

## The relationship between budget emphasis, budget planning models and performance

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### ABSTRACT

**Introduction:** In order to provide a new approach about the budget planning models, this study examined the relationship between budget emphasis, budget planning models and performance of Fars Province University of Medical Sciences.

**Method:** This research is a survey-descriptive study on the purpose and its method. The participants of this research included the financial experts in Shiraz University of Medical Sciences (including the accountants) in 2016. The sample size consisted of 250 individuals and the method of sampling used was available sampling. The questionnaire of Kang et al. (2013), after some modifications, was used to gather the data. To evaluate the reliability of the questionnaire, we used Cronbach's Alpha and split-half method. The measurement tools used in the study were reliable and none of the questions was removed. Finally, for analysis of the data, correlation coefficient and regression were applied using SPSS Software Version 23.

**Results:** The results of the study indicated there was a significant relationship between budget emphasis and strategy distinct from budget planning models as well as between strategy distinct from budget emphasis, budget planning models, organizational performance, management performance and budgetary satisfaction. A positive and meaningful relationship among budget planning models and organizational performance, management performance and budgetary satisfaction was found.

**Conclusion:** Based on the research findings, it is necessary to consider the budget concepts, the importance of budgeting, and budgetary participation of the employees and financial managers for improving organizational performance.

**Keywords:** Budget planning models, budget emphasis, distinctive strategy, budgetary satisfaction, organizational performance

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### Introduction

The practical budget is the one which is based on the stated amount, as the figured budget paves the way to have specified objectives for planning and have a tool for controlling the objectives. The content of this approach is that the budget is the best criteria for performance evaluation. The general concept of budgeting is that the organization can be planned in a detailed and significant manner for a future period. Moreover, this plan can be used for guiding, controlling and coordinating various activities of the organization's members (1). In management and control system point of view, budgeting processes can provide the information about organization's performance, its financial performance, and the performable plans; they can be provided by coordination, communications, and performance evaluation. To meet these objectives by these performances, it is necessary to

have a budgeting system that is coordinated with organizational culture. Moreover, attitude and management knowledge about the features of budget, system and the effect of budgeting system on the employees' behavior is necessary (2). In management control system perspective, the budgeting processes can provide information for organization that is aligned with financial plans and their performance and can be imposed by motivations, performance evaluation, control, communication, and coordination (3). Meeting these objectives requires a budgeting system that is coordinated with working culture of an organization. In addition to this approach, the management knowledge about the features of budgeting system and the effect of budgeting system on the employees' behavior has a great importance (4). A model of budget designing is divided into two categories: flexible and inflexible (hard).

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In the flexible budget, the employees have a role in adjusting it or, in other words, they can influence the budget by their ideas. Also, there is more emphasis on the diagnostic connection. A flexible budget should have information and emotional motivations. Information exchange between the employees and supervisors can facilitate the information circulation and impression and this makes the employees think that they are important (5, 6). However, the researches conducted in order to investigate the direct effect of a budgeting design model on management performance show that there isn't necessarily a connection among variables and this reality makes the recognition of one by one relationship between a budget design and performance difficult (7). The budgeting system indicators and the attention of management to the budget can specify the level of impression (8). The emphasis on the budget leads to better objectives achievements; the more emphasis on budget needs the more flexible budgeting design model as it can increase the emotional motivations. The emotional motivations accompanied by cooperation in budgeting leads to better acceptance of the budget and subsequently improves the management performance (9, 10).

This research investigated the relationship among budget emphasis, budgeting planning models and performance by applying the viewpoints of institutional and subjective behavior theories. The great emphasis on budget increases the budgeting planning models' accuracy and appreciates flexible budgeting controls done by senior managers. Also, this research investigated the effect of strategies classification on budgeting emphasis, budgeting planning models and the performance.

