

# CORPORATE BUDGET GOVERNANCE THROUGH THE OPERATING MANAGERS ENGAGEMENT: DOES LOCUS OF CONTROL MATTER?

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## Abstract

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The current study aims to investigate the relationship between budgetary participation and job satisfaction, moderated by the personality variable, locus of control. The data is gathered via a questionnaire administered to 75 managers from Tunisian hotels. To test the hypothesis of this study, moderated regression analysis was performed. Our results in a developing country setting confirm the contingent aspect of budgetary participation and show that the locus of control moderates the budgetary participation effects on job satisfaction. Budgetary participation was found to have a positive effect on internal managers while having a negative effect on external managers. The results suggest that it is necessary for Tunisian hotels to focus on the broader context in which budgetary participation is used. This latter has two aspects: structural and behavioral. The success of budget participation certainly depends on the organizational setting in which it is used but also on the psychological willingness of actors involved to develop and succeed in such budgetary practice.

**Keywords:** Budgetary Participation, Job Satisfaction, Locus of Control, Contingency Theory, Tunisian Hotels

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## 1. INTRODUCTION

In the past decades, budgetary participation has attracted increasing attention (Brownell, 1981; Amir et al., 2021; Brownell & Hirst, 1986; Chenhall & Brownell, 1988; Murray, 1990; Brownell & Dunk, 1991; Krenl, 1992; Baccouri & Hassouna, 2017; Her, Shin, & Pae, 2019; Lau, Scully, & Lee, 2018; Lleo, Viles, Jurburg, & Santos, 2020; Sofyani, Santo, Najda, & Al-maghribi, 2020; Apriwandi & Supriyono, 2021; Santos, Beuren, & Marques, 2021). Budgetary participation is defined as a process whereby subordinates are given the opportunity to get involved in and have an influence on the budget setting process (Brownell, 1992). It refers to

the practice of allowing managers to participate in the decisions by which budgets are established to measure and evaluate their performance (Swieringa & Moncur, 1975; Shields & Shields, 1998). According to the behavioral approach in accounting, budgetary participation can influence the attitudes of individuals at work (Chong, Eggleton, & Leong, 2005), including satisfaction with the work, and the feeling of being part of the company (Viseu, Pinto, Borralha, & de Jesus, 2020).

The relationship between budgetary participation and job satisfaction has attracted many researchers (Nguyễn, 2019; Brownell, 1981; Cheng, Chen, & Shih, 2014; Kahar, Rohman, & Chariti, 2016; Becker & Green, 1962; Bonach, Maurice, & Moris, 2012;

Leach-López, Stammerjohan, & Lee, 2009; Dakhli, 2009; Widiawati & RS, 2019). However, the results still suffer from contradictions and a lack of conclusiveness (Boujelbene & Affes, 2015; Costa da Silva Zonatto, Nascimento, Lunardi, & Degenhart, 2020). While some authors have found statistically significant and positive relationship (Milani, 1975; Chenhall, 1986; Frucot & Shearon, 1991; Shields & Shields, 1998; Boujelbene & Affes, 2012; Dakhli, 2009; Baccouri & Hassouna, 2017; Khaddafi, Raza, & Heikal, 2015; Costa da Silva Zonatto et al., 2020), several studies concluded that there is no significant relationship between budgetary participation and job satisfaction (Kenis, 1979; Brownell, 1982; Harrisson, 1992; Ginting, 2021). Also, there are some researchers who proposed a negative relationship between these two variables (Otley & Pollanen, 2000; Leach-López, Stammerjohan, & McNair, 2008; Lau et al., 2018). Yuliansyah, Inapty, Dahlan, and Agtia (2018) say that these mixed results indicate that no universalistic relationship exists between budgetary participation and job satisfaction, and suggest that there could be other variables involved. In this vein, several studies adopted a contingency approach and attempted to advance some contingency variables that greatly influence budget behaviors (Brownell, 1982; O'Connor, 1995; Chow, Shields, & Wu, 1999). They considered that how the budgetary system is developed and used as a complex outcome of some contingent variables (Hormati, Laduna, Mahdi, & Kahar, 2017). They demonstrated the existence of links between structural and contextual characteristics of the company (size, strategy, structure, perceived environmental uncertainty, etc.) and its use of budgetary participation (Chenhall, 2003; Komarev, 2007). Other authors added behavioral factors (authoritarianism, locus of control, etc.) related to the actors in their links to the budget system. They argued that budget control practices differ according to the context and profiles of the actors involved (Brownell, 1982; Seiler & Bartlett, 1982; Chenhall, 1986; Bonache et al., 2012; Viseu et al., 2020). This study proposes to extend this line of research by investigating whether the locus of control, as a personality variable, moderates the budgetary participation-job satisfaction relationship. We aim to provide answers to the following research questions:

