



St. MARY's UNIVERSITY
SCHOOL OF GRADUATE STUDIES
MBA IN ACCOUNTING AND FINANCE

**TOWARDS PROGRAM BASED BUDGETING SYSTEM IN ETHIOPIAN
PUBLIC AGENCIES AND ITS IMPLICATIONS IN THE CASE OF
FEDERAL MINISTRIES.**

By:

DEREEJE TASSEW

ID Number SGS/0325/2012A

Advisor: Zenegnaw A. (PhD)

July, 2021

ADDIS ABABA, ETHIOPIA

**TOWARDS PROGRAM BASED BUDGETING SYSTEM IN ETHIOPIAN
PUBLIC AGENCIES AND ITS IMPLICATIONS IN THE CASE OF
FEDERAL MINISTRIES**

By: DEREJE TASSEW

**A THESIS SUBMITTED ST.MARY'S UNIVERSTY SCHOOL OF
GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE
REQUIRMENTS FOR THE DEGREE OF MASTERS OF BUSINESS
ADMINISTRATION**

July, 2021
Addis Ababa, Ethiopia

ST.MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

I, the undersigned, declare that the thesis prepared by Dereje Tassew entitled: **Towards Program Based Budgeting System in Ethiopian Public Agencies and its Implications in the Case of Federal Ministriessubmitted** in partial fulfilment of the requirements for the degree of master of business administration compiles with the regulations of the university and meets accepted standards with respect to originality and quality

Signed by the Examining Committee:

Chairman _____ **Signature** _____ **Date** _____

External Examiner AREGA SEYOUM (PHD) **Signature** _____ **Date** _____

Internal Examiner ABEBAW KASSIE (PHD) **Signature** _____ **Date** _____

Advisor ZENEGNAW ABIY (PHD) **Signature** _____ **Date** _____

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Zenegnaw A. (PHD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Name

DEREJE TASSEW

Signature & Date

Endorsement

This thesis has been submitted to St. Mary's University. School of Graduate studies for examination with my approval as a university advisor.

ZENEGNAW ABIY (PHD)

Advisor

St. Mary's University, Addis Ababa

Signature & Date

July 2021

ACKNOWLEDGEMENTS

First of all I would like to thank Almighty God and his mother Saint Marry forgive me strength and commitment for the compilation of this thesis and in whole of my life.

I am forever indebted to my advisor Zenegnaw Abiy (**PhD**) for everything he thought me. He provided advice on every step of this thesis and encouragement whenever I experienced self-doubt in doing the thesis. Without his advice this thesis could not have been completed. Finally I would like to thank my family and friends

ABSTRACT

Fully implementing program based budgeting has many advantages over line item budgeting. However, in Ethiopian public agencies it is not effectively implemented. The main objective of the study was to assess the move towards program based budgeting systems in public agencies in Ethiopia. For the purpose of achieving this objective descriptive method of analysis was used. In this study primary data by using structured questionnaire used and the questionnaires were distributed to 102 randomly selected respondents from four (ministry of finance and development, ministry of education, ministry of agriculture, and ministry of health) public agencies. But 102 questionnaires were returned to the researcher. Budget preparation process, challenges and support by Ministry of Finance were used as key indicators. The result shows that, the implementation of program based budgeting is not effective and efficient, and lack of sufficient training (45% are disagree), lack of clear program structure, lack of knowledge program based budgeting (44.1% are disagree) the major problems for the effective implementation of the project. The support by the ministry of finance is not adequate in that for 5 questions for 3 questions the majority (>50%) are disagree. It is recommended that public agencies should provide sufficient and timely training for the staffs, regular supervision and prepare performance report; staffs of the ministries should be committed in planning process of their respective budget.

Key words: program based budgeting; public agency; Ethiopia

Contents

Abstract.....	vii
Acknowledgements.....	Error! Bookmark not defined.
List of Tables	x
List of Acronyms.....	xi
Chapter one	1
Introduction	1
1.1. Back ground of the study	1
1.2. Statement of the problem	2
1.3. Objectives of the study	4
1.3.1. Specific Objectives	4
1.4. Scope of the Study	4
1.5. Significance of the Study.....	4
1.6. Limitations of the Study	5
1.7. Organization of the paper	5
CHAPTER TWO	6
2. REVIEW OF RELATED THEORETICAL AND EMPIRICAL LITERATURES.....	6
2.1. Introduction	6
2.2. Review of Theoretical Literature.....	6
2.2.1. Definition of Terms	6
2.2.2. Theoretical overview of budgetingsystem.....	6
2.3. Types and reforms of budget.....	7
2.3.1. Line Item Budgeting	7
2.3.2. Performance Budgeting	7
2.3.3. Program based budgetingsystem	8
2.4. The Transition to ProgramBudgeting.....	9
2.5. Challenges in Implementing ProgramBudgeting	10
2.6. Linking Programs to Strategic PlanningProcesses.....	10
2.7. Budgeting systems and its applicability in the publicagency.....	11
2.8. Empirical Study to integrate program based system inpublic agency.....	12
2.8.1. Empirical Studies on program based budgeting system in Ethiopia.....	15

2.9. Summary and Literature Gap.....	17
CHAPTER THREE	18
3. THE METHODOLOGY OF THE STUDY.....	18
3.1. Research design	18
3.3. Source and types of data	18
3.4. Method of Data collection	18
3.5. Sampling techniques and sample size determination	19
3.6. Methods of Analysis.....	19
3.7. Ethical Consideration	19
3.8. Validity and Reliability.....	20
Chapter four.....	21
Data analysis and presentation.....	21
4.1. Introduction	Error! Bookmark not defined.
4.2. Validity and reliability of the data.....	21
4.3. Demographic characteristics of respondents	22
4.3.1. Gender Distribution of the Study.....	22
4.3.2. Educational Background of the Respondents.....	22
4.3.3. Field of study of the Respondents	22
4.3.4. Current Positions of Respondents	23
4.3.5. Working Experience of the Respondents.....	23
4.4. Analysis of Responses on Program Based Budgeting	24
4.4.1. Budget Preparation Process.....	24
4.4.2. Challenges for program budgeting system	28
4.4.3. Support for minister offices by Ministry of Finance	30
4.5. Summary of Descriptive Statistics.....	32
CHAPTER FIVE	34
SUMMARY of FINDINGS, CONCLUSION and RECOMMENDATION	34
5.1. Summary of Findings.....	34
5.2. Conclusion.....	35
5.3. Recommendation.....	36
Reference	42

List of Tables

Table 4.1: Reliability test of the variable used in the study	27
Table 4.2. Gender distribution of respondents	27
Table 4.3: education level of respondents.....	28
Table 4.4: field of study of the respondents.....	28
Table 4.5: current position of respondents.....	29
Table 4.6: working experience of respondents	29
Table 4.7: Frequency distribution of respondents answer on budget preparation process	32
Table 4.8:Frequency distribution of respondents answer on challenges for program budgeting	35
Table 4.9: Support for minister offices by Ministry of Finance	37
Table 4.10: summary statistics of variables	39

List of Acronyms

MoF	Ministry of Finance
MoFED	Ministry of Finance Development
MS-VECM	Markov Switching Vector Error Correction Model
PBB	Program Based Budgeting
PBBS	Program Based Budgeting System
TBS	Traditional Budgeting System
ZBB	Zero-Based Budgeting

Chapter one

Introduction

1.1. Back ground of the study

The need to have effective budgeting system is just as important for public organizations, which by their nature are not required to maximize their profits, as it is for businesses, which exist to bring the utmost return on the stockholders' investments. The art of budgeting in government is essentially a process of allocating limited financial resources to services and activities in a manner that will most effectively meet the needs of the citizens (Mullins and Pagano, 2015). Typically, a simplistic and often used approach to budgeting is called line-item budgeting (Boex, et. al, 2015). In essence, the line-item budgeting is derived from the current year's budget by adding amounts expected to the required by line items. It also focuses largely on controlling resources inputs and typically uses the line-item budget format in which the focus is on departmental expenditures for specified purposes or objects, such as personnel, supplies, equipment and travel.

On the other hand, Cutt (2017) noted that the program budget differs from the traditional line-item approach to preparing, reviewing, and presenting the budget. Rather than focusing on what a community buys (personnel, and commodities), a program budget focuses on the expected results of services and activities that you carry out. In this case, the emphasis is on the attainment of long-term, community- wide goals. In a program budget, the organization link revenues and expenditures to multiyear programs that meet federal ministries' goals, objectives, importantly, a program budget identifies the anticipated results and outputs of these investments. In addition, West, Eric and Lindquist (2013) assert that Program budgeting removes activities from their organizational homes for analytical purposes and evaluates them in terms of their contributions to hierarchically ordered objectives.

Experts on the subject area argued different perspectives on the subject area. For instance, Bagdigen (2014) suggested that traditional budgeting has come under criticism for being overly time consuming, and rigid. For example, noted that line-item budgeting system encounters various limitations in budgeting process, like that; it assumes activities and methods of working will continue in the same way, no incentive for developing new ideas, no incentives to reduce costs and encourages spending up to the budget so that the budget is maintained next year. Contrary to this, Kluvers (2016) argued that Program budgeting system

(PBS) is the planning of public expenditure for the purpose of achieving explicitly defined results, which may be policy objectives or simply outputs of routine public service activities. The ultimate aim of PBS is far from simply being an elaborate way of measuring or recording activities but instead, it is a mechanism that will help government in decision-making depending on whether the objectives are being met or not, and enhancing transparency and accountability. In addition PBS can motivate program-managers and service-providers to have a genuine interest in improving bad performance and thereby improving the value for money of public spending by reducing waste and increasing impact and facilitate cross-institutional working (West, Eric and Moshe, 2013).

