

EXPLORING BUDGETARY SLACK: THE INFLUENCE OF ORGANIZATIONAL COMMITMENT AND JOB-RELATED TENSION

*Desmond C. Yuen**, *Philip K. Law***, *Mike Tayles****

Abstract

The variables of organizational commitment and job-related tension have been given much individual attention in studies of organizational behaviour, but little consideration has been given to the joint effect of both on budgetary behaviour. This paper reports a study of the effects of organizational commitment and job-related tension on the propensity of managers to create budgetary slack under conditions of high and low levels of budgetary participation. The results indicate that, in a situation of high budgetary participation, highly committed managers who report low job-related tension are associated with a reduced propensity to create budgetary slack, whereas lower committed managers with higher job-related tension are associated with a greater propensity to create slack. Additionally, the study finds that organizational commitment and job-related tension, in the low-participation situation, have no effect on propensity to create budgetary slack. The implications of the results for design of control systems and personnel management are considered.

Keywords: Budgetary Slack, Budgetary Participation, Organizational Commitment, Job-related Tension, Hotel Industry

JEL Code: D23, D73

**Department of Accounting, Faculty of Business Administration, University of Macau, Macau SAR, China*

***Corresponding author. Room 3067, Department of Accounting, Faculty of Business Administration(FBA), University of Macau, E22, Avenida da Universidade, Taipa, Macau, China
Tel: 853 8822 4652*

****University of Hull, Hull, United Kingdom*

1 Introduction

For some time the management accounting literature has examined the design and use of budgeting systems and their various effects on budgetary behaviour and financial performance (Dunk 2011). Indeed, it caused Brownell and Dunk (1991:703) to assert at the time that it constitutes “the only organized mass of empirical work in management accounting”. One such effect on budgetary behavior is the propensity of managers to create budgetary slack. The term ‘budgetary slack’ essentially refers to the setting of budget targets such that they become easier to achieve (Lukka, 1988). From an individual perspective, budgetary slack can be beneficial as a buffer against uncertainty regarding the achievement of preset targets (Cyert and March, 1963). From an organizational perspective, budgetary slack has several negative implications—including reduced managerial effort, misallocation of the organization’s resources and distorted performance evaluations of managers and their areas of responsibility (Davis, DeZoot and Kopp, 2006; Nouri and Parker, 1998). The contingent nature of many of these factors has

meant that the results of research into these matters have often been contradictory and difficult to integrate.

Research suggests that budgetary slack is common in organizations (Buchheit, Pasewark and Strawser, 2003; Merchant, 1985; Merchant and Manzoni, 1989). Several studies have investigated the relationship between budgetary participation and the propensity to create slack (Chow, Cooper and Waller, 1988; Davila and Wouters, 2005; Merchant, 1981; Nouri and Parker, 1998). In some studies budgetary participation has been found to have a positive effect on managerial propensity to create budgetary slack, i.e. a positive effect on the incidence of budgetary slack. However, other studies have suggested that the level of participation has weak effects or even negative effects on managerial behaviour, i.e. a positive effect on the undesirable organizational implications of budgetary slack. Because previous studies have been inconclusive, the purpose of the current study is to explore further these conflicting results using a contingency theory approach (Govindarajan, 1986).

We take the view that budgetary participation alone is insufficient to explain the propensity to create slack, and many studies have noted that the creation of budgetary slack requires the interaction of budgetary participation with other factors (Dunk, 1993; Lau and Eggleton, 2003; Mia, 1989; Yuen, 2001). Many studies have investigated the budget process in the manufacturing sector. There have been fewer studies within the services sector, and particularly the hotel industry, of the relationship between budgetary participation and budgetary slack and the variables identified for investigation in the present paper.

Macau like Hong Kong is a Special Administrative Region (SAR) of the Peoples Republic of China; it lies on the western side of the Pearl River Delta across from Hong Kong. It is a former Portuguese colony (the first and last European Colony in China) and operates with a considerable degree of autonomy¹. Macau is ranked highly as a tourist destination in terms of tourist arrivals and tourism receipts. Many new hotels have been opened, where efficient operation and high quality service levels are critical, (Galaxy, MGM Grand, Sands, Sheraton, Venetian, Wynn) such that it rivals Las Vegas as a tourist and gaming location. Preliminary interviews were held with 10 corporate managers to investigate the current operational problems of the hotel industry in Macau, China. A major problem which emerged was the high staff turnover rate at a managerial level and this was noted to disturb the normal operation of their business. The mobility of labour in the Macau hotel industry is very high and there is considerable demand for the middle management in this sector. The dysfunctional impacts of budgetary slack to these organizations during the participation phase of budget setting was seen to reduce the effectiveness of the organization and impact the motivation of these managers. In this context the objective of the study is to have a greater understanding of the factors impacting on the budget operation in the hotels, whether setting financial targets or non-financial performance measures, and through this to suggest ways to remove negative effects and to motivate and retain employees in the organizations and in the hotel industry.

Researchers who have examined participatory management strategies have suggested that such strategies increase employees' commitment and involvement, which, in turn, leads to more favourable job-related outcomes, such as a reduced propensity to create budgetary slack (Gray and Ligouri, 1994; Parsons, 1995). Potter and Schidgall, (1999) Fisher, Frederickson and Peffer (2002) and Dunk (2007) have all suggested that there is a need for continuing research to investigate the links between the design of accounting systems and the overall organizational design, with a view to improving organizational

efficiency. This paper therefore presents an empirical examination of the moderating role of two individual level variables, managers' organizational commitment and job-related tension, on the propensity to create budgetary slack in settings of high and low levels of participation. It is of importance in that it is the basis of suggesting a better budgeting environment that facilitates effective management in the hotel industry, improved employee attitude and more appropriate motivation.

The results of the study indicate that, in a situation of high budgetary participation, highly committed managers who report lower job-related tension are associated with low propensity to create budgetary slack. In the low-participation situation this study finds that organizational commitment and job-related tension have no effect on propensity to create budgetary slack. This latter finding is in contrast with the literature which suggests that low-committed managers with higher job-related tension are often associated with a greater propensity to create budgetary slack.

Following this introduction, the next section reviews the relevant literature to develop a theoretical framework linking the variables of interest. This review leads to statements of the hypotheses of the current study. Sections dealing with research methods, results, and discussion then follow in turn.

2 Literature and hypothesis development

2.1 Budgetary participation

Whether managers should or should not participate in budget setting continues to exercise the minds of researchers who use various perspectives and methodologies to improve our understanding (Byrne and Damon 2008). The results of studies on budgetary participation are mixed; some have found that budgetary participation has a positive effect on managerial behaviour (Agbejule and Saariloski 2006; Becker and Green 1962; Brownell 1981; Kenis 1979, Marginson and Ogden, 2005). Other studies have suggested that the level of participation has weak effects (Lau and Buckland, 2001; Milani 1975; Steers, 1976) or even negative effects on managerial behaviour (Brownell and McInnes, 1986; Bryan and Locke, 1967; Emsley, 2003). Given these conflicting findings, the current study attempts to contribute to a discussion of the nature of the relationship between budgetary participation and one aspect of managerial behaviour—the propensity to create budgetary slack and address this in a specific organizational setting that of hotel management.

