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## BUDGETING SYSTEMS AND THEIR APPLICABILITY IN PUBLIC SECTOR

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### ABSTRACT

Views on the need for a public budget have varied over time. Before the twentieth century, the chief reason for the early application to the budget was a desire to control public spending and taxation. The mid-twentieth century saw major worldwide changes in socio-economic circumstances and therefore in budgeting. Keynesian thinking had led many economists to consider the public budget not only as legislative governmental tool, but also as an instrument for political, economic, accounting, and administrative of the public sector. Since then, the budget has been examined from the viewpoint of a number of disciplines.

This paper analyzes the issue of budgeting and budgeting systems with special reference to TBS, PBS and PPBS and their applicability in public sector. Comparisons of these systems have shown that although TBS is used widely within the public sector, PPBS is, however, dominated as the most functional one to apply for budgeting.

### I. INTRODUCTION

Prior to the twentieth century, the primary concern for the application of public budgeting was fiscal control and responsibility (Babunakis, 1976:4). Public budgeting aimed for legislative accountability for the purpose of taxation and spending. In Britain, Magna Carta (1217) was a clear example of budgeting, giving power to Parliament to create control over the Crown. In this was, tight Parliamentary controls over the outlays provided the public money be spent according to regularity rules. As common idea was that government was perceived as *guardian*, its activities were therefore restricted to a few basic activities, providing interior and national security, education, health, and justice. Government was not interested in providing aggregate balance in the macro-economy; its activity was seen as a barrier to the developments and the growth of nations. Therefore, until the early dates of the century the public budget was normally limited.

The mid-twentieth century saw major worldwide changes in socio-economic circumstances. Namely, Keynesian thinking had led many economists to consider

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the public budget not only as legislative accounting tool, but also as an instrument for political, economic, and administrative of the public sector. Since then, the budget has been examined from the viewpoint of a number of disciplines, i.e. economics, politics, accounting, management and administrative. Each of these disciplines can supply a different view to the public budgeting. There are interconnections between and amongst these disciplines. Their most obvious aspects and the chief role of the public budgeting in these disciplines have been set out by Premchand (1983) in Appendix I.

The budget is a major tool for definition of public objectives and for quantifying the required data. A number of studies<sup>1</sup> had appeared with the outset of 20th century to explain the need for budgeting. Jones and Pendlebury (1992:50-51)'s study, for example, is one of them in which they clearly indicated the need for the budgeting by listing some functions of the budget. Those functions determine authorities' income and expenditure

- To assist decision-makers to make good decisions on their plans and policies,
- To authorize authorities to make legal of future spending and
- To provide fundamental method to control income and expenditure.

In the literature, there have been many arguments on the issue of public budgeting. The idea which was asked as '*on what basis shall it be decided to allocate X dollars to activity A instead of activity B?*'<sup>2</sup> has not yet led to agreement upon a particular form of budget.

## II. RESEARCH DESIGN

The main concern of this paper is to examine budgeting systems and their applicability in public sector with special reference to Planning, Programming, Budgeting System (PPBS). The paper is, therefore, in two sections. The first is devoted to general characteristics of budgeting systems, especially PPBS and the second section is on the applicability of PPBS in the public sector.

## III. REQUIREMENT OF BUDGETING SYSTEMS

Public sector is controlled by elected politicians and this control usually lasts until the next election. Re-election is not guaranteed. Hence financial and budgeting plans can change from one election to another. When control changes, the annual budget is a good tool for the elected power to implement its plans as it "encompass[es] annual decision-making, and the ability to check that expenditures have been made and revenues collected as set out in the budget" (Caiden, 1989:53-60).

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<sup>1</sup> See, for example, Burkhead (1956); Musgrave (1989); Wildavsky (1974) and Jones and Pendlebury (1992).

<sup>2</sup> Key (1940 : 1137).

Although the budget is built on short-term characteristics, it would also be an annual representative of long-term financial plans. As Jones and Pendlebury (1992) point out "the need to retain flexibility to deal with future uncertainties leads to short-term decision making and a focusing of attention on the annual budget" Jones and Pendlebury (1992:68).

The elected power can seek their objectives by orienting their medium/long-term plans on the annual budget. Although, such medium/long-term plans may often not be completed during the term of the budgets.

As the method of budgeting is likely to depend on the ruling party's policies, there are a number of distinct budgeting systems that would be implemented with the aim of political as well as some other objectives. Each of those systems is "a process of systematically relating expenditures of funds to the accomplishments of planned objectives" Schick (1972:46).

If it is, for example, decided to spend some money in materials, there must be both some reasons of taking that decision and a kind of way to accomplish such purpose: the decision taken would likely be linked a kind of planning in order for decision-makers to see that their proposed budgetary decisions are going to be fulfilled. By plan, it is not particularly meant a detailed long-term plan. It could be a kind of plan that would be short-term plan as well.