Many studies also argue that it makes the service-providers (ministries, departments or city administration and any public agency) more results- accountable to beneficiaries of services provided, to government for policy implementation and to taxpayers for good use made for their contribution to the coffers of the government. This ultimately leads to more transparency. Thus, the move is increased to run from traditional budgeting system to the new PBS in the Ethiopian Public sector. Interestingly, in Ethiopia many studies have recommended that program budgeting system is needed to be applied in Ethiopian public sector to have a better delivery of service to their society. Moreover, Ethiopian ministry of Finance has designed to adopt program based budgeting system in the public sector.

Un-doubtfully, having a clear understanding of significant problem of the line-item budgeting system and how to apply the new budgeting system in Ethiopian government sector can be more helpful in designing program based budgeting system for public agency. Accordingly, this study was intend to analyze the move towards program based budgeting system in the context of Ethiopian public agency the case of federal ministries and the implication of this budgeting system on the activities of federal ministries.

1.2. Statement of the problem

Ministry of Finance (MoF, 2017) initiated work on introducing program budgeting on a pilot basis in the office of ministries. The design of programs builds on the work already carried out on strategic plans for these ministries, with the intention of aligning resource allocation with the new directions being implemented under those plans.

Following the introduction of new budgeting system in Ethiopian government sector is the current issue to curve the previous budgeting system limitations. In this context, adopting program based budgeting is one issue by which the Ethiopian government at the federal

ministries would improve its budgeting system and mitigate the limitation of traditional budgeting system and also following the above statements, the transition to the program budgeting, the difficulties in the implementation of program based budgeting system at federal ministries level and the implication of this budgeting system on the activities of the agency are worth investigation. In addition, the qualification of the employees, and human resource requirements, facilities, and administration aspect of program budgeting are the area that require concrete study in Ethiopian context. In addition, other areas like: The way to move to program budgeting, the level of participation of employees, lower level management in program budgeting, the confusions and understanding of employees on PBS and implication or consequences of PBS in the implementation of process, reform needed in the ministries and identifying the challenges are the areas that are not yet studied in Ethiopia.

There are many studies conducted on the area of program based budgeting system in both international and national level. For instance, Diamond (2003) from program to performance budgeting: the challenge for emerging market economies; kluvers (2001b) program budgeting and accountability in local government; Lee & Wang (2009) assessing the Impact of performance-based budgeting: A comparative analysis across the United States; Marc (1992) program budgeting: costs and benefits; Pugh (1984) program budgeting reforms in South Australia; Spigelman (1967) program budgeting for new South Wales. In addition to the above listed studies in Ethiopia there are many studies conducted on program based budgeting system. For instance, Bessie and Tafa (2016) assessed intrinsic factors affecting budget utilization in Ethiopian public universities; Fenta&Abebe (2012) examined the challenges and opportunities of implementing program budgeting system in two selected ministries of Ethiopia; Tefera (2015) conducted a study on budgeting system in Ethiopia: program budgeting system. However, Fenta&Abebe focused only on the challenges of program budgeting. Despite this hardly any evidence all of the above listed researchers did not examine the moves from traditional to program based budgeting system and its implication on budget process. Therefore, this study was intend to fill this gap by analyzing the move from the traditional method to program based budgeting in Ethiopian public agencies by taking four ministers offices as a case study. To this end this paper tried to answer the following question:

- Are the plan and budgeting department of selected ministries are performing their budgets based on program budgeting standards set?
- What is the attitude of employees towards new budgeting system at the federal offices of

the ministry?

- What are the challenges of program budgeting system in public agencies at federal office of the ministries?

1.3. Objectives of the study

The main objective of this study is to examine the move towards program based budgeting system in Ethiopian public agencies and its implications in the case of Federal Ministries.

1.3.1. Specific Objectives

- To assess whether the plan and budgeting department of selected ministries are performing their budgets based on program budgeting standards set.
- To examine the attitude of employees towards new budgeting system at the federal offices of the ministry.
- To examine the challenges of program budgeting system in public agencies at federal office of the ministries.

1.4. Scope of the Study

The budget practice of each institution may vary from time to time and place to place. Furthermore, cost and time make difficult to obtain country-level program based budgeting system. Thus, this study is restricted only to deal with the move towards program based budgeting system in Ethiopian public agencies and its implications in the case of four federal ministries. These are Ministry of Finance, Ministry of Education, Ministry of Agriculture, and Ministry of Health based on their importance and the size of the budget they run. The study is conducted by using the data collected from second half of March to April, 2021.

1.5. Significance of the Study

In Ethiopia it is not only a new attempt but also part of the recent wave of reforms related to expenditure management program. There is very few study conducted on the subject yet MoF is pushing its implementation by all government budgetary agencies. As a result this study will gives an insight about the program-based budgeting reform implementation and their challenges at public ministers through identifying the challenges and the performance of program based budgeting in public agencies. It will be used as a reference for future studies related to program based budget system.

1.6. Limitations of the Study

This study has many limitations. For instance, the researcher was expected to support the analysis of the data collected by questionnaire by including the data collected through interview questions. However, due to covid-19 the researcher didn't conduct interview of respondents.

1.7. Organization of the paper

This paper is organized into five chapters. The next chapter presents, chapter two comprises theoretical and empirical literatures on program based budget system and its challenges. The third chapter includes research methodology. The fourth chapter covers estimation and the fifth chapter, which covers the conclusion and recommendation of the study.

CHAPTER TWO

2. REVIEW OF RELATED THEORETICAL AND EMPIRICAL LITERATURES

2.1. Introduction

In this chapter both theoretical and empirical studies related to the relationship between trade balance and financial development and theories on international trade are discussed. Based on the review conceptual frameworks of the study and the gaps identified is discussed.

2.2. Review of Theoretical Literature

2.2.1. Definition of Terms

Program budgeting refers is a budgeting systems that primary basis expenditures on programs of work and secondarily on objects. It is considered as a transitional form between traditional line-item and performance based budgeting approaches, and it may be called modified program budgeting. In contrast to other approaches, a full program budget bases expenditures solely on programs of work regardless of objects or organizational units (West, Eric and Moshe, 2000). On the other hand, PBS is the planning of public expenditure for the purpose of achieving explicitly defined results, which may be policy objectives or simply outputs of routine public service activities (Mosher, 2009).

2.2.2. Theoretical overview of budgetingsystem

Many budget policies, procedures, and technical practices that we currently associate with modern budgeting were developed during the nineteenth century when major changes in budget practices occurred in France (Schaeffer & Yilmaz, 2008). To effectively achieve the objective of providing services the public agencies use different budgeting system at federal, State, Local government sector and city administration level. The theoretical conception has already provides various budgeting guidelines for the public agency and these various budgeting models continue to be commonly used and fall predominantly into categories of (1) line- item, or "traditional," budgeting; (2) performance budgeting; (3) program based budgeting (4) zero-based budgeting (ZBB); and (5) site-based budgeting. In addition, many governments use a variety of hybridized versions to address the specific needs of the organization. Although these approaches are considered distinct in terms of the underlying preparation process, actual formats of the prepared budgets may be quite similar; for example,

the format of a site-based budget may be quite similar to the format of a line-item budget (Johnson, 2003). Based on the theoretical overview, types of budgeting system and concept of budgeting system in public agencies and their applicability in public agencies are to be discussed here under

2.3. Types and reforms of budget

2.3.1. Line Item Budgeting

From theoretical point of view, line-item budgeting uses a budget prepared using a previous period's budget or actual performance as a base, with incremental amounts added for the new budget period. It assumes activities and methods of working will continue in the same way. There is no incentive for developing new ideas. In this system the budget is stable and change is gradual and Managers can operate their departments on a consistent basis. (Abdurahman, 2012). According to the Bagdigen (2016), in incremental budgeting or line item budgeting, it seems rather necessary to use public resources in a way that makes sure inputs are being used as sanctioned. If it did not so, there would be tight control by the appropriation Body, which is in the charge of the operating the budget. It also, seems as a good monitor to control whether the level of accepted spending has done according to the initial approval.

According to World Bank Public Expenditure management hand book (1998), in a line item system, expenditures for the coming year are listed according to objects of expenditure, or 13 line items. These line items are often quite detailed, specifying how much money a particular agency or subunit will be permitted to spend on personnel, fringe benefits, travel, equipment, and the like. The most important focus of the budget system is to specify the line item ceilings in the budget allocation process and to ensure that agencies do not spend in excess of their allocations. This type of budget system was applied in Ethiopia public sector before Program based budgeting was introduced. Due to the shortages of the system identified by government it is currently replaced by Program based budgeting at federal level. But at regional and local level still this system is currently used as their budget preparation model.

2.3.2. Performance Budgeting

Performance budgeting aims to improve the effectiveness and efficiency of public expenditure by linking the funding of public sector organizations to the results they deliver. It uses systematic performance information (indicators, evaluations, program costing, etc.) to make this link. The impact of performance budgeting may be felt in improved prioritization of expenditure, and in improved service effectiveness and/or efficiency. (Marc & Last, 2009).

This type of budgeting drew on a long-term concern with the efficiency of government and attempted to integrate information about government activities into the budget process so that budget decisions could be based to a greater degree on the relationship between what government did and how much it cost. The specific reform, known as "performance budgeting," was designed to allow managers to develop measures of workload and unit cost. A performance budget usually divides proposed expenditures into activities within each organization and a set of workload measures that relate the activity performed to cost. Performance budgeting allows the budget to be built, not incrementally (as in traditional line item budgeting), but on the basis of anticipated workload. Managers could arrive at a budget by simply multiplying the cost of a unit of output by the number of units needed in the next year (World Bank, 1998).

2.3.3. Program based budgeting system

Program budgeting refers to a variety of different budgeting systems that base expenditures primarily on programs of work and secondarily on objects. It is considered as a transitional form between traditional line-item and performance based budgeting approaches, and it may be called modified program budgeting. In contrast to other approaches, a full program budget bases expenditures solely on programs of work regardless of objects or organizational units (Minjire&Ogollah, 2017). As these two variations attest, program budgeting is flexible enough to be applied in a variety of ways, depending on organizational needs and administrative capabilities.

