

The Moderating Role of Employees' Professionalism on BSC Usage and Organizational Performance Relationship

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ABSTRACT

Innovations in management accounting practices require placing more comprehensive integrated performance measures to improve performance. Although there is evidence on the practice of balanced scorecard (BSC) in Malaysia, little is known about the influence of BSC usage to organizational performance and factors that improves this relationship. This paper examines the moderating effect of employees' professionalism on the relationship between BSC usage and organizational performance. A questionnaire survey was administered to chief financial officers (CFOs) of Malaysian manufacturing firms. Using 110 responses, the findings indicate that professionalism of staffs significantly enhanced the relationship between BSC usage and organizational performance. Specifically, the findings suggest that social obligation dimension strengthens the implication of using the firms' BSC.

Keywords: professionalism dimensions; professional community affiliation; social obligation; self-regulation; professional dedication; autonomy demand; BSC

INTRODUCTION

Prior research has acknowledged that traditional performance measures have essential limitations that affect their capability in providing the necessary information required by firms (McAdam & Bailie, 2002; Baird & Su 2018). In order to sustain in global business market and to survive in rapidly changing environment, many business firms have turned to contemporary management accounting techniques. As with other businesses around the globe, the Malaysian business firms are expected to be proactive against the social-economic needs. This leads firms to look for management accounting practices that would not only provide past performance reports but also provide future information which are vital in guiding decision making and assessing the likelihood for success. Thus, firms have placed more emphasis on management accounting practices such as BSC. Arguably, prior studies have highlighted on BSC as one of the most popular multiple performance measures (Ayvaz & Pehlivanl 2011; Bremser & Barsky 2004; Hudson et al. 2001; Kennerley & Neely 2002). It is the most commonly applied tool which provides a balance between nonfinancial and financial measures to achieve strategic alignment.

In examining issues related to BSC, prior research has focused on the effect of the extent of use, manner of use and types of BSC on organizational performance (e.g., Davis & Albright 2004; Ittner et al. 2003; Malina & Selto 2001; Yongvanich & Guthrie 2009). Another research orientation has been carried out by some researchers (e.g., Aravamudhan & Kamalanabhan 2009; Braam & Nijssen 2011; Hoque & James 2000; Iselin et al. 2008; Mastilak et al. 2012; Xi 2010) to examine the impact of external factors such as firm size, market position, business strategy,

industry, quality, structure, culture, and ownership on the implementation of BSC which in turn affects organizational performance.

Although the empirical research on BSC has become prominent and gained momentum in accounting research (Abu-Jarad et al. 2010), studies that examine BSC in Malaysia are quite limited (Ayoup et al. 2012). The focus of these studies was on examining the differences in BSC implementation between adopters who developed a causal model of their strategy and those who did not (Othman 2006), BSC relationship with scenario planning (Othman 2008), effect of contextual and environmental factors (Jusoh 2006), highlighting the importance of BSC in different industries (Binden et al. 2014) and implementation of the BSC (Zin et al. 2013). Despite the significance of BSC in today's business environment and the extensive research on it, Person (2008) and Rompho (2011) stated that BSC still fails in some firms. Kaplan and Norton (2000) emphasize that employees' understanding is critical to the success of BSC measures. In addition, professional internal staffs are required to ideally work with BSC (Person, 2008). Although professionalism can be critical in the context of BSC, there is lack of research on its impact in strengthening the relationship between BSC and organizational performance. Due to the mixed evidence on the impact of BSC usage on organizational performance found in the literature, this study thus begins by examining this relationship. The study then investigates further on whether employees' professionalism moderate the relationship between BSC usage and organizational performance.

Although an extensive research in the area of performance measurement systems and particularly in

using the contingency approach has been conducted, it is likely that this study is one of the first to include professionalism dimensions, BSC and organizational performance in one model. The inclusion of managers' professionalism into the study of BSC is worthwhile, as it was contended that these professional skills have strong influence in improving the capacity of performance measurement (Berman & Wang 2000; Carmeli & Tushler 2006; Said et al. 2017). As such, firm with professional managers are likely to be better in utilizing their PMS, especially in the case of a multidimensional PMS such as the BSC, to achieve higher performance. This study, therefore, contributes to the existing literature in several ways. First, it contributes to the impact of using a multidimensional PMS namely, the BSC, in manufacturing firms in emerging economies. Such economies provide growth opportunities and the literature provides evidence on modernization of management accounting practices, specifically with the popularization of BSC. Nevertheless, there is doubt whether the management practices rooted in the western advanced economy will work effectively as they differ in terms of economy, social and politics. Second, the study adds to the literature as it explains the effects of professionalism dimensions on BSC and organizational performance relationship, which was not covered well in past studies, using contingency theory (Otley 2016). Third, incorporating professionalism dimensions as moderating variables helps to explain the mixed findings of prior studies that examined the effect of BSC on organizational performance. Hence, the study should provide evidence for a better understanding on the role of employees' professionalism in enhancing the implications of BSC. Lastly, the findings of this study may encourage firms to improve the level of employees' professionalism when dealing with strategic performance measures such as BSC. The remainder of this paper is organized as follows: The subsequent section discusses the contingency theory and hypotheses development followed with a discussion on research method. The paper then reports the findings of the study and in the last section provides a discussion, conclusion and suggestions for future research.

