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## THE INFLUENCE OF BUDGETARY PARTICIPATION ON KNOWLEDGE SHARING AMONG BUDGET PREPARERS WITHIN LIBYAN PUBLIC INDUSTRIAL COMPANIES

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### ABSTRACT

**S**uccessfully motivating employees to share valued knowledge can improve and sustain job-related outcomes. This research, modelled on organisational knowledge creation theory, explores the effect of budget participation on knowledge sharing, and specifically how budget participation influences knowledge sharing among budget preparers within Libyan public industrial companies. Shared knowledge flows between management levels efficiently to provide the information necessary for budget preparers to produce accurate budgets. Quantitative methods were applied to achieve the research purpose: a single questionnaire was developed and distributed to 260 personnel involved in budget preparation, from which 151 completed questionnaires were analysed. The Structural Equation Modelling technique and SmartPLS software were employed to analyse the relevant data. The results show that there is a direct relationship between budget participation and knowledge sharing. This study additionally explains the implications for cultivating knowledge sharing in Libyan public industrial companies to improve the effectiveness of key areas of functions associated with the budget preparers. The study encourages management to exploit budgetary participation as a means to enhance and develop knowledge sharing in companies throughout Libyan industrial sectors.

**Keywords:** Budget Participation; Knowledge Sharing; Budget Preparers; Libyan Industrial Companies.

## 1. Introduction

A basic concept of knowledge management is that knowledge can be shared. Performance in various parts of an organisation is enhanced when people share information, effective practices, experiences, insights, preferences, lessons learned, as well as common and uncommon sense. Knowledge sharing implies that individuals mutually adjust their beliefs and actions through more, or less, intense interactions. In the 'resource-based view' theory, knowledge is considered to be the most strategic resource (Liao, Fei, & Chen, 2007). Knowledge is one of the most valuable intangible assets possessed by human beings. Unlike finite economic resources such as land, capital and labour, knowledge is an infinite resource that can generate increasing returns through its systematic use and application (Dodgson, 1993). In the twenty-first century, knowledge, rather than capital or labour, is considered to be the most essential production resource, and managing knowledge resources is a major focus of modern organisations (Kumaraswamy & Chitale, 2012). Knowledge sharing, an important part of knowledge management, has received much attention from researchers due to its link to successful knowledge management initiatives and innovation (Yeşil, 2014).

According to Davenport and Prusak (2005), knowledge is distinguished from information, and information from data, by value-adding processes, which transform collected facts and figures into a communicable message and then into knowledge and wisdom. Knowledge is defined as "a fluid mix of framed experience, contextual information, values and expert insights that provide a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of the knower". While some researchers have attempted to differentiate between knowledge and information, Bartol and Srivastava (2002) use the two concepts interchangeably, in line with more recent works which argue that there is little practical utility in making a distinction between the two. Following Bartol and Srivastava (2002), the present study considers knowledge to include information, ideas, and expertise relevant to tasks performed by individuals, teams, work units, and the organisation as a whole.

Budget participation, as described in the behavioural accounting literature, is the process in which strategic business unit managers participate in deciding their particular unit's budget goals, and possess some degree of influence on their final budget (Brownell & McInnes, 1986; Milani, 1975). Budget participation relates to the extent to which employees in an organisation have the opportunity to be involved in the formulation of budgets for activities and programmes that they (the employees) are responsible for implementing. Budgetary participation is used for many purposes, including for knowledge purposes, because with higher employee participation in the budget process, employees will be more likely to share their knowledge and help each other in the planning stage (Heath & Brown, 2007; Kyj & Parker, 2008; Yuen, 2007). Hence it is predicted that a high level of budgetary participation is likely to lead to a high level of knowledge sharing.

Budget preparers in Libyan public industrial companies currently have a low level of effectiveness in the key areas of functions associated with the budget, as a result of the lack of necessary knowledge during preparation and implementation (Administrative Control Authority, 2016). This study, therefore, focuses on the effects of the budget setting process through budgetary participation, on the extent of knowledge sharing among participants in the budget setting process.