In addition, Program budgeting differs from approaches previously discussed because it is much less control- and evaluation-oriented. According to Jones and Mccaffery (2005) noted that budget requests and reports are summarized in terms of a few broad programs rather than in the great detail of line-item expenditures or organizational units. PBS systems place a great deal of emphasis on identifying the fundamental objectives of a governmental entity and on relating all program expenditures to these activities. This conceptual framework includes the practices of explicitly projecting long-term costs of programs and the evaluation of different program alternatives that may be used to reach long-term goals and objectives (Jones&Mccaffery,2005).The focus on long-range planning is the major advantage of this approach, and advocates believe that organizations are more likely to reach their stated goals and objectives if this approach is used. On the other hand, PBS is the planning of public expenditure for the purpose of achieving explicitly defined results, which may be policy objectives or simply outputs of routine public service activities (Mosher et. al., 2009). The ultimate aim of PBS is far from simply being an elaborate way of measuring or recording

activities but instead, it is a mechanism that will help Government in decision-making depending on whether the objectives are being met or not, and enhancing transparency and accountability (Gilmour et. al, 2006).

2.4. The Transition to Program Budgeting

The most recent effort to transition to program budgeting was initiated to link public agencies resources to result oriented. As Morgan et.al. (2017) noted the initial transition to program budgeting was intended to help the new executive staff handle the shortfall through a better understanding of the purposes for which state funds were being spent. Program budgeting with a performance orientation was also viewed as a best practice and one that would presumably reorient managers away from inputs towards results. The new budget instructions of program budgeting required agencies to prepare a strategic plan with performance measures linked to countrywide priorities, as well as to develop a budget based on programs. Saliterer et.al. (2018) stated that each public agency had to identify its core businesses with associated performance measures and indicators. A subset of these core businesses would be programs which would be identified in the agency annual business plan. Each of these programs was expected to be attached to a set of results measures and agencies were required to rank the importance of these programs in a prioritization process. Similarly, Cutt (2017) stated that program based budgeting aims to improve the efficiency and effectiveness of public expenditure by linking the funding of public sector organizations to the results they deliver, making systematic use of performance information. Jensen (2013) define the program budgeting as budget preparation and adoption process that emphasizes performance management, allowing allocation decisions to be made in part on the efficiency and effectiveness of service delivery. This broader concept of the two budgeting system signify that incremental and program based budgeting systems can help to determine the benefits of the two systems in using for implementation in the government. Hence, the move to apply the new budgeting system not the matter of choice rather it needs a critical consideration of different factors about the budgeting system that going to apply (Diamond, 2013).

These compromises imply that the need to budgeting approach is not simply driven by compliance with management attitude or values, but with a set identifying of fundamental factors that provide the limitations and merits of each budgeting approach in government activity and objectives. the need to move from the traditional budgeting to new budgeting is about the integrity of the program based budgeting system in the government of financial plan to achieve their activity through which deficiencies of the previous budgeting system are

resolved or mitigated and identifying the process to integrate the new budgeting effort to be used in public sector. Thus, identifying the limitation of old budgeting system and understanding the way to devise the new budgeting system in every policy and objectives implementation will enable government sectors institutions to achieve their goals (Ibid).

2.5. Challenges in Implementing Program Budgeting

There are significant challenges in implementing PPBB in Africa. The 2012 CABRI survey revealed that the most important challenges during implementation of PPBB relate to: unclear program objectives; inadequate leadership; the role that performance information should play in budget decision making; technical issues (defining appropriate PIs, costing program and reclassifying expenditures to a program basis); and limited capacity (especially in respect of trained officials) to implement PPBB.⁴⁵ Some of these challenges are common to non-African countries, which also struggle to limit performance information to what is useful for budget allocation decisions or improving spending efficiency and effectiveness. The discussion below also discusses additional important challenges: holding budget managers to account; technological challenges; legal challenges; and ownership of the PPBB reforms by Parliament and the involvement of civil society in budgeting (Worthington, 2013).

Although seemingly a simple shift, the actual designation of a program structure for the state lies at the cross section of several competing agendas as well as a series of technical and organizational challenges for agency staff (Rubin & Willoughby, 2014). One of the challenges associated with program budgeting is defining a program for budgetary purposes is conceptually more complex than most people realize. According to Bordeaux (2008), although significant attention has been given to policy criteria linked to strategic planning, program definitions in actuality also need to accommodate: varying levels of control and accountability, demand for transparency and links to evaluation, and technical and managerial concerns.

2.6. Linking Programs to Strategic Planning Processes

Most states begin their program based performance oriented budgeting process by attempting to define programs in relations to a strategic plan. Program should be designed in such a way that it provides to identify mission, goals, objectives and outcomes and then the strategies or programs that would be associated with attainment of those outcomes and objectives (Smithies, 1967). In addition, Smithies (1967) stated that programs should be customer and outcome focused and should result in a positive change for the programs' customers.

Programs should address key policy and service areas, and decision makers must be able to link budget requests, funding, and expenditures to individual programs (Pugh, 1984). Other literatures like Kluvers et al (1999) define programs as a method to achieve goals and objectives: formulated from goals and objectives- a program is a means of transforming inputs into outputs and ultimately outcomes with the best use of resources. The author defines program as products or items produced by the agency or services (an action that the agency takes to fulfill its mission).

2.7. Budgeting systems and its applicability in the public agency

This part aims to highlight some budgeting systems and their applicability by the public agency. However, it must be pointed out that a comprehensive review of all the budgeting systems is neither possible, nor convenient regarding the space availability for this paper. Therefore, two budgeting systems are particularly reviewed. Although there are plenty of budgeting system in public sector, Pardaev (2016) wrote that there are two important types of budgeting system that is incremental budgeting system or Traditional Budgeting System (TBS) and program based Budgeting System (PBBS).

Because the Line-Item-Budgeting System pays most of its attention on the level of spending, it is mostly preferred by those who are seeking to control the amount of expenditure. Therefore, as Schick (2010) refers, the importance of line itemizations and the level of expenditure, that play crucial role in the line item budgeting in order for resources to be estimated, are distributed and completed on 'objects of expenditure'. Furthermore, as the system ignores the evaluation of outputs, there is no requirement within the process to address why and for what purposes the inputs are going to be used in the budget. This means that the system does not only fail to give information about the outputs, but also increases the cost of every single objective.

On the other case, Caiden (2010) noted that Because of taking last year budget as base, application of the system is seen as simply preparing of next year's budget. The procedure does not require a great deal of work to compute next year's spending by orienting it simply from previous year's budget items, i.e. TBS allows participants to accept estimations without making any argument or disagreement. It would be enough for decision-makers just to focus on that of last year's budget items in order to decide on the level of spending of next year's budget. Budgetary decision-makers do not tend to analysis appropriateness of the objects of expenditure on the objectives.

2.8. Empirical Study to integrate program based system in public agency

Programmer budgeting, as a method of substantiation, design and plans accumulation of budgetary resources, is based on a mechanism consisting of goals, objectives and performance evaluation indicators. In addition, by prioritizing, design and implementation decisions on the allocation of budgetary resources, performance budgeting becomes an effective management tool. In this regard, using the legal framework as a tool for providing opportunities to accumulate sufficient resources to achieve those objectives, public authorities must implement programs based budgeting mechanism. The conceptual framework, as a way of structuring the main components of performance based budgeting provides internal logic of the program. The elements in the lower level components contribute to achieving higher levels components. Budgetary resources allocated for the implementation of programs contribute to achieving the objectives expressed by outputs and outcomes and objectives to achieve the goals of the program. The author conclude that programmer budgeting requires the need to establish goals, objectives and performance indicators, identify implemented policies and programs, taking into account the conceptual framework (Fuior&Gutan, 2015).

Petoria (2017) examined the essence and efficiency of program based budgeting. The author indicate that program budgeting applies to cases where expenditure is classified in the budget by objectives (outcomes and outputs) rather than solely by economic categories (i.e., inputs such as salaries) and organizational category. And the author conclude that Program and performance budgeting reforms should, therefore, provide information in a way that informs choices about spending alternatives and should improve transparency and accountability of government. There is no “best practice” approach, more “best fit” and the unique context of each country needs to be considered. It could be noted that some key public finance specialists recommend getting the “basics” right first as a priority. At the end of given research, there is introduced an experience of program budgeting in Hungary, which has already have good results of its use.

Minjire&Ogollah (2017) assessed the factors affecting program based budgeting performance in public organization in Kenya. In this study a descriptive survey design was used. Target population include administrators with authority to incur expenditure, Finance officers, economists, accountants, auditors- internal and external totaling to a population of 247 officers. The researcher used a questionnaire to collect primary data. The SPSS (version 20) computer software aided the analysis. Descriptive statistics was employed to analyze the

data. An odd's ratio regression model was applied to determine the relative probability of importance of each factor variable. The study findings indicated that there are adequate policies and procedures guiding PBB budgetary process, stakeholders views and expert opinions are well sought in the development of policies and procedures and the budgetary policies and procedures are not donor forced ideologies but accepted negotiated domestic instrument. Results further indicated that there are adequate laws that make it mandatory for all stakeholders' consultation on budgetary process for the budget to be legitimate, adequate awareness forums and sensitization program are undertaken by treasury to sensitize public on budget.