The effect of budgetary participation on a propensity to create budgetary slack has been a common focus in the literature (Dunk, 1993; Lilleyman, 1979; Merchant, 1985; Nouri, 1994). Managers protect themselves from the 'downside potential' of an uncertain future by means of slack

¹ Macau maintains its own legal system, monetary system and immigration policy. The population is predominantly Chinese though Portuguese and English is also spoken.

creation, for example, Merchant and Manzoni (1989) found that slack increases the chances of achieving budget targets, thus avoiding unwelcome intervention from senior management.

Young (1985) used an agency model and Govindarajan (1986) used contingency theory to explain the propensity to create budgetary slack. Both these studies suggested that variable findings can occur as a consequence of contextual differences among organizations—such as organizational differences, varying environmental conditions, and different norms and values within organizations and the wider society. For example, Merchant (1981) found a greater propensity to create budgetary slack among employees of larger companies, more diversified companies, and decentralized companies. Merchant (1985) also conducted a field study to investigate how managers' propensities to create budgetary slack were affected by the budgeting system and the technical context of their environment. His results showed that employees demonstrated a reduced propensity to create slack if managers participated actively in budgeting, particularly when technologies were relatively predictable. In contrast, the propensity to create budgetary slack was greater if a tight budget required frequent tactical responses to avoid overruns. He also found that the propensity to create slack was: (i) positively related to the importance placed on meeting budgetary targets; (ii) negatively related to the level of participation allowed in the budgeting process; (iii) negatively related to the degree of predictability in the production process; and (iv) negatively related to their superiors' abilities to detect slack.

Dunk (1993) and Van der Stede (2000) replicated earlier studies to investigate the propensity to create slack during budgetary participation. They found that slack was low when rigid budgetary control increased the likelihood of senior management detecting slack. Moreover, during participation in budgetary activities, managers who were committed and those who adopted long-term thinking were less likely to create budgetary slack than those with low commitment and short-term thinking. On the basis of the above discussion, it would seem that budgetary participation, considered in isolation, has no clear relationship with the propensity of managers to create slack. The following null hypothesis is therefore proposed:

H₀₁: There is no significant relationship between budgetary participation and propensity to create budgetary slack.

2.2 Moderating variables

A possible reason for the equivocal results reported in the previous studies is that the relationship might be moderated by other variables, and several studies have investigated possible interactions among various factors (Brownell, 1981; Frezatti, Braga de Aguiar and

Rezende, 2007; Lau and Eggleton, 2003; Nouri and Parker, 1998; Van der Stede, 2000). In particular, Hopwood (1972) has suggested that the moderating role of certain variables (such as job characteristics, personal characteristics, and social conditions) should be considered when studying the effect of budgetary participation on managerial behaviour.

Mia (1988; 1989), Reid (2002) and Magner, Johnson, Staley and Welker (2006), all studied employees' attitudes, motivation, and job difficulty in assessing the relationship between budgetary participation and managerial performance. They found that participation in the budgeting process by managers who reported a more favourable attitude or motivation was associated with improved performance; conversely, a less favourable attitude or motivation was associated with impaired performance. Dunk (1993) and Yuen (2001) showed that the relationship between budgetary participation and budgetary slack was contingent upon information asymmetry and managerial commitment to the achievement of budgetary targets. Their results showed that managers who possessed more information, and those who placed emphasis on the achievement of the budget, demonstrated improved performance and less budgetary slack; in contrast, managers who possessed less information, and those who placed less emphasis on the achievement of the budget, demonstrated diminished performance. As a result, Dunk (1993) and Yuen (2001) concluded that budgetary-participation factors interact with other factors in influencing a manager's propensity to create budgetary slack.

Researchers have also considered budgetary participation in association with other factors. For example, Young (1985) and Chong & Leung (2003) found that, in a working environment characterized by high uncertainty, a participatory budgetary process led to an increase in budgetary slack; in contrast, a working environment characterized by low uncertainty led to a decrease in budgetary slack. Onsi (1973) provided evidence that participation leads to a reduction in slack, which was attributed to positive communication between managers and subordinates, such that subordinates felt less pressure to create slack. Chow et al., (1988) found that, when information asymmetry was absent, budgetary slack did not differ significantly among various pay schemes; in contrast, when information asymmetry was present, slack was found to be significantly lower under a reward-based 'truth-inducing' pay scheme. However, Lau, Dunk and Smith (1996) found that the correlation between participation and slack was negative only when chances of slack detection was high; when slack detection was low, these authors found that budgetary participation did not influence the propensity to create slack.

2.3 Organizational commitment and job-related tension as moderating variables

It is apparent that a variety of possible moderating variables have been investigated in an attempt to clarify the relationship between budgetary participation and budgetary slack. The current study investigates two such possible moderating factors—(i) organizational commitment; and (ii) job-related tension. Previously researchers have often treated these constructs as outcome variables in evaluating the effectiveness of budgetary participation on managerial behaviour.

Organizational commitment has been the focus of numerous studies, including some that have attempted to identify its antecedents, because of its potential for improving work outcome. For example, several researchers have proposed that employee participation in decision-making increases employee commitment to an organization. These authors have included March and Simon (1958); Lincoln and Kalleberg (1985); Boshof and Mels (1995); Parker and Kyj (2006) who all found that greater participation in organizational policy-making enhanced the tendency for subordinates to identify with the organization. In terms of participatory budgeting, it is therefore reasonable to contend that organizational commitment, which implies a belief in organizational goals and values, might be increased through participation in budgetary processes.

Nevertheless, Boshof and Mels (1995) and Macky and Boxall (2008) found that employees can have low organizational commitment, but still have significant participation in budgetary activities; however, in these circumstances, dysfunctional behaviour is possible. Nouri (1994) attempted, unsuccessfully, to explain the results of earlier research by introducing two motivational factors (job involvement and organizational commitment) to explain slack. Whilst not totally successful he was able to indicate that, for highly committed managers, job involvement was associated with decreased propensity to create budgetary slack.

Organizational commitment is a bond that links the individual to the organization (Mathieu and Zajac, 1990; Randell, 1990). Meyer, Paunonen, Gellatly, Goffin and Jackson (1989) described ‘commitment’ as being characterized by a strong belief in, and acceptance, of the organization’s goals, and a willingness to exert considerable effort on behalf of the organization. It has therefore been argued that organizational commitment improves work outcomes (Adler and Corson, 2003; Douglas and Wier, 2000). Furthermore, high organizational commitment might cause employees to suffer from various issues of job-related tension, which might not be constructive in motivating employees. However, low organizational commitment might also result in psychological uneasiness, and thus induce a propensity to create budgetary slack—perhaps because employees seek to

protect their jobs and their self-image (Cyert and March, 1963).