While running with the fiscal policy, it may be better for the ruling party to evaluate its activities properly so as to find out diseconomies involved in the budget and keep effectiveness and efficiency at maximum. To do so, public sector may need systematized information systems that it could be as a fundamental part of the budgeting. Also, changes in economic circumstances would be important for fiscal policy of public sector that would push it to pay its attention on a new budgeting system in order to provide balance between revenue and spending as well as getting most effective and efficient resource allocation. When public sector is necessarily involved in providing, for example, social services, demands will be increased greatly with regard to existing resources. If it is the case, there may be two alternatives for the service providers to make a balance between demand and supply. The service providers may increase their supply to respond to the increasing social service requirements or they may supply services at constant level, but seek to provide services in order of priority. In doing so, there will likely be need for an appropriate budgeting system. In other words, with the first alternative, the service providers would seek either to create some new resources or a way of getting, controlling, and organizing resources in most efficiently. Requirement of tight control and use of public resources may direct the service providers to consider all the budgeting systems and their possible performance to cope with current economic and financial constraints as well. With the second alternative, service providers will likely seek to find out a reasonable budgeting system that its characteristics must be suitable to put the public services in order of priority.

As it is explained in the next section, from the very early development of budgeting systems to very recent ones, it seems obvious that there has been no end in having quest for a new operational budgeting system in order for decision-makers to find out the most effective and beneficial way of budgeting to accomplish objectives.

#### IV. BUDGETING SYSTEMS

After outlining some aspects of public budgeting above, this part aims to examine some budgeting systems and their applicability by the public sector. 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<sup>3</sup>. Therefore, three budgeting systems are particularly reviewed. These systems are the Traditional Budgeting System (TBS), Performance Budgeting System (PBS) and Planning, Programming, Budgeting System (PPBS). From the practices, there seems no doubt about their applicability in public sector environment.

It is started off to examine some reasons of implementing a budgeting system within the budgetary environment. Then, the evolution of the budgeting systems is reviewed. Examining the each system in its broad detail is the main body of this paper. In doing so, it is thought fruitful to go on by examining in the way seeking to find out advantages and disadvantages of each system.

##### A. Traditional Budgeting System (TBS)

Identification of the method of budgeting system, in general, depends on its existing characteristics that differ it from others. In other words, if the budget is prepared regarding "*the nature of income and expenditure*"<sup>4</sup>, it is called TBS that is the earliest application in the budgeting systems. As this system mostly depends upon the method of considering materials and line-item, it is also called '*Line-Item-Budgeting system*'.

There are a number of definitions of TBS. One of which can be given as; "a form of budgeting in which there is a high-level legislative or executive control over individual objects of expenditures in large organizations" Lewis (1988:7).

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 (1972:20) 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

<sup>3</sup> For this reason, forthcoming paper reviews other budgeting systems with special reference to zero-based budgeting system.

<sup>4</sup> Jones and Pendlebury (1992:52).

purposes the inputs are going to be used in the budget. (Shultz and Harriss, 1965:103.) This means that the system does not only fail to give information about the outputs, but also increases the cost of every single objective.

In TBS, 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.

TBS seems as a good monitor to control whether the level of accepted spending has done according to the initial approval. Accordingly, efficiency, accountability and control are seen as primary objectives of the administration unit in TBS. Such accountability is determined by Heald (1987) as "the current conceptions of accountability (in the Line-Item-Budgeting) are political accountability [and] managerial accountability" (Heald, 1987:155-158).

TBS is also known incremental because it considers the existing budget as base for decision-makers to make their estimations and calculations on coming year's expenditure level. TBS simply ignores the issues of the quality and quantity of services in many cases. The system takes only the previous year's budget items into account and then increases their spending levels as a requirement of next year objects of expenditures. Hence, Schultze (1966) stresses this as a weakness of the system and states that "unless a new program is proposed, there is no examination of the basic program structure or performance. It does not bring up alternatives. It does not lend itself to the periodic examination of the objectives of older programs" (Schultze, 1966:79).

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.

In contrast to the above argument, Wildavsky (1974:136) emphasizes that disagreements on TBS would be unnecessary. He 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 of TBS 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/decrease at the level of spending regarding previous year's results as measurement.

Concentrating only on the level of spending puts some obstacle against the decision-makers to consider whether or not to use some financial plans. TBS is not suitable to help or stimulate decision-makers to consider long-term financial plans. Its unsuitability is stressed by Carpsen (1968) that, through TBS, decision-makers "tend to produce justifications for decisions already made rather than data that can be used to evaluate alternative possibilities" (Carpsen, 1968:147-8)

Although TBS is the oldest budgeting system amongst the others, it is still being used by a large number of authorities (Rubin, 1992:454-466). Hence the system should not be regarded as completely old fashioned, but rather it would be implemented and re-adopted to these days' budgetary requirements. In that frame, it can be examined its advantages and disadvantages derived from the current literature.

