

# Budgetary Management and Control of Finance and Economic Cooperation Organization in Mettu Woreda of Ilu Ababor Zone: An Assessment

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## Abstract

The main purpose of this study was to investigate the gaps in budget management and control in the Finance and Economic Cooperation Office in Mettu Woreda of Illu Ababora zone, Oromia. This investigation is focused on eight purposely selected sectors and Finance & Economic Cooperation Office. From the total population, (Kothari 2004) formula was used to determine sample of respondents. For the purpose of data collection the management team along with workers of Budget and Finance & Economic Cooperation Office of Mettu, the workers of poverty eradicates sectors and standing committee of finance in the woreda were selected. The SPSS was used to analyze the data using descriptive statistics. For this study, five independent variables were identified including proper plan & budget preparation, budget execution, analyzing & feedback budgetary record and competent internal audit staff. The dependent variable effective & efficient budget management & control which was measured under Binary logistic regression. According to the logistic regression output, proper plan & budget preparation, budget execution, competent internal audit staff & budget monitoring and evaluation were contributed for the budget management & control in the Finance & Economic Cooperation significantly and positively. The remaining variables: the analyzing & feedback budgetary record for the budget management & control is negatively related and insignificant. All these five independent variables are contributions for assessment of budget management & control in the Finance & Economic Cooperation Office in the Woreda. Then, the researcher recommended that the office need to be understand the contributions of these four variables collectively significant and their odd ratio were greater than one to infinity indicate the relationship type between those predictors and the outcomes and add values for the budget management & control in the offices.

**Keywords:** Budget, Plan, Budget Management, Budget Control, Performance Audit.

**JEL Classification:** G18, H61, H69.

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## Introduction

### 1.1 Background of the Study

Currently in the world, organizations have developed a variety of processes and techniques designed to contribute to the planning and control functions. One of the most important and widely used of these processes is budgeting. Budgeting involves the establishment of predetermined goals, the reporting of actual performance results and evaluation of performance in terms of the predetermined goals. Then, budgeting is defined as a form of financial planning and as such budget is utilized to impose the strategy of a country. Therefore, a budget is composed of different functional budgets that could help a country for development such as agriculture, technology, tourism and other (Smith and Mcgeary, 1997). Also, among the essential reasons for having a budget plan are to effectively allocate resources, coordinate, and render service to the public and measure the activities of the country.

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, the Chartered Institute of Management Accountants of England (2007) defined the process of budgetary control in the following way: “Budgetary control is the establishment of budgets relating to the responsibilities of executives of a policy and the continuous comparison of the actual with the budgeted results, either to secure by individual action the objective of the 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 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)

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).

Presently Ethiopian government is investing in various infrastructures like the Grand renaissance dam, railway, 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). Most regional states, however, do not cover their budget requirements from their own source of revenue. As a result, it is through the Federal Block Grant Transfers that each regional state covers its major proportion of their budget. The Oromia Regional State is one of the nine (9) states which get block grant to cover its budget deficits (MoFED, 2009). On the other hand, as one of the 9 regional states, it has the full autonomy as per the FDRE constitution of 1995 article 52 which allows it to enact and execute its own state constitution and ratify laws as long as they comply with the federal constitution (FDRE constitution, 1995). So, the states draw up and administer the state budget. The regional state has 20 (twenty) zonal administration and 6 (six) city administration at zonal level. Iluabor zone is one among these zonal administration located at south-west Oromia. It consists 13 (thirteen) woreda & one town administration. One of these woredas is Mettu. Mettu woreda in Iluabor zone is get block grant to cover its budget deficit from Oromia regional government 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. Thus, the purpose of this study is to evaluate the budget management and control in case of Mettu woreda Finance and Economic Cooperation.

## **1.2. Statements of the Problem**

An organization sustains for a long period of time so long as it accomplishes its activities in accordance with stated mission. This mission is “Make real a prosperous the country by formulating development policies, preparing development plan & budget, mobilizing and administering external resources, installing modern,

efficient, effective & accountable public finance & properly administration & controlling system.” (MoFED of FDRE). In order to achieve these missions and objectives, the organization must build a strategy according to the existing situations. It should also prepare annual plan and budget based on the strategy. One of the responsibilities of budget users is controlling costs and constantly improving the ways of doing things. The Finance and Economic Cooperation is responsible to follow and control for managing budget users to respect the rule, regulation and directives of finance (MoFED of FDRE 2004). According to L. R. Gay (2012) another source of initiation to the research problem is to examine some of the questions the researcher commonly ask himself about concerned sector from his personal experience through different intervention. Accordingly, the researcher has been serving for more than one decade in Mettu woreda in different organizations and in the Finance and Economic Cooperation Office as expert and organization heads. Thus, many years’ experience on the study area was obtained and identified that the woreda administration faced a greater problem in budget deficit but mostly it used under adjusted budget because of poor budget management and control of the woreda’s Finance and Economic Cooperation Office.

Globally, studies like (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 nonprofit making firms and concluded a positive correlation between budgetary participation and managerial performance in nonprofit making organizations. Moreover, Nyageng’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 control led 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.

Eliyas (2018) also examined assessment on budget implementation and controlling case of Addis Ababa city administration Finance and Economic Development Bureau and revealed that there are lack of internal control system implementation. From the review of past research, most studies have concentrated on only budget preparation, practice, and budget implementation in the public sectors.

According to researcher’s experience different sectors in the woreda’s administration was unable to provide proper service for the community and the capital budget was not budgeted according to directives given from finance and economic cooperation bureau as well. As a result, the community asks a lot of question regarding poor governs related with lack of service. Therefore, the study aimed to investigating the gaps in budget management and control in case of Mettu woreda finance and economic cooperation office.

### **1.3. Research Hypothesis**

In line with the broad purpose statement, the following hypothesis were formulated for the investigation. Hypothesis of the study stands on the theory related to budget management and control in FECo. Office. The results from the literature review were used to establish expectation of the different factor on the budget management and control. Hence, based on the objectives the study formulated and tested the hypothesis listed below.

**H01:** Proper plan and budget preparation has no significant effect on budget management and control of the office;

**H02:** The budget execution has no significant effect on budget management and control of the office;

**H03:** Monitoring and evaluation of budget have no significant effect on budget management and control of the office;

**H04:** Analysing and feedback in budgetary records has no significant effect on budget management and control of the office;

**H05:** The competent internal audit staffs in the office has no significant effect on budget management and control.

## **1.4. Research Objectives**

### **1.4.1. General Objective**

The general objective of the study is to identify the gaps in assessment of budget management and control in case of Mettu Woreda Finance and Economic Cooperation Office.

### **1.4.2. Specific Objectives**

The specific objectives of the study were: -

1. To identify the causes of mismatch between plan and budget;
2. To identify weakness observed in budget execution;
3. To identify and know the suitable control mechanisms for budget execution
4. To find out deviations observed in budgetary records compared to the country's rules and regulation.
5. To know the presence of performance auditing practice to evaluate the effectiveness and efficiency of the office budget utilization.