Saghafi&Pouryous (2016)examined Performance-based budgeting, focusing on program results and calculating total cost, is seeking transparency and presenting appropriate information for confidence-building. Regarding its positive role in annual program of universities and problems facing budgeting system, various advantages of this method for budgeting resulted in considering it as a purpose for several years. On the other hand annual programs of universities are designed based on their main objective that is teaching students and empowering them in different fields regarding response to the job market. Most universities perform program or incremental budgeting in establishing their annual programs and detailed budget. By ignoring past realities and performances and without taking into account activity levels, this trend causes university mangers not to use scientific accounting methods. Therefore, this article discusses the method of document mining and explores and analyzes performance budgeting system in promoting annual programs of universities. Depending on its advantages and purposes specially increasing efficiency of expenses and its results, the author conclude that establishing budgeting system based on performance in universities is a necessity in achieving general and specific purposes.

Sila (2016) distinguished the reasons for poor spending ingestion limit in the general population segment and to determine best practices to enhance assimilation limit of affirmed government assets to better open administration conveyance. The scientist utilized a contextual analysis show. The objective populace of the study was one hundred (100) staff that handles planning and execution of spending plan at Center for arithmetic, science and innovation training in Africa. The study set up that the need of maintaining stringent straightforwardness and responsibility has influenced usage of spending plans. Additionally, they found that an absence of arrangement between the authoritative structure and structure of execution reporting prerequisites, the esteem and helpfulness of execution data undermines the spending usage. The concentrate advance built up that social components contribute the

most to the difficulties to compelling spending usage in the Public Sector. At 5% level of importance and 95% level of certainty, outside variables, basic components, social elements, representative behavioral elements, and preparing and training were all critical in the Public Sector. The concentrate likewise presumed that an absence of arrangement between the authoritative structure and structure of execution reporting necessities, the esteem and value of execution data undermines the spending usage. The study suggested that Public part in Kenya ought to embrace a legitimate observing and survey of the planning procedure. The spending arranging procedure ought to incorporate every one of the divisions. The monetary allowance ought to be imparted to all offices and to all staffs. This will ease usage of the monetary allowance consequently diminishing spending change.

According to the finding of Carlin, et al (2008) , the specific criticism points are: encouraging rigid planning and incremental thinking being time-consuming producing inadequate variance reports leaving the 'how' and 'why' questions unanswered ignoring key drivers of shareholder value by focusing too much attention on short-term financial numbers being a yearly rigid ritual. Incremental budgeting system could indeed have a resource allocation and input control without considering the performance of the government organization and need to be replaced by the performance budgeting system(without precondition. Bourdeaux (2014)indicates to the reason of unnoticeable of disagreements. According to him, any possible disagreement between and amongst participants would likely be upon the level of spending rather than programs. In order to solve the matter, it seems most applicable way for them to make some increase or decrease in the objects of expenditure. Policies and programs and their possible results may not need to be considered at all. It is one of the fundamental aspects that final approval body of the budget takes into account only list of categories included in the budget and their level of spending. Then the approval body decides whether it is appropriate to accept or need some increase or decrease at the level of spending regarding previous year's results as measurement (Bourdeaux, 2014). Other arguments have stated that before integrating program budgeting system in the budgeting system of the public sector, it needs to understand a precondition to move towards the new system.

Kluvers (1999) conclude that program based budgeting should not be seen as an isolated initiative rather. It should be viewed, as part of a set of broader reforms of the program structure of the public agency that is designing to focus public management more on results delivered and less on internal processes. These broader reforms include civil service reforms designed to increase the motivation and incentives of public employees; organizational restructuring to increase the focus on service delivery and improve coordination. For example, creation of

agencies and reduction of the number deliver, making systematic use of performance of public agency; and institutional and oversight changes to strengthen public accountability for performance.

The experiences from USA showed that over the past 30 years, governmental entities in the United States have used a variety of budget approaches and formats. The development of more advanced budget philosophies reflects growth in both the scope and the complexity of governmental operations and the simultaneous need for systems that are capable of translating the variety of policy decisions into financial plans (Carlin,2004).

2.8.1. Empirical Studies on program based budgeting system in Ethiopia

Dikasso (2017)assesses effect of budgeting process on organizational effectiveness in the government finance organization of Hadiya zone. The study has a targeted 262 staff employee from 5 selected woreda .Those woreda were selected purposely from the 12 word's due to their establishments' priorities. The study employed a descriptive survey research design targeting the staff in the government finance organization of hadiya zone. A sample of 150 staff members was selected by using mulit-stage sampling system and, which were stratified and at last, simple random sampling systems were applied in the study. The researcher was mainly employed a structured questionnaire, unstructured interview's and secondary source of data used for triangulation purpose for primary data. Data was analyzed in form of descriptive and multiple linear regression models (OLS). Data was analyzed using Statistical computer software Package. The study established that effect of budgeting process capacity had a strong positive significant relationship with the organizational effectiveness.

Bessie (2016) investigated internal (intrinsic) factors that affect budget utilization in public universities of Ethiopia in 2016. A total of 178 respondents were randomly selected from Dilla, WolaitaSodo and BuleHora Universities. Primary data were collected using closed and open questionnaires. To supplement the survey result secondary data were collected from federal general auditor annual report. The data were analysed using various descriptive statistics. The findings indicated significant improvement of budget allocation to public universities from time to time. However, lack of proper planning and allocation of budget in these Universities were found to be serious challenges. Inadequate timely revision of initial proposed physical activity plan based on the approved and available budget, inadequate knowledge on the concept of program budgeting system, shortage of adequate number of human resources and insufficient involvement of all concerned bodies during the budget plan preparation were found to be main the causes of the aforementioned problems. Decentralized

budget administration system, absence of result oriented evaluation of budget performance and regular revision of plan in accordance with the available budget, lack of effective communication, lack of effective budget monitoring and evaluation, and absence of full involvement of the line managers in planning process were identified as the most important internal factors that affected budget utilization in public universities.

Ganecho (2018) examined the challenges and prospects of budget preparation and utilization in Kaffa zone selected finance bureau. All 94 employees directly related to budget related issue was used as population. Five-year data has been collected from secondary sources and also primary data was collected through self-administered questionnaire, & semi- structured interview. To collect essential data the study employed both qualitative and quantitative approach. All collected information was analysed by using both descriptive and empirical model. Finding indicates that budget preparation process in Kaffa zone was good but budget utilization practice is unsuccessful. As the study compare recurrent budget to capital budget, recurrent budge have satisfactory utilization performance while capital budget was ineffective performance. The finding also discovered that budget utilization significantly affected by contractor's capacity, auditing system and diverting fund from planned activities to unplanned one whereas staff capacity and Inland Revenue collection has no significantly effects on budget utilization.

Fenta&Abebe (2012) examined principles and processes of sustaining the implementation of program budgeting system (PBS) in the two ministries in Ethiopia, namely, Ministry of Finance and Economic Development (MoFED) and Ministry of Education (MoE). Drawing data from field survey, it attempts to show the progresses made in adopting PBS and the extent to which the system is understood and complied with in the government agencies. Down the road, the paper also puts premium on the prospects and the challenges of PBS in the intimated federal ministries. The paper employed mix of qualitative and quantitative approach to generate data that have a significant bearing on diagnosing facts ascertained through semi-structured questionnaire and in-depth interview, with the latter specifically being used to elicit information from senior staff and experts in the field. The finding demonstrated that quite impressive progresses have been registered in revising the program budget manual and training modules, significant program budget training, and piloting of PB at federal level and gradual improvements on the budget submission formats.

2.9. Summary and Literature Gap

In Ethiopia there are many studies conducted on program based budgeting system. For instance, Bessie and Tafa (2016) assessed intrinsic factors affecting budget utilization in Ethiopian public universities; Fenta&Abebe (2012) examined the challenges and opportunities of implementing program budgeting system in two selected ministries of Ethiopia; Tefera (2015), Ganecho (2018), and Bessie (2016) conducted a study on budgeting system in Ethiopia: program budgeting system. From theoretical and empirical literatures discussed above, it is reasonable to conclude that the importance of program based budget system is recognized by researchers and it becomes the concern of each country in the world. However, in Ethiopia the practice is very low and there are many challenges for the effective implementation of program based budget system. Scholars suggested that the challenges that institutions faced in implementing program based budget system is different. Despite the seriousness of the challenges that institutions faced there is minimal efforts on research outputs of program based budget system, particularly in public institutions. To fill this gap the current study tried to examine the transition from traditional to program based budget system and its implication on the budget process for four federal ministers. These are Ministry of Finance and Development, Ministry of Education, Ministry of Agriculture, and Ministry Of Health.

CHAPTER THREE

3. THE METHODOLOGY OF THE STUDY

3.1. Research design

Research design is the framework of research methods and techniques chosen by a researcher. The design allows researchers to hone in on research methods that are suitable for the subject matter and set up the study up for success. According to Anol B. (2012) descriptive research is directed at making careful observations and detailed documentation of a phenomenon of interest. These observations must be based on the scientific method (i.e., must be replicable, precise.), and therefore, are more reliable than casual observations by untrained people. Hence in this study descriptive type of study design was used. The reason why the researchers uses the descriptive method is that to collect detailed description of existing phenomenon with the intent of employing data to justify current conditions and whether and whenever possible to draw conclusion from the facts that the researcher could discovered.

3.2. Research Approach

Research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation(Creswell, 2014)..In this study quantitative research approach was used. The quantitative approach uses mean, maximum, minimum and standard deviation.

3.3. Source and types of data

According to William, et al., (2010), there are two types of data, primary and secondary data. The primary data are those which are gathered for the first time and afresh and thus collected for the case at hand (Kothari, 2004). Secondary data is defined as data that have been previously collected for some purpose other than the one at hand. For the purpose of this study in order to obtain relevant information primary data was used.

3.4. Method of Data collection

The primary source of data was obtained through a direct interviewing and distributing questionnaires to higher and middle level managers of Ministry of Finance, Ministry of

Education, Ministry of Agriculture, and Health. The researcher used structured questionnaire which includes both open ended and close ended question. The reason to use close ended questions is because of it is simple for respondents to answer and for data analysis. If the question is too long respondents are may be boarded and it is because to lose the exact values of the responses. Moreover questionnaires with five likert scale options was prepared and distributed to respondents.

