

A Review on Budgetary Fairness, Budget Satisfaction and Managerial Performance: Evidence from Mechanistic Public Sector Organization

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Abstract

This paper examines budgetary fairness and the mediating roles of budget satisfaction in determining their effect on managerial performance in budget setting in public sector organization, mechanistic environment. Exploring organizational justice theory, it is proposed that budgetary fairness dimensions interact with budget satisfaction to affect managerial performance. Structural equation modelling analysis on the data obtained from 128 budget managers in mechanistic public organization via survey questionnaire found to be significant. The paper suggests fairness and budget satisfaction are crucial factor in determining managers performance in budget process.

Keywords: Budgetary Fairness, Budget Satisfaction, Managerial Performance, Mechanistic Public Sector Organization

1. Introduction

The research on the role of budgetary fairness in budget setting in public sector especially in mechanistic public sector organization has not been studied extensively. Limited evidence to support its roles in mechanistic public sector budget setting has prompted further research on this area. This paper examines whether budget satisfaction mediates budgetary fairness to effect managerial performance in mechanistic organization.

The contribution of fairness in budget setting has been linked and tested in fractional dimension, mostly procedural fairness (Lau & Lim, 2002; Lau and Tan, 2012; Zainuddin and Isa, 2011a and Rachman, 2012, 2014) and full dimension of organizational fairness inclusive of procedural, distributive and interactional fairness (Maiga, 2006). Fairness has been studied in many perspectives of budgetary setting in manufacturing unit in combination with other variables such as a predictor to performance in direct relationship (Lau and Lim, 2002; Rachman, 2014), mediator via intervening effect (Zainuddin and Isa, 2011a; Lau and Tan, 2012; Rachman, 2012, 2014; Kohemeyer et al, 2014) mediator to motivation (Zainuddin and Isa, 2011b). Fairness has been linked to have interaction effect in budgetary participation and motivation relationship (Zainuddin and Isa, 2011b), budget satisfaction and budget performance (Maiga, 2006), as a predictor in relation to turnover intention (Staley and Magner, 2008). Despite its linkages to motivation, satisfaction and performance, some studies show evidence of its role on budget slack (Maiga and Jacobs, 2007; Oktorina and Soenarno, 2014), organizational commitment (Kohemeyer et al, 2014). Most of previous research utilise structural equation modelling with path model for their hypothesis testing analysis, using Smart PLS as a statistical tool (Maiga, 2006; Zainuddin and Isa, 2011a; Rachman, 2012, 2014). Interestingly, the study by Maiga and Jacobs (2007) has pointed out that outcome of budgeting procedure influences managers' attitude and behaviour because budget performance may affect manager's organizational reward both tangible and intangible reward. This is due to managers' concern on their performance, increase in organizational commitment and trust. Fairness is important as it increases organizational commitment, trust and reduces negative perceptions reactions to unfavourable budget. Employing social exchange model and expectancy model of motivation, their research found the three fairness dimensions have direct positive effect on budget satisfaction and budget satisfaction subsequently has direct effect on budget performance.

Budgetary setting environment involves the sharing of budget information between superior and subordinates. At this point, superior and subordinate manager at each level of responsibility exchange their budget proposal and counter proposal and finally compromise to some quantum of budget allocation. Therefore, the budgeting allocation needs to be carried out in ethical manner as this will affect the managers' attitude and behaviour and consequently, budgetary outcomes.

2. Theoretical Framework, Operational Definition and Hypothesis Development

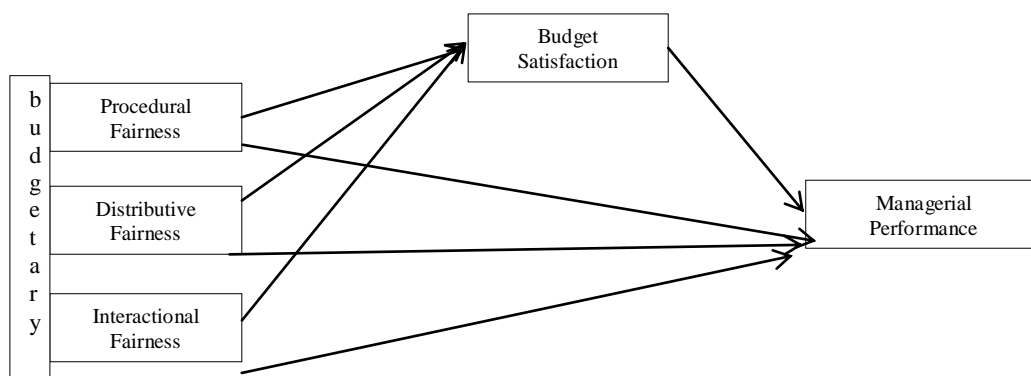
The word budgetary fairness is evolved from equity theory which concerns employees' performance (Adam, 1965). Current budgetary literature highlights three dimensions of budgetary fairness that are procedural, distributive and interactional fairness, which are important variables in determining organizational success. Procedural fairness is defined as a procedure used in allocating the resources (Thibaut and Walker, 1975). Distributive fairness is concerned on 'fair share' that is expectations about what they have received or allocated in relative to other managers (Maiga, 2006). Interactional fairness is defined