## 2. Theoretical Background and Research Hypothesis

### 2.1 Budget Participation

Higher level management who are involved in the budget very often understand little of the potential problems and barriers that are faced by those employees responsible for executing the budget, and thus may produce goals or plans prepared in circumstances where they lack valuable knowledge that is possessed by subordinates but is not available to the budget preparers. Therefore, some organisations have begun to apply a budgeting system that could address the problem at the top of the system through participatory budgeting (Derfuss, 2015; Rokhman, 2017). Participative budgeting is commonly defined in the accounting literature as a process in which a lower level manager is involved with, and has an influence on, the determination of his or her budget. Participation involves interaction among participants, and budget programmes involve many individuals, often operating in teams (Kyj & Parker, 2008; Marginson & Ogden, 2009). Participative budgets include lower-level managers who are tasked with coming out with estimates, which are later coordinated and communicated upward. Such budgets are referred to as bottom-to-top budgets. In these budgets, attainment of goals is more likely, as a result of the active role played by lower-level managers in establishing budgets. Because of their day-to-day involvement in departmental activities, these managers possess an intimate knowledge of the capabilities of their department and the requisite resource requirements (Magner, Welker, & Campbell, 2008).

Budgetary participation encompasses the concept of influence in the budgetary process. Influence suggests that workers are afforded a degree of control over the outcomes of a decision-making process. As a result, they are likely to view their budgetary involvement as a means of getting a more favourable budget (Darman & Baharuddin, 2015; Leach-Lopez, Stammerjohan, Lee, & Stammerjohan, 2015). Budgetary participation also provides a framework within which managers exchange information and ideas to make budgetary planning, coordination and control more efficient (Poon, Pike, & Tjosvold, 2001).

### 2.2 Knowledge Sharing

Researchers have defined knowledge sharing in various ways. Hendriks (1999) explained that knowledge sharing as a communication process involves two steps: (a) the knowledge owner externalises the knowledge, and (b) the knowledge demander internalises the knowledge. Based on Tiwana (1999), knowledge sharing provides a basis for development, so the model of knowledge sharing needs to be interactive and collaborative. Collaboration is a process through which people who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their limited vision of what is possible. Similarly, Davenport and Prusak (2005), described knowledge sharing as an activity which involves exchanging knowledge between groups and individuals, while Ryu, Hee, and Han, (2003) specified knowledge sharing as the practices of an individual dispersing his or her acquired knowledge and information to other colleagues throughout an organisation. Knowledge sharing is the exchange of employee knowledge, skills and experiences across the whole organisation. When the level of participation increases, the organisation members share and exchange knowledge and this knowledge contributes to the development of innovative ideas (Byukusenge, Munene, & Orobia, 2016).

According to some researchers, knowledge is the most strategically important resource for creating and sustaining innovation. Managing organisational knowledge is a way of establishing an innovation (Akhavan & Hosseini, 2015; B. Hu & Zhao, 2016; Nonaka & Takeuchi, 1995; Sook & Ae, 2014; Wu, Wu, & Chen, 2016). Knowledge sharing is an important process, and connecting people is one effective way to support this (Grant, 1996; Yesil, Buyukbese, & Kosak, 2013; Yu, Yu, & Yu, 2013). Communities of

practice are groups of individuals who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. They operate as social learning systems, where practitioners connect to solve problems, share ideas, set standards, build tools, and develop relationships with peers and stakeholders. Organisations and researchers use a variety of terms to describe similar phenomena, such as knowledge communities, competency networks, thematic groups, and learning networks. A community of practice is a particular type of network that features peer-to-peer collaborative activities to build member skills and supervise the knowledge assets of organisations and society (Wenger, McDermott, & Synder, 2003). Mei et al.(2004), propose a communication strategy which facilitates effective communication between senior managers and staff so that effective knowledge sharing can take place. The strategy provides proactive and reactive communication to achieve acceptance of and commitment to knowledge management in the organisation. It is believed that investing in social values based on mutuality, trust, and respect yields long-term benefits such as corporate well-being and innovativeness. The benefits arise from knowledge sharing, lower transaction costs due to a communicative spirit, and a greater coherence of action.