## **1.5. Significances of the Study**

The study is helpful for Mettu Woreda Finance and Economic Cooperation office management, employees, Mettu Administration office and any other concerned body in addressing the problems related to budget management and control. Moreover, the study can contribute to create awareness on budget management and control to the success the office mission and serve as motivation for financial decision making. Finally, the study can be baseline for other researchers who would like to conduct their research in similar area

## **1.6. Scope of the Study**

The study was delimited geographically, conceptually, and timely. The study geographically was carried out in Oromia Regional State Ilubabor Zone at Mettu Woreda Finance and Economy Cooperation Office. Conceptually it is delimited to assess the budget management and control of Mettu Woreda Finance and Economy Cooperation Office. The study was also limited to assess the budget management and control of Mettu Woreda Finance and Economy Cooperation Office in the time between 2007 E.C – 2011E.C by descriptive survey method with quantitative and qualitative approach.

## **2. Research Methodology**

### **2.1 Description of the Study Area**

Mettu woreda is located in Ilu Ababor Zone at a distance of 600 km from Addis Ababa. In absolute terms; Mettu extends from 8<sup>o</sup>23'5"E latitudes and 35<sup>o</sup>20'31'N longitude. The elevation of the woreda ranges from 1300 to 1600 meters with average annual rainfall 1,153mm. The total population of the woreda is estimated 87,298, from which male account 43656(50.008%) and female 43642 (49.99%). The estimation of the households is about 13367 (Basic data of Mettu woreda FECo, 2019).

### **2.2 Research Design**

Research design is the plan of action that links the philosophical assumptions to specific methods (Creswell & Planoclark, 2007). For Upagade & Shende (2012), research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Hence, in this study descriptive survey research specifically Cross-sectional designs was employed. Because the major goal of Cross-sectional designs asks large numbers of people questions about their behaviors, attitudes, and opinions. In addition, a cross-sectional study is one that produces a 'snapshot' of a population at a particular point in time (Louis Cohen et al, 2007). Additional explanatory research is applied; because the research has dependent and independent variables. Descriptive research design is concerned with describing the characteristics of a particular individual, or of a group by aiming at obtaining accurate information in the study. Explanatory research establishes cause-and-effect relationships; it attempts to explain why one variable causes change in another variable.

### 2.3 Research Approaches (Methods)

There are two basic approaches to research, viz., quantitative approach and the qualitative approach. The former involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. Qualitative approach to research is concerned with subjective assessment of attitudes, opinions and behavior. Such an approach to research generates results either in non-quantitative form or in the form which are not subjected to rigorous quantitative analysis. Generally, the techniques of focus group interviews and depth interviews were used. For this study the researcher have used both quantitative and qualitative research approach. Because it is helpful to get balanced information and to triangulate the data from primary and secondary data sources.

### 2.4 Data type and sources

In order to strengthen the findings of the research the relevant data for the study was generated from both primary and secondary sources. To carry out this research, the researcher used primary data sources. Kothari, (2004) stated that, primary data are those which are collected afresh and for the first time, and thus happen to be original in character. In this study, the major sources of primary data were employees of Mettu Woreda FECo. Office from different department, woreda administrative council and budget and finance affairs committees.

The secondary sources of data were the FEDC office documented records of financial report auditor's feedback and action plan and monitoring check list of the year 2007 E.C up to 2011 EC and others research works, journals, articles, books and internet and other related documents from the town such as annual plans, performance reports, directives, etc. These files were observed to strengthen the data obtained through questionnaires and interviews.

### 2.5 Sampling Design

#### 2.5.1 Population

Population refers to the total of items about which information is desired (Kothari, 2004). The total population of this study was employees of the woreda FECo. Office and woreda's poverty eradication sectors (244), the management committee of FECo. Office (8) and budget and finance affairs standing committees (5).

#### 3.5.2 Sample Frame

Sampling frame consists of a list of items from which the sample is to be drawn (Kothari, 2004). Accordingly, the sample frame of this study was the woreda FECo, woreda's poverty eradication sectors and budget and finance affairs standing committees.

### 3.6 Sampling Techniques

#### 3.6.2 Sampling Techniques

Both probability and non-probability sampling technique were employed in this study. Simple random and purposive sampling techniques will be conducted to identify respondents from the population. Since the woreda has 31 government organizations, the researcher took the most government focused area (poverty eradication sectors). The simple random sampling technique was employed for employees of poverty eradication sectors that are 8 in number and employees of FECo, because simple random technique gives equal chance of being included in a sample. Purposive sampling technique was also employed to select respondents from FECo. Since the management members are familiar with the issue of study due to their responsibility and due to their manageable size of population, office management committee & budget and finance standing committee were used purposively by using purposive sampling technique.

#### 3.6.2 Sample Size

To determine the sample size of the study, the researcher employed (Kothari, 2004) formula. According to Kothrie (2004) during the determination of the sample size, level of precision or acceptable error, standard deviation of the population, confidence or risk level and standard variant at given confidence level should be considered. Therefore, by considering these issues sample size for this research was determined.

Kohtar's (2004) formula,

$$n = z^2pqN/e^2(N-1)+z^2pq \quad (1)$$

Where: n =the sample size;

N= the study population;

e =the level of precision;

z = standard variation at given confidence level;

pq = standard deviation of population;

1= designates the probability of the event occurring;

In line with this, the sample size is computed as follows.

The total population of the study N=244, the level of precision e =0.02, the standard error at 98% confidence level z=2.005 and the standard deviation of population pq, p=0.02 and q=1-p,

1-0.02=0.98.

So,  $n = z^2pqN/e^2(N-1)+z^2pq$  (2)

$n=(2.005)^2(0.02)(1-0.02)(244)/(0.02)^2(244-1)+(2.005)^2(0.02)(1-0.02)$

$n = 192.225/0.273= 70$

8(eight) woreda FECo management committee, 5(five) budgets and finance affairs committee will be selected by purposive sampling techniques. The total sample size is = 70+13 =83

As described above, the researcher take independent sample for each woreda poverty eradication sector and woreda FECo offices to ensure equal representation through proportionate probability sampling technique because each office have different number of employees. To do this the following formula was employed Ahmed (2009). The formula is,

$n_i=(N_i/N)*n$ , where  $n_i$ =sample size for individual office

$N_i$ =the total population of individual office       $N$ = the total population

$n$ = total sample size

Table 1. Proportionate sample for Woreda FECo & each poverty eradication sector

List of woreda public office	Total number of employees in each office	Number of sample size in each size	Sampling techniques
Finance & Economy Cooperation	54	15	Random sampling
Agricultural & Natural resource	48	14	Random sampling
Education sector	32	9	Random sampling
Road Authority	8	2	Random sampling
Water & Energy	15	4	Random sampling
Enterprise of Industry dev.?	19	5	Random sampling
Health office	31	9	Random sampling
Cooperative work office	16	6	Random sampling
Veterinary & Fish development	21	6	Random sampling
Management team of FECo. Office	8	8	Purposive sampling
Finance standing committee	5	5	Purposive sampling
Total	244	83	

Source: Mettu woreda FECo.2019.