as the quality of formal communication between employees in organization in decision making process (Baldwin, 2006).

The effect of full dimension of budgetary fairness encompassing procedural, distributive and interactional fairness showed consistent evidence with direct and significant effect on budget satisfaction (Maiga, 2006). The result of budgetary fairness mainly represented and viewed from a single dimension of procedural fairness also continuously consistent. Positive and significant both direct and indirect effect on performance includes (Lau and Lim, 2002; Maiga, 2006; Rachman, 2014), positive and significant effect as mediating role affecting motivation (Zainuddin and Isa, 2011a).

This study suggest there is positive relationship between fairness and budget satisfaction that effect managerial performance, illustrated via the theoretical framework in Figure 1 below:

Figure 1: Theoretical Framework between Fairness, Budget Satisfaction and Managerial Performance



2.1 Operational Definition

Budgetary Fairness: Budgetary procedural fairness is defined as the best practices that upholding fairness in term of procedure use in determining the budget allocation and the fair communication in information sharing between superior and subordinates during budget activities.

Budget Satisfaction: Satisfaction is a pleasurable or positive emotional state that result from self-appraisal of experiences (Livingstone et al 19950 as quoted in Maiga (2006). This study defines budget satisfaction as a high degree of acceptability after an individual feel that their budget requirement has been fulfil to enable them to execute and achieve their planned activities accordingly.

Managerial Performance: Nouri and Parker (1996) asserted that managerial performance is a function of willingness, capacity and opportunity. Willingness mostly concern to work motivation while capacity is related to individual abilities, skills and energy levels. Opportunity refers to the job-related environmental factors that facilitate or hinder performance, such as equipment, supplies, co-worker actions and organizational policies.

Mechanistic organization differ from organic organization as the structure of command, control and authority normally hierarchical with subordinate is less consulted and has little chance in centralized

decision making process (Marshall, 1983). We expect that managerial performance is affected due to influence by mechanistic environment where less focus are given on fairness budget satisfaction.

2.2 Hypothesis Development

2.2.1 Procedural Fairness, Budget Satisfaction and Managerial Performance

Perceived procedural fairness may influence the subordinate satisfaction due to employees believe they are given a fair treatment over the budgeting process and outcomes decisions (Thibaut and Walker, 1975). When the employee feels they have been receiving fair treatment by the superior during the budget setting process, it will influence subordinate towards active collaboration with superior, thus improving budget satisfaction. Budget satisfaction on the other hand lead to higher performance. Therefore, the following hypothesis is developed:

H1. Budget satisfaction mediate the significant and positive effect of procedural fairness on managerial performance.

2.2.2 Distributive Fairness, Budget Satisfaction and Managerial Performance

Perceived distributive fairness may influence the subordinate satisfaction due to employees believe they are given a fair treatment over the budgeting process and outcomes decisions (Thibaut and Walker, 1975). When the employee feels they have been receiving fair treatment by the superior during the budget setting process, it will drive the subordinate to improve budget satisfaction and subsequently budget satisfaction lead to higher performance. Thus the following hypothesis is developed and put forward:

H2. Budget satisfaction mediate the significant effect of distributive fairness on managerial performance.

2.2.3 Interactional Fairness, Budget Satisfaction and Managerial Performance

Maiga (2006) noted that by allowing the employee to participate in budgetary process may lead to increase interactional communication between superior and subordinates. Moorman (1991) noted that perceived interactional fairness may be connected to how employees judge supervisor 's valuation on their allocation thus affecting satisfaction and subsequently to improve in performance. Thus the following hypothesis is developed and put forward:

H3. Budget satisfaction mediate the significant effect of distributive fairness on managerial performance.