### *2.3 The Relationship Between Budget Participation and Knowledge Sharing.*

To obtain knowledge, Hsiao (2017), and Ikujiro Nonaka and Toyama (2003) suggest that the theory of organisational knowledge creation and its processes of knowledge conversion require platforms or regions where knowledge is created; knowledge assets existing in an organisation; and strategies or occasions that allows these knowledge creation constructs. Knowledge creation or sharing will not happen in emptiness, rather it relies on the manner of participation and the individuals who participate (Tyagi, Cai, Yang, & Chambers, 2015). "The shared context or place "platform" could be tangible, intangible, or a combination of both to utilise the knowledge and create. Commitment to spend time and energy on events as well as in activities and interactions in the platform is essential for knowledge creation". The individuals participate in the platform to generate a shared sense of purpose by interacting with each other and transcend one's subjective and limited perception to create knowledge (Tyagi et al., 2015). The process of knowledge creating is essentially context-specific (Ikujiro Nonaka et al., 2000). Budgetary participation is a context exactly where information is interpreted and incorporated as new knowledge for the participants.

The most considerable advantages of the participation in budgeting operation is the exchange of relevant information between organisational members. Information exchanges during budget dialogues between superiors and subordinates are especially important with many possible benefits both for the individual and the organisation (Shields & Shields, 1998). Vertical knowledge sharing includes both upward transmission of information from subordinate to superior and downward communication from superior to a subordinate. Regarding upward communicating, a common presumption in the accounting literature, specifically in agency studies, is that subordinates commonly know much more regarding their operational areas than do their superiors; that is, subordinates have so-called personal information or tacit knowledge (Parker & Kyj, 2006). According to Shields and Young (1993), one of the most important reasons that organizations use participative budgeting is definitely to facilitate the communication of private knowledge or "tacit knowledge" from subordinates to superiors.

As Simons (1995) notes, budgeting systems may be used on an interactive basis to encourage discussions between superiors and subordinates that result in information sharing. Within an organisation, those subordinates who have an interactive dialogue with their superiors in the budgeting process may reveal critical information about strategic uncertainties. Magner, Welker, and Campbell (1996) propose, that budget participation allows subordinates the opportunity to reveal private information which leads to higher

quality budgets; that is, budgets that more accurately represent future conditions in the subordinate's work environment. Relating to the nature of information sharing by the subordinates during the budgeting preparation, there is sufficient empirical proof in the accounting literature. Shared goals promote mutual understanding as well as promote the exchange of suggestions (Chow & Chan, 2008). Shared goals can be characterised as the pressure which ties individuals together and enables them to share what these individuals know. Having shared goals or shared knowledge is a resource from which advantages (such as having transferred information comprehended conveniently between individuals within the organisation) can be accumulated (Hu & Randel, 2014). With collaboration and knowledge sharing, shared goals can easily be attained inside an organisation (Chow & Chan, 2008). The present study examined the relationship between budget participation and knowledge sharing by exploring the links between budget participation and knowledge sharing in the budgeting process.

### Research Hypothesis:

**There is a relationship between budget participation and knowledge sharing.**

**Figure:1 Research Model**



### 3. Research Method

The quantitative approach was employed as the research technique for this study since data collection involved a large-scale survey. This approach provides valuable comprehension of the studied population by examining the relationships between variables included in budget participation and knowledge sharing. A cross-sectional survey method was used in this study, and one questionnaire was employed to gather the data on budget participants from a cross-section of Libyan public industrial companies.

#### 3.1 Research Instruments

One questionnaire was employed to collect data from respondents whose job responsibilities require them to be involved in the budget setting process, to examine the impact of that budget participation on any knowledge sharing within Libyan public industrial companies. A self-administered questionnaire with closed-ended questions utilising a five-point Likert-scale was used to measure respondents' viewpoints on all the components of the constructs. The first section captured the demographic information of the respondents. The second section, consisting of six closed-ended type questions developed by Milani (1975) and adopted from Cheng, Chen, and Shih (2014), was selected for measuring budget participation, as this instrument has been tested and used frequently by several management accounting researchers (Brownell, 1982, 1985; Brownell & Dunk, 1991; Brownell & Mcinnes, 1986; Cheng et al., 2014; Chenhall & Brownell, 1988; Leach-López, Stammerjohan, & McNair, 2007; Nouri & Parker, 1998). The final section covered two

dimensions, knowledge donating and knowledge collecting, to determine and measure the degree of knowledge sharing among individuals in the organization. The original measurements were created by Hooff and Ridder (2004), and some questions of the original measurements were later modified by Liao et al. (2007), to more efficiently measure knowledge sharing. Knowledge donating is the action of individuals to successfully pass on their own intellectual capital to others. Knowledge collecting indicates employees requesting advice from each other to acquire intellectual capital (Van Den Hooff & Ridder, 2004; Liao et al., 2007).

