4	31	106	137
	22.63	77.37	100.00
	48.44	68.39	62.56
5	4	11	15
	26.67	73.33	100.00
	6.25	7.10	6.85
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(3) = 34.4179 Pr = 0.000
likelihood-ratio chi2(3) = 35.0678 Pr = 0.000
Cramer's V = 0.3964
gamma = 0.4136 ASE = 0.120
Kendall's tau-b = 0.2184 ASE = 0.069
Fisher's exact = 0.000
```

```
. tab APEC BC,col row nokey chi2 lrchi2 V exact gamma taub
```

Enumerating sample-space combinations:

```
stage 5: enumerations = 1
stage 4: enumerations = 4
stage 3: enumerations = 70
stage 2: enumerations = 1374
stage 1: enumerations = 0
```

audit procedures and evidence collection	Budget control		Total
	absent	present	
strongly disagree	3	0	3
	100.00	0.00	100.00
	4.69	0.00	1.37
disagree	20	11	31
	64.52	35.48	100.00
	31.25	7.10	14.16
neutral	25	41	66
	37.88	62.12	100.00
	39.06	26.45	30.14
agree	13	87	100
	13.00	87.00	100.00
	20.31	56.13	45.66
strongly agree	3	16	19
	15.79	84.21	100.00
	4.69	10.32	8.68
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(4) = 42.7076 Pr = 0.000
likelihood-ratio chi2(4) = 42.8611 Pr = 0.000
Cramér's V = 0.4416
gamma = 0.6350 ASE = 0.084
Kendall's tau-b = 0.3762 ASE = 0.058
Fisher's exact = 0.000
```

Table: Appendix 8 Cost effective procurement and budget control

```
. tab CEP BC,col row nokey chi2 lrchi2 V exact gamma taub
```

```
Enumerating sample-space combinations:
stage 4: enumerations = 1
stage 3: enumerations = 20
stage 2: enumerations = 187
stage 1: enumerations = 0
```

cost effective procurement	Budget control		Total
	absent	present	
disagree	18	3	21
	85.71	14.29	100.00
	28.13	1.94	9.59
neutral	22	31	53
	41.51	58.49	100.00
	34.38	20.00	24.20
agree	22	102	124
	17.74	82.26	100.00
	34.38	65.81	56.62
Strongly agree	2	19	21
	9.52	90.48	100.00
	3.13	12.26	9.59
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(3) = 48.1116 Pr = 0.000
likelihood-ratio chi2(3) = 46.3137 Pr = 0.000
Cramere's V = 0.4687
gamma = 0.6853 ASE = 0.079
Kendall's tau-b = 0.3951 ASE = 0.058
Fisher's exact = 0.000
```

Table: Appendix 9 employee think plan for the future and budget control

```
. tab ETPF BC,col row nokey chi2 lrchi2 V exact gamma taub
```

```
Enumerating sample-space combinations:
stage 5: enumerations = 1
stage 4: enumerations = 12
stage 3: enumerations = 179
stage 2: enumerations = 2620
stage 1: enumerations = 0
```

employee think about plan future	Budget control		Total
	absent	present	
Strongly disagree	6	5	11
	54.55	45.45	100.00
	9.38	3.23	5.02
disagree	17	4	21
	80.95	19.05	100.00
	26.56	2.58	9.59
neutral	20	53	73
	27.40	72.60	100.00
	31.25	34.19	33.33
agree	21	76	97
	21.65	78.35	100.00
	32.81	49.03	44.29
Strongly agree	0	17	17
	0.00	100.00	100.00
	0.00	10.97	7.76
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(4) = 40.4056 Pr = 0.000
likelihood-ratio chi2(4) = 41.9267 Pr = 0.000
Cramere's V = 0.4295
gamma = 0.5627 ASE = 0.087
Kendall's tau-b = 0.3182 ASE = 0.057
Fisher's exact = 0.000
```

Table: Appendix 10 expenditure with approved budgets and budget control

```
. tab EAB BC,col row nokey chi2 lrchi2 V exact gamma taub
```