3. Research Methodology

3.1 Sample Selection and Data Collection Procedure

This study focuses on budget managers from 130 budget responsibility centers across department in a mechanistic public organization selected for this study. The budget managers were purposively selected and nominated as sample respondents based on their full time direct involvement in budget setting, whose appointments are directly linked to budget related tasks and have years of relevant budget experience and budget authorization. A budget responsibility center with bigger budget volume is given more than one questionnaire considered appropriate as the managers such allocation are expected to have bigger accountability. These budget managers perform important budgetary roles and activities, therefore,

the findings of a study may provide a meaningful and interesting comparison with prior studies which have largely focused on the private sector. The experience in budget is meaningful as this will add the credibility of the data.

3.2 Instruments Measurement, Validation and Data Analysis

The items used to measure procedural fairness were adapted from Levanthal (1980) six rules for determining the fairness allocation procedure (Maiga, 2006). Following Wentzel (2002) approach, this study uses two items in relation to representativeness rule (Levanthal, 1980) and the informational facet of procedural fairness (Greenberg, 1993). Distributive fairness was measured using four-items adapted from Magner and Johnson (1995) scale which was developed for use in the budgeting environment and assesses various comparative bases (needs, expectations, and what is deserved) that managers may use when judging the fairness distribution. Additional item from Greenberg (1993) addresses informational facet of distributive fairness, Interactional Fairness was measured using five - items from Folger and Konovsky (1989) and Moorman (1991) works. The instruments measure the superior interpersonal behaviour concerning supervisor communicating with subordinates with regards to the extent to which the supervisor response to the employee needs, employees rights, in honest and dignified manner (Maiga, 2006). The instruments required the respondent to measure the extent their supervisor response to their budget need. Budget satisfaction was measured using three- item measurement from Smith, Kendall and Hulin (1969) while managerial performance was measured using self-rated nine-item developed by Mahoney et al. (1963,1965) and additional one item testing the transformational abilities of the manager with the given budget. All items of the research instruments were ranging from 1 (strongly disagree/strongly dissatisfied/low/very low performance) to 5 (strongly agree/strongly satisfied/high/very high performance). The Cronbach Alpha of the instruments are found to be high with more than 0.60 which are considered very high reliability (Chua, 2012), while the factor loadings indicates more than 0.5, within the acceptable range as recommended by Chin (1998). Structural equation modelling via SMART PLS is used to test and analyze the hypotheses.

4. Result Analysis

4.1 Procedural Fairness, Budget Satisfaction and Managerial Performance

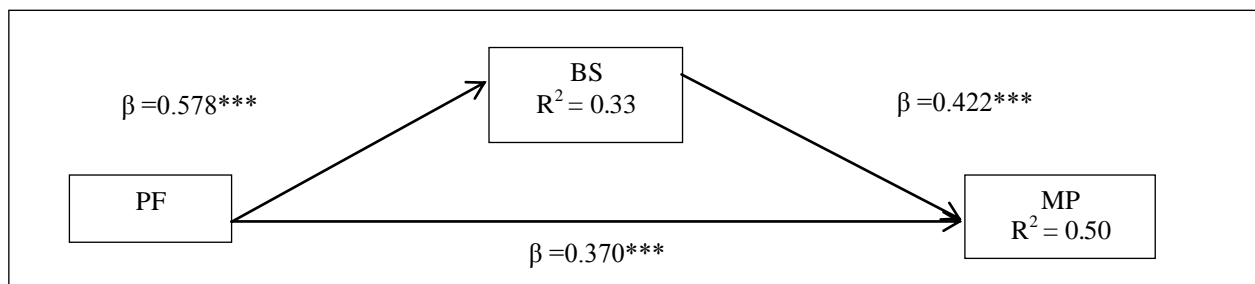
Hypothesis being tested is:

H1. Budget satisfaction mediates the effect of procedural fairness on managerial performance

The result in Figure 2 below, obtained from bootstrapping in PLS SEM procedure shows the combination of procedural fairness and budget satisfaction has explained 50% variance in managerial performance. Procedural fairness and managerial performance shows positive and significant effect ($\beta=0.370$, $t>4.070$, $p<0.000$) while procedural fairness has positive and significant effect on budget satisfaction with R^2 at 0.33. ($\beta=0.578$, $t>8.542$, $p<0.000$). The effect of budget satisfaction on managerial performance is significant ($\beta=0.422$, $t>4.896$, $p<0.000$). Following Hair et al 2014 method of assessing VAF value to determine the strength of mediator effect, the model shows VAF of 0.40. Consequently, this value indicates that 40% of procedural fairness effect on managerial performance is explained via budget satisfaction mediator. Since the value of VAF is larger than 20% but smaller than 80%, it is concluded that partial mediator exist. The result conform to Hair et al (2014) which suggest that the mediating effect only exist when indirect effect between third variable and criterion variable is significant. The result

provides evidence that budget satisfaction does partially mediates the relationship between procedural fairness and managerial performance. Therefore, the hypothesis is supported.