*RQ1: How does budgetary participation affect managerial job satisfaction?*

*RQ2: How does the locus of control moderate the relationship between budgetary participation and job satisfaction?*

Answering these research questions implies using a theoretical framework that proposes certain factors as well as an indication of the direction of the impact of these factors on the budgetary process. We will approach it from the perspective of contingency theory. This perspective has "the merit of presenting management control as eminently adaptable to different types of organizations" (Pariante, 1998, p. 4). Our study claims originality insofar as it addresses the hotel industry. Although budgetary participation is well documented in manufacturing, it is not so in the service sector, particularly in hospitality (Viseu et al., 2020; Boujelbene & Affes, 2012; Harris & Brown, 1998;

Mia & Patiar, 2001; Viseu et al., 2020), despite the industry's growing economic importance (Harris & Brown, 1998). For instance, tourism is a major industry sector in the Tunisian economy. Moreover, the hotel industry differs considerably from the manufacturing industry (Mia & Patiar, 2001; Winata & Mia, 2005). In fact, managers in the hotel industry, compared to their counterparts in manufacturing industries, face a more uncertain and complex work environment because of the hotel industry's exceptional service characteristics. Also, the business environment in the hotel industry is highly competitive (Yuliansyah et al., 2018; Mia & Patiar, 2002). In the hotel industry, good or bad service has many facets (Darvishmotevali, Arasli, & Kilic, 2017), including cycles of internal service quality (Lam & Chen, 2012; Scanlon, 2007). Unless employees are happy, it is quite difficult for an organization to provide good service to its customers (Gouthier & Rhein, 2011). Job satisfaction, therefore, is an organization's responsibility (Jermias & Setiawan, 2008). It is very likely that the research findings on the budgetary participation-job satisfaction relationship may not be applicable in the hotel industry (Yuliansyah et al., 2018; Mia & Patiar, 2001). Thus, more research on such issues is needed to fill this gap in the hotel industry. For this purpose, the current study compiled data that is gathered via a questionnaire administered to 75 middle-level managers from Tunisian hotels. Our results confirm the contingent aspect of budgetary participation and show that the locus of control moderates the budgetary participation outcomes.

The remainder of the paper is structured as follows. Section 2 presents the theoretical framework. Section 3 describes the research methodology, followed by the results in Section 4. Section 5 discusses the findings in connection with prior studies and concludes.

## 2. CONCEPTUAL FRAMEWORK

### 2.1. Budgetary participation and contingency theory

How the budgetary system is developed and used was considered as a complex outcome of some contingent variables (Komarev, 2007; Govindarajan, 1986). Some authors retained the contingency theory as a theoretical basis to study the issues of budgetary participation. This theory has "the merit of presenting management control as eminently adaptable to different types of organizations" (Pariante, 1998, p. 4). Several studies have demonstrated the existence of links between the structural and contextual characteristics of the company (size, ownership structure, type of strategy, environmental perceived uncertainty, culture, etc.) and its use of budgetary participation (Chapman, 1997; Chenhall, 2003; Bonache et al., 2015; Bescos, Cauvin, Langevin, & Mendoza, 2004; Krenl, 2003; Merchant, 1981). According to Adler (1983), culture influences organizations through societal structures such as laws and political systems and also through the values, attitudes, behavior, goals, and preferences of participants. Thus, the view of "reality" held by members of a group is expected to affect their perception of the budgetary process and the values that they place

on participation in that process (Hofstede, 1987; Leach-López et al., 2008; Dakhli, 2009). Using the work of Hofstede (1980) for hypothesis development, Frucot and Shearon (1991) tested the interrelationship of budget participation and locus of control (a personality variable) and their impact on job performance and job satisfaction. They assumed that an organizational system such as budget participation would have different effects in different cultures. They concluded that the lack of significance in their variables was due to cultural differences. Following the methodology employed by Frucot and Shearon (1991), Leach-López et al. (2008) examined the effects of budgetary participation, and the personality variable, locus of control, on the performance and job satisfaction of Mexican managers working for US-controlled maquiladoras on the US/Mexican border and within interior Mexico. They found similar empirical results. In this vein, we can expect that budgetary participation would have different consequences in the Tunisian context as it presents a strong cultural gap with those where were born such budgetary practice. With respect to Hofstede's classification and some empirical studies made on Tunisian context (Zghal, 2008; Fakhfakh & Louadi, 2015), a more paternalistic and autocratic leadership style (with less participation in decision making and more rules and centralization) is still preferred (Ben Hamadi, Chapellier, & Villesèque-Dubus, 2014; Mansour, 2015). Power delegation is rarely practiced (Zghal, 1992) and the participants generally concern only the managers who belong to the second level of the hierarchy (Lassoued, 2008). Therefore, it would be worthwhile to examine this issue in Tunisia, a sociocultural context with very little explored (Mansour, 2015; Baccouri & Hassouna, 2017). In fact, most budgetary participation research has been conducted in American, British, and Australian contexts (Brownell, 1981; Krenl, 1992; Leach-López et al., 2008; Her et al., 2019). One contribution of this study was to shed light on how budgetary participation could improve the employees' attitudes and behavior in Tunisian hotels.