### 3.7 Data Collection Methods

In order to gather the data, the researcher employed both open and closed ended questionnaires since it is more convenient and easier to collect the required information.

**Interview:** the Office of Finance and Economic Cooperation plan & budget, monitoring and evaluation process owners, the audit team, financial administration process owner's team, woreda FECo. Office management members and budget and finance affairs committee interviewed.

**Questionnaires:** two types of questionnaires that one is for plan, budget, monitoring and controlling process employee and the other for Finance core process and Internal Audit Core Process employees. The

questionnaires which comprise both close ended and open-ended was prepared in English that respondents easily understand the question and give appropriate answer.

### 3.8 Data Analysis Method

The researcher reviewed the appropriate statistical data analysis tools namely descriptive, and test statistics. Before analyzing the data, raw data Collected were cleaned and edited for completeness and consistency. It then systematically organized to confirm if it represents the target population and to facilitate objective analysis at a later stage. The responses also screened for correctness and accuracy and then they were assigned numerical values which are representing various attributes being the 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 Statistical Package for Social Science (SPSS) was used to analyze the data obtained from primary sources. Specifically, descriptive statistics tables, percentages, bars and logistic regression was used for analysis of this study. The results were interpreted with the help of odds ratio (i.e.  $e^{\beta_i}$ ), 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 would be a corresponding change in the Odds ratio.

In order to assess the reliability and consistency of the instrument the Cronbach’s Alpha ( $\alpha$ ) analysis was conducted. Then to determine the relationship among the variables and to test the research hypothesis logistic regression were used.

### 3.0 Findings

#### 3.1 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 budget management & control in Mettu Woreda FECo. 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, age , educational status , marriage status & work experience. The results of the reliability analysis and the logistic regression test also reported and finally the results of hypothesis testing were presented.

#### 3.2 Descriptive Statistics

##### 3.2.1 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 & finance standing committee with the help of questionnaire. 83 questionnaires were distributed and 73 returned from respondents and 10(12%) questionnaires were not returned. This represents a response rate of 88 percent. Therefore, data were analyzed based on the data collected using questionnaires from 73(88%) respondents.

##### 3.2.2 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. 73 respondents were returned the questionnaire distributed to the 83 samples, which were found in Woreda FECo. Office, woreda poverty eradication sector, finance standing committee.

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

Table 2. Sex distribution of Respondents

Categories		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	49	59.0	67.1	67.1
	Female	24	28.9	32.9	100.0
	Total	73	88.0	100.0	
Missing	System	10	12.0		
Total		83	100.0		

Source: Primary survey 2020.

As it can be seen in the above table there were a large number of male respondents which accounts for 49(59%) and 24(28.9%) of female working on FECo.Office and selected organizations in Mettu Woreda. This enables the researcher that there is no bias in the survey instrument related to the gender of the respondents.

Table 3. Age distribution of Respondents

Categories		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	4	4.8	5.5	5.5
	26-35	32	38.6	43.8	49.3
	36-45	20	24.1	27.4	76.7
	46-60	17	20.5	23.3	100.0
	Total	73	88.0	100.0	
Missing	System	10	12.0		
Total		83	100.0		

Source: Primary survey 2020.

From the 73 returned questionnaires from respondents, 4.8% were found under age of 18-25 and 38.6% were found under age of 31-40. In addition, 42.3% were found under age of 36-45, while 20.5% were found under the age of 46-60. From this fact we could understand that the majority (62.7%) of employees are moderately young age group which would enable to give good comments for questionnaires.

Table 4. Educational back ground of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12&<	3	3.6	4.1	4.1
	Certificate	1	1.2	1.4	5.5
	Diploma	21	25.3	28.8	34.2
	Degree	43	51.8	58.9	93.2
	Masters &>	5	6.0	6.8	100.0
	Total	73	88.0	100.0	
Missing	System	10	12.0		
Total		83	100.0		

Source: Primary survey 2020.

Another commitment of employees to competence that contributes to effectiveness of budget management & control is the level of education the employees possess. This competence is referred to as academic competence. The management & control system reveals that a good education level has a positively determine the effectiveness of internal management & control in organizations. As summarized in the above table, majority of the respondents 43(51.8%) were qualified in first degree and 6.8% were master's degree which is favorable and led to contribute the presence of budget management & control in the governmental organizations. This is an indication that the respondents are also at suitable education level to understand the concept of budgeting and budget management & control system.

Table 5. Work Experience of s Respondents

Categories		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	5	6.0	6.8	6.8
	6-10	8	9.6	11.0	17.8
	11-15	24	28.9	32.9	50.7
	16-20	17	20.5	23.3	74.0
	>20	19	22.9	26.0	100.0
	Total	73	88.0	100.0	
Missing	System	10	12.0		
Total		83	100.0		

Source: Primary survey 2020.

Experience is one of the competences to understand managing & 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 managing & control system.

Then purpose of the above table is to assess the experience of the respondents. Accordingly, 6% of respondents worked 1-5 years, 9.6% worked 6-10 years, and 28.9% respondents worked 11-15 years. In addition, 20.5% worked 16-20 years and 22.9% of respondents worked above 20 years. From this majority of respondents



(72.3) worked in government organization for more than 11 years & above. Hence the more experienced employees are the more they understand about the public budget management and control they perform.

### 3.3 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 ( $\alpha$ ) 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 ( $\alpha$ ) greater than 0.600 is also acceptable.

Table 6. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha based on the standardized Items	N of items
0.765	.820	5

Sources: survey data, 2020 SPSS output.

From Table 6 above, the value for Cronbach's Alpha ( $\alpha$ ) was 0.765 for all variables. 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.

### 3.4 Determinants of Budget Management and Control

The determinants of effective budget management & control in Mettu Woreda FECo. Office were asked positively using likert scale through which respondent shown their level of agreement. The identified variables expected to improve the budget management & control. The respondent was asked to indicated their level of agreement with the factors on the following measurements scale such as

1=strongly agree 2= Agree, 3=Neutral, 4= Disagree, and 5= strongly disagree. Their responses organized in the following manner.

