

# Does The Performance-Based Budgeting Work In Indonesia?

Soffan Marsus, Mas'udin

**Abstract:** As Law of Republic Indonesia Number 17 of 2003 on State Finance mandated that government prepare the draft of the State Budget based on the work plan of the government, Indonesia at that time began to implement a budgeting system called performance-based budgeting (PBB). Implementing PBB, based on various studies, aside from having positive impacts, can also leaves various problems. This study, using system theory, identifies the elements, problems, and benefits of implementing PBB, based on the perspective of budget practitioners at the budget office in Directorate General of Budget as well as in line ministries/agencies (Kementerian/Lembaga or K/L). Regarding the benefits of PBB, the research found that the implementation of PBB could affect the effectiveness of the programs of the line ministry/institution (K/L) and reduce duplication of K/L activities. This result is consistent with the research conducted by Melkers and Willoughby (2001) that implied that the most important factor in implementing PBB is improving the effectiveness of government programs. However this research also found that several effective budget formulation were still considered ineffective, and some PBB implementation problems still exist. One of the problem is the difficulty in formulating performance measures. This research contributed not only by describing the conditions of performance-based budgeting in Indonesia, but also by comparing it with performance-based budgeting in the United States based on two survey studies that have conducted there.

**Index Terms:** Benefits of PBB, Weaknesses of PBB, Budget System, Public Expenditure

## 1. INTRODUCTION

Law of Republic Indonesia Number 17 of 2003 on State Finance mandates that government prepare the draft of the State Budget based on the work plan of the Government to realize the achievement of the state objectives (Article 14 of the law). In other words, since the enactment of the Law, the government implemented a budgeting system called performance-based budgeting (PBB). According to Geraghty & Klosek (2016), PBB is "... the allocation of funds based on programmatic results that contribute to organizational goals." PBB uses evidence to maximize budget allocations to successful programs and reduce budget allocations to less successful programs to achieve organizational goals. PBB is not intended to punish or reward certain agencies or departments, but to focus progress on measurable goals during a budgeting process or cycle. Unlike PBB, traditional budgeting, known as line-item budgeting, allocates a budget based on line item costs, without considering the ability of the program to meet agency objectives. Accountability in traditional budgeting is aimed at the input from program implementation. Line item budgeting is characterized by a focus on inputs such as staff, equipment, equipment, and others. Navin (2003) in this case stated that budget justification in line item budgeting "... is based on increasing in line item costs -- an incremental approach." Regarding aspects of program outcomes, in line-item budgeting, attention to the results or impacts of the program or "performance" is very lacking. Leaders are encouraged to spend, not to save or innovate. The criteria for accountability are to keep spending according to the budget. In PBB, on

the other hand, budgeting is linked to expectations of results or outcomes, namely what a program must achieve. Accountability is aimed at the results or performance achieved. PBB focuses on results. The budget is there to fund the outcome and not input. PBB is part of broad public sector reform known as result-based management (Binnendijk 2000; Ahmad & Ahmad, 2018) or new public management (Hood 1991). The economic pressures that drive public sector reform include budget deficits, structural problems, increasing competition, and globalization. It also includes political and social incentives, namely reduced public confidence in the government, increasingly better and more responsive demand for government services, and increasingly strong demands for government accountability from taxpayers. After being applied for almost 15 years, it is interesting to look back on whether economic, political and social pressures, which underlie the application of PBB, have been answered well, or not. This research is expected to reveal these problems. Given the breadth of the scope of PBB's discussion, this study seeks to portray the implementation of PBB so far, based on the perceptions and experiences of budget practitioners, both budget practitioners at the budget office or Directorate General of Budget as well as budget practitioners in K/L (ministries/agencies). These two budget practitioners have the roles as budget allocators and as proposers and recipients of budget allocations. To examine these problems a system theory approach will be applied, even in its simple form. About this system theory, the University of Twente (2004) states the following: System theory is the transdisciplinary study of the abstract organization of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities and the (usually mathematical) models which can be used to describe them. .... A system, then, is a set of things that affect one another within an environment and form a larger pattern that is

- Soffan Marsus: Department of Accountancy, Polytechnic of State Finance STAN, Indonesia, soffanm@pknstan.ac.id
- Mas'udin: Department of Accountancy, Polytechnic of State Finance STAN, Indonesia.

different from any of the parts. The fundamental systems-interactive paradigm of organizational analysis features the continual stages of input, throughput (processing), and output, which demonstrate the concept of openness/closedness. Based on this system approach, the implementation of PBB will be based on input, process, and output. From the input side, it will be analyzed what are the roles of budget practitioners in budgeting, both budget allocation reviewers and proposers and recipients of budget allocations. In terms of the process, the elements of the implementation of PBB and the problems that emerged will be examined. From the output side, the direct and indirect impacts of PBB's implementation also will be explored. Thus, the formulation of the problem to be examined in more detail in this study are as follows:

1. What is the role of budget practitioners in drafting PBB?
2. What are the elements of the implementation of PBB that are considered effective and what problems arise?
3. What are the direct and indirect impacts of implementing PBB?