### **A.1. Advantages of TBS**

1. Reduction of conflict: Because TBS mainly focuses on the level of expenditure, any possible disagreement will only focus on the level of expenditure: debates between participants will only revolve around increases or decreases in spending level. (Wildavsky, 1974:136)

2. Exercise of control: Starting from any department to the approval body, TBS has been checked and controlled at each stage. While departments start to prepare their budget proposals, they take previous year's items into account and orient them to their next year's budget. The control process then proceeds to higher departments until the proposal is accepted as a next year's budget. At each stage, the budget is checked and controlled item-by-item. That means that TBS has an exclusive control procedure, starting with spending departments and ending with the approval body.

3. Simplicity: Because the system is capable of ignoring every item included in the budget and paying attention on particular categories and new items included in the budget, TBS can be said as one of most applicable methods in practice. The system only gathers relatively small amount of information to evaluate and finally proceeds them to find out next year's budget. As Wildavsky (1974) puts it "many items in the budget are standard and are simply re-enacted every year unless there is a special reason to challenge them" (Wildavsky, 1974:13).

4. The system saves budget producers from possible trouble: Decision-makers, as a nature of human being, do not likely want to take any risky decision upon next year's budget items. They avoid and save themselves from responsibility of any risk and problem by taking last year's budget approvals granted and building next years' budget with adding something on those approvals.

## A.2. Disadvantages of TBS

1. Despite to the decreasing in the burden of calculation, the system can be very basic: As TBS follows previous year spending results, there may be in fact too little difficulty in calculation of items. Simply, using rates given and formulating according to inflationary, demographic, etc. changes of previous year's level of spending will likely produce next year's budget. Such procedure can be obstacle against decision-makers to take rational decisions for the future. Therefore, it would be useless to expect so much output from this system. It is essentially a duplication of incremental, non-programmatic and sequential procedures of previous year's budget. The only thing to do is seen just simply to look at the cost of what it was done in the previous year and than to evaluate results to find out level of spending for next year's budget (Schick, 1972:37).
2. TBS ignores policy-making: The system mostly focuses on details of items. It does not have any financial plan and alternative ways to produce new policies (Shoup, 1970:64). The items being involved in the next year's budget are sequence of last year's budget.
3. TBS may cause duplications: TBS does not determine one objective that might be carried out by two or more spending units. In other words, it does not seem suitable to determine spending heads that serve for the same objective but are launched by different units. Therefore, the system fails to compare cost of spending made for similar object of expenditure (Wildavsky, 1964:21-23). In this case, since there is not obvious cost/benefit analysis to evaluate spending upon one similar target, there would be waste of money. For instance, it seems possible to encounter two different departments that are aimed to take care of elderly people and provide a kind of benefit in similar ways.
4. TBS fails to provide enough information: TBS is not capable of providing clear information to identify the amount of money allocated to services and also fails to identify level of activity for each service (Jones and Pendlebury, 1992:52-3).
5. Because the system tends to create next year's budget on the basis of using the previous year's revised budget, it would fail to consider items that were in the old budget but are not, completely or partly, needed in future any more. This means that TBS can employ items that are no longer needed.
6. TBS fails to corporate with long-term economic plans: Since TBS does not consider financial plans, it does not seem as a convenient system to assist long-term economic and financial plans (Smithies, 1967:29). Taking long-term plans as cornerstone of economies, TBS would therefore be obstacle for countries whose economic development is necessarily based on plans.

## **B. Performance Budgeting System (PBS)**

This budgeting system can be placed between TBS and Planning, Programming, Budgeting System (PPBS). PBS is also a stage for PPBS to be developed. Requirement in the public sector to establish their administration and communications within and amongst other departments led PBS to be developed. "In the ideal, this budget system requires measurement of results, outcomes, and impacts" Melkers and Willoughby (1998:66).

PBS was first implemented in the USA in order to recover the weaknesses of the TBS. One of its primary aims was not to focus on objectives, but rather on activities, i.e. determination of programs by PBS is not depended on expenditure required, but on activities. Another aim was to sustain efficiency and economy in the public sector (Babunakis, 1976:4-6). Particularly, after World War II, for several reasons there was tendency to a new budgeting system. These reasons were

- To recover insufficient response of existing budgeting system,
- To find out utilities and costs of public spending and
- To categorize public activities according to their functions.

In 1950, Commission on Organization of the Executive Branch of the Government, as called 'Hoover Commission, published a report that was about development of PBS. The fundamental aim of the Commission was to reshape PBS by concerning on activities and objectives. Namely, "the whole budgetary concept of the federal government should be refashioned by the adaptation of a budget based upon functions, activities, and projects: This we designed a Performance Budget" Smithies (1965:31).

Between 1954-55, second Hoover Commission stepped intensely to widened its work on PBS in order to make it works well in practice. PBS had last until the beginning of 1960s.

## **C. Planning, Programming, Budgeting System (PPBS)**

After the first implementation of PPBS by the Department of Defense in the USA, it was then carried out in the public sector. Its implementation was due to weaknesses of existing budgeting system that those weaknesses had been particularly devoted to the TBS. The main concern of PPBS is to enable departments to improve efficiency and effectiveness of their provisions. For this reason, PPBS was first implemented as an alternative to the TBS. PPBS links program information to planning in budgetary decision-making and evaluates public services on output basis. The need for PPBS mainly arises in the area that public sectors have limited resources against increasing public demand. To provide increased welfare to the individuals and optimize their demand in the face of scarce public resources, PPBS was proposed as an alternative system to public budgeting in 1960s.