#### 3.4.2 Prepare Proper Plan and Budget

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 budget & planning preparation is based on suitable professional employees, reliable basic data, understanding strategic plan before prepare annual work plan & the budget it needs then budget estimates must be realistic, and achievable. The respondents' response in relation to this and budget management & control was interpreted as follows:

Table 7. Plan & budget preparation

Item	N	Minimum	Maximum	Mean	Std. Deviation
1. The plan, budget, monitoring & evaluation work process has adequate understanding to prepare plan & budget.	73	1	5	3.33	1.344
2. The office has adequate number of professionals (budget officers) who prepare plan and budget.	73	1	5	3.34	1.366
3. The FECo office prepares its annual plan based the strategic document.	73	1	5	3.49	1.345
4. The office revises its plan frequently in relation to budget	73	1	5	3.55	1.302
5. Plans of the office are systematically linked to the annual budget.	73	1	5	3.70	1.163
6. Budget is prepared based on reliable data and reasonable estimated cost.	73	1	5	3.51	1.303
7. There is a tendency of submitting budget request without plan.	73	1	5	2.36	1.447
8. Sectors in the woreda analyze their budget properly in terms of transformational plan.	73	1	5	3.64	1.295
Valid N (list wise)	73				

Source: SPSS Results of primary data Calculated, 2020.

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 plan & budget preparation. The overall mean of the plan & budget preparation can be approximated to 3.365 which indicate as such agreement in practices of budget management & control; then there be a need for improvement. The highest mean 3.70 indicates that majority of respondents not agreed that the plans of the office are systematically linked to the annual budget. The result of the survey in line with the Sectors in the woreda analyze their budget properly in terms of transformational plan are not sufficient is indicated by mean value of 3.64. This means majority of the respondents were disagree that the mere proper planning & budget preparation process is contributed for the presence of budget management & control.

The above table also indicates that, the planning & budget preparation planning is effectively determining the budget management & control in the woreda FECo. Office. The least mean 2.36 indicates that majority of the respondents agreed that there is tendency of submitting budget request without plan the office is not managed. In percent 64.38% of respondents agreed and strongly agreed with this statement while 27.39% of respondents either disagree or strongly disagree and the remaining undecided (Appendix II- PBP 07).

From the table it is also indicated that the mean 3.34 show there is uncertainty by the respondents; that the office has not adequate number of professionals who prepare plan and budget. Finally, the mean 3.51 implies that majority of respondents were not agreed that the budget is prepared based on reliable data and reasonable estimated cost which help for sensible management & control. Then the finding indicates that much as proper plan & budget bring effect into a proposed course of action. The mismatch of plan & budget also happened in case of these reasons. On the other hand, from the open-ended question respondents suggest that there were different reasons that affect to prepare proper plan & budget. These are:

- Unplanned activities came from the regional government without budget.
- Budget was not allocated according to prepared plan. Mostly it depends on the previous budget year.
- Human resource management in the Woreda was poor; that manpower in some sector excess.
- Most of capital budget was prepared without design, specification & engineering estimated cost of the project.
- Lack of SWOT analysis

#### 4.4.2 Suitable Budget Execution

As per Allen and Tommasi (2001), successful budget execution depends on numerous factors, such as the implementation capacities of the agencies concerned.

Every budget user unit has the obligation to register daily inflow and outflow budget movement and maintain the balance on the ledger prepared for this purpose. The Finance & Economic Cooperation is authorized to follow how the allocated budget implemented with regarding to the prepared plan. The plan, budget, monitoring & evaluation work process in FECo responsible to evaluate take corrective action about the budget implementation & transfer.

However, according to the discussion shown by the Wereda's FECo. Office management members in interview part the following problems were observed in budget execution.

- Little supervision and control by the budget user sectors
- Most of the year especially from (2007-2011 EC) sectors told about budget deficit in the woreda; but the summery report of the office indicate the problem of budget utilization.(see the following table)

Table 8. Comparison of appropriation & actual spending for recurrent by budget year

Budget year (EC)	Approved budget	Supplements	Adjusted budget	Actual expenditure	Over/under Budget	Budget used in %
2007	44183132	12175675	56358807	53764964.45	2593842.55	95.4
2008	65670210	2060120	67730330	64611908.39	3118421.61	95.39
2009	69420211	15376362	84796573	80011943.59	4784629.41	94.35
2010	89144185	2973750	92117935	91338761.31	779173.69	99.15
2011	102217297	5084320	107301597	108057788.73	(756191)	107.04

Source: Mettu Woreda FECo. Office.

On the other hand respondents react to the questionnaires in the (table 4.9) the highest standard deviation of the response was showed in question number (9) which is the sectors are not utilize the approved budget based on their plan. Additionally, the mean of 3.81 indicated on the (table 4.9) question number (16) also show majority of respondents disagree that, in the office budget implementation & control is sufficient. In percent (43.83%) respondents disagreed, (23.28%) respondents were strongly disagreed, (15.06%) of respondent agreed, (6.84%) of respondents strongly agreed and the remain (10.95) undecided. Then finding indicated that the budget execution weakness brings effect on budget management & control in Wereda's FECo. Office.

#### 4.4.3 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 the Mettu Woreda FECo. Office is presented as follows.

Table 9. Budget Execution, Evaluation & monitoring

Item	N	Minimum	Maximum	Mean	Std. Deviation
9. The sectors utilizes the approved budget based on their plan.	73	1	5	3.62	1.198
10. The FECo. Office prepares monthly cash flow demand based on its plan.	73	1	5	3.55	1.131
11. The office has the practice of regular follow up on its balance budget.	73	1	5	3.49	1.180
12. The office prepare timely, explanatory complete budget implementation report to sectors & woreda's administration council	73	1	5	3.79	1.092
13. Sectors request frequent budget transfer.	73	1	5	2.64	1.059
14. The office has suitable capacity to evaluate budget with its main activities.	73	1	5	3.74	1.155
15. The office faces cash shortage during the budget year	73	1	5	2.27	1.134
16. The budget implementation and control of the office is sufficient.	73	1	5	3.81	1.036
17. The office has strong control mechanism.	73	1	5	3.88	.999
18. Payment is implemented always based on full documents and evidences.	73	1	5	2.62	1.126
Valid N (listwise)	73				

Source: SPSS Results of primary data Calculated, 2020.

From the above table, the overall means of the budget monitoring and evaluation for the ten questions can be estimated to 3.339 which are very good

The highest mean (3.88) indicated on table above confirm that majority of respondents disagree that the office has strong control mechanism. In percentiles also 46.575% of respondents disagreed and 27.397% strongly disagreed with this statement while only 8.219% of respondents agreed and the remaining 15.068% undecided (Appendix II BME12). Subsequently the mean (3.79) of the response was showed in question number 12 which is the office does not prepare timely, explanatory complete budget implantation to sectors & administration council. The mean (3.74) of question number (14) indicated on the above table majority of respondents disagreed & strongly disagree that the office has suitable capacity to evaluate budget with its main activities. In the other hand the lowest mean (2.27) indicated majority of respondents agreed that the office faces cash shortage during the budget year. In percent also (63.01%) of respondents are agree & strongly agreed which means monitoring and evaluation of budget in the office was poor. It wanted to take corrective action. Then the finding indicates that, the budget monitoring and evaluation determining the budget management & control in woreda's FECo. Office. On the other hand, from the open ended question respondents suggest that there were different reasons that show poor monitoring & evaluation in the office.

- The office sometimes delays to accounting recording.
- Inappropriate usage of budget.