## 2.2. Literature review and hypotheses development

Prior researches indicate that budgetary participation has many positive effects (Bonache et al., 2012; Chong et al., 2005; Viseu et al., 2020; Chenhall, 1986; Frucot & Shearon, 1991; Brownell, 1981; Shields & Shields, 1998; Boujelbene & Affes, 2015; Baccouri & Hassouna, 2017; Widiawati & RS, 2019; Costa da Silva Zonatto et al., 2020). Through budgetary participation, a manager gets the opportunities to interact, communicate, and influence the company's goals (Brownell & McInnes, 1986). Authors of human relations school propose that participation can fulfill some of the primary needs of the subordinate such as self-expression, self-esteem, and self-accomplishment and improving, as a result, his morale and job satisfaction. In this regard, it is important to refer to the study of Swieringa and Moncur (1975), which is a first attempt to describe budgeting in behavioral terms. Swieringa and Moncur (1975) reproach budget research for being limited to a purely technical vision of budgeting and ignoring the mechanisms

through which it influences managerial behavior. They concluded that the manager who is involved in the budgeting process shows favorable attitudes at work. These results corroborate Milani's (1975) findings, which already established a positive association between participation and managerial attitudes. Boujelbene and Affes (2015) note that budgetary participation motivates subordinates by encouraging them to accept and be committed to the budget targets and thus improving their job satisfaction. Finally, Baccouri and Hassouna (2017) find that budgetary participation intensity is antecedent to job satisfaction which in turn affects innovation. This result was confirmed recently with Costa da Silva Zonatto et al.'s (2020) study which concluded that budgetary participation is positively and significantly associated with managerial job satisfaction in Brazilian companies. More recently, Raucci and Paolini (2021), using a sample of clinical managers of Italian PHOs, show that budgetary participation has a direct positive effect on job satisfaction. However, other previous studies concluded that there is no significant relationship between budgetary participation and job satisfaction (Kenis, 1979; Harrisson, 1992; Ginting, 2021). In this vein, Brownell (1982) found weak evidence for a positive association between budgetary participation and job satisfaction. Most recently, Özer, Özcan, and Akpınar (2012) concluded that budgetary participation has not direct and significant association with job satisfaction. Seeking to investigate the antecedent, mediating, and outcome variables of budgetary participation in a developing country, namely Turkey, Jermias and Ygit (2013) found that budgetary participation alone does not improve job satisfaction and performance. Also, there are some researchers who propose a negative relationship between these two variables (Otley & Pollanen, 2000; Leach Lopez et al., 2008; Lau et al., 2018).

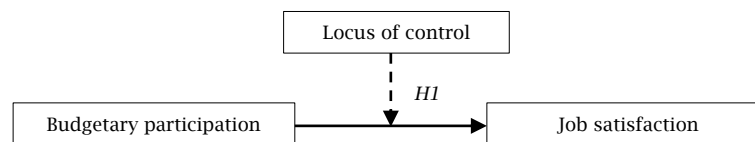
As presented above, the results of studies into the association between budgetary participation and job satisfaction are equivocal. An advanced explanation for these mixed results is that no universalistic relationship exists between budgetary participation and job satisfaction (Yuliansyah et al., 2018). In this vein, several studies adopted a contingency approach and attempted to advance some contingency variables that greatly condition budget behaviors (Brownell, 1982; O'Connor, 1995; Chow et al., 1999; Leach-López et al., 2008; Leach-López et al., 2009; Annakili & Jayam, 2018; Soleiman & Thalib, 2021). They considered that how the budgetary system is developed and used as a complex outcome of some contingent variables (Hormati et al., 2017). They demonstrated the existence of links between structural and contextual characteristics of the company (size, strategy, structure, perceived environmental uncertainty, etc.) and its use of budgetary participation (Chenhall, 2003; Komarev, 2007). Other authors (Frucot & Shearon, 1991; Seiler & Bartlett, 1982; Dakhli, 2009; Patten, 2005; Licata, Strawser, & Welker, 1986; Indriantoro, 2000) proposed to broaden this research framework to the behavioral contingency theory by integrating behavioral factors related to the actors in their links to the budget system. They argued that budget control practices differ