Figure 2: Path relationship between procedural fairness, budget satisfaction and managerial performance



Note: Significant at * $t > 1.96$ ($p < 0.05$); ** $t > 2.58$ ($p < 0.01$); *** $t > 3.29$ ($p < 0.001$)

As expected, budget satisfaction plays a mediating effect on the relationship between fairness and performance. As supported in the earlier direct effect studies, both procedural fairness had a direct positive and significant effect on both budget satisfaction and managerial performance, indicating the presence of budget satisfaction as mediator has influenced the performance. This means that budget satisfaction acts as a contingent factor to affect performance, consistent with the contingency setting theory. Due to limited studies involving budget satisfaction in fairness and performance relationship, this study offers new evidence to the literature, with regards to budget setting in public sector. Therefore, it is suggested that fairness in budget setting influenced the managers' satisfaction on the allocation of resources and thus lead to positive managerial outcomes, that is performance.

4.2 Distributive Fairness, Budget Satisfaction and Managerial Performance

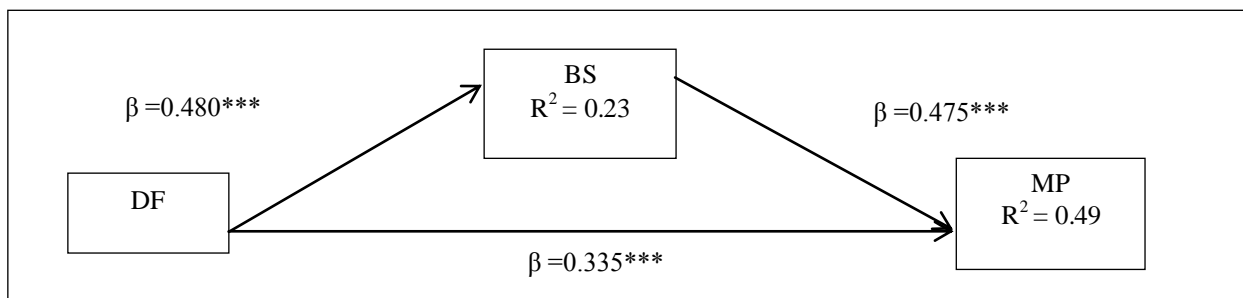
Hypothesis being tested is:

H2. Budget satisfaction mediates the effect of distributive fairness on managerial performance

The result in Figure 3 below, obtained from bootstrapping in PLS SEM procedure shows the combination of distributive fairness and budget satisfaction has explained 49% variance in managerial performance. Distributive fairness and managerial performance show positive and significant effect ($\beta = 0.335$, $t > 3.855$, $p < 0.000$) while distributive fairness has positive and significant effect on budget satisfaction with R^2 at 0.23. ($\beta = 0.480$, $t > 5.035$, $p < 0.000$). The effect of budget satisfaction on managerial performance is significant ($\beta = 0.475$, $t > 6.508$, $p < 0.000$). Following Hair et. al. 2014 method of assessing VAF value to determine the strength of mediator effect, the model shows VAF of 0.40. Consequently, this value indicates that 40% of distributive fairness effect on managerial performance is explained via budget satisfaction mediator. Since the value of VAF is larger than 20% but smaller than 80%, it is concluded that partial mediator exists. The result conforms to Hair et al (2014) which suggest that the mediating effect only exist when indirect effect between third variable and criterion variable is significant. The

result provides evidence that budget satisfaction does partially mediates the relationship between distributive fairness and managerial performance. Therefore, the hypothesis is supported.

Figure 3: Path relationship between distributive fairness, budget satisfaction and managerial performance



Note: Significant at * $t > 1.96$ ($p < 0.05$); ** $t > 2.58$ ($p < 0.01$); *** $t > 3.29$ ($p < 0.001$)

As expected, budget satisfaction plays a mediating effect on the relationship between fairness and performance. As supported in the earlier direct effect studies, both distributive fairness had a direct positive and significant effect on both budget satisfaction and managerial performance, indicating the presence of budget satisfaction as mediator has influenced the performance. This means that budget satisfaction acts as a contingent factor to affect performance, consistent with the contingency setting theory. Due to limited studies involving budget satisfaction in fairness and performance relationship, this study offers new evidence to the literature, with regards to budget setting in public sector. Therefore, it is suggested that fairness in budget setting influenced the managers' satisfaction on the allocation of resources and thus lead to positive managerial outcomes, that is performance.