**Method**

This is a survey-descriptive research applied in terms of purpose and its method. As far as the theoretical part is concerned, the necessary information was gathered from books, journals and internet websites. The statistical population of this research included the financial experts in Shiraz University of Medical Sciences (including the accountants) in 2016. The sample size consisted of 250 individuals and available sampling was used to collect the data. The questionnaire of Kang et al. (2013), after some modifications, was used to gather the data. This questionnaire includes 5 general and 32 specific questions

by using option 5 point Likert scale. To evaluate the reliability of the questionnaire, Cronbach's Alpha and split-half method were used. The measurement tools used in the study were reliable and none of the questions was removed. Finally, for analyzing the data, correlation coefficient and regression were applied using SPSS Software Version 23.

In order to ensure a reasonable validity, in addition to the formal validity of the corrective feedback of the experts, a pre-test was used in such a way that first the primary questionnaire was distributed among 20 subjects of the sample population chosen randomly, and then the necessary reforms were applied to the questionnaire according to the recommendations of this group. In order to evaluate the reliability, Cronbach's alpha was used. The Cronbach's alpha calculated was equivalent to 0.84; therefore, no question was omitted.

To ascertain the validity of the questions, the researchers corrected the questions through several sessions based on the expert opinion. As a result, the questionnaire is a valid one. To evaluate the reliability of the questionnaire, we used Cronbach's Alpha and split-half method. Because the observed coefficients were above 70% for all of the cases, the measurement tools used in the study were reliable and none of the questions was removed.

The population consisted of financial administrators and assistants in oil refining and petrochemical companies, a subsidiary of the national oil company. There was no sampling method used and we tested the whole society. Due to the possibility that some of the questionnaires do not return, 200 questionnaires were distributed among the population directly. Of the questionnaires distributed, 160 (85% of sample) were returned.

**Results**

This research consisted of two sections of descriptive statistics and inferential statistics; for statistical analysis of the frequency of the questionnaire, the percentages and their related tables (descriptive statistics), correlation coefficient and regression (inferential statistics) were utilized. In inferential statistics, the calculations were done by regression approaches using SPSS 23 software. The descriptive statistics showed that the participants' responses to the questions were considerably similar to each other and they deviated very slightly from the mean.

**Table 1.** General Information of the Questionnaire

	Variables	Frequency	Frequency Percentage	Cumulative Frequency Percentage
Gender	male	215	86	86
	female	35	14	100
Education	Diploma	8	3.2	3.2
	Associate Degree	16	6.4	9.6
	Bachelor	145	58	67.6
	Master's degree and more	81	32.4	100
Age group	20-30	21	8.4	8.4
	30-40	53	21.2	29.6
	40-50	97	38.8	68.4
	50 years old and more	79	31.6	100

**Table 2.** Central Tendency Measure and Dispersion Index of Main Research Variables

Variables	Mean	SD	Kurtosis	Skewness	Min	Max
Budget Emphasis	3.68	0.86	0.23	-0.59	1	5
Budget Contribution	3.32	0.87	-0.32	-0.08	1.17	5
Budget communication	3.37	1.02	-0.27	-0.39	1	5
Budget details	3.26	0.91	-0.26	-0.25	1	5
Budget Planning Models	3.32	0.8	-0.3	-0.16	1.44	5
Differentiation Strategy	3.33	0.93	-0.33	-0.08	1	5
Organizational Performance	3.15	0.91	0.26	0.13	1	5
Management Performance	3.33	0.85	-0.13	0.04	1	5
Budget Satisfaction	3.46	0.93	-0.36	0.035	1	5

**Table 3.** Results of the Research Hypotheses Test

Hypotheses	Variables	F	Sig	Non-Standard Coefficient		Standard Coefficient	T Statistic	Sig
				$\beta$	SD	$\beta$		
H1	Constant	133.68	0.0001	1.28	0.181	-	7.07	0.001
	Budget Emphasis			0.55	0.048	0.59	11.56	0.001
H2	Constant	95.06	0.0001	2.07	0.17	-	12.05	0.001
	Differentiation strategy			0.48	0.05	0.526	9.75	0.001
H3	Constant	157.51	0.0001	2.07	0.17	-	12.05	0.001
	Differentiation strategy			0.536	0.05	0.526	9.75	0.001
H4	Constant	115.91	0.0001	1.32	0.177	-	7.44	0.001
	Differentiation strategy			0.551	0.051	0.564	10.76	0.001
H5	Constant	122.08	0.0001	1.59	0.164	-	9.73	0.001
	Differentiation strategy			0.522	0.047	0.547	11.04	0.001
H6	Constant	53.13	0.0001	1.95	0.198	-	9.88	0.001
	Differentiation strategy			0.41	0.057	0.42	7.28	0.001
H7	Constant	71.89	0.0001	1.27	0.214	-	5.97	0.001
	Budget Planning Model			0.56	0.063	0.498	9.05	0.001
H8	Constant	109.96	0.0001	1.38	0.191	-	7.25	0.001
	Budget Planning Model			0.586	0.056	0.554	10.48	0.001
H9	Constant	106.85	0.0001	1.24	0.209	-	5.93	0.001
	Budget Planning Model			0.633	0.061	0.549	10.33	0.001