Enumerating sample-space combinations:

```
stage 5: enumerations = 1
stage 4: enumerations = 6
stage 3: enumerations = 87
stage 2: enumerations = 2650
stage 1: enumerations = 0
```

expenditure with approved budget	Budget control		Total
	absent	present	
Strongly disagree	4	1	5
	80.00	20.00	100.00
	6.25	0.65	2.28
disagree	31	31	62
	50.00	50.00	100.00
	48.44	20.00	28.31
neutral	23	41	64
	35.94	64.06	100.00
	35.94	26.45	29.22
agree	5	69	74
	6.76	93.24	100.00
	7.81	44.52	33.79
Strongly agree	1	13	14
	7.14	92.86	100.00
	1.56	8.39	6.39
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(4) = 41.9257 Pr = 0.000
likelihood-ratio chi2(4) = 46.2635 Pr = 0.000
Cramér's V = 0.4375
gamma = 0.6671 ASE = 0.072
Kendall's tau-b = 0.3913 ASE = 0.050
Fisher's exact = 0.000
```

Table: Appendix 11 Evaluation on timely basis and budget control

```
. tab ETB BC,col row nokey chi2 lrchi2 V exact gamma taub
```

Enumerating sample-space combinations:

stage 3: enumerations = 1

stage 2: enumerations = 14

stage 1: enumerations = 0

evaluation on timely bases	Budget control		Total
	absent	present	
neutral	28	42	70
	40.00	60.00	100.00
	43.75	27.10	31.96
agree	36	93	129
	27.91	72.09	100.00
	56.25	60.00	58.90
Strongly agree	0	20	20
	0.00	100.00	100.00
	0.00	12.90	9.13
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```

Pearson chi2(2) = 12.2964 Pr = 0.002
likelihood-ratio chi2(2) = 17.6382 Pr = 0.000
Cramér's v = 0.2370
gamma = 0.4396 ASE = 0.111
Kendall's tau-b = 0.2088 ASE = 0.059
Fisher's exact = 0.001

```

Table: Appendix 12 Weakness of monitoring and evaluation and budget control

```
. tab WMEB BC,col row nokey chi2 lrchi2 V exact gamma taub
```

Enumerating sample-space combinations:

```
stage 5: enumerations = 1
stage 4: enumerations = 2
stage 3: enumerations = 15
stage 2: enumerations = 174
stage 1: enumerations = 0
```

monitor and evaluate budget	Budget control		Total
	absent	present	
0	1	0	1
	100.00	0.00	100.00
	1.56	0.00	0.46
disagree	13	5	18
	72.22	27.78	100.00
	20.31	3.23	8.22
neutral	9	38	47
	19.15	80.85	100.00
	14.06	24.52	21.46
agree	40	106	146
	27.40	72.60	100.00
	62.50	68.39	66.67
Strongly agree	1	6	7
	14.29	85.71	100.00
	1.56	3.87	3.20
Total	64	155	219
	29.22	70.78	100.00
	100.00	100.00	100.00

```
Pearson chi2(4) = 21.8090 Pr = 0.000
likelihood-ratio chi2(4) = 20.2417 Pr = 0.000
Cramér's V = 0.3156
gamma = 0.2732 ASE = 0.132
Kendall's tau-b = 0.1317 ASE = 0.068
Fisher's exact = 0.000
```

Table: Appendix 13 Multicolliniarity test

```
. corr EBS ESE APEC CET CEP EPBP ETPF EAB MEB var25 RDB ODBP
(obs=219)
```