The purpose of this study is to find out and describe the application of PBB to the central government so that it can identify the following:

1. Role of budget practitioners in drafting PBB.
2. Elements for the effective implementation of PBB and problems arose in the implementation of PBB.
3. Direct and indirect impacts of PBB's implementation.

## 2. LITERATURE REVIEW

### 2.1. The Objectives and Consequences of PBB

Conceptually, PBB is an approach in the budgeting system that takes into account the relationship between funding and expected performance and efficiency in achieving that performance. PBB wants every detail of the budget spent to be accountable for its usefulness. The budget is allocated to achieve the specified output and outcome. The main characteristic of PBB is that the budget is prepared to pay attention to the linkages between funding (input) and expected results (output and outcome) so that it can provide information about the effectiveness and efficiency of activities. PBB is designed to create efficiency, effectiveness, and accountability in utilizing public expenditure. In general, the principles of PBB are based on the concept of value for money (economics, efficiency, and effectiveness) and the principles of good corporate governance, including the existence of accountability of decision-makers for the use of budgeted money to achieve predetermined goals, objectives and indicators (Taufiqurrohman 2014).

According to Directorate General of Budget (DJA 2010), the implementation of PBB has several objectives: (1) creating direct linkages between performance and budget, (2) increasing efficiency and transparency in implementation (known as operational efficiency), and (3) to promote more flexibility and accountability in carrying out tasks and managing the budget. The DJA also noted the conceptual based of PBB, which consist of: (1) the budget allocation is oriented to performance (output and outcome-oriented), (2) flexibility in budget execution but still maintain accountability principle (let the manager manage), and (3) the budget allocation for programs / activities is based on the work unit functions that are attached to the organizational structure

(money follow function). The demand for the importance of implementing performance-based budgeting turns out to have consequences that must be prepared. Several factors are successful in implementing PBB: (1) leadership and commitment from all components of the organization, (2) the focus of continuous administrative improvement, (3) sufficient resources for the improvement effort (money, time and people), (4) clear rewards and sanctions, and (5) strong desires to succeed (BPKP 2005).

### 2.2. Research on PBB Outside Indonesia

We can group research on PBB into research abroad and research in Indonesia. Research in Indonesia itself can be distinguished into PBB research on the central government and PBB research on local governments. One of PBB research outside Indonesia revealed about the problems of implementing PBB. Melkers & Willoughby (2001) surveyed budget preparers in 49 states in the US, both executive and legislative. The results of the study found that overall the implementation of PBB had an impact on the effectiveness of managing programs and decision-making processes. But at the same time, there were also known challenges and problems in the implementation of PBB. Among them was revealed that only a few states could link performance information with the appropriation of their budgets. Andrews & Hill (2003) in their study found that most of the States in the USA that implements PBB reforms, only a few show evidence of the direct behavioral changes resulting from PBB reform, both in terms of development, response, performance-based or allocation of new incentives which is associated with performance. This is because PBB is applied as an addition to the traditional approach to the previous budget regime so that traditional approaches dominate PBB. To influence behavior, PBB reform must be carried out as a substitute, not as an addition to the previous budget regime. Meanwhile Grizzle & Pettijohn (2002) proposed a dynamic system model for evaluating budget reform. The use of the model for PBB, in the state of Florida in the US, identifies several actions in the short term that can increase the likelihood of implementing successful budgeting reforms, which include providing clear communication, facilitating budget routines and accounting, and strengthening the reliability of performance information. The model also found that legislative behaviors that influence the implementation of PBB by executives, including how the legislature uses performance information in the long run to allocate resources and how these behaviors apply incentives or sanctions to programs that succeed or fail to achieve each performance standard. Hou et al. (2011) found that the performance measurement system requires time to develop it and operate it properly. Experiences from other countries show that it takes a long time to implement this PBB system.

### 2.3. Research on PBB in Indonesia

PBB research in Indonesia at the central government can be noted, among others, from Madjid & Ashari (2012) and Agus & Riyanto (2012). Madjid & Ashari (2012) reviewed the implementation of PBB at the Financial Education and Training Agency (FETA or BPPK), Ministry of Finance. The study revealed that related to the completeness of the elements and the application of the medium-term expenditure framework (one of the components of PBB), FETA has developed a set of planning and budgeting

following the provisions. The difficulty faced was that FETA prepares a strategic plan based on functions but the strategic plan execution was based on an existing bureaucracy which was a relatively permanent structure. Consequently, the objectives made and included in the strategic plan cannot be compared directly with the output in the work plan (Rencana Kerja dan Anggaran Kementerian Lembaga or RKAKL). This condition made it difficult for policymakers to measure to what extent the ability of the organization to achieve the goals set out in the strategic plan.

