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THE INFLUENCE OF BUDGETARY COMMITMENT ON BUDGETING PARTICIPATION AND MANAGERIAL PERFORMANCE OF MIDDLE MANAGERS IN VIETNAMESE ENTERPRISES

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Abstract

The purpose of this research is to analyze the relationship between budgetary commitment and budgeting participation; the relationship between budgetary commitment and managerial performance; and relationship between budgetary participation and managerial performance. In addition the research also aims to provide empirical evidence of the relationship between situational factors, individual factors and budgetary commitment. Research data is collected through questionnaires. The respondents were middle managers working in enterprises located in Ho Chi Minh City, Vietnam. Respondents are responsible for budgeting for business. This research used 210 questionnaires collected randomly. This research uses a Path-SEM model for analyzing. The results show that budgetary commitment has a significant relationship with budgeting participation; budgetary commitment has a significant relationship with managerial performance; and budgeting participation has a significant relationship with managerial performance. Besides, the results of the research provide empirical evidence of the relationship between situational factors, individual factors, and budgetary commitment.

Keywords: *Scientific abstract, research paper, academic conference*

Introduction

Research Background

Budget is a detailed financial plan of a company for upcoming years (Kim Langfield-Smith, 2006). According to Colin Drury (2000), budgetary is established for various purposes in management. Budget is one of research themes in management accounting. Most of previous researches based on economic, psychology and sociology. Psychological perspective suggested that personality effected budgeting. Research questions have made related to the influence of budget variables on personal thinking



and behavior.

Budget participation, bottom-up budgeting, is one of methods allowed various level managers joining budgeting process. According to Atkinson and partners (2007), budget participation allowed all level managers build budget targets. This method lets employee participate in decision making process. Researches approved the increase in working satisfaction and working spirit when employees join in budgeting process. Hilton, Maher and Selto (2000) said that: most of people will work better and harder to achieve their own targets if they joined in the discussion to build budget targets. At small and medium enterprises, middle managers are functional managers who made budget targets for their department and are the bridge to connect higher level managers and lower level managers. Therefore, middle managers play an important role in budgeting process.

Researches about budget participation tried to find out the evidences for the relationship among budgeting, managerial performance, budget commitment, etc. However, there are conflicts in the research results.

This research was conducted to analyze the relationship between budgetary commitment and budgeting participation; the relationship between budgetary commitment and managerial performance; and relationship between budgetary participation and managerial performance. In addition the research also aims to provide empirical evidence of the relationship between situational factors, individual factors and budgetary commitment. This research focuses on small and medium enterprise located in Ho Chi Minh City, Vietnam where middle managers as key players in the budgeting process become the respondents.

This research contributes to enrich the knowledge about budgeting in detail and management accounting in general. Furthermore, this research helps Vietnamese managers in adopting management accounting into their businesses.

This research tries to answer: the influence of budget commitment on budget participation and managerial performance of Vietnamese SME. Contingent variables and personality variables influence budget commitment of middle managers in Vietnamese SME. In order to answer these research question this research must prove: (i) the positive relationship between budget commitment and budget participation, budget commitment and managerial performance, budget participation and managerial performance; (ii) the influence of situational factors and individual factors on budget commitment.

Literature Review and Hypothesis Development

Budgetary Commitment and Its Antecedents

Antecedents are driven to independent variables (Shields and Shields, 1998). Therefore, these antecedents will effect or influence independent variables and become



an important clue to understand the independent variables deeply.

Neubert and Cady (2001) investigated program commitment, the relationship between program commitment and organization performance, and program commitment's antecedents. Neubert and Cady (2001) assumed the compliance awareness (situational factors: material encouragement, leadership behaviour, co-worker behaviour) and emotional awareness (individual factors: organization commitment, change efficacy, teamwork orientation) positively influence program commitment.

In the reasearch on the influence of budget participation on the relationship between program commitment and managerial performance, Kevin T. Breaux (2004) assumed: situational factors and individual factors include material encouragement, leadership behaviour, co-worker behaviour, organization commitment, change efficacy, and teamwork orientation positively influence program commitment.

Neubert and Cady (2001) defined program commitment is the degree of the attachment to the specific program or innovation in the organization plan. Breaux (2004) mentioned program as budgeting process.

Budgetary Commitment and Budgeting Participation

Budget participation is the budgeting process which allow middle managers participated in building budget targets related to their departments and ensure the organization congruence. Budget participation ignite commitment sense and encourage innovation of middle managers.