- Capital budget is not allocated according to BFEC directives send yearly.

#### 4.4.4 Analyzing & Feedback Budgetary Recording

Budgetary or appropriation accounting consists of tracking & registering operations concerning appropriations and their uses. It should cover appropriations, distribution, any increase or decrease in appropriation commitment/obligations expenditures at the verification /delivery stage, and payments budgetary accounting is only one element of government accounting system, but it is the most crucial for both formulating policy supervising budget implementation. In particular, weakness in budgetary accounting and recording make quality analysis of the performance outputs impossible. Most developed countries keep registers for the transaction at each stage of the expenditure cycle, or at least at the obligation stage & the payment stage. This whatever their accounting system or budget implementation procedures. Many developing countries keep similar registers either at spending agency level or through centralized control procedures. However, on both cases, budgetary accounting presents insufficiencies.

Mettu Woreda FECo, Office use IBEX for its accounting record. IBEX is a financial information system that has been designed and developed to automate & support public finance in Ethiopia. It includes budget, account, budget adjustment, budget control, account consolidation & administration. The account part manages the tracking of the revenues & expenditure for the budgetary institutions. More specifically the accounts' part records the financial transactions of budgetary institutions, captures the aggregated monthly accounting reports & provides accounts report in the form of ledgers, financial statements, management reports and transaction listing. 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 of management & control.

Table 10. Budgetary Recording

Item	N	Minimum	Maximum	Mean	Std Deviation
19. The office keep complete & reliable budgetary record.	73	1	5	2.77	1.149
20. All expenditures are sufficiently documented.	73	1	5	2.81	1.151
Valid N (list wise)	73				

Source: SPSS Results of primary data Calculated, 2020.

From the above table, the overall mean of the suitable Budgetary Recording for the two questions can be estimated to 2.79 which indicates not as such agreement in practice of budget management & control.

The mean (2.81) of the response was shown in question number 20 which is all expenditures are sufficiently documented get not support for achieving Office objectives through managing & controlling public budget. On this question 41.09% respondents agree and strongly agree with the statement. 27.39% of respondents was undecided and 31.5% of respondents disagree & strongly disagree (Appendix II BR 20). This shows that the Woreda's FECo. Office mostly documented the expenditure in good way even if it needs improvement. The lower mean (2.77) indicated on table above confirms that a relatively majority of respondents agreed & strongly agreed that the office keeps complete & reliable budgetary account records.

In percentiles 46.57% respondents agreed & strongly agreed with this statement while 27.39% of respondents disagree & strongly disagree and the remaining 26.02% undecided (Appendix II BR 16). According to respondents' feedback, the office performs almost enough to keep complete & reliable account records. Then the above table also indicates that, budgetary records do not determine the budget management & control in the case of Mettu Woreda FECo. Office.

#### 4.4.5 Competent Internal Audit

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, providing reliable data about program results as a basis for future adjustments in budget allocations, identifying cases and patterns of waste and inefficiency that, if corrected, will permit more economical use of available budget resources, and detecting irregularities involving the misuse of public funds and identifying related weaknesses in management controls that may endanger 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 11. Competent Internal Auditor

Variables	N	Minimum	Maximum	Mean	Std. Deviation
21. The office has adequate internal audit controls system to ensure that funds are utilized for the planned purpose.	73	1	5	3.77	1.124
22. Internal audit of the office independently conduct their duties & responsibilities.	73	1	5	3.40	1.266
23. The office has enforcing mechanism to improve the audit comments.	73	1	5	3.53	1.156
24. Internal auditors conduct performance auditing to evaluate efficiency & effectiveness of budget utilization.	73	1	5	3.63	1.184
Valid N (listwise)	73				

Source: SPSS Results of primary data Calculated, 2020.

From the table above, the overall mean of competent internal audit staff for the four questions can be estimated to 3.58 which are good. The highest mean (3.77) indicated on table confirm that majority of respondents disagree that the office has adequate internal audit controls system to ensure that the funds are utilized for the planned purpose. The highest standard deviation (1.266) show majority of respondents disagreed that internal audit of the office independently conduct their duties & responsibilities. Besides as seen from (Appendix II CIA 22), of 41.09% and 24.65% of the respondents are disagreed & strongly disagreed that IA conduct performance auditing to evaluate efficiency & effectiveness of budget utilization. So the finding indicated that competent internal audit staff in the office determines the budget management & control.

#### 4.5 Binary logistic regression analysis

Under this study it is important to carry out a statistical analysis which would incorporate more than one predictor variable at a time. The regression analysis method adopted in this study is binary logistic regression, which would allow the identification of the effect of each of the selected predictor variables on budget control for the effects of other predictor variable

Table 12. Case Processing Summary and dependent variable encoding logistic regression

Unweighted Cases <sup>a</sup>		N	Percent
Selected Cases	Included in Analysis	73	100.0
	Missing Cases	0	.0
	Total	73	100.0
Unselected Cases		0	.0
Total		73	100.0

a. If weight is in effect, see classification table for the total number of Cases

Table 13. Dependent variable encoding

Original Value	Internal Value
Absence of budget management & control	0
Presence of budget management & control	1

Source: SPSS output, 2020.

The *Case Processing Summary* simply tells us about how many cases are included in our analysis. The second row tells us that there are no missing data on all of the variables included in the analysis and the *Dependent Variable Encoding* reminds us how outcome variable is encoded ‘0’ for absence and ‘1’ for presence of budget management & control.

##### 4.5.1. The assessment of prediction power of baseline model/null model

In this description, table shows that the null model (constant in the equation i.e. constant is analogous to the y-intercept in OLS regression) logistic coefficient ( $\beta$ ) associated with the constant variable and the overall statistics prediction power of null models respectively. Table 4.14: the significance of the models with only constant at (0.015) which is less than the level of significance of 0.05 (i.e.  $p < 0.05$ ). Moreover, the overall statistic is correct to extent of 83.56%– so it is better than a cut point 0.5 (better than just guessing).

**Beginning Block**

Table 14. Classification Table and Variables in the Equation

	Observed		Predicted	Classification Table a,b	
			Budget management & control		Percentage Correct
			Absence of budget management & control	Presence of budget management & control	
Step 0	Budget Mgt & control	Presence of budget management & control	0	12	.0
		Absence of budget management & control	1	61	100.0
	Overall Percentage				83.56

a. Constant is included in the model. b. The cut value is .500

Variable in the equation							
		B	S.E.	Wald	df	Sig.	Exp (B)
Step 0 <sup>a</sup>	Constant	1.719	.195	77.711	1	.015	5.581

Source: compiled by author.

In the model equation we see that the intercept-only model or null model is  $(B) = 1.719$ . If we exponentiate both sides of this equation we find that our predicted odds  $\text{Exp}(B) = 5.581$ . Then the finding of significance above indicates this null model should be rejected.