according to the context and profiles of the actors involved (Brownell, 1982; Chenhall, 1986; Bonache et al., 2012; Viseu et al., 2020). In this vein, locus of control was presented as a relevant variable that can moderate the impact of budgetary participation on job attitudes and behaviors. The locus of control construct can be defined as a psychological construct that captures individuals' perceptions towards the casual relationship between their own behavior and its consequences (Xia & Ma, 2020). The locus of control is conceptualized as referring to a unidimensional continuum, ranging from external to internal. Internal-individual believes that his/her behavior is guided by his/her personal decisions and efforts. While, external individual believes that his/her behavior is guided by fate, luck, or other external circumstances (Rotter, 1966). Brownell (1982) examined the effects of participative budgeting and locus of control on performance and job satisfaction in a field setting. Brownell's results indicate that participation does not have a significant direct effect on job satisfaction, but that individuals' locus of control has a moderating effect on the relationship between participation and job satisfaction. Using the framework of Hofstede

(1980) for hypotheses development, Frucot and Shearon (1991) tested the eventual interaction between budgetary participation and locus of control and its impact on job performance and satisfaction. They assumed that budgetary participation would have different effects in different cultures. Leach-López et al. (2008) examine the effects of budgetary participation, and the personality variable, locus of control, on the performance and job satisfaction of Mexican managers. Their study follows the methodology employed by Frucot and Shearon (1991), finds similar empirical results, but reaches quite different interpretations and conclusions. While Frucot and Shearon (1991) interpreted their results as suggesting caution in the use of participative budgeting by US companies operating in Mexico, they find that Mexican managers may exhibit cultural values much like their US counterparts and that the performance of these Mexican managers may benefit from budgetary participation. Based on these findings, we hypothesized that:

*H1: Locus of control moderates the relationship between budgetary participation and job satisfaction.*

Figure 1. Research framework



### 3. RESEARCH METHOD

The methodology used in this research is characterized as a descriptive study, conducted through survey and quantitative data approach.

#### 3.1. Measurement of variables

Our variables were measured by scales used by previous relevant studies and showed satisfactory validity and reliability. Milani's (1975) six-item measures were deployed to assess the middle-level managers' degree of participation in the budget process. This instrument has been widely used in previous budgeting studies (Krenl, 1992; O'Connor, 1995; Leach-López et al., 2009; Boujellbene & Affes, 2015). Most of these studies recommend a two-dimensional analysis of the budgetary participation variable. A factorial analysis was conducted. The results retained two factors explaining 71.813% of the total variance, i.e., involvement and influence. The Cronbach's alpha coefficient for budgetary participation was 0.836 which confirms the validity and the reliability of this measure. Respondents were asked to rate different aspects of budgetary participation, which include six items, using a five-point Likert scale (for details, see Appendix).

To treat the locus of control, we used the scale of Rotter (1966). This scale contains 19 items (statements) for which the respondent must check "True" or "False" that best fit his/her own belief. If the respondent marked a statement true, he/she gets 1 point and if he/she marked it false he/she gets -1. Based on his/her score, the respondent will be qualified as an internal locus of control (if he/she obtains a positive score) or an external locus of control (if he/she obtains a negative score). This instrument is widely deployed in psychological and accounting researches and several extensive literature reviews attest to its validity and reliability (Swieringa & Moncur, 1975; Brownell, 1981, 1982; Licata et al., 1986; Frucot & Shearon, 1991; Krenl, 1992). In this study, the Cronbach's alpha coefficient was 0.796 which indicates acceptable internal reliability for the scale.

Job satisfaction was measured by a six-item scale developed by Dewar and Werbel (1979) and largely used by prior accounting studies (Chenhall & Brownell, 1988; Chong et al., 2005; Jermia & Ygit, 2013; Baccouri & Hassouna, 2017). For this measure, we used a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This measure appears to be reliable since the Cronbach's alpha coefficient is equal to 0.95.

**Table 1.** Variables, operationalization, and definition

<i>Variables</i>	<i>Acronym</i>	<i>Definition</i>	<i>Scale</i>	<i>Authors</i>
Budgetary participation	<i>BP</i>	Process whereby subordinates are given the opportunity to get involved in and have an influence on the budget setting process.	Six-item, five-point Likert scale	Milani (1975)
Job satisfaction	<i>SAT</i>	Attitude toward work activities, the structural and social conditions of the work environment (Schermerhorn, Hunt, & Osborn, 2007).	Two-item, five-point Likert scale	Dewar and Werbel (1979)
Locus of control	<i>LOC</i>	The extent to which a person perceives events as being a consequence of his or her own behavior and therefore potentially under personal control (Rotter, 1966).	19-items scale	Rotter (1966)

Note: For details, see Appendix.