### *3.2 Target Population*

The population of this study is budget preparers in the Libyan Public Industrial Companies, which are determined to be employees at many different levels who definitely participated in the budget-setting process to some extent. The questionnaire survey was distributed to employees working in a variety of industries in Libyan public companies.

### *3.3 Sample and Sampling Procedure*

Purposive sampling, a non-probability sampling technique, was employed in this study. Purposive sampling is a suitable technique to use in a situation where primary data sources are limited to particular individuals. The data collected were analysed using SmartPLS SEM. The SmartPLS-SEM can work with much smaller sample sizes, even when models are highly complex (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). G\*Power software was used to calculate the minimum sample size. A priori power analysis is a powerful technique for regulating statistical power before a study is executed (American Statistical Association, 2017; Faul, Erdfelder, Buchner, & Lang, 2009). Settings were set at  $\alpha=0.05$  and  $\beta=0.95$ ; use F test (multiple linear regression: fixed model. R<sup>2</sup> deviation from zero). G Power Test was carried out, and it indicated that a sample size of **89** is acceptable for medium (0.15) effect size with the probability of alpha error at 0.05. A total of 260 questionnaires were distributed and 167 completed questionnaires were returned, of which 151 (58%) were usable questionnaires. Employees were selected from a range of industries in Libyan public companies, the only criterion for selection being that they were involved in the budgeting process. The sample for this study drew from employees in the industrial public sector throughout Libya.

### *3.4 Data Analysis*

Data obtained from the questionnaires completed by the sample of 151 budget preparers were analysed. SmartPLS SEM was applied to test the theoretical model of the study.



## 4. Analysis and Results

### 4.1 Profile of Respondents

**Table 1: Profile of Respondents**

Characteristics	Categories	Frequency	Percentage (100%)
<b>Job position</b>	Chief financial officer	20	13.2
	Accountant	86	57
	Accounts clerk	45	29.8
<b>Gender</b>	Male	126	83.4
	Female	25	16.6
<b>Age</b>	26 - 35	34	22.5
	36 - 45	75	49.7
	46 - 60	41	27.2
	Above 60	1	0.7
<b>Education</b>	High school	30	19.9
	Diploma	38	25.2
	Degree	75	49.7
	Masters	6	4
	Doctorate	2	1.3
<b>Working experience</b>	1 - 5	21	13.9
	6 - 10	39	25.8
	11 - 15	30	19.9
	Above 15	61	40.4

### 4.2 Study Model Evaluation Using SmartPLS-SEM

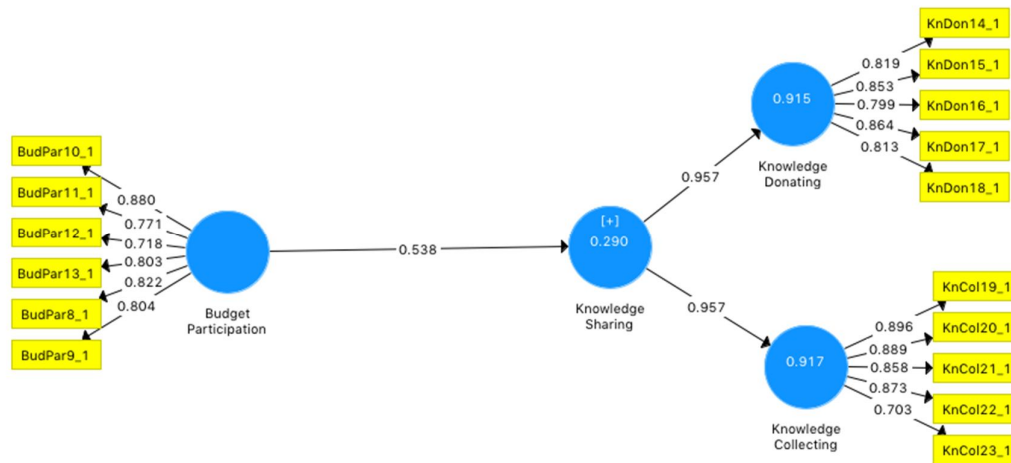
Analysis by SmartPLS-SEM was carried out in two main stages: assessment of the outer model (Measurement Model), and assessment of inner model (or Structural Model) (Garson, 2016; Hair, Huf, Ringle, & Sarstedt, 2014; Hair, Sarstedt, et al., 2014). Assessment of the outer model involved assessing reliability and validity. The outer model was evaluated for latent variables in order to assess the relationships among latent variables and their items, so as to determine their ability to measure the study variables. The second step of the analysis is the evaluation of inner model, which concerns the relationships between latent variables with each other, rather than their items, to assess their capability to measure the study phenomenon itself (Chin, 2010; Hair, Huf, et al., 2014).