Because PPBS was mainly implemented as an alternative to the TBS, it is better explain different properties of the TBS and PPBS that those also illustrate some basic differences of both systems. These can be outlined as follows

1. In the TBS, the inputs and spending are considered according to the administrative departments. Whereas these are evaluated in PPBS upon objectives (Edizdoğan, 1991:155-6).

2. Although the TBS focuses on inputs, PPBS takes long-term outputs into account as well (Gordon and Heivilin, 1982:319).

3. Evaluation of the budget in TBS primarily depends upon the kind of spending and its amount, level of expenditure. In PPBS, the criteria of budgetary evaluation are mainly depended on the targets and their accomplishment. It takes all alternatives into account and then enables decision-makers to make decisions on the most beneficial alternative by providing better cost/benefit to beneficiaries (Edizdoğan, 1991:155-6).

4. The TBS may include spending that do not have benefit for its beneficiaries. Whereas, PPBS seems capable of meeting public needs by illustrating new programs as necessary and eliminating programs that are not necessary. Suppose that in Education Services there was need to extra teachers at large in primary schools during last half decade as pupils' population was intensive. But, when those pupils finished the primary education and intensiveness in new pupils' population is now less than last five years. In that case, TBS would possibly carry on to employ such increased number of teachers even though there is no longer need to them in primary schools. Using PPBS, in such manner, would reveal the reality that employing extra number of teachers in such education does no longer provide benefit, but extra cost.

5. As the TBS just looks at the level of spending, it does not consider alternative ways of reaching to the purposes and decided level of spending. On the other hand, PPBS looks at the accomplishment of its targets and it seeks very carefully to evaluate other alternatives upon one objective so that it can find out the best way of getting objectives in the line of most effective way.

Suppose that a department has got a good reason to complete an objective. Completing such objective could be possible with both systems. If it is so, the question can be asked as to what could possibly happen within these systems. As TBS does not consider alternative ways in accomplishing of objectives and does only take 'inputs' into account, the objective would likely be accomplished ineffectively. Whereas, as PPBS takes all alternatives into account, the department can provide its objectives in most efficient way. Police department, for example, may be searching to improve its capability to prevent crime in city center. To do so, there might be a number of alternatives. Amongst those alternatives, increasing number of patrol and installing cameras for surveillance of critic areas in city center can be shown as two alternatives for PPBS on the manner to decide.

6. From politicians' point of view, there seem some differences between TBS and PPBS. One of which is that the TBS may be more convenient than PPBS for politicians to get their political purposes that is being proceeded. The claim lies on the possibility that politicians usually do not, want to, consider long-term plans to implement. As PPBS seeks to implement parts of long terms planning process with its annual budget by taking all alternatives into account for cost-effective outputs, politicians may not want to put their purposes into chance as their political leadership life is restricted by regular elections unless they are re-elected. In contrast, Pyhrr (1973:140) stresses the importance of PPBS and indicates that PPBS enables decision-makers to be able to determine strategic targets, evaluate their costs/benefits and then decide the inputs regarding to the time cycle of the budget. In addition to Pyhrr's advocacy of PPBS, Schick (1971:201-2) is, also, eager to advocate PPBS and argues that it is capable to increase rationality of debates on budgetary decision making because the system puts alternatives on display with provided information. Decision-makers would have been informed well enough to reduce disputes and make decision on budgets. He believes that PPBS is "*an effort to extend the bounds of collective rationality*".

On the other hand, Babunakis (1976:29) warns budgetary decision-makers on that although PPBS provides good information to make rational decisions, it cannot ensure objectiveness of decisions taken.