The Block 0 output is for a model that includes only the intercept (which SPSS calls the constant). Given the base rates of the two degree of disagreement ( $61/73 = 83.56\%$  indicate the absence of budget management & control,  $16.44\%$  is presence budget management & control), and no other information, the best strategy is to predict, for every case, that the subject decided to know the factors of budget management & control.

4.5.2 Assessment of the significance of predictors not included in Null Model Once the prediction power of null model and its significance level is identified, the next important thing to do is checking the significance of predictors that not included in null Model.

Thus, Table 14 and Table 15, revealed the significance of each independent variable that is not included in the base line model and the omnibus tests of model respectively. As evidenced in table 4.15: the independent variable that are not included in the base line model is less than 0.05 (i.e.  $p < 0.05$ ) and significant, except budgetary recording. Moreover, the omnibus tests of model are significant for all predictor. Therefore, this indicates that new model with explanatory variable is different and including all predictors improve new model over baseline model. Then the variable not in the equation table tells us whether each independent variable improves the model.

Table 15. Variables not in the Equation

			Score	Df	Sig.
Step 0	Variables	Proper plan & budget preparation	4.434	1	.004
		Budget execution	5.495	1	.013
		Budget monitoring and evaluation	5.519	1	.018
		Analyzing & feedback in budgetary records	.786	1	.211
		Competent internal audit	4.431	1	.003
Overall Statistics			4.133	5	0.0498

Source: SPSS Results 2020.

Block 1: Method = Enter

Table 16. Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	42.327	5	.000
	Block	42.327	5	.000
	Model	42.327	5	.000

Source: SPSSResults 2020.

Table above shows that when all seven predictor variables are considered together, they significantly predict the budget control in public organization at  $\chi^2 = 42.327$ ,  $df = 5$ ,  $N = 73$ ,  $p < .05$ .

The table labeled variables not in the equation tell us that the residual chi-square statistics 42.327 Which is significant at  $p < 0.05$  (it labels this statistic overall statics).

In other words, the addition of one or more of these variables to the model will significantly affect its predictive power. If the probability for the residual chi-square had been greater 0.05 it would meant that forcing the entire variable excluded from the model into the model would not have made a significant contribution to its predictive power. In the table above, proper plan & budget preparation, budget execution, budget monitoring & evaluation and competent internal audit, at  $p < 0.05$  could potentially make contribution to the model but analyzing & feedback budgetary records does not look Likely to be good predictive because its score statistic is not significant at  $P > 0.05$ . Omnibus Tests of Model Coefficients gives us a Chi-Square of 42.327 which is significant at 0.05. Then researcher can conclude that adding the predictors to the model has significantly increased our ability to predict the absence of budget management & control in Wereda's FECo. Office.

#### 4.5.2 Evaluation of Prediction Power of Models with All Predictors

In this section, further analysis of prediction power of models with all predictors and percentage dependent variable explained by variables. Accordingly, table 13 & 14 with Cox & Snell R Square and the Nagelkerke's  $R^2$ , they provide an indication of the amount of variation in the dependent variable. But, the Nagelkerke's  $R^2$  modification that does range from 0 to 1 is a more reliable measure of the relationship with a better model displaying a value closer to 1 and provides an indication of the model fitting information. Thus, there is good relationship between the predictors and the response variable at 76%. And also, as per table 15 model with all predictors is 84.9 % accurate in determining the dependent variable.

Table 17. Model summary

Step	Cox & Snell R Square	Nagelkerke R Square
1	.520	.76

a. Estimation terminated at iteration number 6 because parameter estimates

Changed by less than .001 for split file \$bootstrap split = 0.

Table 18. Classification Table <sup>a</sup>

	Observed		Predicted		
			Budget control		Percentage Correct
			Absence of budget control	Presence of budget control	
Step1	Budget control	Presence of budget management & control	1	11	3.2
		Absence of budget management & control	0	62	100.0
	Overall Percentage				84.9

Source: compiled by author.

The overall fit of the new model is assessed using the log-likelihood statistic. In SPSS, rather than reporting the log-likelihood itself, the value is multiplied by  $-2$  (and sometimes referred to as  $-2LL$ ): this multiplication is done because  $-2LL$  has an approximately chi-square distribution and so it makes it possible to compare values against those that we might expect to get by chance alone (Cohen et.al 2003).

At this stage of the analysis the value of  $-2LL$  should be less than the value when only the constant was included in the model (because lower values of  $-2LL$  indicate that the model is predicting the outcome variable more accurately). When only the constant was included,

$-2LL = 193.847$ , but now predictor of budget management & control has been included this value has been reduced to 151.520. This reduction tells us that the model is better at predicting (Chatterjee and Hadi 2006).

The question of how much better the model predicts the outcome variable can be assessed using the *model chi-square statistic*, which measures the difference between the model as it currently stands and the model when only the constant was included.

We could assess the significance of the change in a model by taking the log-likelihood of the new model and subtracting the log-likelihood of the baseline model from it. The value of the model chi-square statistic works on this principle and is, therefore, equal to  $-2LL$  with predictor of budget control included minus the value of  $-2LL$  when only the constant was in the model ( $193.847-151.520 = 42.327$ )

### 4.5.3 Goodness of Fit of Model

The following (Table 18) of Hosmer and Lemeshow test, which divides subjects into 10 ordered groups of subjects and then compares the number actually in each group (observed) to predicted probabilities of occurrence in subgroups of the model population. Each of these categories is further divided into two groups based on the actual observed outcome variable (presence of budget management & control, absence of budget management control Appendix III). A probability (p) value is computed (comparing the observed frequencies with those expected) under the linear model from the chi-square distribution with 8 (number of groups -2) degrees of freedom to test the fit of the logistic model.

Small values (with large p-value closer to 1) indicate a good fit to the data, i.e. an insignificant chi-square indicates a good fit to the data and, therefore, good overall model fit. Since the p-value is 0.847 which is insignificant therefore our fitted logistic regression model is good fit (Table 15). Based on this, Hosmer-Lemeshow test suggesting that the model was fit to the data well at statistics  $\chi^2$ , 4.109 & p value of .847 which is ( $p > .05$ ) which means that the data fit the model adequately (Hosmer and Lemeshow 2000).

Table 19. Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.109	8	.847

Source: compiled by author.

### 4.5.4 Parameters Estimates and Significance levels of Each Predictor in the Model

Once all above section is described well, the last important thing is identifying table that enable to identify the coefficient of estimates, effect of predictors and significance level of each independents variable in the model. To do so, better to look at table 4.17: that has several important elements including logistic coefficients  $\beta$ , Wald test, p value, and odd ratio.

Table 20. Bootstrap for Variables in the Equation Results of binary logistic regression model

Independent variable	B	S.E.	Wald	Df	Sig.	OR=Exp(B)	
Step 1 <sup>a</sup>	Proper plan & budget preparation	1.522	.831	3.355	1	.004	4.59
	Budget execution	.757	.367	4.258	1	.013	2.131
	Budget monitoring & evaluation	1.541	1.048	3.664	1	.018	4.67
	Analyzing & feedback in budgetary records	-.116	.607	.037	1	.211	.890
	Competent internal audit	1.541	1.048	3.664	1	.003	4.67
	Constant	5.245	5.132	1.133	1	0.0498	149.797

\*\* $P < 0.01$ , 95% level of Confidence, N = 73

Based on the above table, the „ $\beta$ “ values are the logistic coefficients that can be used to create a predictive equation (like the beta values in linear regression).