The significance level of the first hypothesis test for the lack of impression of budget emphasis on budgeting planning models equaled 0.001. In other words, the significance of this hypothesis was confirmed and the regression model showed that budget emphasis had a significant effect on budgeting planning models. The positivity of standard coefficient showed the direct relationship among the studied variables; in other words, if budget emphasis increases one unit, then budgeting planning models raises 0.55 units.

The significance level of the second hypothesis (the lack of impression of differentiation strategy on budget emphasis) equaled 0.0001, so the significance of this hypothesis was confirmed and the regression model showed that differentiation strategy had a significant effect on budget emphasis.

The third hypothesis tested the relationship between differentiation strategy and budget planning models. The significance level equaled 0.0001, so the regression model

showed that budget planning models had a significant effect on budgeting planning models. Thus, based on estimation parameters, the regression line was calculated, as shown in the Table. The positivity of the line's tangent showed the positive relationship of these two factors; also, the positivity of standard coefficient showed the direct relationship of the studied variables; in other words, if budget planning models increase one unit, then budgeting planning models raise 0.536 units.

The fourth hypothesis test confirmed that there was a positive and significant relationship between differentiation strategy and organizational performance. The positivity of standard coefficient showed the direct relationship of the studied variables; in other words, if differentiation strategy increases one unit, then organizational performance raises 0.551 units.

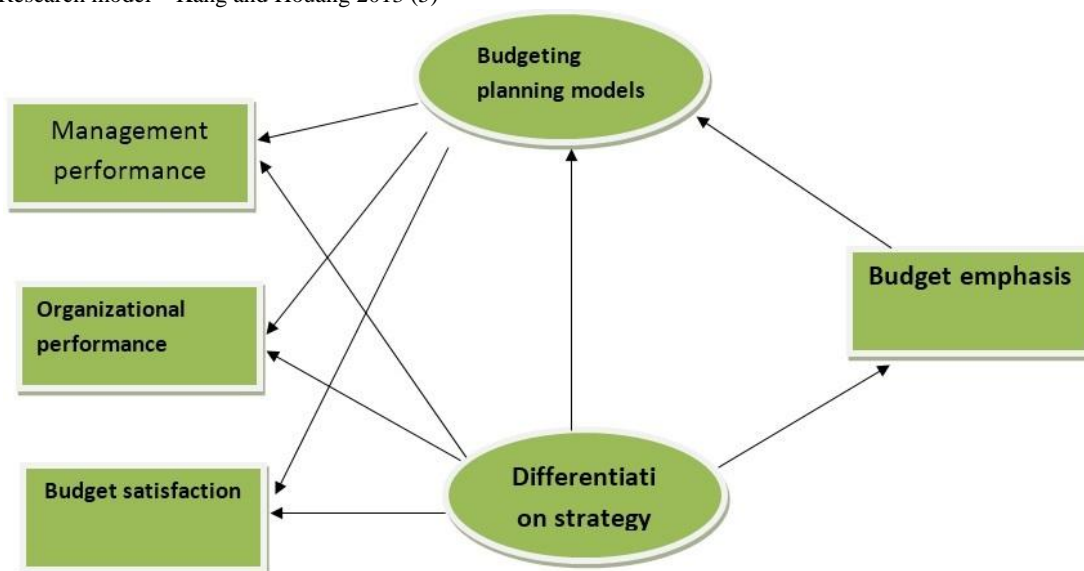
The significance level of the fifth hypothesis (the lack of impression of differentiation strategy on management performance) equaled 0.0001 and the regression model

showed that differentiation strategy had a significant effect on management performance. Thus, based on estimation parameters, the regression line equation was considered and the higher the table's tangent, the more the relationship between the two variables. The positivity of standard coefficient shows the direct relationship of the studied variables; in other words, if differentiation strategy increases one unit, then management performance raises 0.522 units.