Job-related tension is a situation in which managers feel frustration, stress, and anxiety, all of which can have a negative effect on their budgetary behaviour. Examples include: (i) a tendency for managers to charge costs to incorrect accounts; (ii) a tendency to delay repairs until more budgetary funds are available (in spite of the higher costs that are incurred) (Hopwood, 1972); or (iii) providing invalid data in reports (Hirst, 1981). Significant job-related tension can result from task uncertainty and a high reliance on accounting performance measures (Hirst, 1981). In particular, Hopwood (1972) examined various evaluations of employee performance, and noted that a greater emphasis on achievement can induce more job-related tension. However, in replicating this study in a different environment, Otley (1980) found no significant relationship between the level of job-related tension and the styles of performance evaluation. Several studies have used a contingency approach to ascertain how job-related tension affects managerial behaviour (Bottger and Hirst, 1988; Dunk, 1990; Govindarajan, 1986). However, these studies have produced conflicting results, probably as a consequence of contextual differences among various organizations.

When employees are able to have significant budgetary participation, they have more opportunity to influence budgetary slack. Highly committed managers are more likely to have a sense of achievement and task enjoyment in the role and thus they might not consider working in the organization to be a form of pressure and tension (Brownell and McInnes, 1986). Such managers are likely to have a reduced propensity to create budgetary slack because they understand the dysfunctional effect it can create. Additionally a reduced propensity to create budgetary slack may apply to managers who have a lower level of job related tension, because either they do not care about their jobs or they do not feel pressure and stress in their roles (Shuler, 1980; Weick, 1983). Thus, for managers who are highly committed to the organization, or those with low job-related tension there may be a reduced propensity to create budgetary slack.

On the other hand, managers with low commitment, those who do not subscribe to the organization’s goals and values, might feel under pressure when they have more budgeting responsibilities and thus might have a greater propensity to create slack (Nouri, 1994). Managers with high levels of job-related tension might have a greater propensity to create budgetary slack—in order to release the stress associated with their job (Langfield-Smith, 1997). Thus managers with a low level of organizational commitment and higher job-related tension are most likely to create budgetary slack as a means of defence. The above discussion leads to the formulation of the following hypothesis:

H1: At a high level of participation, highly committed managers who report low job-related tension are associated with low propensity to create budgetary slack.

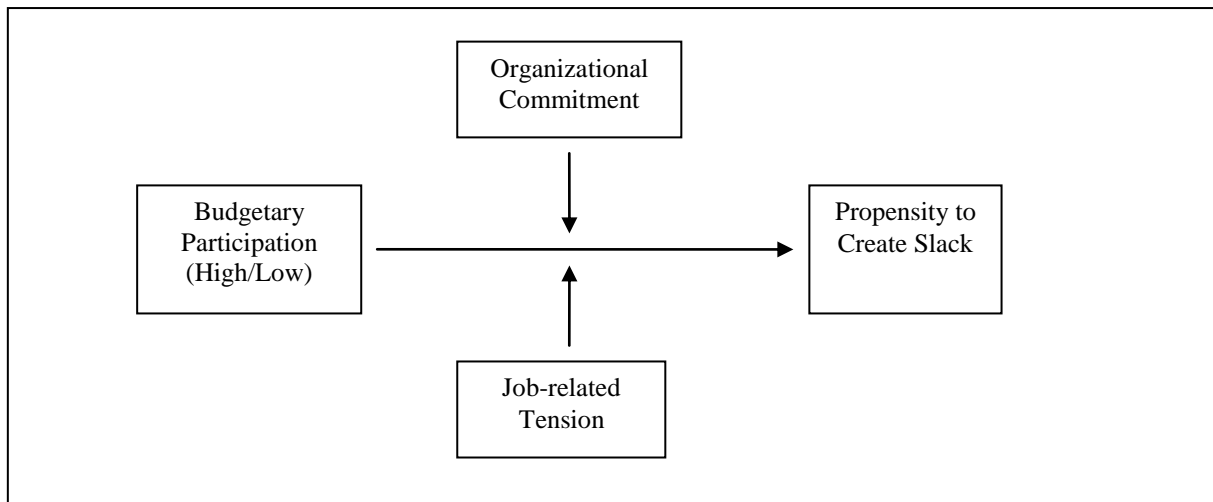
According to Dunk (1993), when budgetary participation is low, subordinates have few opportunities to determine the amount of slack. Kren (1993) suggests that a low level of budgetary participation reduces the opportunities of sharing information. Some managers may not care about their achievement of the budget (lower commitment), or others may feel a need to achieve the budget under the instruction from the upper management (higher commitment). In either case, they may perceive different levels of job related tension. If their budgetary participation is low they are unlikely to have any opportunity to create slack. In this case their level of organizational commitment and job-related tension has no effect on the production of budgetary slack under this situation. The hypothesis in its null form can be stated as follows:

Ho2: Organizational commitment and job-related tension have no effect on the production of budgetary slack in a low level of participation.

In summary, it is suggested that the level of participation is not directly associated with the presence of slack in unit budgets. If this was the case subordinate management could try to increase the level of budgetary participation to benefit from highly valued incentives and perks. However the extent of participation, the extent to which this give rise to stress and tension for the employee and the access to such incentive for participation are all tied up with the perceptions of the employee and his or her commitment, hence the issue is justified for further empirical investigation.

The paper proposes that organizational commitment and job-related tension might have interactive effects on managers' creation of budgetary slack at different levels of budgetary participation. Hence, the study examines the potential for job-related tension and organizational commitment to act as moderating variables of the relationship between budgetary participation and a propensity to create budgetary slack see Figure 1.

Figure 1. Conceptual Model of the study



3 Methodology

3.1 Data collection

A field survey method was adopted for this study whereby the data were obtained through questionnaires distributed to managers in selected hotels in Macau. Before circulating the questionnaires, pilot questionnaires were distributed to five potential respondents to check the clarity of the wording. To overcome any language barriers, the questionnaire was also translated into the Chinese language. The Chinese version of the questionnaire was also tested with another five Chinese respondents, to ensure their understanding of the wording, and back-translated for comparison purposes and to check for accuracy.

With the cooperation of the companies concerned the respondents for this study were selected from managers in 19 hotels in Macau employing between 100 and 600 staff in their particular units. The survey was conducted with a sample of 152 middle managers who had responsibility for preparing and implementing budgets in their departments. All responses were returned to the researchers anonymously and no respondents were identifiable in the data. A total of 131 completed questionnaires were collected, yielding a good response rate of 86.18% (Cohen and Manion, 1994) partly attributable to the support from the companies and the careful preplanning of the study. The responding managers were all between 25 and 57 years of age, had held their current positions for an average of 3.75 years,

and had experience in their present companies for between 5 and 15 years. They consisted of senior supervisors, middle managers and senior managers. Respondents were from all departments in the hotels, such as, marketing, food and beverage, sales, front office, and recreation in addition to service departments of the hotel (for example, accounting, personnel, and central services). Late and early replies were compared in order to test for non-response bias which was not found to be a problem.

3.2 Measurement of variables and descriptive statistics

The variables incorporated into the questionnaire were: (i) organizational commitment; (ii) job-related tension; (iii) budgetary participation; and (iv) propensity to create budgetary slack. Factor analysis was applied in order to determine vales for each of the items of interest.