Typical researches about this topic are Neubert and Cady (2001), Breaux (2004) and Budi Hartono Kusuma (2017). Neubert and Cady (2001) investigated the influence of program commitment on budget participation. Breaux (2004) provided the evidence about the relationship between program commitment and the degree of congruence in budget participation. These researches show the relationship between program commitment and budget participation. In order word, the person who has high commitment will actively participate in budgeting process. Budi (2017) show negative effect of program commitment on budget participation.

Budgeting Participation and Managerial Performance

Managerial performance is defined as key management, reflect management knowledge and skill. Managerial performance base on managing function of management. Literature review show many researches on managerial performance since 1960. The research results devided into three groups: no effect, negative effect and positive effect.

Evidences proved the positive relationship between budget participation and

managerial performance belong to Bass and Leavitt (1963), Latham and Yukl (1975), Brownell (1981), Brownell and McInnes (1986), Dunk (1993), Indarto and Ayu (2011), Venkatesh and Blaskovich (2012), Rani (2013), Lina (2015), Budi (2017). This relationship means that one participate in budgeting process will has higher managerial performance.

Budgetary Commitment and Managerial Performance

Neubert and Cady (2001) investigated that program commitment positively effects managerial performance. This means budget commitment positively effect on managerial performance. Budi (2017) assumed: budget commitment positively effect managerial performance. However, the hypothesis is rejected in this research.

H₁: Awareness of promotion and motivation has positive influence on budgetary commitment.

H₂: Awareness of leader behavior has positive influence on budgetary commitment.

H₃: Awareness of co-woker behavior has positive influence on budgetary commitment.

H₄: Organizational commitment has positive influence on budgetary commitment.

H₅: Change efficacy has positive influence on budgetary commitment.

H₆: Teamwork orientation has positive influence on budgetary commitment.

H₇: Budgetary commitment has positive influence on budgeting participation.

H₈: Budgetary commitment has positive influence on managerial performance.

H₉: Budgeting participation has positive influence on managerial performance.

Research Model

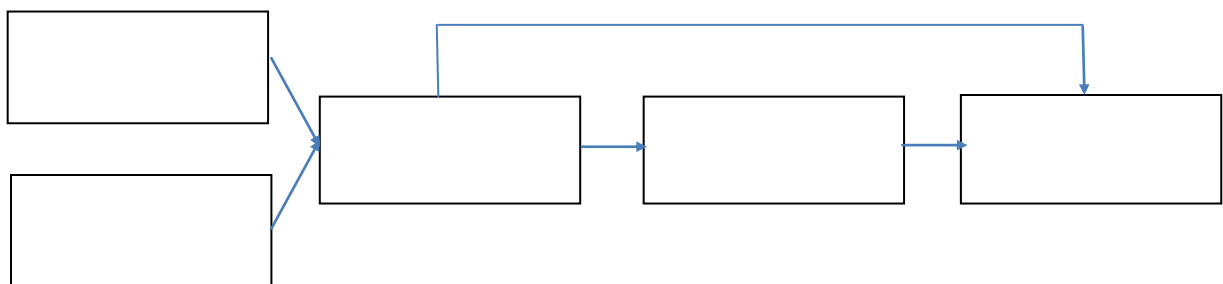


Figure 1. Research Model

Methods

Research Data

This study uses questionnaires to collect data for research purpose. Repondents are middle managers currently working in those enterprised located in Hochiminh city and



surrounding areas.

Variable Definitions and Measurements

Situational factors and individual factors are measured by Likert 5 (1: absolutely disagree, 2: disagree, 3: neutral, 4: agree, 5: absolutely agree). Latent variables based on previous researches.

Promotion and Motivation

Promotion and motivation are company policies not only include tangible benefits but also include intangible benefits. These concepts are measured by 03 instruments adapted from Neubert and Cady (2001) and Breaux (2004) researches.

Leader Behavior

This concept is measured by 10 instruments employed from Neubert and Cady (2001), Podsakoff et.al (1990), Moorman (1991) and Breaux (2004) studies.

Co-worker Behavior

This definition is measured by 6 items adopted from Neubert and Cady (2001) and Breaux (2004).

Organizational Commitment

Organization commitment is measured by 9 items adopted from Neubert and Cady (2001), Mayer and Schoorman (1992) and Breaux (2004).

Change efficacy

Change efficacy is measured by 3 items adopted from Neubert and Cady (2001), Noe and Wilk (1993) and Breaux (2004).

Teamwork Orientation

This variable is measured by 03 items from Neubert và Cady (2001); Moorman và Blakely (1995); Breaux (2004).