#### 4.2.1 Assessment of the Measurement Model

This research included two reflective constructs: Budget Participation, which describes the involvement and influence of budget preparers in budget setting within the organization; and Knowledge Sharing, which refers to employees' interaction with their knowledge in the workplace. The evaluation of the Measurement model generally produces two indicators, which are reliability and validity (Sarstedt, Ringle, & Hair, 2018). Reliability evaluation is measured by two indicators, which are an indicator of reliability (item loading), and internal consistency reliability (composite reliability **CR**). The validity assessment that is measured by convergent validity, which is evaluated by the indicator of the average variance extracted (**AVE**), and by discriminant validity (Sarstedt et al., 2018).

The results of the of reliability assessment are given in Table 2, which showsthat all item loadings were higher than 0.70 and all the composite reliability **CR** indicators were greater than 0.70. In general, following Hair, Huf, et al. (2014), the item loading and composite reliability **CR** must be 0.70 or more. Hence, all reliability indications were accepted because they were in line with the criterion set.

**Figure: 2 The Measurement Model**



**Table 2: Measurement Model**

First-Order Construct	Second-Order Construct	Item	Loadings	CR	AVE
Budget Participation		BudPar10_1	<b>0.88</b>	<b>0.915</b>	<b>0.642</b>
		BudPar11_1	<b>0.771</b>		
		BudPar12_1	<b>0.718</b>		
		BudPar13_1	<b>0.803</b>		
		BudPar8_1	<b>0.822</b>		
		BudPar9_1	<b>0.804</b>		
Knowledge collecting		KnCol19_1	<b>0.896</b>	<b>0.926</b>	<b>0.717</b>
		KnCol20_1	<b>0.889</b>		
		KnCol21_1	<b>0.858</b>		
		KnCol22_1	<b>0.873</b>		
		KnCol23_1	<b>0.703</b>		
Knowledge Donating		KnDon14_1	<b>0.819</b>	<b>0.917</b>	<b>0.689</b>
		KnDon15_1	<b>0.853</b>		
		KnDon16_1	<b>0.799</b>		
		KnDon17_1	<b>0.864</b>		
		KnDon18_1	<b>0.813</b>		
	<b>Knowledge Sharing</b>	Knowledge Collecting	<b>0.957</b>	<b>0.956</b>	<b>0.916</b>
		Knowledge Donating	<b>0.957</b>		

The discriminant validity of the measurements signifies "the degree to which items differentiate between constructs or measure how the measurement of each construct is unique on other constructs to ensure that the measurement is only valid for this variable" (Chin, 2010).



**Table 3: Discriminant Validity**

	Budget Participation	Knowledge Sharing
Budget Participation	<b>0.801</b>	
Knowledge Sharing	0.538	<b>0.802</b>

\* **Bold diagonal elements should be greater than off-diagonal elements to confirm discriminant validity.**

The results of the validity analysis are set out in Tables 2 and 3, which show that values of average variance extracted (**AVE**) for convergent validity were above 0.50, which also meet the criterion set by Hair, Huf, et al. (2014) that such values must be greater than 0.50. Discriminant validity values also exceed the criterion, as illustrated in Table 3. As a result of the reliability and validity evaluation, all the measurement model indicators were accepted.