	EBS	ESE	APEC	CET	CEP	EPBP	ETPF	EAB	MEB	var25	RDB	ODBP
EBS	1.0000											
ESE	0.2416	1.0000										
APEC	0.2641	0.2619	1.0000									
CET	0.2879	0.3812	0.2723	1.0000								
CEP	0.0691	0.4409	0.2452	0.0546	1.0000							
EPBP	0.5468	0.2808	0.1099	0.3104	0.1131	1.0000						
ETPF	0.1714	0.2257	0.2643	0.1163	0.3899	0.1522	1.0000					
EAB	0.1163	0.3077	0.3495	0.4359	0.3196	0.1394	0.0644	1.0000				
MEB	-0.0163	0.1902	0.2502	0.0252	0.4243	-0.0772	0.3520	0.3263	1.0000			
var25	0.0242	0.0667	0.0950	0.1105	0.2554	0.0865	0.1301	0.2022	0.2203	1.0000		
RDB	0.2867	0.3221	0.2001	0.2014	0.2291	0.1709	0.0912	0.2831	0.1386	0.0262	1.0000	
ODBP	-0.1384	-0.0921	-0.0963	0.2807	-0.0231	0.2002	-0.1163	0.1527	-0.1476	0.1710	0.1602	1.0000

Table: appendix 14 Result Of logistic regression

```
. logit BC EBS ESE APEC CET CEP EPBP ETPF EAB MEB var25 RDB ODBP
```

```
Iteration 0: log likelihood = -132.3073
Iteration 1: log likelihood = -72.680803
Iteration 2: log likelihood = -65.710386
Iteration 3: log likelihood = -64.932866
Iteration 4: log likelihood = -64.925123
Iteration 5: log likelihood = -64.92512
```

```
Logistic regression              Number of obs   =          219
                                LR chi2(12)      =          134.76
                                Prob > chi2         =           0.0000
Log likelihood = -64.92512       Pseudo R2      =           0.5093
```

BC	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
EBS	1.594267	.6796448	2.35	0.019	.2621879 2.926347
ESE	.906431	.3226467	2.81	0.005	.2740551 1.538807
APEC	.6960499	.3094777	2.25	0.025	.0894848 1.302615
CET	1.192227	.3541835	3.37	0.001	.4980397 1.886414
CEP	1.724742	.5257121	3.28	0.001	.694365 2.755119
EPBP	-.4464486	.3328121	-1.34	0.180	-1.098748 .2058512
ETPF	.9064469	.375796	2.41	0.016	.1699003 1.642994
EAB	1.018175	.3534546	2.88	0.004	.3254163 1.710933
MEB	-1.568828	.5376425	-2.92	0.004	-2.622588 -.5150676
var25	.9348891	.4674678	2.00	0.046	.0186691 1.851109
RDB	-.0167123	.3707935	-0.05	0.964	-.7434542 .7100297
ODBP	-.1929375	.4025112	-0.48	0.632	-.9818449 .5959699
_cons	-21.98355	4.865534	-4.52	0.000	-31.51982 -12.44728

Table: appendix 15 Marginal effects after logit

Marginal effects after logit
 y = Pr(BC) (predict)
 = .83162216

variable	dy/dx	Std. Err.	z	P> z	[95% C.I.]	X
EBS	.22324	.1003	2.23	0.026	.026664	.419816		3.7032
ESE	.1269246	.04405	2.88	0.004	.04059	.213259		3.60731
APEC	.0974656	.04707	2.07	0.038	.00522	.189712		3.46119
CET	.1669436	.0532	3.14	0.002	.062666	.271221		3.45205
CEP	.24151	.07894	3.06	0.002	.086789	.396231		3.6621
EPBP	-.0625147	.0456	-1.37	0.170	-.151888	.026859		3.81735
ETPF	.1269268	.04994	2.54	0.011	.029042	.224812		3.40183
EAB	.1425717	.0453	3.15	0.002	.05379	.231353		3.13699
MEB	-.2196778	.07115	-3.09	0.002	-.359137	-.080219		3.6347
var25	.1309095	.06449	2.03	0.042	.004519	.2573		3.77169
RDB	-.0023402	.05196	-0.05	0.964	-.104184	.099504		4.13242
ODBP	-.0270164	.0565	-0.48	0.633	-.137762	.08373		3.94977

Table: Appendix 16 Cronbach's Alpha (α) reliability test

. alpha EPBP EBS APEC EAB ETPF ETB WMEB CET ESE RDB ODBP

Test scale = mean(unstandardized items)

Average interitem covariance: .1208998

Number of items in the scale: 11

Scale reliability coefficient: 0.7024