**2.4. Contemporary Research on PBB**

Contemporary PBB research were varied. Several research examined PBB practice with innovation theory, other research made critical introspection to the practice, and other research tried to make a systematic structure about the topics which were considered scattered and unorganized since the very first day the research started back in years 1950. Hijal-Moghrabi (2017) addressed PBB from an innovation theory perspective. His article conceives of PBB as an innovative budgetary tool that was initially proposed in the late 1950s as an attempt to rationalize the government’s budgetary decision-making process. Nemec and de Vries (2019) discussed that traditional budgeting shows where the money was spent, but it does not give any idea as to the results of this spending. They continued, “Performance-based budgeting is expected to address this gap. However, positive expectations connected to it have not been fully met in practice because of the implementation problems.” The problems exist in the form of dilemmas and imperfections that emerge in the practice of performance-based budgeting and critics are right in saying that it has negative side effects. Finally, Mauro, Cinquini, and Grossi (2017), tried to organized systematically the wide variety of PBB’s topics into PBB implementation stages, PBB approaches and PBB results. Those variety topics have enlivened the debate on PBB, but the growing amount of theoretical and empirical works calls for systematization. They made a systematic review to the public management and accounting studies published in international academic journals from 1990 to 2014.

**3. RESEARC METHOD**

Following the problems and objectives of the study, the framework of this research can be seen as shown in Figure 1. As noted in Figure 1, the research objective is to analyze the implementation of PBB with a system approach, i.e. input, process and output of PBB’s system. This research was carried out by distributing questionnaires which were then processed using descriptive statistics.

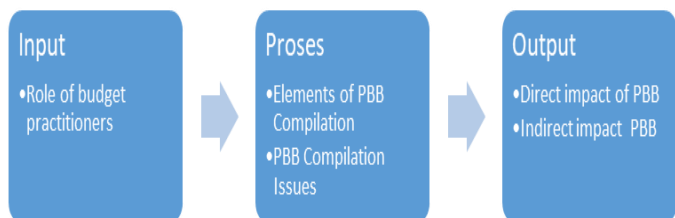


Figure 1: Research Framework

In contrast to previous researches which were limited to one particular ministry from the central government, or one

particular district or city to the local government, this research tried to expand population coverage to all agencies and ministries in the central government. The study was conducted through a survey of the perceptions of officials who compiled the central government budget. The questionnaires were spread out throughout the ministries/agencies, and to budget practitioners in the Directorate General of Budget who conduct budget studies, related to the implementation of budgeting based on performance. Respondents were asked about their perceptions of the budgeting process and implementation of PBB in their work units.

The data to be used in the study are primary data and secondary data, with the following explanation:

1. Primary data obtained through questionnaires. Data collection techniques in this study were conducted by distributing and re-collecting questionnaires distributed to stakeholders in the planning and budgeting fields. The questionnaire in this study was adapted from AABPA, The American Association for Budget and Program Analysis (2011), which surveyed professionals compiling the United States Federal Government in 2011, 2012, 2013 and from Melkers and Willoughby (2001). This AABPA survey is conducted regularly. Adaptation is done by the author by including the budgeting context in Indonesia in the substance of the survey.
2. Secondary Data in the form of data and planning and budgeting documents.

The population in this study are officials preparing programs and budgets in all ministries/agencies in Indonesia. Respondents consisted of echelon II, III, IV, and staffs at the Planning and Finance Bureau in each ministry/institution. Sampling using a purposive random sampling method. Some of the criteria that underlie sample selection are that the sample (respondents) is involved in planning the program/activity, budgeting and making budget performance indicators.

**TABEL 1**  
Sample Characteristics

| N O | Respondents Characteristics  | Number | Percentage    |
|-----|------------------------------|--------|---------------|
| A   | Respondents Fill in The Form |        |               |
| 1.  | Position                     |        |               |
| a   | Staff                        | 47     | Person 52.8%  |
| b   | Eselon IV                    | 37     | Person 41.6%  |
| c   | Eselon III                   | 5      | Person 5.6%   |
| .   | Total                        | 89     | Person 100.0% |
| 2.  | Education                    |        |               |
| a   | Graduate (S2)                | 7      | Person 7.9%   |
| b   | Undergraduate (S1)           | 35     | Person 39.3%  |
| c   | Bachelor / Diploma III       | 47     | Person 52.8%  |
| .   | Total                        | 89     | Person 100.0% |
| 3.  | Major                        |        |               |
| a   | Economics                    | 12     | Person 13.5%  |
| b   | Management                   | 37     | Person 41.6%  |
| c   | Accounting                   | 16     | Person 18.0%  |