By applying all coefficients to the logistic regression model, we obtain the following predicted full model:

$$\begin{aligned} \text{Logit} \left( \frac{\pi(x)}{1-\pi(x)} \right) &= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + u_i \\ &= \beta_0 + \beta_1 \text{BPP} + \beta_2 \text{MS} + \beta_3 \text{CIA} + \beta_4 \text{OC} + \beta_5 \text{BME} + \beta_6 \text{INFO} + \beta_7 \text{CR} + u_i \\ &= 5.245 + 1.522 \text{PPBP} + 0.757 \text{BE} + 1.541 \text{BNE} - 116 \text{AFBR} + 1.541 \text{CIA} \end{aligned} \quad (3)$$

The Wald statistics has a chi - square distribution that provide an index of effect of the predictors on dependent variable in the equation which used to test whether all predictors' coefficients are different from zero to show and to enable to understand that at least one predictor " has effect on outcomes (Bewick et al. 2005).

Additionally, the *P* value is simplest way to assess the significance of each predictor.

In this case, if predictors *p* value is less than 0.05 ( $P < 0.05$ ); then each predictors have a significance effect on response/ dependent variable. Moreover,  $\text{EXP}(\beta)$  is namely called as odd ratio, it meant that it is the exponential of the logistic coefficients revealed relationship type between the predictors and the outcomes and also presents the extent or influence level to which raising the corresponding measure by one unit influences the odds ratio. Consequently, if the  $\text{EXP}(\beta)$  value just below 1 indicate the event is less likely to happen in the comparison than in the base group, and mean that there is no effect of that variable on the outcome at which result of the Wald statistic is near and became to zero and result of *p*-value is non- significant, if the  $\text{EXP}(\beta)$  value is just above 1 to infinity indicate the event is more likely to happen in the comparator than in the base group (Park and Hyeoun-Ae 2013). This study discovered in table 4.17 all explanatory variable coefficients of Wald statistics are different from zero (3.555, 4.258, 3.664, 0.037 and 3.664) that confirm the explanatory variable effect on the outcomes, the *p* value of each predictors, except analyzing & feedback in budgetary records *p* value of 0.211 all other predictors are less than 0.05 (i.e. 0.004, 0.013, 0.018, and 0.003) which confirm that the above five explanatory variable (proper plan & budget preparation, budget execution, budget monitoring and evaluation and competent internal audit) are significance in determining the outcome. But also, the odd ratio of each predictor that stated in the above table, except. analyzing & feedback in budgetary records which its odd ratio less than 1 indicate that it is not determine dependent variable (budget management & control), all others revealed that there is a positive relationship between predictors and the outcomes i.e. (4.59, 2.131, 4.67, & 4.67).

#### 4.6. Statistical test of hypothesis

To achieve the objective of the study and to test the related hypotheses the logistic regression statistics computed in above Table 17: were considered, and demonstrated by Wald test, the level of significance (*p* value) and odd ratio attained by each of the independent variables Therefore, the logistic regression results obtained from the model were utilized to test these hypotheses. The hypotheses sought to test for a significant influence of proper plan & budget preparation (PPBP), budget execution (BE), budget monitoring & evaluation (BME), analyzing & feedback budgetary records (AFBR) and competent internal audit staff (CIA), which was measured in terms of weather the woreda's FECo. Office manage & control budget or not. Let see each hypothesis based on the logistic regression output on the above table

##### **H01: Proper plan & budget preparation has no significant effect on the budget management & control in woreda's FECo. Office.**

The result of logistic regression showed in table 4.18: The individual test figures of proper plan & budget preparation indicated by (Wald test = 3.355,  $p = 0.004$ ,  $\text{Exp}(\beta) = 4.59$ ). The result showed that the proper plan & budget preparation has positive relationship on the budget management & control woreda's FECo. Office. The study show that suitable plan & budget preparation contribute a lot for the budget management & control. Most of the year in the Wereda's there were deficit of budget that most public sectors could not achieve their plan because of the mismatch plan & budget. The main reasons are lack of adequate professionals, unplanned activities comes from the regional government without budget, employed the workers without plan and interference of woreda's administrative council that command unplanned expenditure. Also, less attention is given for the preparation of plan & budget and the plan is not revise with the allocated budget. The preparation process must consultative and participatory 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 as recommended by (Anwar S.2007).

Therefore, this result is consistent with (Mohammed and Asfaw 2014) study on government expenditure management and control in Ethiopia which revealed that there is a problem of linking the work plan with expenditure budget preparation, purchasing of goods and services is not based on the annual action plan by sectors and there is a problem of budget preparation and execution not effectively controlling budget in public sector offices.

**H02: The budget execution has no significant effect on budget management and control of the office;**

On the other hand, the result of logistic regression showed in table 4.17: The individual test figures of the budget execution indicated by Wald test = 4.258,  $p = 0.013$ ,  $\text{Exp}(\beta) = 2.131$ ). The result showed that the budget execution has effects on budget management & control as revealed by Wald test of 4.258 which is different from zero and significant in determining the outcome with the  $p$  value (0.013) is less than significance level 0.05. In the woreda's several sectors didn't utilize the allocated based on their plan. So, they request budget transfer mostly on the code per diem. As indicated on the above (table 4.8) even the woreda's has deficit of budget there is unused budget that the budget execution must need improvement.

**H03: Monitoring and evaluation budget have no significant effect on budget management and control of the office.**

The third hypothesis of this research which is assumed to monitoring and evaluation had significant effect on budget management & control. As shown in Table 19 above the Wald test= 3.664,  $p = .018$ ,  $\text{Exp}(\beta) = 4.67$ . Then the logistic regression results also showed that monitoring and evaluation had significant effect on budget management & control at 5% significant level by rejecting  $H_0$  this was consistent with (Hancock 2009), to enhance effectiveness and transparency the management team should be actively involved in the process of monitoring and evaluation of budget management & control processes and procedures in office.

**H04: Analysing and feedback in budgetary records has no significant effect on budget management and control of the office;**

The result of logistic regression showed in Table 19: The individual test figures of analyzing & feedback budgetary records indicated by (Wald test = 0.037,  $p = 0.211$ ,  $\text{Exp}(\beta) = 0.890$ ). The result showed that the analyzing & feedback in budgetary records has no effects on the budget management & control as revealed by Wald test of 0.037 and the  $p$  value is also greater than significance level 0.05. The result clearly shows that analyzing & feedback budgetary records has no a positive significant effect in determining the outcomes. analyzing & feedback budgetary records is very issue in FECo. Office. But the study shows that in the office the payment is implemented based on the full documents & evidences. Moreover, if records were supported by computerized systems, repetitive manual errors would not occur though corrected later by cross checking.