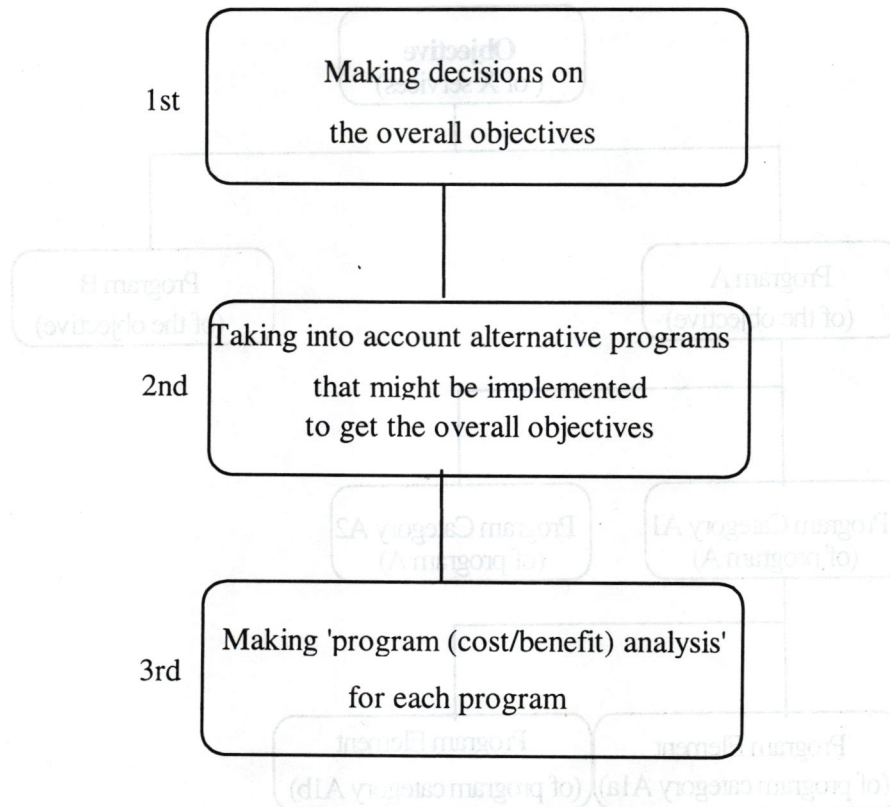
Since TBS does only consider justifying request for funds, it does not seem convenient for decision-makers to justify their existing programs. It takes last year's budget as base and therefore it would not be capable of justifying activity whether it has been in public needs to provide. Such characteristics may therefore cost public sector to have some diseconomies in their budgets. The issue is exactly contrast in the PPBS. Namely, PPBS's concern is to take into account existing programs so that decision-makers can be able to eliminate diseconomies from the budget. If any existing program is found that it is no longer needed by public, PPBS is dominated as most applicable to identify that program and wake decision-makers to give it up.

7. In TBS, budget is distinguished for two parts. Which are called 'the annual revenue budget' and 'the capital budget'. The former is concerned with revenue income and expenditure in its process. In contrast, the latest is concerned with capital income and expenditure. Making this distinction between both budgets separate outlays from each other. As the annual budget is mainly financed by revenue incomes, i.e. tax revenues, it will most likely involve costs of running governmental programs. As the capital budget is financed by capital incomes, i.e. bonds and funds, it will involve cost of capital improvements.

Although having two separate budgets in TBS may cause inefficiency in public provisions, such weakness can be eliminated by combining these two budgets as one with PPBS.

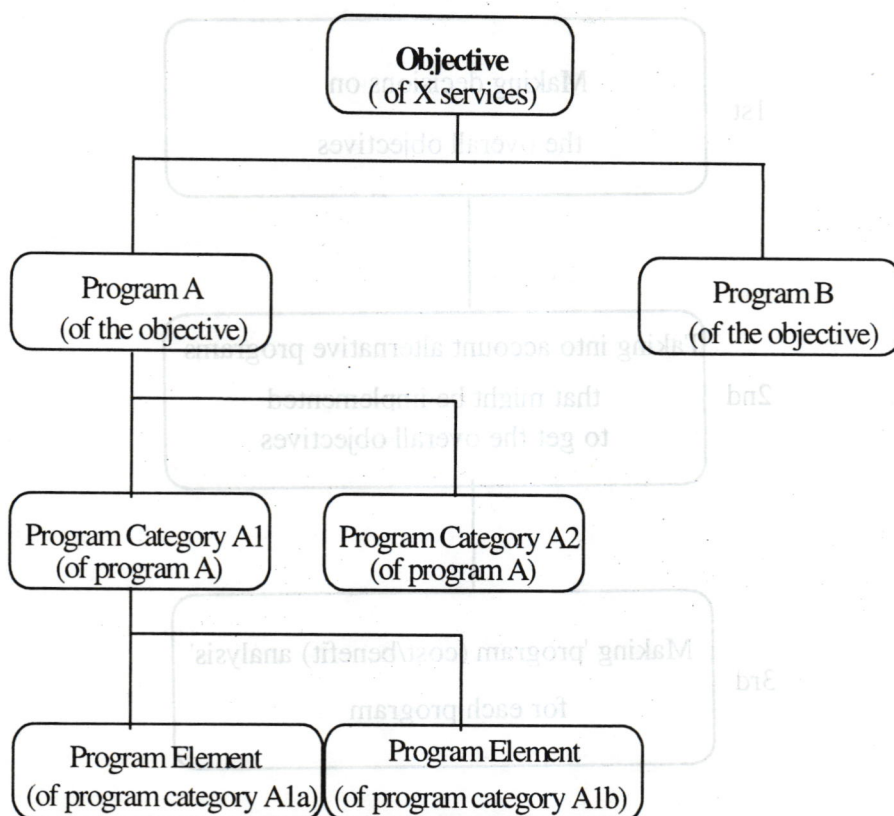
The following diagrammatic figure shows the three stages to apply, proceed and achieve the mission of PPBS in practice. Those are;

## Stages of Implementing PPBS



At the first stage, it is crucial for decision-makers to determine which *objectives* are going to be provided to public in the next year's budget. After determining such objectives, it is requirement of PPBS to categorize such objectives into *programs* and *categories* that make up the *programs* by categorizing sub-outlines in *program elements*. The program structure of an objective in the PPBS can be formatted as follow;

### Program Structure of an Objective



Although it seems necessary to decide on inputs of program structure that are used through sub-programs, program categories and program elements, such identification may not be enough. It may need to have good communication and organization amongst different departments as well. In other words, one program will may be provided by two or more than two departments in some ways. In such a certain circumstance, it should be perceived as a task to get good *"correspondence between program structure and organization structure"* (Jones and Pendlebury (1992:72)).