### 3.2. Sample and data collection

The population of this study is hotel middle-level managers. We randomly selected from the database of the Tunisian federation of hotels four and five-star hotels located in four tourist areas (Hammamet, Sousse, Mahdia, and Djerba). Moreover, hotels chosen do not pertain to any hotel chain to permit comparative analysis (Uyar & Bilgin, 2011). Our sample is homogeneous, both in terms of the number of chambers and employees. Hotels selected were expected to have clearly defined budgeting systems. The instrument used for data collection is a questionnaire composed of 27 multiple-choice questions, which were elaborated from the constructs presented in Table 1, observing their original measurement scales. The survey was pilot-tested with ten budget managers from three hotels from our sample. Generally, they considered that the questionnaire was comprehensive and they proposed some modifications in order to be adopted in Tunisian hotels. To increase our response rate, we take three steps suggested by Yuliansyah et al. (2018). Those steps are pre-notifications contact, the initial distribution of the questionnaire, and follow-up. Pre-notification is a preliminary meeting with general managers of selected hotels were held. In these meetings, we explained the purpose of our research and asked permission to handle the survey in their hotels. We informed that the respondents' names would be anonymous for security and confidential purposes. These interviews helped, also, to gather general information about the hotels and their corporate planning and budgeting systems and to identify a sample of middle-level managers who were involved in budgeting. Initial distribution of the survey instrument is by hand, physically visiting each participating hotel. The last step, and arguably the most important step, is follow-up. We collect the questionnaires and replace the questionnaire if it is said to be lost. By this approach, we received 80 questionnaires from 95 distributed questionnaires, which reflect a response rate of 84.2%. Of those collected questionnaires, 75 are usable, and the others 5 are discarded due to inappropriate responses and incomplete answers. The final sample size for hypotheses testing was reduced to 75 middle-level managers.

**Table 2.** Sample selection procedure

<i>Sampling steps</i>	<i>No. of managers</i>
Initial sample	95
Respondents	80
Response rate	84.2%
Less: questionnaires with missing data	5
<b>Final sample</b>	<b>75</b>

Respondents were heading the following functional departments: Human Resources Management (25.5%), Sales and Marketing (28%), Accounting (26.5%), and Purchasing (20%). Through a descriptive analysis of information on the participants in the survey, we found that they had been with their hotels for at least five years, they occupy their current position for an average of 4 years and they have a management and financial background. These findings strengthen the reliability of our sample because our respondents have adequate academic training and sufficient experience to adequately respond to the questionnaire. The collected data was stored in a database to be simply introduced in the SPSS software for statistical treatment.

**Table 3.** Respondents' distribution across

<i>Functional department</i>	<i>Number</i>
Accounting	20
Purchasing	15
Human Resources management	19
Sales & marketing	21
<b>Total</b>	<b>75</b>

Three parts structure our questionnaire. The first part aimed to gather general information about the respondents. Questions were as follows: the service held, the number of years working within the hotel, his/her academic formation, and for how many years he/she holds the current position. The second part consists of eight items classified under two groups of questions using a five-point Likert scale. These items are designed for budget participation and job satisfaction. The purpose of this part of the questionnaire was to explore respondents' perceptions about these two factors, budgetary participation, and job satisfaction. The scales included in the questionnaire have been used extensively in previous studies with satisfactory results for reliability and validity. The third part aims to survey the degree to which respondents perceive events in their lives as being

a consequence of their own behavior and thereby controllable (internal control), or as being unrelated to their own actions, and therefore beyond personal control (external control). It consists of 19 items. Then, by counting the internal answers and the external ones, we can qualify the respondent as an external locus of control if the external answers exceed the internal ones and vice versa.

### 3.3. Model specification

The hypothesis was tested using moderated regression analysis (MRA). It is a specific application of multiple linear regression analysis, in which the regression model contains an interaction term (Jeon, 2015). This procedure is well suited to the detection of moderating effects (Stone & Hollenbeck, 1984; Memon et al., 2019; Baron & Kenny, 1986; Hayes, 2017) and is widely used to test contingency hypotheses that predict interaction effects between budgetary participation and contextual variables (Chenhall, 1986; Tsui, 2001; Dunk, 2003; Chong et al., 2005). For this purpose, we fit the model presented below:

#### Model 1

$$SAT = a_0 + a_1BP + a_2LOC + a_3BP * LOC + \varepsilon \quad (1)$$

where, *SAT* is the job satisfaction, *BP* is the budgetary participation, *LOC* is the locus of control, *BP \* LOC* is the interaction term, and  $\varepsilon$  is the error term.