#### 4.2.2 Assessment of the Structural Model

In the last step of the analysis, following confirmation that all the measurement model indications were accepted, it is necessary to assess the structural or inner model which shows the capability of all the constructs jointly to predict the phenomenon (Hair, Huf, et al., 2014). The indicators that are needed at the beginning to analyse and report are: path coefficient significance and **R<sup>2</sup>** values. The indicative values were achieved through bootstrapping with re-samples of 5000. The most important results are the values of **R<sup>2</sup>** and corresponding **t-values**. **R<sup>2</sup>** is recognized as the coefficient of determination, which points out the total variation percentage of endogenous described by the regression model (Hair, Huf, et al., 2014). Besides the previous indicators, Hair et al. (2014) advised that evaluation should consist of effect sizes (**F<sup>2</sup>**) and predictive relevance (**Q<sup>2</sup>**).

**Table 4: Results of Hypothesis Testing.**

Relationship	Beta	S Devia	t-value	Decision	F <sup>2</sup>	R <sup>2</sup>	Q <sup>2</sup>
Budget Participation-> Knowledge Sharing	0.538	0.062	8.627	Supported	0.408	0.290	0.171

The table of hypothesis testing outlines the results of the structural model analysis. Budget Participation ( $\beta = 0.538$ ,  $p < 0.01$ ), was positively associated with Knowledge Sharing, and explained 29% of the variance in Knowledge Sharing.

The value of **R<sup>2</sup>** ranges from 0 to 1; higher levels indicate greater predictive accuracy. An **R<sup>2</sup>** is described as ‘small’ when its value is 0.25, ‘moderate’ when it is 0.50, and ‘large’ when its value is 0.75 and above (Hair, Ringle, & Sarstedt, 2011). However, in some research areas, **R<sup>2</sup>** values of 0.10 are considered acceptable (Raithel, Sarstedt, Scharf, & Schwaiger, 2012), while **R<sup>2</sup>** values of 0.20 are considered high in some knowledge branches, for example, consumer behaviour, in studies explaining customer satisfaction or loyalty (Hair, Hult, Ringle, & Sarstedt, 2017). Within the present study, the **R<sup>2</sup>** value was 0.290, so the result of **R<sup>2</sup>** value was considered satisfactory, since that this study falls within the area of behavioural research, hence **R<sup>2</sup>** could be considered high.

**T**-values were used to assess the importance of the path coefficient. In other words, the **t**-value signifies whether the hypothesis was supported or not. Hypothesis testing was carried out utilising a bootstrapping of a 5000 subsample and 5% significance level. According to statisticians (Garson, 2016; Hair, Huf, et al., 2014), in order to accept the hypothesis, the **t**-value ought to be 1.96 or larger. The results in Table 4 show that the **t**-value exceeded 1.96, indicating that the study hypothesis was supported.

The values of **F**<sup>2</sup> effect size and predictive relevance **Q**<sup>2</sup> give additional information regarding the quality of the PLS path model estimations (Hair et al., 2017). The effect size **F**<sup>2</sup> assesses an exogenous construct's contribution to an endogenous latent variable's **R**<sup>2</sup> value. **F**<sup>2</sup> values of 0.02 ('small'), 0.15 ('moderate'), and 0.35 ('large') signify an exogenous construct's effect on an endogenous construct (Cohen, 1992). Table 4 at the same time clarifies the **F**<sup>2</sup> effect size. Fairly large **F**<sup>2</sup> effect sizes occurred for the relationship Budget Participation → Knowledge Sharing (0.408). The **F**<sup>2</sup> effect size permits the researcher to explore the significance of constructs in characterizing selected endogenous constructs. More specifically, it is possible to assess how much a predictor construct (exogenous) contributes to the **F**<sup>2</sup> value of a target construct (endogenous) in the structural model (Hair et al., 2017).