The difficulty, arises at this stage, is that although PPBS tends to assess one objective in relation to a measurable benefit, it seems not possible to do this for all objectives. Such as foreign and interior security policies are an example for the case. With the interior security policy, the aim is not to sentence as much criminal as possible, but to provide some expedient that pushes them to give up their illegal behaviors.

At the second stage, decision-makers need to identify and evaluate alternative ways of accomplishing their objectives. That is the nature of PPBS to

evaluate all alternatives and decide which one is most suitable amongst others. In this procedure, cost/benefit analysis plays fundamental role.

The last stage of implementing PPBS is emerging at program analysis. This stage contains a description of objects and activities as well as involvement in preparing and orienting of long-term plans. Analytical activity is the heart of PPBS. It has been called the cornerstone of the system since it puts identified activities in a systematic order and analysis alternative courses of activities (Huet et al., 1975; Fisher, 1967:77).

### **C.1. Advantages of PPBS**

PPBS has some advantages that can be outlined as follow<sup>5</sup>:

1. PPBS provides clear information on objectives of organization: With PPBS, administrative departments are enabled to understand which targets they must have. At the end of the day, they can also know whether they were successful in obtaining such targets. Because of its informative property, PPBS also enables both public and Approval Body to evaluate the budget and be aware of programs and their financial resources.
2. PPBS shows responsibility centers in the administration: As earlier stressed, the TBS is concerned with departmental structures that consider its activities in the line of departmental basis. PPBS has however objectives that are also responsibility center of activities. It would make clear that who are responsible with the objective of the budget.
3. It helps decision-makers to decide on programs: As PPBS searches more than one alternative to fulfill one objective, it assists decision-makers, during its preparation and operation, to evaluate alternatives and decide on the best one for the target of the budget's objectives (Eckstein, 1973:28).
4. PPBS provides opportunity to find out programs that are overlapping with each other and therefore it prevents resources from extravagant spending.
5. PPBS considers on long-term effects of programs: Cost of new program would be seen unnecessary for the first year. But rational man should consider the whole life of any program that needs to be completed. It is the PPBS that takes the whole life of project into account in the annual basis as well.
6. PPBS provides opportunity for decision-makers to allocate resources by considering cost/benefits of program elements.
7. PPBS is capable of allocating resources to individual services and then monitoring achievement of results.
8. From taxpayers' point of view, a budget must be good informative and more visible so as to increase their trust upon decision-maker's activities. It seems right to agree with Howard (1973) that "most men are rational and will make better

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<sup>5</sup> See, for example, Jones and Pendlebury (1992 : 75).

decisions if they are given better information. Decision will be better if the decision-maker knows what is trying to do, if the objectives are stated and if the resources devoted to their accomplishment are grouped together" (Howard, 1973:112).

It must be right of public to understand exactly

- What kind of services public sector provides?
- What is the cost of those services?
- Are those services provided efficiently?

Requesting transparency in the budget would not only push political decision-makers to make their budget more concerned in public needs, but also to be more accountable to the residents. From the review of PPBS, it seems possible to find such requirements through PPBS as it is mostly based on providing systematic information systems to and from those who are involved in PPBS.

## **C.2. Disadvantages of PPBS**

Despite the advantages of PPBS, it has also some disadvantages that can be outlined as follows;

1. Although PPBS focuses on objectives to find out what can be done, it does not however consider how these objectives would be done (Pyhrr, 1973:149).
2. PPBS needs some systematic system information so that it can perform its objectives. If decision-makers, who want to implement PPBS, have not got required systems information, that would cause authorities not to succeed. From the practices of implementing PPBS in the USA, it was illustrated that it is the main subject caused PPBS to fail. As the study of Drew (1969:163-65) argues on the failure of PPBS, it is mostly accepted fact that it does not work in an environment where lacks required systems information. Therefore, it seems necessary to identify the need to the data that PPBS needs and makes sure that it is available. To succeed, it may be useful to use computerized network system for well-organized systems information. Schultze (1968) also seem as a good translator of the fact that if decision-makers want to implement PPBS, it is necessary to have required systems information within and amongst departments. In his words, he says that "*an agency head's ability to control the direction his department takes depends in part on his being able to face his operating subordinates with information and analysis about their own programs*" (Schultze, 1968:92-94).