3.5. Population of the study

From the total of 22 federal minsters four minsters were selected purposively based on their importance and the size of the budget they run. These are Ministry of Finance, Ministry of Education, Ministry of Agriculture, and Health. All the four selected ministries have a total of 110 middle and higher level employees/managers. Since the population is small in this study census was used and all of 110 higher and lower level managers were taken as respondents. The distribution of respondents from each ministers are presented as follows;

Table 3.1: Respondents from each ministers

Ministers	Number of Respondents
Ministry of Finance	36
Ministry of Education	29
Ministry of Agriculture	24
Ministry of Health	21

3.6. Methods of Analysis

According to the nature of data which the researcher was collected, descriptive method of analysis was employed. The descriptive part of the study helps the researcher to describe different variables with respective to desired characteristics. The descriptive statistics that was included in this study are quantitative measures such as mean and standard deviation supported by analysis by using likert's measurement of data.

3.7. Ethical Consideration

The researcher obtains the consent of the organization for the study. Employees who actively participated in four minsters completes the questionnaires were informed about the purpose of data collection, analysis and the covenant to maintain privacy of their responses. The collected data are confidential and it would be used only for the purposes of the study.

Regarding published and unpublished materials used in the literature review and throughout all part of the study, all citations from copy right holder are made properly. Generally the researchers used proper citation, follow systematic collection and analysis of data techniques, maintain data confidentiality, obtained the consent of the case organizations and staffs and based on their consent to meet the ethical obligation of research.

3.8. Validity and Reliability

Validity is concerned with how well the concept is defined by the measure(s) and accurately represents what it is supposed to. Therefore this study was tried to address validity through the review of literature and adapting instruments used in previous research. Reliability is the overall consistency of a measure. To do so pilot survey for 20 respondents were distributed and collect the feed backs about the questionnaire. Then after, the feedbacks were considered and a questionnaire was revised. This measure is said to have reliability if it produces similar results under consistent conditions. It is the characteristic of a set of test scores that relates to the amount of random error from the measurement process that might be embedded in the score. For this study the widely used Cronbach Alpha method of testing reliability was used it is reported in chapter four. Internal reliability or consistency is a measure of how well the test is actually measuring what it wants to measure (Duffy and Kilbourne 2001). The overall consistency (reliability of the data is tested and reported below. Accordingly Cronbach's alpha was employed to test the reliability of the data.

Chapter four

Data analysis and presentation

In this chapter the frequency and summary statistics of the data collected through questionnaire from four public ministers are discussed and presented. Using Census method a total of 110 questionnaires was distributed and only 102 questionnaires were correctly filed and returned to the researcher. It shows that the non-response rate is equal to 7%. It is relatively good.

4.1. Validity and reliability of the data

In this study the validity and reliability of the data were checked. The reliability of the data is tested by Cronbach's Alpha test. As we see from Table 4.1 below the Cronbach's Alpha test of demographic characteristics, budget preparation process, perceptions on the level of implementation and the effectiveness of program based budgeting than line budgeting, challenges of program based budgeting, support from MOF and the overall value of the test are greater than or equal to 0.6. According to George and Mallery (2003) as a rule of thumb a test statistics value of greater than 0.6 is acceptable which confirms the reliability of the data (there is no problems in the data set). The other is validity test which is done by using pilot study. For instance, before distributing the whole questionnaire 20 questionnaires were prepared and distributed to the randomly selected respondents (5 for each ministers) as a pilot study and the pilot sample respondents were asked about the validity of the data related to their minister's task force with regard to the implementation of program based budgeting. .

Table 4.1: Reliability test of the variable used in the study

Variables	N of items	Cronbach's Alpha
Demographic Characteristics	4	0.654
Budget preparation process	10	0.728
Perceptions on the Level of implementation and effectiveness of PBB than line budgeting	2	0.6
Challenges of program budgeting	5	0.786
Support from Ministry of Finance	5	0.692
Overall	20	0.779

Source: own computation using 2021 survey data and SPSS 20 software

4.3. Demographic characteristics of respondents

4.3.1. Gender Distribution of the Study

As reported on Table below 4.2 among the total respondents of 102 only 19 respondents are female and the remaining 83 respondents are male.

Table 4.2: Gender distribution of respondents

	Frequency	Percent	Cumulative Percent
Female	19	18.6	18.6
Male	83	81.4	100.0
Total	102	100.0	

Source: own computation using 2021 survey data and SPSS 20 software

4.3.2. Educational Background of the Respondents

The other demographic related information of the respondents collected is educational background of the study. Hence among 102 respondents 75 (73.5%) respondents are bachelor of art/science degree holders. While the remaining 27 (26.5) respondents are master's degree and above it holders. Therefore, this has a clear understanding that most of the respondents participated in this study had university degree and above as their highest level of education which can give more information on the intended work in this study.

Table 4.3: education level of respondents

	Frequency	Percent	Cumulative Percent
BA or BSC	75	73.5	73.5
MSc and above	27	26.5	100.0
Total	102	100.0	

Source: own computation using 2021 survey data and SPSS 20 software

4.3.3. Field of study of the Respondents

Table 4.4 below shows the profession of respondents. From the total of 102 respondents 41 (40.2%) are accounting and finance graduates. While 14 (13.7%) of the respondents are economics graduates. The remaining 20 (19.6%) and 27 (26.5%) are business administration and other (management, information technology) program graduates respectively. So in the four ministers there are employees of many fields, which help to do tasks easily and

effectively available in the four ministers (ministry of health, education, agriculture and development, and finance).

Table 4.4: field of study of the respondents

	Frequency	Percent	Cumulative Percent
Accounting and Finance	41	40.2	40.2
Economics	14	13.7	53.9
Business Administration	20	19.6	3.5
other	27	26.5	100.0
Total	102	100.0	

Source: own computation using 2021 survey data and SPSS 20 software

4.3.4. Current Positions of Respondents

In this study only 4 (3.9%) respondents are head of planning and budget department and 29 respondents are junior experts. On the other hand, 37 (36.3%) are senior planning and budget expert and 32 (28.4%) are planning and budget expert. From this the researcher fulfils the combination positions which will enable to capture accurate information about the practice of program based budgeting.

Table 4.5: current position of respondents

	Frequency	Percent	Cumulative Percent
Head of Planning and Budget Department	4	3.9	3.9
Senior Planning and Budget Expert	37	36.3	40.2
Planning and Budget Expert	32	31.4	71.6
Junior Expert	29	28.4	100.0
Total	102	100.0	

Source: own computation using 2021 survey data and SPSS 20 software

4.3.5. Working Experience of the Respondents

Form the survey data presented on Table 4.6 below, among the total 102 respondents participated in this study only 18 respondents have working experience of less than 1 year and 10 respondents have 1 to 3 years work experience. While the remaining 18 and 56 respondents have working experience of 4 to 6 years and 7 and above years' experience. This also gives an understanding that the respondents selected for the study are appropriate for the topic under study and also to see the perception of the issue in diversified way.

Table 4.6: working experience of respondents

	Frequency	Percent	Cumulative Percent
less than 1 year	18	17.6	17.6
1 to 3 years	10	9.8	27.4
4 to 6 years	18	17.6	45
7 years and above	56	55	100.0
Total	102	100.0	

Source: own computation using 2021 survey data and SPSS 20 software

4.4. Analysis of Responses on Program Based Budgeting

4.4.1. Budget Preparation Process

Table 4.7: Frequency distribution of respondents answer on budget preparation process

		SA		A		N		D		SD		mean	Standard deviation
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
1	PBB is fully implemented in your organization	5	4.9	38	37.3	10	9.8	46	45.1	3	2.9	2.96	1.07
2	PBB is a better budgeting system than the previous line item budgeting.	6	5.9	51	50	13	12.7	28	27.5	4	3.9	2.81	1.069
3	Your institution have well organized strategic plan	3	2.9	29	28.4	9	8.8	55	53.9	6	5.9	2.69	1.043
4	Your organization reported its report to MOF based on the procedure of PBB	6	5.9	27	26.5	10	9.8	53	52	6	5.9	2.75	1.096
5	Your organization reported its report to MOF based on the	1	11.8	34	33.3	11	10.8	44	43.1	1	1	3.12	1.128

	calendar of PBB												
6	Your organization evaluates performances strictly against set programs.	7	6.9	66	64.7	10	9.8	13	12.7	6	5.9	3.54	1
7	You have sufficient knowledge on program based budgeting	8	7.8	32	31.4	17	16.7	42	41.2	3	2.9	3.2	1.063
8	PBB is used to use resources efficiently	20	19.6	20	19.6	10	9.8	43	42.2	9	8.8	2.99	1.33
9	Sufficient Training has been provided about PBB	15	14.7	26	25.5	16	15.7	38	37.3	7	6.9	3.04	1.226
10	Your department have the prerequisite qualification, experience and skills required to effectively implement PBB	9	8.8	32	31.4	13	12.7	39	38.2	9	8.8	2.93	1.2

Source: own computation using 2021 survey data and SPSS 20 software

To examine the current status of budget preparation process 10 questions were distributed to respondents. The first question is related to whether program based budgeting is fully implemented or not. The majority of respondents, 46 (45.1%), are agree and it is followed by 38 (37.3%) respondents are disagreed confirming this respondents believe that program based budgeting is fully implemented in their organization. The remaining 10 (9.8%), 5(4.9%) and 3 (2.9%) are neutral, strongly agree and strongly disagree. The second item is asking the perception of respondents about the effectiveness of program based budgeting than line item budgeting. In this regard the majority of respondents are agreed on the effectiveness of program based budgeting than line item budgeting. In addition, 28 (27.5%) respondents are disagree and 13 (12.7%) are neutral. On the other hand, 6 (5.9%) and 4 (3.9%) are strongly agree and disagree respectively. For the two questions the response of the majority respondents is agreed. This response is supported by Tefera (2015) and the author indicated that until 2012 program based budgeting system was not submitted to the parliament and practiced. But since 2012 all ministers found in Ethiopia started to submit their budget using

program based budgeting. However, fully implementation and the betterment of program based budgeting from line budgeting does not mean program based budgeting system is implemented effectively and efficiently. Moreover, one can deduce that the application of program based budgeting has many advantages over previously used line budgeting system. This is because program based budgeting depends on the question why the money is allocated to the specific task and does it results the output expected from it. For instance, MacManus (1998) state the critics of line item budgeting system as it concerned on inputs which have no clear connection with outputs, and it is very problematic to conclude the effectiveness and efficiency of the system.