Budgetary Commitment

This variable is measured by 6 items adopted from Hollenbeck, Klein, O'Leary and Wright (1989); Neubert and Cady (2001); Breaux (2004); Budi (2017).

Budgeting Participation

This variable is measured by 6 items adopted from Bruns and Waterhouse (1975); Clinton and Hunton (2001).



Managerial Performance

This variable is measured by 9 items adopted from Brownell (1982c); Brownell and Hirst (1986); Brownell and Dunk (1991); Chong and Chong (2002); Merchant (1981); Breaux (2004); Budi (2017).

Data Analysis Method

Statistic Descriptive Test

Descriptive statistics provide an overview of the characteristics of respondents. This test shows the descriptive of work position, years of employment at current job of participated respondents.

Data Quality Test

Reliability Test

Reliability is measured by the Cronbach alpha coefficient. A Cronbach alpha coefficient will be calculated for each variable to measure the internal reliability of the construct. Variable having a Corrected Item – Total Correlation coefficient > 0.30 and a Cronbach's alpha \geq 0.60 is reliable (Nunnally & Burnstein, 1994).

Validity Test

Convergence value and discriminant value are evaluated through exploratory factor analysis (EFA). This study focuses on the following important statistical indicators: Kaiser – Meyer – Olkin measure of sampling adequacy index (KMO), Eigenvalue index, Variance Explained Criteria index, Factor loadings index, Bartlett test. If the variable meets the requirements of Hair & et al (2006), it is retained for subsequent analysis; and Bartlett test is significant if sig. <5% (Hair & et al, 2006).

To test the fit between measurement model and actual data, this research conduct confirmatory factor analysis (CFA). CFA concerns the following issues: Chi-square (CMIN), Chi-square adjust the degree of freedom (CMIN/df), Comparative Fit Index (CFI), Tucker & Lewis Index (TLI), Root Mean Square Error Approximation Index (RMSEA). If P-value > 0.05; GFI, TLI, CFI \geq 0.90 (Bentler & Bonett, 1980); CMIN/df \leq 2 or CMIN/df \leq 3 (Carmines & Mclver, 1981); RMSEA \leq 0.08 (Steiger, 1990); Measurement model fit real data.

Hypothesis Test

Overall Model Fit Test

Structural equation Model (SEM) was used to test the fit of the data to the hypothesized model and to examine the significance of the individual paths. To



determine the overall fit of the model, this research uses multiple measures. These measures are: CMIN, CMIN/df, CFI, TLI, RMSEA parameter. Likewise CFA, If P-value > 0.05; GFI, TLI, CFI \geq 0.90 (Bentler & Bonett, 1980); CMIN/df \leq 2 or CMIN/df \leq 3 (Carmines & Mclver, 1981); RMSEA \leq 0.08 (Steiger, 1990); structural model is fit.

Path Analysis

The hypotheses are evaluated based on the significance of path coefficients obtained in the structural equations model. The significance of each path coefficient say whether the constructs being studied have an effect on other constructs in the model or not.

Bootstrap test

Bootstrap is appropriate method to evaluate the reliability of the estimates

Results

Data Collection

Collected data is primary. Questionnaire was mailed to respondents directly or emailed to respondents working in 57 companies located in Hochiminh city and surrounding. Data description as below:

Table 1 Questionnaires Summary

Description	Amount
Distributed questionnaires	240
Received questionnaires	228
Incomplete questionnaires	18
Used questionnaires	210

Descriptive Statistic

Table 2 Demographics

Demographics	Percentage
Work position	100.00
Chief Accountant / Equivalent	26.67
Manager / Equivalent	37.62
Deputy / Equivalent	14.28
Factory Manager	16.67
Other	4.67
Years of employment at current job	100.00
Less than 1 year	11.90
Over 1 year to 3 years	69.05



More than 3 years

19.05

Data Quality Test

Reliability Test

54 out of 55 observed variables have corrected item – total correlation index more than 0.3 and Cronbach's alpha is from 0.6. these 54 variables are used for further analysis (Nunnally and Burnstein, 1994).

Kết quả phân tích 55 biến quan sát cho thấy 54 biến quan sát có Corrected Item – Total Correlation indexes lớn hơn 0.3 và Cronbach's Alpha từ 0.6 trở lên. Do đó, 54 biến quan sát được đưa vào phân tích ở bước tiếp theo (Nunnally & Burnstein, 1994).