Having computer data processing is not the only prescription to get success in implementing PPBS. It may also be remedy for decision-makers not to waste time when they needs some information, i.e. it seems very economical way to gather and organize data in one place, in computer's memory that is able to retrieve relevant information at any required time.

3. When PPBS evaluates cost of objectives, it mostly tends to get information and data from decisions taken both at level of planning and

programming. It does not consider existing political decisions and their alternatives (Pyhrr, 1973:149).

4. PPBS does not seem as capable of defining programs in their priorities (Pyhrr, 1973:149).

5. Most attention of PPBS is to focus on new programs and/or existing programs that have faced necessary increases (Pyhrr, 1973:149).

6. There would be some difficulties in operating PPBS as it needs more calculations and long-term systematic information. Supposing that a person in one department has several tasks and each of those tasks belongs to different programs. In this case, there would be needs to allocate costs of his/her involvement in relevant programs.

In the light of above argument, the question must be asked is how can PPBS assist decision-makers to make budget?

## **VI. APPLICABILITY OF PPBS IN PUBLIC SECTOR**

From the efficiency point of view, if the public sector has already not attempted to implement the PPBS, it would help decision-makers to review their existing activities so as to justify and detail them as those activities would not likely have reviewed before. Since the characteristic of the TBS heavily uses last year's budget, it would not enable decision-makers to make good justification and good evaluation on their current activities. Whereas, the PPBS had introduced as a system that categorizes activities under programs which enable decision-makers to have program and specified objectives in order to meet public needs.

The first benefit of implementing the PPBS is 'the use of program analysis in budgetary decision-making' in public sector (Lee, 1997:136).

The second benefit of implementing the PPBS would be to enable decision-makers to find out whether they are fulfilling their responsibilities in a way that was decided in their budgetary policies. Also, it may be possible for the PPBS to re-organize public sector by providing good communication between and amongst departments. As earlier stressed, the lack of the TBS to provide good interdepartmental communications would cause possible duplications of providing some services and therefore the characteristic of the PPBS, by providing good communications amongst departments and focusing on the purpose of expenditures, enables decision-makers to eliminate possible duplication of the same services between and amongst departments. Also, the PPBS eliminates programs, which is no longer in public needs, from coming years' budgets.

Continues increases in public activities push decision-makers in a difficult position since public revenues do not increase as much as the increases in public needs. Therefore, the public sector had better consider overall public needs and put them in order so that provision of services can be evaluated in respect to their

priorities. To do so, the PPBS gives opportunity for decision-makers to decide on which services are in most priority and which services in less to meet public needs.

The third benefit of the PPBS can be shown its impacts on the public sector administration. As known, public sector employs considerable number of people since its main provisions are in service-based outputs. Having intensive employees within the this sector illustrates that any change, even small, in salary rates and any increase in inflation would likely have important impact on level of payments and therefore increase in the level of payments cause public sector extra cost. Applying the PPBS would provide data required by administration to improve its administrative activities.

Also, the characteristics of the PPBS, providing good collaboration between and amongst departments, provide good coordinated performance and make clear their roles and responsibilities. Thus each department would be aware of which services is going to be performed and what responsibilities will be taken on. Accordingly, cooperation with other departments on provision of the same programs, supposing that other departments use the PPBS as well, provides establishment of good relations.

The fourth benefit of implementing the PPBS is that it enables to combine the annual revenue budget with the capital budget as one. With such capability, PPBS can enable decision-makers to consider the both budgets while evaluating alternatives. Such ability would be as an opportunity to evaluate and consider cost/benefit analysis upon that combined budget. The importance of taking the both budgets as one is interpreted by Howar (1973) that development in rationalistic budgeting system would result a planning process in budgeting that will alleviate distinction between operating and capital budget "throughout analysis requires that all costs, both operating and capital, be evaluated. Under this emphasis, distinction between operating and capital outlays may become less critical, since both are relevant in evaluating total program costs and results" (Howar, 1973:258).

Under the fourth benefit, the question may be raised as to what benefit can such procedure provide to decision-makers? An example may be a good answer to this question. Having both budgets combined as one can provide good information to budgetary decision-makers to decide on one amongst varies alternatives. Such alternatives may be explained with the example of searching by police to reach crime area as fast as possible. To do so, there would be two alternatives of constructing new police stations in crime-intensive areas and of employing more police officers in order to keep police officers waiting ready to act on time. In the example, there are two alternatives to pick one of them up. Decision-makers would likely look at cost/benefits of these alternatives. The former alternative is capital spending alternative, and the latest one is revenue-spending alternative. To make decision on one of these alternatives, the PPBS seems most suitable since it does enable the decision-makers to decide on the most efficient one without considering financial resources. Also, as the PPBS sets priorities amongst programs, such ability can, provide advantage for decision-makers to rank programs and subprograms in terms of their priorities, regardless of considering which one is capital and which one is revenue spending.