|   |                                     |     |        |        |
|---|-------------------------------------|-----|--------|--------|
| d | Administration                      | 19  | Person | 21.3%  |
| e | Communication                       | 5   | Person | 5.6%   |
|   | Total                               | 89  | Person | 100.0% |
| B | Respondents Didn't Fill in The Form |     |        |        |
|   | Total                               | 85  |        |        |
| C | RESPONDENTS TOTAL (A DAN B)         | 174 | Person |        |

**TABEL 2***Type of Work Performed by Respondents*

| NO | Type of Wokrs               | $\Sigma$<br>Respondents | Percentage |
|----|-----------------------------|-------------------------|------------|
| 1  | Plan and Policy             | 26                      | 29.2%      |
| 2  | Economics Analysis          | 2                       | 2.2%       |
| 3  | Budget Compilation          | 40                      | 44.9%      |
| 4  | Budget Execution            | 10                      | 11.2%      |
| 5  | Performance Management      | 2                       | 2.2%       |
| 6  | Budget Legislation Analysis | 7                       | 7.9%       |
| 7  | Others                      | 2                       | 2.2%       |
|    | Total                       | 89                      | 100.00%    |

**TABEL 3***Respondents Length of Works in Budget Processing*

| No | Length of works   | Person | Percentage |
|----|-------------------|--------|------------|
| 1  | >/ 10 years       | 36     | 40.4%      |
| 2  | 5 s.d. < 10 years | 20     | 22.5%      |
| 3  | 2 s.d. < 5 years  | 23     | 25.8%      |
| 4  | 0 s.d. 2 years    | 10     | 11.2%      |
|    |                   | 89     | 100.0%     |

**TABEL 4***The Role of Respondents in Budget Process*

| No | No | Role in Budget Process  | Percentage<br>Indone<br>sia US |    |
|----|----|---|--------------------------------|----|
| 1. |    | Reviewing Program/activity/output/outcome                     | 68,4                           |    |
| 2. | 1. | Reviewing programs/activities with Bappenas                   | 44,7                           | 76 |
| 3. |    | Conduct budget studies with the Directorate General of Budget | 42,1                           |    |
| 4. | 2. | Policy Recommendation   | 36,8                           | 63 |
| 5. |    | Budget Consolidation in Echelon I                             | 23,7                           |    |
| 6. |    | Program/Activity/Output Proposal                              | 21,1                           |    |
| 7. |    | Budget Consolidation in K/L                                   | 18,4                           |    |
| 8. |    | Budget Discussion with Legislative                            | 15,8                           |    |
|    | 3. | Develop Initial Budget  |                                | 56 |
|    | 4. | Track Congressional Action                                    |                                | 51 |
|    | 5. | Consolidate Multiple Budget                                   |                                | 48 |
|    | 6. | Coordinate with OMB and Congress                              |                                | 41 |

**TABEL 5***Elements for Effective Budget Formulation Process*

| No | Elements for Effective Budget Formulation Process   | Respo<br>ndents<br>mentio<br>ning | Respondents'<br>opinions                     |  | US<br>Re<br>spo<br>nde<br>n |
|----|---|-----------------------------------|--|--|-----------------------------|
|    |   |                                   | Perce<br>nt<br>sayin<br>g<br>ineffe<br>ctive | Perce<br>nt<br>sayin<br>g<br>effec<br>tive |                             |
| 1  | Ensure links between the budget and line ministries strategic plan  | 63,2                              | 91,2   | 8,8  | 4                           |
| 2  | Include the explanation of human resources needs and potential impacts                                      | 63,2                              | 86,1   | 13,9                                       | 1                           |
| 3  | Allow flexibility to budget formulator in line ministries to choose their appropriate inputs for themselves | 63,2                              | 84,2   | 15,8                                       | 2                           |
| 4  | Emphasize communicating line ministries policy objectives through the budget                                | 39,5                              | 93,9   | 6,1  | 5                           |
| 5  | Involves line ministries leadership early on in order to provide clear priorities and direction             | 31,6                              | 82,4   | 17,6                                       | 3                           |
| 6  | Give impression to the line minisitries stakeholders that resulting budget is good                          | 15,8                              | 74,3   | 25,7                                       | 6                           |