Organizational commitment was measured using the nine-item short-form scale developed by Mowday, Steers and Porter (1979). Responses were assessed on a seven-point Likert-type scale. Earlier studies had reported acceptable levels of reliability and validity for this nine-item scale (Blau, 1987; Price and Muller, 1981). In the current study, the Cronbach alpha coefficient of internal reliabilities was 0.72. The factor accounted for 76% of the variance. Job-related tension was measured by the instrument developed by the Institute for Social Research at the University of Michigan (Kahn, Wolfe, Quinn, Snoek and Rosenthal, 1964). This index is a 15-item, seven-point, Likert-type scale. The measure is based upon the perceptions of employees of their routine work—such as employees being unclear on the scope and responsibility of the job, beliefs that they have

insufficient authority or qualifications to carry out their assignments, and feelings that they must do things against their better judgment (Kahn et al., 1964). Acceptable levels of reliability and validity have been reported. The coefficient alpha score for this instrument was calculated for this study as being 0.83. The factor accounted for 52% of the variance.

Budgetary participation was assessed by Milani’s (1975) six-item instrument on a seven-point Likert-type scale to measure the amount of influence and involvement that an individual employee perceives to have in a jointly set budget (Brownell, 1981). This instrument has been used and tested extensively in many other studies, and has provided high internal reliability (Brownell and Hirst, 1986; Dunk, 1993; Lau and Buckland, 2001; Mia, 1988; Subramaniam and Ashkanasy, 2001). The measurement yielded a Cronbach alpha coefficient of internal reliability of 0.69. The factor explained 63% of the variance in participation. Propensity to create budgetary slack was measured by Onsi’s (1973) four-item instrument. This instrument has been used by earlier studies (Merchant, 1985; Nouri, 1994). The response format was a seven-point Likert-style scale. A Cronbach alpha coefficient of internal reliabilities of 0.76 was calculated. The factor explained 64% of the variance in participation.

For each of the variables, a factor analysis of the scores yielded one eigenvalue greater than unity, resulting in the extraction of one factor for each variable. The study used the mean score to incorporate the data into further analysis, for example, to decide the high or low level of budgetary participation. For the whole dataset, means, standard deviations and correlations among the four variables are given in Table 1 Panel (a) and Panel (b).

Table 1. Panel (a). Descriptive statistics of variables of the study

	Means	Standard Deviations	Theoretical Range	Actual Range
1. Organizational commitment	4.31	0.79	1-7	1.1-6.8
2. Job-related tension	3.65	0.24	1-7	1.2-6.9
3. Budgetary Participation	4.87	1.12	1-7	1.3-6.5
4. Budgetary slack	3.83	0.82	1-7	1.5-6.25

Table 1. Panel (b). Correlations among variables of the study

	Crobach Alpha	1	2	3
1. Organizational commitment	0.72	--		
2. Job-related tension	0.83	-0.22**		
3. Budgetary Participation	0.69	0.28***	0.11*	
4. Budgetary slack	0.76	-0.24**	0.08	0.25**

Note: 2N= 131, p<0.1*, p<0.05**, p< 0.01***

4 Results

Table 1 Panel (b) shows that bivariate correlations existed among the four variables of budgetary participation, organizational commitment, job-related

tension, and propensity to create budgetary slack. There were significant positive associations between: (i) organizational commitment and budgetary participation; (ii) job-related tension and budgetary participation; and (iii) budgetary participation and

budgetary slack. In contrast, there were significant negative associations between: (i) organizational commitment and budgetary slack; and (ii) organizational commitment and job-related tension.

It is of interest to evaluate the relationship between organizational commitment and propensity to create budgetary slack, but as shown in Table 1 panel (b), it is suspected that job-related tension has an effect on this relationship. By controlling the job-related tension variable (not shown), it is observed that a relationship between organization commitment and propensity to create budgetary slack variables is at the non-significant level ($r = 0.21$ and $p = 0.128$). The job-related tension, has caused a change in the observed relationship between the other two variables. Thus, the job-related tension variable is influencing

the relationship between organizational commitment and propensity to create budgetary slack. It appears from the correlations presented that it is appropriate to proceed to further more detailed analysis but bearing in mind the interaction that has been established between the variables of interest.

4.1 Tests of hypothesis Ho1 and three-way interaction

A linear regression analysis was adopted to test hypothesis Ho1— that is, the main effect of the relationship between budgetary participation and the propensity to create budgetary slack. The results are shown in Table 2. They support Ho1—that there was no significant relationship between the two variables.

Table 2. Regression of budgetary participation against propensity to create budgetary slack

Source	Coefficient	Coefficient Value	S.E.	T	P
Constant	b1	2.421	0.481	5.04	<0.05
Budgetary Participation	b2	0.085	0.006	2.78	n.s.

Note: $R^2 = 14\%$, $F3, 127 = 1.05$, $n = 131$, $p = 0.214$

However, as argued above, the relationship between these two variables might be significant if other moderating factors are taken into consideration. A further three-way analysis was therefore conducted to test the interaction among the variables of

budgetary participation, organizational commitment, and job-related tension—and their effect on a propensity to create budgetary slack. The following multiple regression equation (1) was employed:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_1X_2 + b_5X_1X_3 + b_6X_2X_3 + b_7X_1X_2X_3 + e \tag{1}$$

Where: Y = propensity to create budgetary slack;
 X₁ = organizational commitment (OCM);
 X₂ = job-related tension (JRT);
 X₃ = budgetary participation (BP); and
 e = error term

Table 3. Regression of propensity to create budgetary slack against job-related tension, organizational commitment, and budgetary participation

Source	Coefficient	Coefficient Value	Std. Error	T	P
Constant	B ₀	7.218	0.637	15.678	<0.01
OCM	b ₁	-0.115	0.056	-2.070	<0.01
JRT	b ₂	0.023	0.013	0.023	n.s.
BP	b ₃	0.014	0.101	0.456	n.s.
JRT X OCM	b ₄	-0.182	0.002	-1.731	<0.05
JRT X BP	b ₅	0.002	0.008	0.701	n.s.
OCM X BP	b ₆	-0.090	0.010	-2.424	<0.01
JRT X OCM X BP	b ₇	-0.214	0.016	-1.242	<0.05

Note: JRT = Job-related tension; OCM = Organizational Commitment; BP =Budgetary participation; $R^2 = 28\%$, $F7, 123 = 3.67$, $n = 131$, $p = 0.003$, $VIF = 1.239$

It is observed that there is still no relationship between budgetary participation and a propensity to create budgetary slack. However, Table 3 shows that job-related tension, organizational commitment, and budgetary participation interact to influence a propensity to create budgetary slack at the 0.5 level. The focus here is not on the individual independent

variables but on the three way interaction term (coefficient b₇). The only significant effect of organizational commitment alone on the propensity to create budgetary slack was a negative effect. Consideration of the two-way interactions shows that the interaction of job-related tension and organizational commitment; and of organizational commitment and

budgetary participation both had a negative effect on propensity to create budgetary slack at a statistically significant level. This provides a basis on which to test the other two hypotheses.