The third question is on the availability of well-structured strategic plan and respondents answered as follows. For instance, the highest proportion of the total samples, 55 (53.9%), are disagree. Despite this, 29 (28.4%) are agreed on the availability of adequate strategic plan. Finally the remaining 6 (5.9%), 3 (2.9%) and 9(8.8%) respondents replied as strongly disagree, strongly agree and neutral respectively. From the response the researcher observed that there is no well-structured strategic plan used for successful implementation. The next item that is discussed by the respondents is whether the ministers and top management of the ministry of finance are reported the activities conducted related to program based budgeting. From the total samples 5.9% are strongly agree and 26.5% are agree implying ministry of finance receives reports from other ministers. Contrary to this 9.8% of the respondents are neutral and the remaining 52 and 5.9% are disagreed and strongly disagree. These respondents response indicate that the ministry of finance are not receiving the important documents. The other question related to budget preparation process is whether the organizations (ministers) evaluate performances against the program. Here 64.7% are agreed on the evaluation conducted on the set of programs and 6.9% of respondents are strongly agreed. Respondents sharing 9.8% are neutral and the remaining 18.6% of respondents are strongly agreed and disagree. Thus the researcher identified that there is a problem of evaluation of the performance of the ministers in effectively implementing program based budgeting systems. This is supported by a study of Dawit (2019) who stated that ministry of finance and economic development does not evaluate the performance because faces difficulties in measuring performance, which is interlinked with the concept of accountability.

The other issue raised in budget preparation process is on does employees (top and middle level managers of ministers) having sufficient knowledge on program based budgeting or not. The larger percentage (41.2%) is disagreeing and only 2.9% are strongly disagree. Opposite

to this 31.4% are disagree and 7.8% are strongly agree, and finally, 16.7% are neutral. Efficient use of resources is a key for good performance and easily running of activities. Respondents were asked to tell their beliefs about efficiently of resource use. 42.2% of the total respondents are disagree and total of 39.2% strongly agree and agree, and 8.8 and 9.8% are strongly disagree and neutral respectively. Therefore to use resources efficiently sufficient training has its own paramount importance. However, as respondent's response, 37.3% are disagreed and 6.9% of respondents strongly disagree. It implies there is no sufficient training in the ministers.

According to Tefera (2015) because of lack of adequate and continuous training of officials in ministers on how to identify and link program budget and organizational structure, the techniques of implementing program based budgeting, officials face difficulties in understanding and effectively implementing program based budgeting. As a result though the design is sound, in Ethiopia most of the reforms in financial institutions in particular and all of the institutions in general fail due to very low, ineffective, not on the appropriate time training. Moreover, in Ethiopia there is no effective way of training and other form of providing information about accrual and double entry accounting system and new institutional structure and the institution itself, which are the necessary condition for the successful reforms in public financial institutions. On the other hand, by taking the ministry of education and ministry of finance and economic development Yemsrach and Mulugeta (2012) indicate that 100 percent of the respondents are confirmed the existence of training and every staffs are familiar with the basic concept and ideas of program based budgeting system. She also supported this view including budget preparation and administration directorate's view as training was provided contagiously based on annual time periods. Surprisingly, she observed critical problems in the provision of training. These includes the selection of trainee (the right person responsible to the implementation of program based budgeting does not attend the training), the trainers do not have adequate knowledge of the issue they trained, this may be because of corruption through benefiting the relatives or friends by selecting him or her as a trainee without checking the skills he or she has.

In addition frequency distribution the mean of each item is discussed based on Kajuju's (2012) classification. The author classified the continuous likert scales as follows. Mean score of 3.5 to 5 is taken as strongly agree/disagree and a mean score of 2.5 to 3.4 is taken as neutral. Finally to the mean score of 0 to 2.5 represents as strongly disagree or agree. For instance, for the first likert scales question the mean score are 2.96 which represent neutral and the standard deviation of 1.07 showing greater variation (significant difference) among

the response of respondents. Likewise the mean scores from question 2 to 4 ranges from 2.69 to 2.5 which signify neutral and the standard deviations are above 0.8. However, for the question whether the ministers reported its report to MOF based on the calendar of PBB, whether professionals have sufficient knowledge on program based budgeting, whether PBB is used to use resources efficiently have a mean score of above 3 and below 3.5 or on average the respondent's response is neutral. But for the question whether sufficient training has been provided about PBB except whether ministers evaluates performances strictly against set programs, the mean value of response of the respondents is 3.54 which indicates strongly agree/agree.

4.4.2. Challenges for program budgeting system

Table 4.8: Frequency distribution of respondents answer on challenges for program budgeting

No		SA		A		N		D		SD		Mean	Standard dev.
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
1.	Lack of stable policies necessary for the implementation of program based budgeting	5	4.9	42	41.2	24	23.5	31	30.4			3.21	0.94
2.	Lack of consistent commitment necessary to allow the reform to be fully implement	3	2.9	19	18.6	14	13.7	58	56.9	8	7.8	2.52	0.98
3.	There is lack of adequate information to run PBS	18	17.6	35	34.3	10	9.8	26	25.5	13	12.7	3.19	1.34
4.	There is low standing of employees about PBS	17	16.7	52	51	10	9.8	17	16.7	6	5.9	3.56	1.13
5.	There is lack clear program structure used to implement	14	13.7	20	19.6	18	17.6	20	19.6	30	29.4	2.69	1.43

Source: own computation using 2021 survey data and SPSS 20 software

The second aspect considered in this study is the challenges that stakeholders faced when implementing program based budgeting. For this aspect five questions were prepared and distributed to respondents. The first question is related to the stable policies necessary for the implementation of program based budgeting. Among 102 respondents 41.2%, which the majority of the respondents answer as they are agree. It indicates there is a problem of accessing stable policies for the program implementation. Opposite to this 30.4% of the total respondents are disagree and 23.5% are neutral. On the other hand 4.9% are strongly agreed. In this question there is nobody who answered as he/she is strongly disagreeing. Next to this respondents were asked whether there is lack of consistent commitment necessary to allow the reform to be fully implemented. Following this question 56.9% of the respondents are disagreed and they believe that lack of commitment is not a series problem for the effective implementation of program budgeting. On the other hand, 18.6% of the respondents are agree on the question provided. Finally, 2.9, 13.7 and 7.8% of the respondents are strongly agreed, neutral and strongly disagree. From the response of respondents for the two questions the researcher understands that there is no stable policy and consistent commitment necessary for the implementation of program based budgeting. This is supported by Tefera (2015) and pointed out that lack of capacity; turnover of the staff, training inefficiency, lack of conceptual understanding on program based budgeting cause's lack of stable policies in the selected ministers.

The third question was whether there is knowledge gap in implementing program based budgeting or not. For this question the large share of the total respondents, 34.3%, replied as they are agree and it is followed by 25.5% of respondents who answered disagree option. The remaining 17.6, 9.8 and 12.7% of the respondents are strongly agreed, neutral and strongly disagree respectively. Thus the majority of the respondents answered as there is knowledge gap in implementing the program. In the fourth question the researcher is tried identify the demand for program based budgeting by the employees. The majority of the respondents comprising 51% of the total samples are agreed and accept the lower demand for the program and by sharing the same percentage, 16.7%, of the total sample respondents answered as they are strongly agree and neutral. The remaining 9.8 and 5.9% of the total respondents are neutral and strongly disagree.

The last question that respondents were asked related to the challenges they face is about the clarity of program structure used to implement the program. Here the majority of the respondents are strongly disagree meaning that there is no problem on the program structure followed by the same percentage share of respondents who answered as they are disagree and

agree. The remaining 17.6 and 13.7% of respondents are neutral and strongly agree. This may be because the final version of program budget manual prepared by MOFED in 2010 is very technical and it creates difficulties in understanding the terminologies for both employees of ministry of finance and development and other ministers. For instance, according to the manual program budget is the core of analytics for performance based budgeting. However, the manual does not show the link/relationship between the two concepts.

Like budget preparation process respondents answer on each items response's mean score of the challenges for program based budgeting program is discussed. Except for low standing of employees the mean score of all items are fall in to neutral category, but the fourth item mean score is 3.59 which shows strongly agree/ agree. The standard deviation for all items are greater than 0.8 showing a greater variation among responses of respondents in each item.