It should be noted that Baron and Kenny (1986) posited a condition to admit the moderating effect. It should be established that there is a significant interaction between the independent variable (budgetary participation) and the contingent variable (locus of control) affecting the dependent variable (job satisfaction). Thus, to support the moderating hypothesis, the coefficient  $a_3$  in the regression Model 1 should be significant and positive. Before performing the regression analysis, several tests need to be conducted. Mainly, the presence/absence of a problem of multicollinearity is tested. Table 4 reports the correlations among the independent variables. As a rule of thumb, a correlation of 0.70 or higher in absolute value may cause multicollinearity between variables (Hayes, 2017). The correlation coefficient between *BP* and *LOC* is 0.089. To better assess the multicollinearity problem, we compute the variance inflation factor test (VIF). To assert the absence of multicollinearity between the variables of the model, the value of VIF must be less than 10 (Chatterjee & Hadi, 2012). As reported in Table 4, we can confirm that no serious multicollinearity problems exist between variables of our model.

**Table 4.** Correlation matrix of independent variables

	<i>BP</i>	<i>LOC</i>	<i>VIF</i>
<i>BP</i>	1.000		1.25
<i>LOC</i>	0.089***	1.000	1.54

Note: *BP*: budgetary participation; *LOC*: locus of control; *VIF*: variance inflation factor.

\*\*\* significant at 1% level; \*\* significant at 5% level; \* significant at 10% level.

## 4. RESULTS AND DISCUSSION

### 4.1. Descriptive statistics

Table 5 provides descriptive statistics for the regression variables, including the mean, minimum, median, standard deviation, and Cronbach's alpha coefficient. The dependent variable, *SAT*, has a mean value of 7.025 and varies between 2 and 10, notably close to Boujelbene and Affes (2012) who found that job satisfaction in Tunisian hotels spans from a minimum of 4 to 10 with a mean of 7.024. *BP* has a mean value of 22.21. Additionally, the mean of the *LOC* of the sample was 0.53 with a standard deviation of 5.8 that shows a wide variety in the locus of control among Tunisian hotels.

**Table 5.** Descriptive statistics for measured variables

Variables	Min	Max	Mean	SD	Cronbach's alpha
<i>BP</i>	6	30	22.21	3.71	0.836
<i>SAT</i>	2	10	7.025	1.55	0.796
<i>LOC</i>	-13	13	0.53	5.8	0.95

Note: *BP*: budgetary participation; *LOC*: locus of control; *SAT*: job satisfaction.

### 4.2. Regression results

Results of the regression analysis are reported in Table 6. According to this table, we note that the probability associated with the correlation test and the heteroscedasticity test is higher than the 5% threshold. Thus we can conclude the absence of any problem of correlation and heteroscedasticity of the errors of our regression. As the most important statistical tests have been performed, we will interpret the results obtained from the estimation of our empirical models.

**Table 6.** Results of regression analysis

	Coefficient	SD	t-value	p
Constant	-0.131	0.160	-0.822	0.416
<i>BP</i>	0.299	0.178	1.678	0.102
<i>LOC</i>	0.272	0.181	1.505	0.141
<i>BP * LOC</i>	0.233	0.129	1.809	0.079
R <sup>2</sup> = 0.233; Adjusted R <sup>2</sup> = 0.170; F = 3.737; p < 0.001				
Breusch-Godfrey Serial Correlation LM test:				
F-statistic	2.307977	Prob.	0.1039	
Heteroskedasticity test: Breusch-Pagan-Godfrey:				
F-statistic	0.793149	Prob.	0.6096	

Note: *BP*: budgetary participation; *LOC*: locus of control; *BP\*LOC*: interaction term between *BP* and *LOC*.

Our results indicate that budgetary participation exerts a positive and significant effect on job satisfaction ( $a_1 = 0.299$ ). This finding is consistent with previous results (Frucot & Shearon, 1991; Leach-López et al., 2009; Boujelbene & Affes, 2012, 2015; Nguyễn, 2019; Brownell, 1981; Kahar et al., 2016; Widiawati & RS, 2019; Costa da Silva Zonatto et al., 2020) which attest a positive relationship between budget participation and job satisfaction. In Table 6, the interactive effect of locus of control on the relationship between budgetary participation and job satisfaction is examined, and the coefficient of *BP \* LOC* is used to test this moderating effect. As *BP \* LOC* is significant ( $a_3 = 0.233$ ), it can be argued that the locus of

control moderates the BP-SAT link. Thus, *HI* is confirmed. However, the moderated regression analysis, performing alone, can detect only the presence or absence of an interactive effect. It does not reveal how this factor influences the direct relationship. As proposed by Sharma, Durand, and Gur-Arie (1981) and Baron and Kenny (1986), we complete the moderated analysis regression with a sub-group analysis in order to determine how the locus of control moderates the budgetary participation-job satisfaction association.