**TABEL 6***Problems in Implementing PBB*

| No  | Have any of the following been problems that your office/ ministries' budget you reviewed has experienced with the implementation of PBB? | Respondents<br>Opinion |      | US<br>Respondents<br>Rank |
|-----|---|------------------------|------|---------------------------|
|     |   | Yes                    | No   |                           |
| 1.  | Difficulty in establishing appropriate performance measures   | 81,1                   | 18,9 | 1                         |
| 2.  | Inability to link PBB components with appropriation bill format   | 72,2                   | 27,8 | 3                         |
| 3.  | Lack of competent personnel resources   | 71,1                   | 28,9 | 9                         |
| 4.  | Problems with computer information systems to manage PBB data   | 66,7                   | 33,3 | 7                         |
| 5.  | Lack of consistent executive leadership   | 66,7                   | 33,3 | 10                        |
| 6.  | Lack of financial resources   | 63,2                   | 36,8 | 11                        |
| 7.  | Lack of consistent legislative leadership   | 62,9                   | 37,1 | 5                         |
| 8.  | Lack of commitment of agency management and personnel   | 59,5                   | 40,5 | 8                         |
| 9.  | Lack of sufficient time   | 48,6                   | 51,4 | 6                         |
| 10. | Problem in defining performance   |                        |      | 2                         |
| 11. | Lack of Legislative Interest in performance information   |                        |      | 4                         |

**TABEL 7***Direct Impact of PBB Implementation*

| No. | Direct Impact of PBB Implementation | Respondents<br>Opinion |    | US<br>Respondents<br>Opinion |
|-----|-------------------------------------|------------------------|----|------------------------------|
|     |                                     | Yes                    | No |                              |

|    |  |      |      |      |
|----|--|------|------|------|
| 1. | To improve effectiveness of agency programs  | 100  | 0    | 89.1 |
| 2. | To reduce duplicative services   | 100  | 0    | 59,8 |
| 3. | To affect cost savings   | 94,7 | 5,3  | 59,4 |
| 4. | To improve decision making in government   | 94,7 | 5,3  | 86   |
| 5. | To improve coordination between Line Ministries and the Ministries of Development Planning and Budget Office | 89,5 | 10,5 | 23,4 |
| 6. | To appease the public  | 89,2 | 10,8 | 25   |
| 7. | To improve coordination between agencies and the legislature   | 81,1 | 18,9 | 55,4 |

**TABEL 8**  
*Indirect Impact of PBB Implementation*

| No. | Indirect Impact of PBB Implementation   | Respondents Opinion |      | US Respondents Opinion |
|-----|---|---------------------|------|------------------------|
|     |   | Yes                 | No   |                        |
| 1.  | I have a better understanding of state government operations because of PBB.  | 100                 | 0    | 81,9                   |
| 2.  | Overall, my state is better off since implementing PBB.   | 97,1                | 2,9  | 75                     |
| 3.  | Some changes in appropriations are directly attributable to outcomes from the implementation of PBB in my state.                                    | 91,7                | 8,3  | 39,1                   |
| 4.  | Conducting PBB in our state, even partially, is better than doing nothing at all.   | 91,4                | 8,6  | 85,3                   |
| 5.  | Communication between line ministries personnel and Ministry of Development Planning and Budget Office has improved with the implementation of PBB. | 81,6                | 18,4 | 54                     |
| 6.  | Communication between agency personnel and legislators in my state has improved with the implementation of PBB.                                     | 55,6                | 44,4 |                        |
| 7.  | PBB has increased my workload.  | 36,1                | 63,9 | 74,6                   |

#### 4. RESULT AND DISCUSSION

The number of respondents who successfully collected on the distribution of the questionnaire stage I was 89 respondents from 120 questionnaires distributed. The rate of return of this questionnaire is 74.2%. This unsatisfactory rate of return of the stage I questionnaire is due to many activities carried out by budget preparers, especially monitoring the budget at the end of the year. Since the number of respondents is still small, the number of samples is then added through the distribution of questionnaires in the second stage. The distribution of the second phase of the questionnaire coincides with the socialization program held by the Directorate General of Budget by inviting all K/L. From the second distribution, 85 additional respondents were obtained, so the total number was 174 respondents. Because using the time for formal socialization program, our respondents asked to focus on the substance of the questionnaire and ignored to fill in demographic data. Therefore the following characteristics of the respondents in the study sample were only for the first stage respondents, 89 respondents. The characteristics of the respondents are