4.4.3. Support for minister offices by Ministry of Finance

No	Statements	SA		A		N		D		SD		Mean	Standard dev.
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
1	Received necessary documents from MOF for the effective implementation of PBB	17	16.7	37	36.3	15	14.7	27	26.5	6	5.9	3.3	1.2
2	You have got the necessary support in relation to operationalizing PBB	6	5.9	33	32.4	12	11.8	41	40.2	10	9.8	2.84	1.16
3	MOF effectively conducted performance evaluation of your budgeting programs regularly	10	9.8	27	26.5	4	3.9	43	42.2	18	17.6	2.69	1.31

4	Top management is aware of the benefits that can be achieved with PBB	13	12.7	34	33.3	6	5.9	36	35.3	13	12.7	2.98	1.3
5	Top management encourages the use of the system	22	21.6	40	39.2	13	12.7	21	20.6	6	5.9	3.5	1.21

Table 4.9: Support for minister offices by Ministry of Finance

Source: own computation using 2021 survey data and SPSS 20 software

In Ethiopia the responsible body for the effective implementation of program based budgeting is ministry of finance. As a result higher and middle level managers of the selected ministers (ministry of health, education, agriculture and development) were asked about the support they get from ministry of finance. Accordingly, the answers of the respondents are discussed as follows. As explained above from the total 110 respondents only 102 questionnaires were correctly filled and returned. Hence the first question is related to the documents prepared by ministry of finance and given to other implementing ministers. From the total of 102 respondents 16.7% of respondents are strongly agree and the majority, 36.3%, are agreed about the necessary documents prepared and given to ministers by ministry of finance. Contrary to this 26.5 and 5.9% respondents were filed the questionnaire as they are disagree and strongly disagree respectively. On the other hand, 14.7% of the samples are neutral about the access of program based budgeting preparation documents from ministry of finance. The answer of the respondents show that there is no problem to access the necessary documents used to apply program based budgeting in the selected ministers (ministry of finance and economic development, ministry of health, ministry of education, and ministry of agriculture). This finding is in line with the study of Dawit (2019). The author used Ministry of Finance, Ministry of Transport and Ministry of Innovation and Technology.

The next question that was asked is the support from ministry of finance to operationalize program based budgeting. 40.2% of the total samples, which is the majority share of respondents, replied as they are disagree about the support from ministry of finance. Opposite to this 36.3% the samples are replied as they are agree. On the other hand, 16.7 and 14.7% of the respondents are strongly agreed and neutral respectively. Finally, only 5.9% of the respondents are strongly disagreeing. The third question given to the respondents related to whether ministry of finance effectively conducts performance evaluation of the sample ministers on budgeting programs regularly or not. In this question like the second question

the majority of the respondents (42.2%) filed the question as they are disagree; which indicates ministry of finance does not regularly evaluate the budgeting practice of ministry agriculture and development, health, and education. Even the top managements of MOF does not regularly evaluate its ministers performance in operationalizing the program based budgeting.

In addition, respondents were asked their perception about top management’s information on the benefit of program based budgeting system. The highest percentages of the respondents, 59.8%, are disagreeing and strongly disagree. On the other hand, 46% of the sample respondents are strongly agree and agree. Finally, 5.9% of the respondents were chose neutral option. The last question prepared and given to the respondents was related to the encouragement of top management for the effective implementation of program based budgeting. For this question the majority of the sample respondents, 39.2%, are agree and it is followed by answers of strongly agree comprising 21.6% of the total sample. Opposite to this 20.6 and 12.7% of respondents are disagree and neutral respectively. Finally only 5.9% are strongly agreed.

For the first four items the mean score ranges from 2.69 to 3.3 and the last item’s mean score is 3.5 which fall into strongly agree/disagree. Overall the respondents answer shows that the support by ministry of finance is not enough. This result is contrary to the result of the study by Dawit (2019) who assessed program based budgeting application effectiveness in ministry of finance, ministry of transport, and innovation and technology. For instance, except for the first question in all other questions the responses of the respondents are opposite.

4.5. Summary of Descriptive Statistics

Table 4.10: summary statistics of variables

	N	Minimum	Maximum	Mean	Std. Deviation
BUDGETPREP ¹	102	2.10	5.00	3.0020	.60656
CHALLPBB ²	102	1.60	4.80	3.0314	.68231
MOFSUPPORT ³	102	1.80	4.80	3.0647	.70706

Source: own computation using 2021 survey data and SPSS 20 software

¹ Budget preparation process

² Challenges of program based budgeting

³ Ministry of finance support to other minister offices

Above table 4.8 shows that the summary statistics of variables used in the study. For example, budget preparation process has 10 items. To calculate the mean likert scale value of each observation for the ten items or questions the researcher added the likert scale values of 10 items and divide it by 10. Finally the summary statistics of the value of each variable for the whole sample is summarized as follows. The mean score of budget preparation process is 3 which represents neutral value with a maximum score of 5 (strongly agree) and minimum score of 2 (disagree). Its standard deviation is 0.61, which shows the degree of variation from its mean value. Moreover, by following similar procedures the mean, maximum and minimum score of the challenges that minister's face in implementing program based budgeting was examined. The mean value of respondent's response for the likert scale questions under the challenges of program based budgeting is 3 (neutral) with the minimum and maximum score of 1.6 (approximating the number into 2 represents disagree) and 4.8 (strongly agree) respectively. Its standard deviation is 0.68 which is greater than the standard deviation of budget preparation process. This mean the response of respondents in the challenges of program based budgeting system shows greater variation than budget preparation process. Finally the mean score of the questions categorized under the ministry of finance and economic development support was summarized. Its mean value is found to be 3.06 (neutral) and the respondents score ranges from 1.8 (disagree) and 4.8 (strongly agree). The standard deviation is 0.71 which is moderately high as compared to the standard deviations of the other two variables.

CHAPTER FIVE

SUMMARY of FINDINGS, CONCLUSION and RECOMMENDATION

5.1. Summary of Findings

The main objective of this study was to examine the move towards program based budgeting system in Ethiopian public agencies and its implications in the case of Federal Ministries. To do so, 110 questionnaires were distributed to respondents and 102 questionnaires are filled correctly and returned to the researcher. In addition, three basic variables were considered. These are budget preparation process, challenges of program based budgeting and support by ministry of finance. For the practice of budget preparation process 10 questions were prepared and the answer of the majority of respondents for 8 questions is disagree and for the remaining 2 questions (PBB is a better budgeting system than the previous line item budgeting and the selected organization evaluates performances strictly against set programs), the majority of respondent's response is agree.

The second variable discussed is the challenges of program based budgeting in public ministers. Here the researcher prepared 5 questions. For the questions related to lack of stability of policies used to implement program based budgeting, there is low standing of employees about program based budgeting and lack of adequate information to run program based budgeting the majority are answered as they are agreed. While for the question concerning lack of commitment devoted by the employees in the ministers the highest proportion of respondents are disagree. Finally, for the question of there is lack clear program structure used to implement program based budgeting, the majority of respondents choose strongly disagree.

Finally, the types and successfulness of supports to public ministers by ministry of finance and economic development was discussed. Like the challenges in this case also 5 questions were prepared. For the question whether the ministers received necessary documents from ministry of finance and economic development used to the effective implementation of program based budgeting and top management encourages the use of the system, the majority of respondents are agree. While for the remaining three questions (whether top management is aware of the benefits that can be achieved with PBB, ministry of finance and economic

development effectively conducted performance evaluation of your budgeting programs regularly, and ministers got the necessary support in relation to operationalizing PBB) the majority of the respondents are disagree.

5.2. Conclusion

Based on the findings the researcher concludes the following points. According to the response of the respondents it is concluded that though program based budgeting is fully implemented in public agencies in Ethiopia, their implementation is not effective and efficient. Despite the inefficiencies of applying program based budgeting it has many advantages over the previously used line budgeting system. One of the basic causes for the ineffective implementation of program based budgeting is lack of well-structured strategic plan that is essential for PBB system. Moreover, ministry of finance and economic development does not prepare and report the activities performed on program based budgeting, and it does not regularly evaluate the performance of ministers on the implementation of the program. Providing training to the responsible body has major advantage in making the implementation of PBB successful. However, there is no timely and sufficient training. When implementing program based budgeting department of budgeting and planning have no the prior qualifications, skills and experiences.

In addition to the above listed problems program based budgeting faces different challenges. Among others lack of stable policies and employee's commitment are the two important challenges for the effective implementation of the PBB. Besides lack of clear program structure is one of the challenges for the successful implementation of the program and employees are facing difficulties in the implementation process of the program because they are not equipped with the concepts and ideas of program based budgeting. However, employees have good standings about program based budgeting and they accept the appropriateness of program based budgeting than line based budgeting system.

Generally, the support of ministry of finance and economic development provided to the other public agencies is indispensable. For instance, it should prepare the necessary documents those can be used for the process of implementing and providing to the public agencies and this is confirmed by respondents. Moreover, from the findings top managements encourage the implementation of the program. However, respondents believe as they did not get adequate and effective support from ministry of finance and economic development particularly in operationalization of PBB. They also add that the ministry of finance and

economic development does not regularly conducted performance evaluation of program based budgeting system. Respondents also criticize that though top managements in ministry of finance and economic development supports the implementation of PBB, their support is not practical rather it is oral and as the respondents believe top managements does not really understand the benefits achieved from the use of PBB.

5.3. Recommendation

Based on the findings the researcher recommends the following policy option:

- The responsible bodies in ministry of finance and economic development and other public agencies should provide sufficient and timely training for the staffs. Not only providing training it should evaluate the status of the training in equipping trainees to understand the concept of program based budgeting system, because it shows the effectiveness of the training.
- The staffs of the ministries should be committed in planning process of their respective budget which gives them an ownership of their programs and ease the implementation processes as well. At last they can contribute to achieve the goals and objectives of their ministry as well as their country.
- The findings indicate that ministry of finance and economic development does not regularly report program based budgeting. So it should create platforms for regular supervision and prepare performance report and provide certification for ministers practicing the program and give advice for the ministers they did not practice the program well.
- Ministry of Finance and economic development as an allocator of budget in Ethiopia have to support to strengthen the spending ministries for the successful implementation of program based budgeting. It should also have a plan to expand the designs of implementing program based budgeting in regions.