**H05: The competent internal audit staffs in the office has no significant effect on budget management and control**

The existence of competent internal audit staff also supposed to be the determinants of the budget management & control and is the last hypothesis of this research. The logistic regression result supports this hypothesis at ( $P < 0.05$ ) level of significant and indicated by Wald test = 3.664,  $p = .003$ ,  $\text{Exp}(\beta) = 4.67$ . Therefore, the existence of competent IA staffs in the office results with positively relationship with budget management & control.

Even if the IA has high contribution for the budget management & control by performing their activities on time cover the planed scope of auditing activities in case of the office lack of adequate professionals are there, the IA are not follow regularly funds are utilized for the planned purpose, they are not independently conduct their duties & responsibilities and evaluating effectiveness of budget utilization is not done as expected.

Table 21. Summary of Hypothesis testing under logistic regression

Hypothesis	Result of the Finding
1. Proper plan & budget preparation has significant effect on budget management & control in wereda's FECo. Office.	Accepted
2. The budget execution has significant effect on the budget management & control in wereda's FECo. Office.	Accepted
3. Budget monitoring and evaluation have significant effect on the budget management & control in wereda' FECo. Office.	Accepted
4. Analyzing & feedback budgetary records has significant effect on the Budget management & control in wereda' FECo. Office.	Rejected
5. The competent IA staffs in the office are significantly determine Budget management & control in wereda's FECo. Office.	Accepted

Source: Primary Survey 2020.

## Summaries, Conclusion and Recommendation

### 5.1. Summary of Major Findings

This research was established to know the gaps of budget management & controls in Mettu Wereda FECo. Office, and to identify the determinants of budgetary management & controls. To accomplish these studies nine sectors were sampled using judgmental sampling by the researcher based on their closeness and most budgeted. (More governmental attention in case of poverty eradicates)

From the total of 83 questionnaires distributed to sampled respondents, 73 questionnaires were collected and analyzed using the Statistical Package for Social Sciences (SPSS) using descriptive statistics and binary logistic regression analysis was employed in the research to investigate the gaps of budget management & controls at Mettu Wereda FECo. Office. The various variables affecting budget management & controls; proper plan & budget preparation, budget execution, budget monitoring and evaluation, analyzing & feedback budgetary records and competent internal audit staff, were examined individually and compared to budget management & 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 budget management & control functions in Mettu Wereda FECo. Offices except analyzing & feedback budgetary records that relatively in good condition. Therefore, the office should give emphasis to use these determinant variables to make their service delivery effective, efficient, and economical. Moreover, proper plan & budget preparation, the competent internal audit's staff, budget execution and budget monitoring and evaluation were the major gaps of budget management & control in the office. However, the analyzing & feedback budgetary records were not significantly determining the budget management & control in the office as of the above four variables for this specific study.

This study finds that the composite measure of proper plan & budget, budget execution, competent internal audit staff, budget monitoring and evaluation, and analyzing & feedback budget records for 78% (Nagelkerke modified  $R^2 = 0.78$ ) variance for the budget management & control in the Worda's FECo. Offices. That means, the impact of these five independent variables contributed for the dependent variable effective & efficiencies budget management & control were 78%, and the remaining 22% 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 proper plan & budget, budget execution, competent internal audit staff, and budget monitoring and evaluation given to the budget management & control activities in the Mettu Woreda FECo. Office.

### Conclusion

Due to its important role, it plays for the overall management system, budget control is the major mechanism to confirm comprehensive administrations governance. The presences of effective budget control in the office links with internal control management system & proper plan and budget preparation improves organizational efficiency and effectiveness, reduce information irregularity during decision making, and ensures internal reliability of financial reporting process. By taking this aspect into consideration, this study was identified causes that determine the budget management & control in the office. And also by testing of the proposed hypotheses showed relations of these independent variables with the budget management & control, the following conclusions were drawn.

- The inaccessibility of adequate & experienced manpower in the office results of plan and budget preparation gaps.
- The employees under the plan, budget, and monitoring & evaluation work process don't have get regular training and, they didn't give training for the plan & budget workers of other sectors in the woreda.
- The budget expenditure indicated that there is under/overused of adjusted budget in the study period. The reasons for the variation according to physical plan there is lack of preparing annual plan based on strategies documented and also lack of reliable & reasonable estimated cost to properly prepare the budget.
- The wereda faces deficit of budget but the study indicated that there is unused budget is there because of no regular follow up of monitoring & evolution of budget. In addition, much deviation has not observed in budgetary records, the adoption of modified cash basis of accounting system has not been implemented fully.
- In Mettu Woreda FECo. Office there is a control system the survey also ensured that but there are deficiencies in the internal control system implementation practically the independence & professional skills of internal auditors doubtful. Beside internal auditors do not perform performance auditing which adversely affect the efficiency & effectiveness of budget spending. Therefore, is the fund lack of properly utilizing for intended purpose.

### Recommendations

The main intention of this project paper is to identify the fundamental causes of Mettu Woreda FECo. Office budget management and control weaknesses observed and suggest possible recommendations to overcome such problems. Therefore, the following recommendations to the Woreda's FECo. Office, the Woreda's Administration council and BoFECo. Thus, the FECo. Offices assign appropriate each individual adequate knowledge on the field, the right person should be put at the right place. Also, different performance improving tools should be implemented like business process reengineering (BPR). Moreover, the opinion suggested by Oromia National Regional State Office of Auditor General should be consider carefully and very strong monitoring & evaluation of the office management needed. The office does not permit a budget for unplanned activities and it has to provide a training for all sectors in the woreda specially in preparation of plan & budget. The Mettu Woreda's Administration council recommended to support and monitoring the FECo. Office closely but minimize interference in authority of the office. Additionally coordinate & evaluate the sectors in basic data they collect and organized. The BoFECo recommended arranged short- term training to develop uniform skills & workers under plan, budget, monitoring & evaluation. Finally, the office need to investigate other factors that contribute to better budget management & controls, like employees motivation and invest more in staff capacity building in order to enhance their performance.

### Abbreviations/Acronyms

<b>BFEC</b>	Bauer of Finance and Economic Cooperation
<b>BI</b>	Budget Institution
<b>EC</b>	Ethiopian Calendar
<b>EFY</b>	Ethiopian Fiscal Year
<b>ETB</b>	Ethiopian Birr
<b>FDRE</b>	Federal Democratic Republic of Ethiopia
<b>FECo</b>	Finance and Economic Cooperation
<b>GTP</b>	Growth and Transformation plan
<b>IA</b>	Internal Auditor
<b>IBEX</b>	Integrated Budget and Expenditure
<b>MoFED</b>	Ministry of Finance and Economic Development
<b>OFECB</b>	Oromia Finance & Economic Cooperation Bureau

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