Table 3
Cronbach's Alpha Summary

	Number	Cronbach's Alpha	Minimum Corrected Item-Total Correlation
Promotion and Motivation	3	.718	.530
Leader Behavior	10	.902	.523
Co-worker Behavior	6	.818	.462
Organizational Commitment	8	.867	.552
Change Efficacy	3	.679	.470
Teamwork Orientation	3	.701	.496
Budgetary Commitment	6	.918	.751
Budgeting Participation	6	.921	.717
Managerial Performance	9	.919	.680

Exploratory Factor Analysis

EFA indexes is shown in below table. Các chỉ số phân tích nhân tố khám phá được tóm tắt trong bảng dưới đây:

Table 4
The Indices of Exploratory Factor Analysis

	Acceptable ranges	Proposed model
KMO	> 0.5	0.867
Eigenvalue	> 1	1.109
Factor loadings	> 0.5	> 0.5
Bartlett test	Sig. < 0.05	0.000
Variance explained criteria	> 50%	62.528%



The result show the fit of the model.

Confirmatory Factor Analysis

EFA show 9 factors. These 9 factors go through CFA and SEM analysis by AMOS. 9 factors are managerial performance (9 items), leader behavior (10 items), budget participation (6 items), organization commitment(8 items), co-worker behaviour (6 item), budget commitment (6 items), teamwork orientation (3 items), change efficacy (3 items), promotion and motivation (3 items).

CFA analysis is shown in the below table:

Table 5
The Indice of Confirmatory Factor Analysis

	Acceptable ranges	Proposed model
Cmin		1783.085
Df		1340
P	< 0.5	0.000
Cmin/df	< 3	1.330
IFI	> 0.9	0.925
TLI	> 0.9	0.918
CFI	> 0.9	0.924
RMSEA	< 0.08	0.040

CFA result show the model fit.

Hypothesis Test

Overall Model Fit

Path-SEM is used to test the hypothesis. The result is shown in the below table.

Table 6 Path-SEM is used to test the hypothesis

	Acceptable ranges	Proposed model
Cmin		1805.852
Df		1353
P	< 0.5	0.000
Cmin/df	< 3	1.335
IFI	> 0.9	0.923
TLI	> 0.9	0.917
CFI	> 0.9	0.922
RMSEA	< 0.08	0.040



The result show the model fit. (Segar & Grover, 1993).

Path Analysis

Based on unstandardized regression weights to test the hypothesis.

Table 7
Unstandardized Regression Weights

			Estimate	P
Budgetary Commiment	<---	Leader Behavior	.149	***
Budgetary Commiment	<---	Org. Commitment	.149	.006
Budgetary Commiment	<---	Co-worker Behavior	.230	***
Budgetary Commitment	<---	Teamwork Orientation	.152	***
Budgetary commiment	<---	Change Ifficacy	.199	.001
Budgetary commiment	<---	Prom. & Motivation	.222	.013
Budgeting Participation	<---	Budgetary commiment	.335	***
Managerial Performance	<---	Budgetary commiment	.439	***
Managerial Performance	<---	Budgeting Participation	.346	***

The result show:

H₁: Awareness of promotion and motivation has positive influence on budgetary commitment (0.222) with a statistically significant level of 5%. H1 is supported.

H₂: Awareness of leader behavior has positive influence on budgetary commitment (0.149) with a statistically significant level of 1%. H2 is supported.

H₃: Awareness of co-woker behavior has positive influence on budgetary commitment (0.230) with a statistically significant level of 1%. H3 is supported.

H₄: Organizational commitment has positive influence on budgetary commitment (0.149) with a statistically significant level of 1%. H4 is supported.

H₅: Change efficacy has positive influence on budgetary commitment (0.199) with a statistically significant level of 1%. H5 is supported.

H₆: Teamwork orientation has positive influence on budgetary commitment (0.152) with a statistically significant level of 1%. H6 is supported



H₇: Budgetary commitment has positive influence on budgeting participation (0.335) with a statistically significant level of 1%. H7 is supported.

H₈: Budgetary commitment has positive influence on managerial performance (0.439) with a statistically significant level of 1%. H8 is supported.

H₉: Budgeting participation has positive influence on managerial performance (0.346) with a statistically significant level of 1%. H9 is supported.

Boottrap Test

Boottrap test show $p = 0.001 < 1\%$, therefore the test is approved 5%. Therefore, the model is reliable (Bollen and Stine, 1993).

Conclusion, Limitation, and Recommendation

The results show that budgetary commitment has a significant relationship with budgeting participation; budgetary commitment has a significant relationship with managerial performance; and budgeting participation has a significant relationship with managerial performance. Besides, the results of the research provide empirical evidence of the relationship between situational factors, individual factors, and budgetary commitment.

Limitation of this research is data collected in HCMC and surrounding. This research also did not consider moderating and mediating effect.

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