presented in Table I. Respondents in this study are budget formulation officials who are in the Planning and Finance Bureau of ministries/agencies (K/L). The types of work respondents do in preparing the budget of their K/L, according to their perceptions, are presented in Table 2. The types of respondent's work can be stated to be very relevant to the objectives of the study, because respondents generally stated that their type of work was in formulation and budgeting (44.9% ) as well as in planning and policy (29.2%) so that the total proportion of respondents whose work is very relevant reaches 64.1%. The rest of the respondents answered their types of work including economic analysis, budget execution, etc., which remained close to the type of work targeted. While the respondent's working time varies, as presented in Table 3. Some questions in the survey have tried to explore the reasons for the respondents' choice of an answer. But of course, the survey will not be able to continue to explore the most basic reason. The second phase of the research is planned to be based on interviews and carry out with qualitative methods, will further explore the reasons. The implementation of PBB will not be separated from the stages of the budgeting process in the ministries/agencies following the provisions. These budget phases are started by the preparation of work plans and budgets of state ministries/agencies (RKA-KL) and ended with the stipulation of budget allocations for ministries/agencies (K/L) as a result of the agreement between the government and parliament. The RKA-KL consists of the work plan of the state ministries/agencies and the budget allocation needed to implement the work plan. In the K/L work plan, the vision, mission, goals, policies, programs, activities, outputs and outcomes are described. Meanwhile, the budget allocation describes the costs for each program and activity. On a practical level, budgeting activities include program proposals, activities, outputs and outcomes to be achieved, consolidating budgets at the K/L level and units below K/L, reviewing programs/activities/outputs, conducting reviews with Ministry of Development Plan (Bappenas) and/or Ministry of Finance, draws policy recommendations, and conducts budget discussions with the Indonesian Parliament. All implementation of this stage is input from the implementation of PBB so that whether it is implemented or not is important enough to know. For this reason, the first question related to the substance of this survey is related to the role of respondents in the budgeting process. Respondents were asked to choose all things that fit their role and/or their everyday work. Most of the respondents in this study have a role in "reviewing programs, activities, outputs and outcomes". The sequence of roles included in the top three is to conduct "Review of programs/activities with Bappenas" and "conduct budget studies with the Directorate General of Budget". The full survey results are presented in Table 4. Compare to the result of AABPA survey in US, we can conclude that the major role of Indonesia budget analysts is almost the same with US budget professional, in the form of review and analyst the budget. However for other roles, we were not succeeded in expressing the role that Indonesian budget analyst can agree, compare to the role of US budget professional can agree. As we can see in table 4, each role for US budget professional was selected by at least 41% of respondents, almost the same with the second most selected role by Indonesian budget analysts. We adapt

many budget roles selection in this question, due to different budget process between Indonesia and US. Next, to explore the process of implementing PBB, respondents were asked what elements were important for effective budgeting. Effective budgeting according to the respondent's are (1) the budgeting process that can ensure the relationship between the budget and K/L strategic planning, (2) The budgeting process that includes an explanation of the required resource needs and potential impacts that arise, (3) and the budgeting process that provides flexibility for budget preparers to select and arrange inputs in their own K/L. The full survey results are presented in Table 5. Compare to the results of AABPA survey, the budget element most chosen by Indonesian budget analysts differs from that chosen by US budget professional. The goal of PBB, to improve budget calculation, is well represented by the element of budget, "explain needs and impact," and US budget professional agree on that. The elements most chosen by Indonesian budget analyst, "links budget to strategic plan," actually is more difficult to attain. Here we can conclude that, Indonesian budget analyst are still doubtful about the achievement of PBB implementation. To explore further, the elements of the budgeting process, then the questionnaire asked how effective it was each for elements to perform in each own K/L, as respondent concerned. The survey results found that all of these elements were carried out effectively. The survey also asked about the issue of requests for additional funds submitted by K/L. The result of this survey found that before submitting a request for additional funds to the Ministry of Finance, 75% of K/L considered first to reduce funding for other activities in their own K/L. This is done by reducing funding for non-priority activities and reducing funding for activities that are not on target. K/L do this because they also understand the fiscal capacity of the state budget is limited. Meanwhile, there were 25% of K/L who did not consider first to reduce funding for other activities. This is because the budget conditions for other activities are very limited, and the additional proposals are what their K/L needs. The survey also asked the same questions to practitioners from Directorate General of Budget of the Ministry of Finance, as a unit that reviews of the K/L budget proposals. The survey found that if there were proposals for additional budgets by K/L, 95.7% of budget analysts considered first to evaluate and reduce funding for activities in the K/L who submitted the proposal. They suggested optimizing the budget through the utilization of the potential budget that was not absorbed, budget efficiency, and budget reallocation to reduce budget waste. This is also due to a deep understanding from analysts that the fiscal capacity of the state budget is limited so that the budget constraints need priority scale. The survey results also found the reasons for the ministries/agencies (K/L) to submit additional budget requests to the Ministry of Finance because of the following factors: (1) presidential directives, new policies and current political developments, (2) implementing defined national priority policies, (3) needs incidental, contingency, and urgent need, and (4) addition of number of employees, addition of targets, and volume of activities. Some of the efforts that can be made by the Government to improve the budgeting process according to the survey results are as follows: (1) improving employee skills, especially for appraising proposals for programs/activities (new initiative), examining the cost