4.2 Tests of hypothesis H1 at the high level of budgetary participation

To test the other two hypotheses we shall dichotomise the participation variable to allow an in-depth analysis of the underlying patterns in each of high-budgetary

and low-budgetary participation situations. The extent of budgetary participation was thus divided into two data sets, high participation and low participation (according to the mean values) to investigate how the variables affected a propensity to create budgetary slack under these different conditions. There were 74 and 57 respondents in the high and low level dataset of participation respectively.

The following regression equation was employed:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_1X_2 + e \tag{2}$$

Where: Y = propensity to create budgetary slack;
 X₁ = organizational commitment (OC);
 X₂ = job-related tension (JRT); and
 e = error term

Two regressions of equation (2) were used (with each of the high and low participation sample) to test the two-way interaction of organizational commitment and job-related tension.

We shall first address the high participation sample of respondents that deals with hypotheses H1.

A significant value for b₃ in equation (2) would indicate an interaction between organizational commitment and job-related tension affecting the propensity to create budgetary slack. The results from the multiple regression models are presented in Table 4.

Table 4. Regression of propensity to create budgetary slack against organizational commitment, job-related tension and their interaction (high participation sub-sample)

Source	Coefficient	Coefficient Value	Std. Error	T	P
Constant	b ₀	14.875	2.354	3.99	<0.01
OCM	b ₁	-0.085	0.016	-3.07	<0.05
JRT	b ₂	0.061	0.100	1.97	<n.a.
OCM x JRT	b ₃	-0.104	0.009	-3.24	<0.05

Note: JRT = Job-related tension; OCM = Organizational Commitment; R² = 25%, F_{3, 69} = 4.29, n = 74, p = 0.006, VIF = 1.066

The results revealed a significant interaction between organizational commitment and job-related tension affecting propensity to create budgetary slack (p < 0.05), which provides support for H1. As shown in Table 4, both a major effect of organizational commitment (p = 0.05) and a significant interaction between job-related tension and organizational commitment (p = 0.05) were apparent under the condition of high participation.

Further analysis of the means and standard deviations of this dataset for the propensity to create budgetary slack are shown in the quadrants in Table 5.

The mean score of the propensity to create budgetary slack was computed for combinations of high and low values of organizational commitment and job-related tension respectively. The mean of high organizational commitment/low job-related tension (2.34) was the lowest and the mean of low organizational commitment /high job-related tension (5.78) was the highest of the four cells, at a statistically significant level. Thus the hypothesis H1 for the sample dealing with the high level of budgetary participation is confirmed.

Table 5. Means, standard deviations, and numbers for propensity to create budgetary slack across higher or lower organizational commitment and job-related tension (high participation sub-sample)

Job-related Tension	Organizational Commitment	
	Low	High
Low	Mean = 3.23 S.D. = 0.567 N = 13	Mean = 2.34 S.D. = 0.456 N = 19
High	Mean = 5.78 S.D. = 0.742 N = 23	Mean = 3.56 S.D. = 0.822 N = 19

The interaction was further analyzed mathematically. First, the interaction analysis used the partial derivation of the regression equation over job-related tension (X_1) by using the following equation:

$$dY/dX_2 = b_2 + b_3 X_1 \quad (3)$$

The value of the ‘inflection point’ was analyzed by the partial derivation of the following equation:

$$X_1 = -b_2/b_3 \quad (4)$$

Substituting the values for b_2 and b_3 from Table 4 into equation (4) produced $X_1 = 0.58$. The inflection point ($42.60 + 0.58 = 43.18$) was within the observed range of the organizational commitment variable. The results indicate that, for high organizational

commitment scores (that is, organizational commitment values greater than 43.18), the level of job-related tension was associated with a decreased propensity to create budgetary slack. On the other hand, for organizational commitment values less than 43.18, the level of job-related tension was associated with an increased propensity to create budgetary slack. These results provide further support for hypothesis H1.

4.3 Test of hypothesis H02 at the low level of budgetary participation

A second analysis for the low-participation situation, using equation (2) above, was also conducted. The results are shown in Table 6.

Table 6. Regression of propensity to create budgetary slack against organizational commitment, job-related tension, and their interaction (low participation sub-sample)

Source	Coefficient	Coefficient Value	Std. Error	T	P
Constant	b0	-6.0670	4.5701	-1.25	n.s.
JRT	b1	0.0232	0.1083	1.45	n.s.
OCM	b2	0.0317	0.0243	2.38	<0.01
JRT X OCM	b3	-0.1532	0.1880	-2.13	n.s.

Note: JRT = Job-related tension; OCM = Organizational Commitment; $R^2 = 13.89\%$, $F_{3, 52} = 1.19$, $n = 57$, $p = 0.26$, $VIF = 1.086$

In contrast to the findings with the high-participation respondents, Table 6 shows that there was no interaction between job-related tension and organizational commitment affecting the propensity to create budgetary slack under the condition of low participation. This provides support for H02.

The quadrants in Table 7 show the means and standard deviations for the propensity to create

budgetary slack under low budgetary participation. The results in this table show no significant differences in the mean scores for the four cells. This provides further support for the argument that, under low budgetary participation there is no significant interaction between job-related tension or organizational commitment affecting the propensity to create budgetary slack.

Table 7. Means, standard deviations, and numbers for propensity to create budgetary slack across high or low organizational commitment and job-related tension (low participation sub-sample)

Job-related Tension	Organizational Commitment	
	Low	High
Low	Mean = 4.12 S.D. = 1.711 N = 11	Mean = 3.85 S.D. = 0.454 N = 12
High	Mean = 4.50 S.D. = 1.256 N = 16	Mean = 3.40 S.D. = 0.878 N = 18

The information in Tables 5 and 7 was used to graph the three-way interaction and this is shown in Figures 2 and 3. The tables and graphs illustrate that slack was highest in the situations of high participation, low commitment, and high job-related tension. Figure 2 with the sharply diverging lines shows that managers with higher organizational commitment and a lower level of job-related tension had a reduced propensity to create slack compared with managers with a higher level of job-related

tension. On the other hand, managers with lower organizational commitment and a higher level of job-related tension had a greater propensity to create slack than managers with a lower level of job-related tension. The Figure 3 demonstrates that, with two closely related and intersecting lines for propensity to budgetary slack, there is no significant difference between managers with higher organizational commitment and a lower level of job-related tension and managers with lower organizational commitment

and a higher level of job-related tension, in creating slack under the situation of low budgetary participation, thus diagrammatically confirming H2.