### 4.3. Additional analysis

In order to better explore how the locus of control moderates the budgetary participation's impact on job satisfaction and as proposed by Baron and Kenny (1986), sub-group analysis was performed by dividing the sample into two balanced groups. Then, a linear regression analysis is conducted within each group based on the following models:

*Model 1a*

$$SAT_I = \beta_0 + \beta_1 BP_I + \varepsilon \quad (2)$$

*Model 1b*

$$SAT_E = a_0 + a_1 BP_E + \varepsilon \quad (3)$$

where,  $SAT_E$ : job satisfaction for externals;  $BP_E$ : budgetary participation for externals;  $SAT_I$ : job satisfaction for internals;  $BP_I$ : budgetary participation for internals.

As shown in Table 7, the participation coefficients are statistically significant. We can conclude that the locus of control significantly moderates the budgetary participation-job satisfaction relationship. Middle-level managers have different attitudes toward budgetary participation. For Internal managers, budgetary participation affects positively and significantly ( $\beta_1 = 0.412$ ) their job satisfaction. Because they behave as active members of the group and aim to be involved in the decisional process of the company, internal managers prefer a participative budgeting system where they will have some effect on the budget that is jointly established. As such, a participative system provides them with opportunities to influence their environment and, consequently, to be active agents. Although, budgetary participation impacts negatively and significantly ( $a_1 = -0.862$ ) the job satisfaction of external managers. External managers refuse responsibilities and prefer receiving and executing supervisors' orders. Thus, they react negatively to budgetary participation. These findings are in line with several prior studies (Frucot & Shearon, 1991; Brownell, 1982; Patten, 2005; Leach-López et al., 2008; Dakhli, 2009; Barus, 2019; Fuadah, Safitri, Yuliani, & Arisman, 2020; Ilyas, 2021) which attested that budgetary participation does not enhance the job satisfaction in a universalistic perspective regardless the manager's personality. Thus, participation in the budget process accentuates job satisfaction when coupled with an internal locus of control. However, it weakens job satisfaction when associated with an external locus of control.

**Table 7.** Additional analysis results

<i>Model 1a</i>					<i>Model 1b</i>				
Coefficient	Value	SD	t-value	p	Coefficient	Value	SD	t-value	p
$\beta_0$	3.422	0.128	0.615	0.416	$a_0$	-0.625	0.132	-4.719	0.000
$BP_I$	0.412	0.15	2.75	0.005	$BP_E$	-0.862	0.117	-7.36	0.001
R <sup>2</sup> = 0.254; Adjusted R <sup>2</sup> = 0.180; F = 3.827; p < 0.001					R <sup>2</sup> = 0.355; Adjusted R <sup>2</sup> = 0.305; F = 6.084; p < 0.001				

Notes.  $BP_I$ : budgetary participation for internals;  $BP_E$ : budgetary participation for externals.

## 5. CONCLUSION

The purpose of this study was to investigate the effect of budgetary participation and locus of control on job satisfaction with a sample of 75 middle-level managers from Tunisian hotels. Descriptive research was performed through a survey and quantitative approach of data. Using the MRA, we find evidence of a significant positive relationship between budgetary participation and managerial job satisfaction in Tunisian hotels. This finding indicates that the participation of subordinates in the budgeting process drives greater satisfaction. This result supports a number of previous studies which link budgetary participation and managers' attitudes and behaviors (Frucot & Shearon, 1991; Leach-López et al., 2008; Boujelbene & Affes, 2015; Nguyễn, 2019; Brownell, 1981; Widiawati & RS, 2019; Costa da Silva Zonatto et al., 2020). Also, our results support the expectation that participation is most effective for internally oriented individuals. Our results indicate that Tunisian internal managers are satisfied under a participative budgeting system but externals are not. The reactions of managers to budgetary participation differ clearly according to their

personal traits. Internals, because they behave as active members of the group and aim to be involved in the decisional process of the company, they prefer a participative budgeting system where they will have some influence on the budget that is set jointly. Externals managers prefer receiving and executing supervisors' orders. Thus, they react negatively to budgetary participation. These results are in line with several prior studies conducted in different socio-cultural contexts, namely American, Australian and Asian contexts (Brownell, 1981, 1982; Krenl, 1992; Chong et al., 2005; Barus, 2019; Fuadah et al., 2020; Ilyas, 2021). Therefore, these findings allow us to reject the cultural contingency hypothesis of the budgetary participation defended by some authors (Frucot & Shearon, 1991; Leach-López et al., 2008). We conclude that the locus of control moderates the relationship between budgetary participation and job satisfaction independently of the socio-cultural context.