structure, analyzing the efficiency and effectiveness of budget allocations, (2) budget allocations that are right on target and program outcomes as felt by the community, (3) budgeting is done dynamically according to the development of the situation, flexible in implementation, but governance must be maintained, and (4) budgetary needs of K/L adjusted to government policy and considering government fiscal capacity. The second aspect that was attempted to explore with the survey on the dimensions of the process of the PBB implementation system was to uncover the problems faced and felt by PBB practitioners. It turned out that the practitioners noted the problems and challenges of implementing PBB, including difficulties in formulating performance, lack of ability to link the components of PBB with budget allocations, and lack of competent of human resources. These three things are the main problems in implementing PBB in Indonesia. The full survey results are presented in Table 6. Regarding the output of PBB implementation system, this survey asked the direct and indirect impacts felt by budget practitioners in implementing PBB. The survey found a direct impact as presented in Table 7, that the main benefits of implementing PBB are the implementation of PBB can "influence the effectiveness of ministries/agencies programs" and "reduce duplication of K/L activities". All of the respondents agree with this choice. The results of this research are consistent with research conducted by Melkers (2001) that the most important factor in implementing PBB is "improving the effectiveness of government programs". The survey results also found a direct impact that the implementation of PBB could increase the efficiency of government programs through cost savings. Besides, the implementation of PBB is considered to be able to improve government decision making, improve K/L's coordination with Bappenas, Directorate General of Budget, and related Commissions in the DPR, and can meet the demands of the community. For the indirect impacts of implementing PBB, the results can be seen in Table 8. All central government budgeting practitioners agreed that implementing PBB could improve better understanding of government operational activities, and overall K/L budgeting was better since the adoption of PBB. Government budgeting practitioners also argued that the adoption of PBB also had the impact of changes in budget allocations that were more directly attributable to output/outcomes. If the K/L had not implemented PBB as a whole, but it was only partially implemented, they also believed that it would be better than not doing anything. The results of the survey in Table 8 also prove that the implementation of PBB can improve communication between K/L and Bappenas and Directorate General of Budget. However, the budgeting practitioners still doubt there is an increase in communication with the relevant commissions in the DPR. This indicates that in the context of the discussion and determination of the State Budget between the K/L and the relevant commission in the DPR, PBB approach with an output base has not been widely used. Under its authority, the parliament as a political institution in its budget discussions and determination is inseparable from the political base approach. The survey results also prove that the implementation of PBB does not increase the workload of K/L employees. The survey results above indicate that, although there are still many problems, the government budgeting practitioners feel the benefits and positive effects

of implementing PBB. It is interesting to note that, the least indirect impact of PBB as chosen by Indonesian budget analyst is "PBB has increases my workload." This indirect impact, nevertheless, is the third most chosen by US budget professional. From this, we can conclude that, the practice of PBB that Indonesia implemented, seems not to have been absorbed by Indonesian budget analysts.

## 5. CONCLUSION, LIMITATIONS, AND CONTRIBUTIONS

The survey results in this study conclude several things as follows:

1. Effective budgeting consists of (1) a budgeting process that can ensure the relationship between the budget and K/L's strategic planning, (2) the budgeting process that includes an explanation of the required resource requirements and potential impacts that arise, (3) and budgeting process that provides flexibility for budget preparers to select and arrange inputs in their own K/L.
2. The main problems and challenges of implementing PBB in Indonesia include difficulties in formulating performance, lack of ability to connect the components of PBB with budget allocation, and lack of competent human resources.
3. The direct and indirect impacts of implementing PBB are as follows:
  - a. The direct impact of the implementation of PBB is to improve the effectiveness of K/L programs, reduce duplication of K/L activities, improve the efficiency of government programs through cost savings, improve government decision making, improve K/L coordination with Bappenas, Directorate General of Budget, and the Commission related to the DPR, and can meet the demands of the community.
  - b. The impact of implementing PBB is to improve better understanding of government operational activities, better K/L budgeting, changes in budget allocation can be directly attributed to output/outcome, improve communication between K/L and Bappenas and Directorate General of Budget.

By understanding the system related to this PBB implementation, it is expected that the government, especially the Ministry of Finance, can take steps to correct existing deficiencies and strengthen what has been considered good. Performance-based budget is an actual technique to improve the effectiveness of budget allocation changes from traditional line-item based techniques. There have been a lot of resources spent to implement this system. It will be wasteful if, in the end, this PBB system does not achieve the expected improvement objectives.