Figure 2. Three-way interaction - the relationship between organizational commitment and job-related tension under the high-participation group

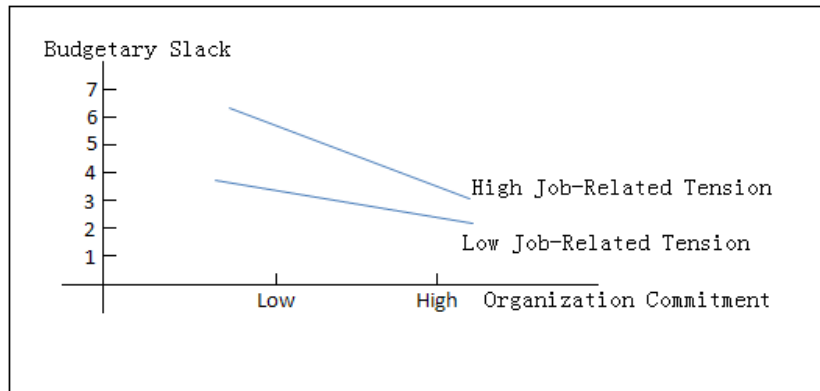
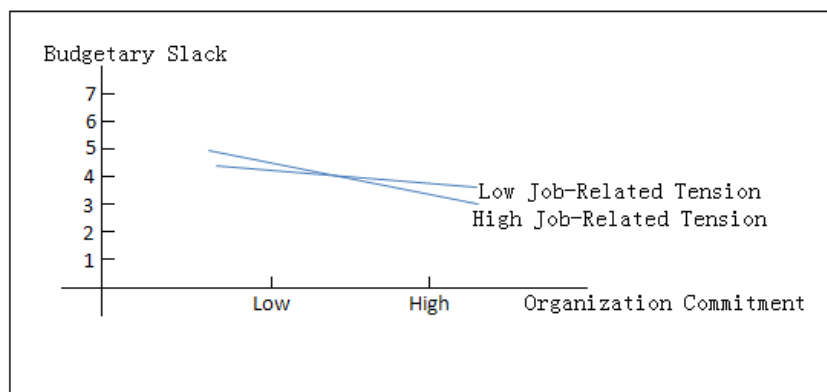


Figure 3. Three-way interaction - the relationship between organizational commitment and job related tension under the low-participation group



5 Discussion, conclusions and limitations

Budgetary slack continues to challenge researchers with no clear answers, various research models and many variables which may be incorporated to address it.

Davila and Wouters (2005) provide us with a contemporary case example where generating budgetary slack can be an explicit design consideration with attendant positive organisational outcomes. Others, often with a more quantitative research approach draw attention to its negative consequences and there is still no firm conclusion to this ongoing puzzle (Marginson and Ogden 2005). Using an Asian service sector as the research setting this study was designed to improve our understanding of how the two factors of organizational commitment and job-related tension might affect the propensity to create budget slack under the conditions of budgetary participation.

By taking into account these two factors, the results of the study have further contributed to the previous findings of researchers including Dunk

(1993), Nouri & Parker (1998), Lau and Eggleton (2003), Merchant, (1981 1985) and Van de Stede (2000) on the relationship between budgetary participation and propensity to create budgetary slack. This study indicates that there is a significant interaction between organizational commitment and job-related tension affecting the propensity to create budgetary slack. That is to say, high (low) committed managers with low (high) level of job-related tension have less (higher) propensity to create budgetary slack under the condition only of high budgetary participation.

Organisational commitment has previously been demonstrated to have positive organisational outcomes (Douglas and Wier, 2000); it has further been seen to influence and be influenced by participation (Boshof and Mels, 1995; Parker and Kyj, 2006). Job-related tension has been shown to have a negative effect on budgetary behaviour (Hopwood, 1972; Hirst, 1981). Some studies have been unable to conclude the relationship between budgetary participation and managers' propensity to create slack. It is suggested here that the variables of organisational commitment and job-related tension in this study may combine to

address the puzzle and this can be revealed by differentiating high and low levels of participation.

It has been pointed out earlier that in situations of low participation there is little opportunity to create budgetary slack (Dunk 1993; Kren, 1993). In line with these earlier findings, this research revealed that where budgetary participation is low, there is no significant interaction between organizational commitment and job-related tension affecting the propensity to create slack. This research therefore provides insights for managers and for organizations to learn more about how these variables can affect the dysfunctional behaviour of managers. Hence, it draws to the attention of corporate management that slack, which is probably contributing to inefficiency, is kept to a minimum by soliciting greater employee participation and commitment whilst seeking to manage job-related tension.

The variables used are based upon various previous studies and have been employed widely (Brownell 1981; Chow, 1983; Chow et al., 1988; Dunk, 1993; Gul, Tsui, Fong and Kwok 1995; Hirst and Yetton, 1999; Mahoney, Jerdee and Carroll 1963; Nouri and Parker, 1998). As a result all the measurements in this study have gained high internal reliability. It should also be noted that previous studies have often selected industries from the manufacturing sector, the present study been based in the hotel industry.

The challenge faced by the Macau hotel industry today is to develop and retain managers especially at the middle level, so organisational commitment and job-related tension would appear to be central to this activity. For these organisations, it is necessary to have an adequate monitoring system for the operation of budget setting, agreeing performance measures, targets and budgetary control. The results in this study indicate that managers with low commitment may consider their involvement in the budget process an extra burden. As such it is more likely that such managers may be inclined to overstate their budget and hence create slack. It is suggested that greater control through record keeping and formalised routines are required to be applied to budgets of managers who have low organizational commitment and high job-related tension. So that the prospects for them building slack into their budgets are reduced. Some highly committed managers might not even identify stress during the budgeting process. They might enjoy working in such an environment because they accept and value the organization's goals (Boshof and Mels, 1995; Lincoln and Kalleberg, 1985; March and Simon, 1958). These managers who display high commitment and low job tension are less likely to attempt to build budget slack and hence the same 'controls' are not required. This is an area where senior management judgement is important.

The high mobility of human resources in the Macau hotel industry is of concern to the management in this sector. Therefore, there must be sufficient attention to what Byrne and Damon (2008) describe as 'voice and explanation', that is, involvement, good

guidance and provision of sufficient resources and information from the upper management to handle problems which the managers may anticipate during the budget-participation process. By using such policies, budgetary slack might be controlled and the commitment of the managers to the company's goals and values can also be increased. Dysfunctional behaviour may therefore not appear when managers have good constructive guidance from and interaction with their senior management.

The researchers were able to report back to the collaborating hotels with the summary findings presented here. Of particular value in the subsequent discussion with managers was the reference to the inflection point of the level of commitment and Figures 2 and 3 depicting the behaviour of the high and low participation sample. For the managers this served to add greater understandability to the findings and they were more able to operationalise the concept of commitment for example related to the questionnaire items. Likewise the different levels of participation prompted significant discussion based on their experience of both managing and being managed.

With respect to the limitations of the current study, several points are worth mention. Firstly, because the participants were selected only from the service sector, the sample was not cross-sectional. The results should be interpreted with caution and further research is required before the current results can be generalized to other industries. Secondly, it is suggested to future researchers that they investigate the cultural factors related to Asian management, since the current results may only be applicable in hotels and particularly Macau. It is worthwhile extending the study to other countries and to compare the results of this research. Future research could also examine further the reasons for the dysfunctional behaviour especially taking into account the environment in other countries or industries. This will enable a fuller evaluation of the prevalence of this phenomenon in organizations in order to prevent personnel from acting adversely. Additionally, more variables (such as environmental factors, task characteristics and working attitude) can be included in future studies so that remedial actions preventing dysfunctional behaviour can be better focused. Finally, future studies are also needed to look into not only dysfunctional behaviour but also other consequences such as health issues, job satisfaction, motivation and performance.