4.3 Interactional fairness, Budget satisfaction and Managerial Performance

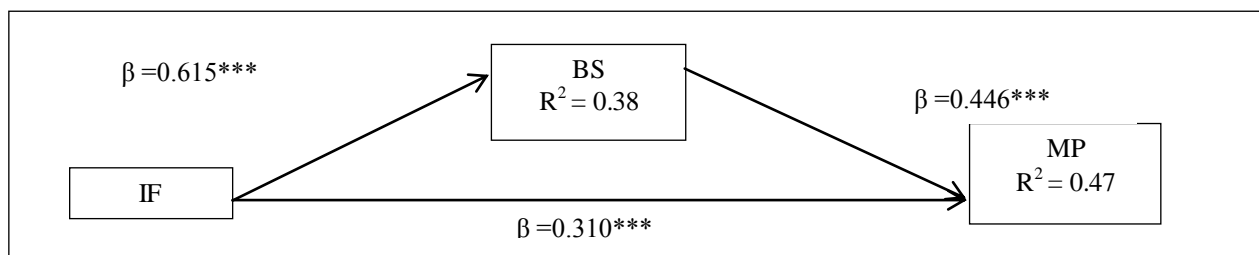
Hypothesis being tested is:

H3. Budget satisfaction mediates the effect of interactional fairness on managerial performance

The result in Figure 4 below, obtained from bootstrapping in PLS SEM procedure shows the combination of interactional fairness and budget satisfaction has explained 47% variance in managerial performance. Interactional fairness and managerial performance show positive and significant effect ($\beta = 0.310$, $t > 3.485$, $p < 0.000$) while interactional fairness has positive and significant effect on budget satisfaction with R^2 at 0.38. ($\beta = 0.615$, $t > 9.399$, $p < 0.000$). The effect of budget satisfaction on managerial performance is significant ($\beta = 0.446$, $t > 4.790$, $p < 0.000$). Following Hair et al 2014 method of assessing VAF value to determine the strength of mediator effect, the Model shows VAF of 0.47. Consequently, this value indicates that 47% of interactional fairness effect on managerial performance is explained via budget satisfaction mediator. Since the value of VAF is larger than 20% but smaller than 80%, it is concluded that partial mediator exists. The result conforms to Hair et. al. (2014) which suggest that the mediating effect only exist when indirect effect between third variable and criterion variable is significant. The

result provides evidence that budget satisfaction does partially mediates the relationship between interactional fairness and managerial performance. Therefore, the hypothesis is supported.

Figure 4: Path relationship between interactional fairness, budget satisfaction and managerial performance



Note: Significant at * $t > 1.96$ ($p < 0.05$); ** $t > 2.58$ ($p < 0.01$); *** $t > 3.29$ ($p < 0.001$)

As expected, budget satisfaction plays a mediating effect on the relationship between fairness and performance. As supported in the earlier direct effect studies, both interactional fairness had a direct positive and significant effect on both budget satisfaction and managerial performance, indicating the presence of budget satisfaction as mediator has influenced the performance. This means that budget satisfaction acts as a contingent factor to affect performance, consistent with the contingency setting theory. Due to limited studies involving budget satisfaction in fairness and performance relationship, this study offers new evidence to the literature, with regards to budget setting in public sector. Therefore, it is suggested that fairness in budget setting influenced the managers' satisfaction on the allocation of resources and thus lead to positive managerial outcomes, that is performance.

5. Conclusion

The primary purpose of this study is to examine the mediating effect of budget satisfaction in the relationship between budgetary fairness dimensions and managers performance in budgetary setting, in mechanistic environment. The study proposed that budget satisfaction mediates with procedural, distributive and interactional fairness to effect managers performance.

Overall results show significant findings and thus support the hypotheses. This result empirically suggest budget satisfaction is important factor in determining the performance of the manager in the budget process. Enhance managerial performance was evidenced with the significant mediating role of budget satisfaction that exist in budget process. In addition, the study has shown that that budgetary fairness favorably relevant to budget satisfaction as it has a significant influence on managerial performance. The result also suggests the importance of a fairness environment in budgetary setting, as the budget process simply need to avoid authoritative decision that disregards subordinate satisfaction. Management should ensure and consistently and constantly upholding fairness in budgetary setting as it will trigger budget satisfaction and consequently leads to higher managerial performance. As this study only focus mechanistic environment in public sector the result may not be generalized to other behavioral setting both at public and private sector, thus suggest avenue for further research.

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