This study has relevant theoretical and practical implications. We expect to make several contributions to the existing literature. First, our research findings provide additional evidence for existing studies examining the budgetary participation outcomes (Argyris, 1952; Brownell,

1982; Chong et al., 2005; Chow et al., 1999; Harrison, 1992; Tsui, 2001; Ueno & Sekaran, 1992; Shields & Shields, 1998; Leach-López et al., 2008; Frucot & Shearon, 1991; Khaddafi et al., 2015; Widiawati & RS, 2019). Prior studies were conducted in American, European, and Australian contexts. Few studies have addressed the African and the Arabic contexts (Baccouri & Hassouna, 2017; Dakhli, 2009; Boujelbene & Affes, 2012). Thus, our study contributes to the enrichment of the management accounting literature about the effects of budgetary participation. Second, our results contribute towards extending extant literature focusing on budget practices' implementation by empirically explaining how some contingent variables contribute to or impede the development and the success of budget control tools. In this regard, this study provides a theoretical contribution to the budgetary literature by suggesting the establishment of dynamic associations between budgetary participation and job satisfaction around the personality traits of managers involved. These results have also important practical implications for human resources management in the hotel industry. They highlight the importance of managers' budget participation as a relevant driver of positive attitudes. Thus, hotel managers should seek to value the contributions of their employees and demonstrate concern about their well-being, which will develop positive perceptions regarding organizational functioning. Our results also suggest that it is necessary for top managers to focus on the broader context in which this budgetary practice should be used. This latter has two aspects: structural and behavioral. The success of budget

participation certainly depends on the organizational setting in which it is used but also on the psychological willingness of actors involved to develop and succeed in such budgetary practice.

Despite these contributions, this study has some limitations that could be addressed in future research studies. The first limit concerns the framework chosen to explain budget behaviors. Admittedly, the locus of control as a personality trait has been shown to have a significant impact on budgetary participation' effects (Brownell, 1981; Frucot & Shearon, 1991; Leach-López et al., 2009); but it remains insufficient, on its own, to explain managers budget behaviors. Following Brownell (1982), four groups of variables (individual, cultural, organizational, and interpersonal) might affect budget participation. Further research should pay attention to all these variables in order to develop an integrated model indicating the conditions under which budgetary participation will generate beneficial effects. The second limit is linked to sample procedure selection. The research was conducted in hotels only. Consequently, the results reported in this paper may only apply to hotels. Therefore, next studies are essential to be conducted on other industries, which certainly have different organizational cultural contexts. The third limit concerns the data collection tool. The survey approach has limitations such as the lack of control over respondents (Nouri & Parker, 1996). Future studies could use other research methods such as case studies to get a deeper understanding of the conditions under which budgetary participation will affect positively job satisfaction.

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## APPENDIX

### Questionnaire

#### Part 1

<b>Budgetary participation:</b> Response points: 1 = weakly important, 5 = strongly important					
1. To what extent do you get involved when your budget is set?	1	2	3	4	5
2. To what extent does your supervisor provide reasons when your budget is revised?	1	2	3	4	5
3. How often do you state your request, opinion, and or suggestions about the budget to your supervisor without being asked?	1	2	3	4	5
4. How much influence do you feel you have on the final budget?	1	2	3	4	5
5. How do you view your contribution to the budget?	1	2	3	4	5
6. How often does your supervisor seek your request, opinions, and suggestions when the budget is being set?	1	2	3	4	5

#### Part 2

<b>Job satisfaction:</b> Response anchors: 1 = strongly disagree, 5 = strongly agree					
1. Globally, I am satisfied with my job.	1	2	3	4	5
2. In general, I like working in this hotel.	1	2	3	4	5

#### Part 3

<b>Locus of control:</b> Please check true or false to the statements below that best fit your own beliefs.		
	<b>True</b>	<b>False</b>
1. I usually get what I want in life.		
2. I need to be kept informed about news events.		
3. I never know where I stand with other people.		
4. I do not really believe in luck or chance.		
5. If I do not succeed on a task, I tend to give up.		
6. I usually convince others to do things my way.		
7. People make a difference in controlling crime.		
8. The success I have is largely a matter of chance.		
9. Marriage is largely a gamble for most people.		
10. People must be the master of their own fate.		
11. It is not important for me to vote.		
12. My life seems like a series of random events.		
13. I never try anything that I am not sure of.		
14. I earn the respect and honors I receive.		
15. A person can get rich by taking risks.		
16. Leaders are successful when they work hard.		
17. Persistence and hard work usually lead to success.		
18. It is difficult to know who my real friends are.		
19. Other people usually control my life.		