The fifth benefit of the PPBS is to provide decision-makers to make forecasting easy on capital improvement programs. The reason for that, the PPBS is multi-year planning process in which annual budgets can only reflect their annual parts in overall plan. Therefore, capital improvement programs would be good evaluated with the PPBS. Knezevich (1973:131) supports this view by saying that "program budgeting helps to minimize the danger of deceptively low expenditures during the first fiscal year of a new program" (Knezevich, 1973:131).

The last benefit of implementing the PPBS can be observed on the field that there may be conflict or disputes between and amongst departments on performing an existing or on a new program. Suppose that there is controversy between Police and Health departments on preventing adults from drug addiction. The both departments would claim that such program is in their responsibility. To solve such manner, the PPBS seems reasonably applicable to describe appropriate programs for departments.

## VII. CONCLUSIONS

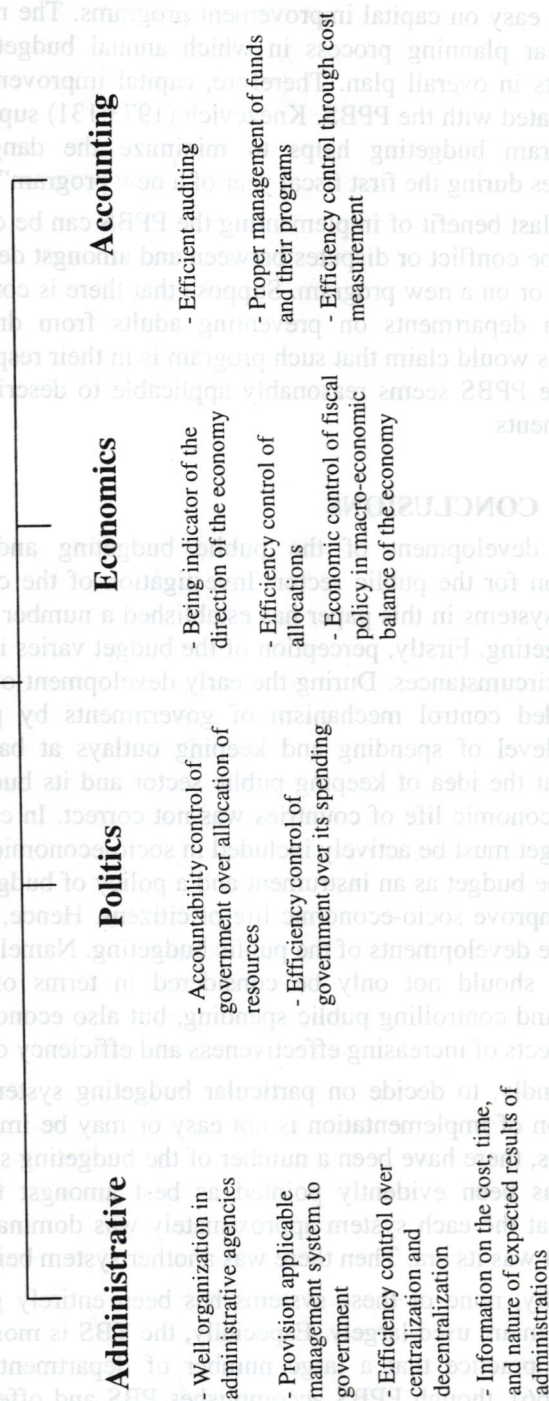
The development of the public budgeting and its applicability is a phenomenon for the public sector. Investigation of the current literature of three budgeting systems in this paper has established a number of facts about the public sector budgeting. Firstly, perception of the budget varies in relation to some socio-economic circumstances. During the early development of the public budgeting, it was regarded control mechanism of governments by preparing the budget at minimum level of spending and keeping outlays at balance. But later, it was realized that the idea of keeping public sector and its budget contents away from the socio-economic life of countries was not correct. In contrast, the public sector and its budget must be actively included in socio-economic life. The reason for that is shown the budget as an instrument and a policy of budgetary decision-makers to help and improve socio-economic life of citizens. Hence, there have been upward trends in the developments of the public budgeting. Namely, it was appreciated that the budget should not only be considered in terms of accounting aspects of observing and controlling public spending, but also economic, administrative, and politics aspects of increasing effectiveness and efficiency of public activities.

Secondly, to decide on particular budgeting system without regarding the time horizon of implementation is not easy or may be impossible. During the last five decades, there have been a number of the budgeting systems created, but none of them has been evidently pointed as best amongst the others. Their trends illustrate that the each system approximately was dominated during in short time horizon that was its era. Then there was another system being prominent.

Thirdly, none of these systems has been entirely given up so far. Rather, some of them are used largely. Especially, the TBS is most obvious example from the current practice that a large number of departments still use it (Rubin, I. 1992:454-466), though PPBS accomplishes PBS and offers better budgeting than TBS.

## APPENDIX I

### The Importance of the Budget in the socio-economic Environment<sup>6</sup>



Source: Adapted from Premchand (1983:34-6)

<sup>6</sup> Premchand (1983) "Government Budgeting And Expenditure Controls: Theory And Practice" International Monetary Fund, Washington, pp. 34-36.

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