References

- 1 Adler, R. and Corson, D. (2003). Organizational Commitment, Employees and Performance, *Chartered Accountant Journal of New Zealand*, 82(3), 31-37.
- 2 Agbejule, A. and Saarikoski, L. (2006). The effect of cost management knowledge on the relationship between budgetary participation and managerial performance, *British Accounting Review*, 38 (4) 427-440.

- 3 Becker, H.B. and Green, D. (1962). Budgeting and Employee Behaviour, *Journal of Business*, 35(4), 392-402.
- 4 Blau, G.J. (1987). Using a Person-Environment Fit model to Predict Job Involvement and Organizational Commitment, *Journal of Vocational Behaviour*, 30(3), 240-257.
- 5 Boshof, C. and Mels, G. (1995). A Causal Model to Evaluate the Relationship Among Supervision, Role Stress, Organizational Commitment and Internal Service Quality, *European Journal of Marketing*, 29(2), 23-42.
- 6 Bottger, P.C. and Hirst, M.K. (1988). The Interaction Effect of Budget Emphasis and Participation on Experienced Job Stress, *Human Resource Management*, 26(4), 38-46.
- 7 Brownell, P. (1981). Participation in Budgeting, Locus of Control and Organizational Effectiveness, *The Accounting Review*, 56(4), 844-860.
- 8 Brownell, P. and Dunk, A. S. (1991). Task Uncertainty and its Interaction with Budgetary Participation and Budget Emphasis: Some Methodical Issues and Empirical Investigation, *Accounting, Organisations and Society*, 16 (8) 693-703.
- 9 Brownell, P. and Hirst, M. (1986). Reliance on Accounting Information, Budgetary Participation and Task Uncertainty: Tests of a three-way interaction, *Journal of Accounting Research*, 24(2), 241-249.
- 10 Brownell, P. and McInnes, M. (1986). Budgetary Participation, Motivation and Managerial Performance, *The Accounting Review*, 16(4), 587-600.
- 11 Bryan, J.F. and Locke, E.A. (1967). Goal Setting as a Means of Increasing Motivation, *Journal of Applied Psychology*, 51(3), 274-277.
- 12 Buchheit, S., Pasewark, W.R. and Strawser, J.R. (2003). No need to Compromise: Evidence of Public Accounting's Changing Culture Regarding Budgetary Performance, *Journal of Business Ethics*, 42(2), 151-163.
- 13 Byrne, S. and Damon, F. (2008). To participate or not to participate? Voice and Explanation effects on Performance in a multi-period Budget Setting, *British Accounting Review*, 40 (3) 207-227.
- 14 Chong V.K. and Leung T. S. (2003). Testing a Model of the Motivational Role of Budgetary Participation on Job Performance: Goal Setting Theory Analysis, *Asian Review of Accounting*, 11(1), 1-17.
- 15 Chow C.W. (1983). Providing Incentives to Limit Budgetary Slack, *Cost and Management*, September-October, 57(5), 34-41.
- 16 Chow, C.W., Cooper, J.C. and Waller, W.S. (1988). Participative Budgeting: Effects of a Truth-inducing Pay Scheme and Information Asymmetry on Slack and Performance, *The Accounting Review*, 63(1), 111-122.
- 17 Cohen, L. and Manion, L. (1994). *Research Methods in Education*, 4th edition, London, Routledge.
- 18 Cyert, R.M. and March, J.G. (1963). *A Behavioural Theory of the firm*, Englewood Cliffs, NJ: Prentice-Hall.
- 19 Davila, T. and Wouters M. (2005). Managing Budget Emphasis Through the Explicit Design of Conditional Budgetary Slack, *Accounting, Organizations and Society*, 30 (7&8), 587-608.
- 20 Davis, S., DeZoort and Kopp, L.S. (2006). The Effect of Obedience Pressure and Perceived Responsibility on Management Accountants' Creation of Budgetary Slack, *Behavioural Research in Accounting*, 18(1), 19-35.
- 21 Douglas, P.C. and Wier, B. (2000). Integrating Ethical Dimension into a Model of Budgetary Slack Creation, *Journal of Business Ethics*, 28(5), 267-277.
- 22 Dunk, A.S. (1990). Budget Emphasis, Budgetary Participation and Managerial Performance, *Accounting, Organisations and Society*, 14(4), 321-324.
- 23 Dunk, A. S. (1993). The Effect of Budget Emphasis and Information Asymmetry on the Relation between Budgetary Participation and Slack, *The Accounting Review*, 68(2), 400-410.
- 24 Dunk, A. S. (2007). Innovation budget pressure, quality of IS information, and departmental performance, *British Accounting Review*, 39 (2), 115-124.
- 25 Dunk, A. S. (2011). Product innovation, budgetary control and the financial performance of firms, *British Accounting Review*, 43 (2), 102-111.
- 26 Emsley, D. (2003). Multiple Goals and Managers' job-related Tension and Performance, *Journal of Managerial Psychology*, 18(4), 345-356.
- 27 Fisher, J., Frederickson, J. and Peffer, S. (2002). The effect of information asymmetry on negotiated budgets: An empirical investigation, *Accounting, Organizations and Society*, 27(1), 27-43.
- 28 Frezatti, F., Braga de Aguiar and Rezende, A. (2007). Strategic Responses to Institutional pressures and Success in Achieving Budget Targets: A Survey at a Multinational Company, *International Journal of Accounting and Information Management*, 15(2), 50-66.
- 29 Govindarajan, V. (1986). Impact of Participation in the Budgetary Process on Managerial Attitudes and Performance: Universalistic and Contingency Perspective, *Decision Science*, 17(4), 496-516.
- 30 Gray, W. and Ligouri, S. (1994). *Hotel and Hotel Management and Operations*. Prentice Hall, New York.
- 31 Gul, F.A., Tsui, S.L., Fong, C.C. and Kwok, Y.K. (1995). Decentralization as a Moderating Factor in the Budgetary Participation- Performance Relationship: Some Hong Kong Evidence, *Accounting and Business Research*, 25(98), 107-113.
- 32 Hirst, M.K. (1981). Accounting Information and the Evaluation of Subordinate Performance: A Situational Approach, *The Accounting Review*, 21(2), 771-784.
- 33 Hirst, M.K. and Yetton, P.W. (1999). The Effects of Budget Goals and Task Independence on the Level of and Variance in Performance: A Research Note, *Accounting, Organisations and Society*, 24(3), 205-216.
- 34 Hopwood, A. G. (1972). An Empirical Study of the Role of Accounting Data in Performance Evaluation, *Journal of Accounting Research*, 10(3), 156-182.
- 35 Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. and Rosenthal, R.A. (1964). *Organizational Stress: Studies in Role Conflict and ambiguity*, Wiley, New York.
- 36 Kenis, I. (1979). Effect of Budgetary Goal Characteristics on Managerial Attitudes and Performance. *The Accounting Review*, October, 54(4), 707-721.
- 37 Kren, L. (1993). Control System Effects on Budget Slack, *Advances in Management Accounting*, 2, 109-118.
- 38 Langfield-Smith, K. (1997). Management Control Systems and Strategy: A Critical Review, *Accounting, Organizations and Society*, 22(2), 207-232.