The sixth hypothesis test showed that there was a positive and significant relationship between differentiation strategy and budget satisfaction. Thus, based on estimation parameters, the regression line equation was considered and the higher the table's tangent, the more the relationship between the two variables. The positivity of standard coefficient showed the direct relationship of the studied variables; in other words, if differentiation strategy

increases one unit, then budget satisfaction raises 0.41 units. The significance level of the seventh hypothesis (lack of impression of budgeting design models on organizational performance) equaled 0.0001 which was lower than 5% error level. In other words, the significance of this hypothesis was confirmed and the regression model showed that budget emphasis had a significant effect on budgeting planning models. Thus, based on estimation parameters, the regression line equation was considered and the higher the table's tangent, the more the relationship between the two variables. The positivity of standard coefficient showed the direct relationship of the studied variables; in other words, if budgeting design models increase one unit, then organizational performance raises 0.55 units.

Figure 1. Research model – Kang and Houang 2013 (5)



**Discussion**

High emphasis on budgeting increases the accuracy and exactness of budget planning models and encourages senior executives to provide more flexible budget controls. Brownell (1983) states that for more emphasis on budgeting, organizations require a more flexible budgeting model which emotionally encourages the employees and increases their motivation (11). The differentiation strategy specially emphasizes the introduction, innovation and service quality. Implementing the differentiation strategy in organizations affects the budget planning models by increasing budget communication and discussions, budget monitoring, and staff participation in budget affairs. There is also a significant relationship between the differentiation strategy with management performance and budget satisfaction. In addition, high emphasis on budgets and budget planning models coordinates the performance of each organizational unit, thus increasing their efficiency (10). Flexible budget planning models can better encourage the employees to

share private information, thus reducing information asymmetries and also promote exchanging and sharing of knowledge and information between the employer and employee (12). Employees' participation in the budget processes informs them about the goals of the work, and this will increase job satisfaction and ultimately increase the organizational performance (9). Also, there was a significant relationship between budget models designing with budget satisfaction.

**Conclusions**

Based on the results of research hypotheses test, there was a significant relationship between (budget emphasis and differentiation strategy) and budgeting planning models. Also, there was a significant relationship between differentiation strategy and variables such as budget emphasis, budgeting planning models, organizational performance, management performance and budgeting satisfaction. The positive and significant relationship between budgeting planning models and variables of

organizational performance, management performance and budget satisfaction was confirmed. According to the results of the present research, the following suggestions are presented in order to improve the organizational performance.

- As the provided results of this research can be applied by organizations for designing budgeting systems, the managers should focus on the amount of organization's emphasis on budget during the design process of budgeting planning models. The organizations that use more flexible budgeting planning models have more emphasis on budgeting objectives and they should create more a stimulating setting for managers of departments.

- The organizations should specify the way of negotiation and communication with departments during budgeting cooperation process, the way of information and experience exchange and the method of increasing accessibility to the job-related information; also, they should try to create a flexible controlled environment to stimulate and support the managers departments.

- Budget information and knowledge exchange between the employers and employees should be done in order to promote the efficient application of information

- Employees stimulation to cooperate in budgeting processes is suggested in order to increase job satisfaction and their confidence

- In order to innovate in provided services, the differentiation strategy should be proportional to the customers' needs.

- It is suggested that the organizational managers should apply differentiation strategy when they understand the pattern of the organization's environmental variations and in this way they are capable of making organization compatible with these variations.

- It is proposed that the organizational managers should encourage the employees to achieve budgeting objectives by budget emphasis and employees' budget collaboration. Therefore, they can decrease the employees' resistance to final decisions.

### **Conflict of Interest**

None declared.

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