Predictive relevance **Q**<sup>2</sup>: "is a measure of a model's predictive power. It examines whether a model accurately predicts data not used in the estimation of model parameters. This characteristic makes **Q**<sup>2</sup> a measure of out-of-sample predictive power (i.e., predictive relevance)" (Hair et al., 2017). The predictive relevance of the model by employing the blindfolding procedure was likewise determined. Whenever the **Q**<sup>2</sup> value is greater than zero the model possesses predictive relevance for a specific endogenous construct (Hair, Huf, et al., 2014). Hair et al. (2014) mentioned likewise that as a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 signify that an exogenous construct possesses a small, moderate, or large predictive relevance for a specific endogenous construct. Commonly, **Q**<sup>2</sup> values larger than zero for a specific endogenous construct indicate that the path model's predictive accuracy is acceptable for that certain construct (Sarstedt et al., 2018). Table 4 shows that the **Q**<sup>2</sup> value is 0.171, indicating that the model has moderate predictive relevance.

## 5. Argumentation and Final Considerations

As proposed by the research model, participation of employees in budget preparation has a direct impact on knowledge sharing, and the results are consistent with the main assumption of the study. The budget participation is not a new concept, but its relationship with the area of knowledge management is considered a growing research area and, drawing upon earlier studies, the present research tested a hypothetical model based on knowledge creation theory to clarify how that the budgetary participation affects knowledge sharing between budget preparers within Libyan public industrial companies. The results indicate that budget participation has a significant effect on the knowledge sharing and its dimensions. These results change traditional ideas regarding budget participation and consequences by providing new ideas leading to study new disciplines and develop an in-depth understanding of the processes that could occur between budget participation, performance, role ambiguity, goal commitment, budgetary slack and relevant information (Avelé & Édimo, 2015; Candidate & Medan, 2015; Darman & Baharuddin, 2015; Karakoc & Ozer, 2016; Kochik, 2011; Leach-Lopez et al., 2015; Macinati & Rizzo, 2014; Setiawan & Ghozali, 2016) that have been reported in the literature of budget participation.

Findings will be beneficial for Libyan industrial companies specifically, as well as more widely, for the companies in developing countries. Because of the crucial role of knowledge sharing on the performance of the individual and of the organization, the study is of importance to the government and to boards of companies, since it attempts to improve the effectiveness of budget preparers in key areas of their functions

associated with the budget, by providing them with valuable knowledge during budget preparation. The knowledge obtained through budgetary participation, which will reflect on the budget setting process as well as the budget preparers themselves, will be more pertinent and detailed, so budgetary planning for future will be more reliable and have less propensity to create budgetary slack.

The results of the analysis provide empirical evidence about how budgetary participation affects knowledge sharing by providing a platform for participants to interact with knowledge from different management levels; hence, budget participation explicitly encourages sharing knowledge among budget setting participants. The fundamental contribution of the current study to the literature is to draw attention to the significance of concepts like knowledge and knowledge sharing that have not received much attention to date in the area of management accounting. This is despite the fact that there is a large body of research regarding the consequences of knowledge sharing, such as innovative work behaviour, performance, innovation, creativity, leadership, organisational learning, and team effectiveness (Kucharska & Kowalczyk, 2016; Kumaraswamy & Chitale, 2012; Manafi & Subramaniam, 2015; Pangil & Chan, 2014; Radaelli, Lettieri, Mura, & Spiller, 2014; S & Manteghi, 2015; Ullah, Akhtar, Shahzadi, Farooq, & Yasmin, 2016; Wang & Wang, 2012; Yesil, Koska, & Buyubese, 2013)

## **6. Limitations**

The sample in the current survey was drawn from Libyan Public Industrial Companies in the capital city of Libya and the adjacent area, since most public-sector activity has ceased in other cities as a result of political problems and conflicts. For this reason, it is uncertain if the final results are generalisable to other non-public, non-industrial companies, so generalising the results should still be done with caution. Furthermore, there are limitations associated with the survey questionnaire as a method of data collection. Although precautions were taken to reduce limitations of the technique, response biases might still exist.

## **7. Future Research Directions**

With regard to future research, researchers should investigate the variables that enhance knowledge sharing, which work to moderate the relationship between budget participation and knowledge sharing in order to obtain enhanced understanding and clarification of this process, and thus the possibility of improved control of these variables. In addition, future research should focus on the consequences of knowledge sharing, such as innovative behaviour, and innovation and performance, within the framework of budget participation.

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