In addition to its contribution, the results of this research certainly have limitations, especially in terms of the use of adapted question items from survey's research in the United States, which are not necessarily suitable with the Indonesian context, even though they are equally about the implementation of PBB. Future research needs to try to explore the dimensions of the implementation of PBB itself which are more explored from PBB practice in Indonesia. The second limitation is related to the use of a simple system theory approach. Further research can examine with more holistic and quantitative techniques such as system dynamic.

## REFERENCES

- [1] Agus, Puji, and Riyanto. 2012. "Pengaruh Implementasi Penganggaran Terpadu, Penganggaran Berbasis Kinerja, Dan Kerangka Pengeluaran Jangka Menengah Terhadap Kinerja." Jakarta.
- [2] American Association for Budget and Program Analysis (AABPA) and Grant Thornton. 2011. "The First Survey of Federal Budget Professionals on the Process, Their Careers and the Opportunities." Washington, D.C.
- [3] Andrews, Matthew, and Herb Hill. 2003. "The Impact of Traditional Budgeting Systems on the Effectiveness of Performance-Based Budgeting: A Different Viewpoint on Recent Findings." *International Journal of Public Administration* 26 (2): 135–55. <https://doi.org/10.1081/PAD-120018299>.
- [4] Ahmad, I., & Ahmad, S. 2018. Multiple Skills and Medium Enterprises Performance in Punjab Pakistan: A Pilot Study. *The Journal of Social Sciences Research*: 44-49: 44.
- [5] Binnendijk, Annette. 2000. "Results Based Management in The Development Co-Operation Agencies : A Review of Experience." In *Dac Working Party on Aid Evaluation*.
- [6] BPKP. 2005. "Pedoman Penyusunan Anggaran Berbasis Kinerja." Jakarta.
- [7] DJA. 2010. "Persiapan Penyusunan RKA-KL 2011." Jakarta.
- [8] Geraghty, Lena, and Katherine Klosek. 2016. "Performance-Based Budgeting." <https://centerforgov.gitbooks.io/performance-based-budgeting/content/whatispbb.html>.
- [9] Grizzle, Gloria A., and Carole D. Pettijohn. 2002. "Implementing Performance-Based Program Budgeting: A System-Dynamics Perspective." *Public Administration Review* 62 (1): 51–62. <https://doi.org/10.1111/1540-6210.00154>.
- [10] Hijal-Moghrabi, Imane. 2017. "The Current Practice of Performance-Based Budgeting in The Largest U.S. Cities: An Innovation Theory Perspective." *Public Performance & Management Review* 40 (4): 652–75. <https://doi.org/10.1080/15309576.2017.1313168>.
- [11] Hood, Christopher. 1991. "A Public Management for All Seasons?" *Public Administration* 3 (19).
- [12] Hou, Yilin, Robin S Lunsford, Katy C Sides, Kelsey A Jones, Source Public, *Administration Review*, No May June, et al. 2011. "State Performance-Based Budgeting in Boom and Bust Years: An Analytical Framework and Survey of the States." *Public Administration Review* 71 (3): 370–88. <https://doi.org/10.1093/ilc/fqm045>.
- [13] Madjid, Noorholis, and Hasan Ashari. 2012. "Kajian Terhadap Penerapan Kerangka Pengeluaran Jangka Menengah Pada Badan Pendidikan Dan Pelatihan Keuangan." Jakarta.
- [14] Mauro, Sara Giovanna, Lino Cinquini, and Giuseppe Grossi. 2017. "Insights into Performance-Based Budgeting in the Public Sector: A Literature Review and a Research Agenda." *Public Management Review* 19 (7): 911–31. <https://doi.org/10.1080/14719037.2016.1243810>.

- [15] Melkers, Julia E., and Katherine G. Willoughby. 2001. "Budgeters' Views of State Performance-Budgeting Systems: Distinctions across Branches." *Public Administration Review* 61 (1): 54–64. <https://doi.org/10.1111/0033-3352.00005>.
- [16] Navin, B. 2003. "Guide to Performance Based Budgeting," 1–15. <http://www.cgg.gov.in/workingpapers/WP-113-127.pdf>.
- [17] Nemec, Juraj, and Michiel S. de Vries. 2019. *Effectuating Performance-Based Budgeting Takes Time*. Springer International Publishing. [https://doi.org/10.1007/978-3-030-02077-4\\_14](https://doi.org/10.1007/978-3-030-02077-4_14).
- [18] Taufiqurrohman. 2014. "Pelaksanaan Anggaran Berbasis Kinerja Di Pemerintahan Daerah: Tantangan Dan Hambatan." *Jurnal Jejaring Administrasi Publik*, 21–25.
- [19] University of Twente. 2004. "Communication Theories." [www.utwente.nl/communication-theories](http://www.utwente.nl/communication-theories).