- 39 Lau, C. M., Dunk, A.S. and Smith, G.D. (1996). The Propensity of Managers to Create Budgetary Slack: A Cross National Re-examination Using Random Sampling, *The International Journal of Accounting*, 31(4), 483-496.
- 40 Lau, C. M. and Buckland C. (2001). Budgeting – role of Trust and Participation: A Research Note, *Abacus*, 37(3), 369-389.
- 41 Lau, C. M. and Eggleton, I. R. C. (2003). The influence of information asymmetry and budget emphasis on the relationship between participation and slack, *Accounting and Business Research*, 33 (2), 91-104.
- 42 Lilleyman, P.G. (1979). Budgeting and Participation, *Australian Accounting*, 18(2), 632-638.
- 43 Lincoln, J.R. and Kalleberg, A.L. (1985). Work Organizational and Workplace Commitment: A study of Plants and Employees in the U.S. and Japan, *American Sociological Review*, 50(6), 738-760.
- 44 Lukka, K. (1988). Budgeting Biasing in Organizations: Theoretical Framework and Empirical Evidence, *Accounting, Organizations and Society*, 13(3), 281-301.
- 45 Macky, K. and Boxall, P. (2008). High-involvement work processes, work intensification and employee well-being: A study of New Zealand worker experiences, *Asia Pacific Journal of Human Resources*, 46(1), 38-51.
- 46 Magner N.R., Johnson, G.G., Staley A.B. and Welker, R.B. (2006). A Case for Fair Budgetary Procedure, *Managerial Auditing Journal*, 21(4), 408-419.
- 47 Mahoney, T.A., Jerdee, T.H. and Carroll, S.J. (1963). *Development of Managerial Performance: A Research Approach*, Cincinnati, South-western Publishing Co.
- 48 March, J.G. and Simon, H.A. (1958). *Organizations*, New York, John Wiley.
- 49 Marginson, D. and Ogden, S. (2005). Coping with Ambiguity through the Budget: Positive Effects of Budgetary Targets on Manager' Budgeting Behaviours, *Accounting, Organizations and Society*, 30(5), 435-456.
- 50 Mathieu, J.E. and Zajac, D.M. (1990). A Review and Meta-analysis of the Antecedents, Correlates, and Consequence of Organizational Commitment, *Psychological Bulletin*, 108(2), 171-194.
- 51 Merchant, K. A. (1981). The Design of Corporate Budgeting System: Influences on Managerial Behaviour and Performance, *The Accounting Review*, 16(4), 813-829.
- 52 Merchant, K.A. (1985). Budgeting and Propensity to Create Budgetary Slack, *Accounting, Organizations and Society*, 10(2), 201-210.
- 53 Merchant, K.A. and Manzoni, J. (1989). The Achievability of Budget Targets in Profit Centre: A Field Study, *The Accounting Review*, 64(3), 539-558.
- 54 Meyer, J.P., Paunonen, S.V., Gellatly, I.R., Goffin, R.D. and Jackson, D.N. (1989). Organizational Commitment and Job Performance: It's the Nature of the Commitment That Counts, *Journal of Applied Psychology*, 74(1), 152-156.
- 55 Mia, L. (1988). Managerial Attitude, Motivation and the Effectiveness of Budgetary Participation, *Accounting, Organizations and Society*, 13(5), 465-475.
- 56 Mia, L. (1989). The Impact of Participation in Budgeting and Job Difficulty on Managerial Performance and Work Motivation: A Research Note, *Accounting Organizations and Society*, 14(4), 347-357.
- 57 Milani, K. (1975). The Relationship of Participation, in Budget-setting to Industrial Supervision Performance and Attitudes: A Field Study, *The Accounting Review*, 50(2), 274-84.
- 58 Mowday, R., Steers, R. and Porter, L. (1979). The Measurement of Organizational Commitment, *Journal of Vocational Behaviour*, 14(4), 224-247.
- 59 Nouri, H. (1994). Using Organizational Commitment and Job Involvement to Predict Budgetary Slack: A Research Note, *Accounting, Organizations and Society*, 19(3), 289-295.
- 60 Nouri, H. and Parker, R.J. (1998). The Relationship between Budget Participation and Job Performance: The Roles of Budget Adequacy and Organisational Commitment, *Accounting, Organizations and Society*, 23(5&6), 467-483.
- 61 Onsi, M. (1973). Factor Analysis of Behavioural Variables Affecting Budgetary Slack, *The Accounting Review*, 48(3), 535-548.
- 62 Otley, D. T. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis, *Accounting Organisation and Society*, 5(4), 413-428.
- 63 Parker, R.J. and Kyj, L. (2006). Vertical Information Sharing in the Budgeting Process, *Accounting Organisation and Society*, 31(1), 27-45.
- 64 Parsons, G. (1995). Empowering Employees- Back to the Future at Novotel, *Managing Service Quality*, 5(4), 16-21.
- 65 Potter, G. and Schidgall, R.S. (1999). Hospitality Management Accounting: Current Problems and Future Opportunities, *International Journal of Hospitality Management*, 18(5), 387-400.
- 66 Price, J.L. and Muller, C.W. (1981). *Professional Turnover: The Case of Nurses*, New York: Spectrum.
- 67 Randell, D.M. (1990). The Consequences of Organizational Commitment: Methodological Investigation, *Journal of Organizational Commitment*, 11(5), 361-378.
- 68 Reid, P. (2002). A Critical evaluation of the effect of participation in budget target setting on Motivation, *Managerial Auditing Journal*, 17(3), 122-129.
- 69 Shuler, R.S. (1980). Definition and Conceptualization of Stress in Organizations, *Organizational Behaviour and Human Performance*, 25(2), 184-215.
- 70 Steers, R. M. (1976). Factors Affecting Job Attitude in a Goal Setting Environment, *Academy of Management Journal*, March, 19(1), 6-16.
- 71 Subramaniam, N. and Ashkanasy N. (2001). The Effect of Organizational Culture Perceptions on the Relationship between Budgetary Participation and Managerial Job-Related Outcomes, *Australian Journal of Management*, June, 26(1), 35-54.
- 72 Van der Stede, W.A. (2000). The Relationship between Two Consequences of Budgetary Controls: Budgetary Slack Creation and Managerial Short-term Orientation, *Accounting, Organizations and Society*, August, 25(6), 609-622.
- 73 Weick, K.E. (1983). Stress in Accounting Systems, *The Accounting Review*, 58(2), 350-374.
- 74 Young, M.S. (1985). Participative Budgeting: The Effects of Risk Aversion and Asymmetric Information on Budgetary Slack, *Journal of Accounting Research*, 23(2), 829-849.
- 75 Yuen, C.Y. (2001). The Effects of Job-related Tension, Budgetary Participation and Their Interactive Term on Job Satisfaction, *Euro Asia Journal of Management*, 2(1), 49-68.