St. Mary'S University
School of Gradyate Studies
Department of Accounting and Finance

Appendix. Survey questionnaire

Dear respondents my name is Dereje Tassewand I am final year MBA in Accounting & Finance. student at Saint Marry University. Currently I am conducting research on **“the move towards program based budgeting system in Ethiopian public agencies and its implications in the case of Federal Ministries**. You are selected to provide accurate and reliable information. the questionnaire is asking about the opinions and experiences of each respondent in using program based budgeting for preparation and administration of public resource (budgets) assigned to them. Each answer is valuable for this study. Your information will be important for policy makers on program budgeting. Participating and answering the question is voluntary and skip the question you feel unhappy. The survey is anonymous, your name is not included in the survey, and your personal identity is kept in secret. It will take 45 minutes to complete all questions.

Thank you for your cooperation In advance

DerejeTassew

Part I: demographic information of the respondent (tick ✓ on the correct space provided)

1. Gender: Male _____. Female_____.
2. Level of education
 - A. Certificate education _____.
 - B. Diploma (Level I, II, III, and IV)_____.
 - C. BA or BSc. Degree _____.
 - D. MSc and above _____.
3. Professions that you have learnt/graduated from:
 - A. Accounting and Finance
 - B. Economics
 - C. Business administration
 - D. Other (please specify). _____.
4. Current positions that you are working for:
 - A. Head of Planning and Budgeting Department
 - B. Senior Planning and Budget Expert
 - C. Planning and Budget Expert
 - D. Junior Expert
 - E. Other (please specify). _____.
5. Experience on program based budgeting work
 - A. Less than 1 year _____.
 - B. 1 to 3 years _____.
 - C. 4 to 6 years _____.
 - D. 7 years and above _____.

Part II: respondent's opinion and experience on budget preparation process based on Likert scale answering mode

Instruction: the following table comprises questions with five likert scales (strongly agree, agree neutral, disagree and strongly disagree). Tick✓ sign on the space provided

	Budget preparation process	SA	A	N	D	SD
1.	PBB is fully implemented in your organization					
2.	PBB is a better budgeting system than the previous line item budgeting.					
3.	Your institution have well organized strategic plan					
4.	Your organization reported its report to MOF based on the procedure of PBB (program based budget)					
5.	Your organization reported its report to MOF based on the calendar of PBB					
6.	Your organization evaluates performances strictly against set programs.					
7.	You have sufficient knowledge on program based budgeting					
8.	PBB is used to use resources efficiently					
9.	Sufficient Training has been provided about PBB					
10.	Your department have the prerequisite qualification, experience and skills required to effectively implement PBB					

In addition to the above specified question please answer the following budget preparation process questions

1. In which of the following your perception about program based and line item budgeting program can be categorized?
 - A. program based budgeting system is better than line item budgeting
 - B. line item budgeting is better than program based budgeting
 - C. the two budgeting programs are indifferent
 - D. Other (please specify). _____.
2. How do you think the level of implementation of program based budgeting in your institution?
 - A. Fully implemented. C. partially implemented D. not implemented
 - B. Others (specify)._____

3. If there is untouched issues in budget preparation process please write on below specified spaces. _____

 _____.

Part III: Tick on the space provided that you feel as challenges for effective implementation of program based budgeting

No	Suggested challenges for program budgeting	SA	A	N	D	SD
1.	Lack of stable policies necessary for the implementation of program based budgeting					
2.	Lack of consistent commitment necessary to allow the reform to be fully implement					
3.	There is lack of adequate information to run PBS					
4.	There is low standing of employees about PBS					
5.	There is lack clear program structure used to implement					

If there is/are other challenges of effective implementation of program based budgeting please specify.

_____.

Part IV: Questions asking your opinion and experience Ministry of Finance and top management support in mainstreaming program based budgeting.

No	Statements	SA	A	N	D	SD
1.	You have got the necessary documents from MOF, which are important for the effective implementation of program based budgeting					
2.	You have got the necessary support in relation to operationalizing PBB					
3.	MOF effectively conducted performance evaluation of your budgeting programs regularly					
4.	Top management is aware of the benefits that can be achieved with PBB					
5.	Top management encourages the use of the system					

Are there any supports that your institution receives from ministry of finance other than specified above? If yes please list down on below specified spaces.

Reference

- Abdurahman, A. (2012). *The move towards program based budgeting system in Ethiopian public agencies and its implications: The case of Federal Ministries* (Doctoral dissertation, Addis Ababa University).
- Anol, B. (2012). Social science research: Principles, methods, and practices. *Open Access Textbooks*.
- Bessie, D. T. S. (2016). Intrinsic factors affecting budget utilization in Ethiopian public universities. *MaddaWalabu University, Ethiopia*, 2222-1700. Ganecho (2018) Challenges and Prospects of Budget Preparation and Utilization: a Study in Selected Finance Bureau of Kaffa Zone.
- Bourdeaux, C. (2008). The problem with programs: multiple perspectives on program structures in Program-Based Performance-Oriented budgets. *Public Budgeting & Finance*, 28(2), 20-47.
- Caiden, N. (2010). Challenges confronting contemporary public budgeting: retrospectives/prospectives from Allen Schick. *Public Administration Review*, 70(2), 203-210.
- Dale E, Kyurumyan A, Kharazyan S, Barroy H: Budget structure in health and transition to programme budgeting: lessons from Armenia. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO. Bagdigen&Muhlis 2004b, 'Local Budgeting in Turkey: Local government finance in Turkey', pp. 69-79, *Istanbul Metropolitan Municipality Press*, Istanbul, viewed April 2011, <http://ssrn.com/abstract=1430869>.
- Diamond, J. (2013). Good practice note on sequencing PFM reforms. *PEFA, January*.
- Dikasso, B. (2017). *The effect of budgeting process on organizational effectiveness: Case Study on Hadiya Zone Selected Government Finance Organization* (Doctoral dissertation).
- Fenta, Y., & Abebe, M. (2012). An assessment of the challenges and opportunities of implementing program budgeting systems (PBS) in two selected Federal Ministries in Ethiopia. *Journal of Business and Administrative Studies*, 4(1), 45-77.
- Fuior, E., & Gutan, V. (2015). The Budgeting based on the Performance: Conceptual Framework and Implementation Details. *Economy Transdisciplinarity Cognition*, 18(1), 70.

Gilmour, J. B., & Lewis, D. E. (2006). Does performance budgeting work? An examination of the office of management and budget's PART scores. *Public Administration Review*, 66(5), 742-752.

Gilmour, J. B., & Lewis, D. E. (2006). Does performance budgeting work? An examination of the office of management and budget's PART scores. *Public Administration Review*, 66(5), 742-752.

Jones, L. R., & McCaffery, J. L. (2005). Reform of the Planning, Programming, Budgeting System, and management control in the US Department of Defense: Insights from budget theory. *Public Budgeting & Finance*, 25(3), 1-19.

Kluvers, R. (1999). To PPB or not PPB—budgeting in Victorian local government. *Australian Journal of Public Administration*, 58(4), 68-77.

Marc, R., & Last, D. (2009). A Basic Model of Performance-Based Budgeting. *Fiscal Affairs Department of International Monetary Fund, Washington, DC*.

Minjire, C. N., & Ogollah, K. (2017). Impact of Factors Affecting Programme Based Budgeting Performance in Government Organisations in Kenya. *Journal of Public Policy and Administration*, 2(1), 37-62.

Minjire, C. N., & Ogollah, K. (2017). Impact of Factors Affecting Programme Based Budgeting Performance in Government Organisations in Kenya. *Journal of Public Policy and Administration*, 2(1), 37-62.

Morgan, D., Robinson, K. S., Strachota, D., & Hough, J. A. (2017). *Budgeting for local governments and communities*. Routledge.

Pardaev, U. (2016). Analyzes of state budget forecasting errors and issues of forecasting accuracy. *Asian Journal of Management Sciences & Education*, 5(1).

Petroia, A. (2017). On The Essence And Efficiency Of Programme Budgeting. *Eastern European Journal for Regional Studies (EEJRS)*, 3(2), 109-122.

Pugh, C. (1984). Program budgeting reforms in South Australia. *Australian Journal of Public Administration*, 43(1), 77-95.

Radovanov, B., & Marcikić, A. (2016). Integration and regional position of stock markets: a case of South East European countries. In *Symposium Proceedings—XV International*

Symposium Symorg 2016: Reshaping the future Through Sustainable Business Development and Entrepreneurship (pp. 598-603).

Rubin, M. M., & Willoughby, K. G. (2014). Measuring Government Performance: The Intersection of Strategic Planning and Performance Budgeting. In *Developments in Strategic and Public Management* (pp. 41-58). Palgrave Macmillan, London.

Saghafi, M., & Pouryousof, A. (2016). Study and Analysis of Establishing Performance Budgeting System in Promoting Annual Program of Universities. *Management*, 3(1), 40-50.

Saliterer, I., Sicilia, M., & Steccolini, I. (2018). Public budgets and budgeting in Europe: state of the art and future challenges. *The Palgrave handbook of public administration and management in Europe*, 141-163.

Sila, B. M. (2016). *Challenges To Effective Implementation Of The Budget In The Public Sector: A Case Study Of Cemastea* (Doctoral dissertation, University of Nairobi).

Smithies, A. (1967). Conceptual framework for the program budget. IN: *PROGRAM BUDGETING, CAMBRIDGE, HARVARD UNIVERSITY PRESS, 1967, P 24-60*.

West, W, Lindquist, E and Mosher-Howe, K (2009). 'NOAA's Resurrection of Program Budgeting: All Over Again?' *Public Administration Review*, pp.435-447, <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-6210.2009.01990.x/abstract>

World Bank.(1998). Public expenditure management handbook.

Worthington, R. (2013). Performance and Programme-Based Budgeting in Africa: A Status Report 2013. Available at SSRN 3057023.

Worthington, R. (2013). Performance and Programme-Based Budgeting in Africa: A Status Report 2013. Available at SSRN 3057023.

Creswell, J. W. (2014). The selection of a research approach. *Research design: Qualitative, quantitative, and mixed methods approaches*, 3-24.