THEORY AND HYPOTHESES DEVELOPMENT

Early contingency-based studies have notified the conflicting results found in accounting performance measures studies, in explaining organizational performance (see review in Otley 2016). Following this, numerous research adopted the contingency-based framework to suggest that there is no one appropriate management system

which can be applied to all firms in all circumstances (Otley 1980; Fisher 1995). Specifically, this theory indicates that the design and the use of performance measures depend upon several organizational and environmental factors, known as contingent factors. The development in recent management accounting includes new techniques being developed and popularized, with new factors being identified that cuts across the individual and organizational boundaries.

In reviewing the contingency framework, Otley (2016) contended that the underlying concept of performance measures, particularly if modified to include non-financial measures, is still a key area that deserves continuing attention. In conjunction with this, the extant literature appears to suggest that the involvement of knowledgeable professionally trained employees form a basis for contemporary performance measures framework to be used and is crucial in enhancing performance (Ong et al. 2010; Person 2008). The potential influence of employees' professionalism on BSC and organizational performance relationship, provide an opportunity for the current study to include dimensions on professionalism as contingent variables. Since BSC was highlighted as a popular framework in the use of multiple performance measures in many companies, this study seeks to understand its usage by proposing that an appropriate "match" between employees' professionalism and BSC usage will result in improved organizational performance and vice versa (Fisher 1995; Hoque & James 2000). Thus, this study proposed that BSC improves organizational performance and that this relationship is contingent upon professionalism dimensions. Figure 1 illustrates the theoretical model of study.

Kaplan and Norton (1996) argued that BSC could improve firm performance with a balanced combination of measures from four perspectives namely, "learning and growth, internal business, customer and financial perspectives". They emphasized that good multiple performance measures should have a mix of outcome measures (lag indicators) and performance drivers (lead indicators). Nonfinancial measures should be linked to the financial objectives to allow for their use in predicting future financial performance. These measures may increase efficiency given highly informative managerial knowledge concerning the processes (Ittner et al. 1997). Customer satisfaction, which contains additional information not reflected in past financial measures, was found to be consistently and significantly associated with future financial performance (Banker et al. 2000). It is widely noted that overall usage of BSC is significantly correlated

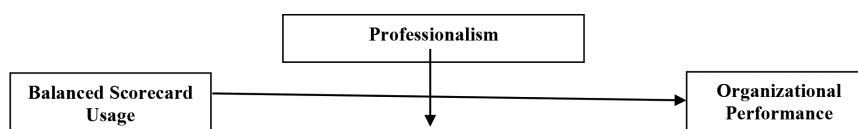


FIGURE 1. Theoretical model

with organizational performance (e.g., Hoque & James 2000; Jusoh et al. 2008). This view is supported by Chenhall (2003), who emphasized that strategic competitiveness of firms' dimensions can be enhanced by integrative strategic performance management system. More recently, it was found that the use of broad scope management accounting information systems, which included the information that could be provided using BSC, enhanced the performance of Malaysian manufacturing firms (Ismail et al. 2018). Based on these consideration, it is proposed that:

Hypothesis 1: BSC usage is positively related to organizational performance.

Ong Teh and Lau (2010) found that large firms, with knowledgeable and expert employees, are more likely to use contemporary "balanced" measures than traditional performance measures. This supports the view of the contingency theory that the use of performance measures is contingent upon employees' expertise. Person (2008) stated that an important reason for the failure of BSC in some firms can be attributed to the complexity in implementing these measures, which require professional training for managers who undertake the work. In general, the impact of individual level factors on the organizational level outcome has been illustrated in past research. For instance, Brewer and Selden (2000) and Kim (2005) verified that the individual level factors, such as structure of task/work, task motivation, job satisfaction and affective commitment are important predictors of organizational performance. According to Hall (1968), the individuals' professionalism includes five dimensions; namely, professional community affiliation, social obligation, belief in self-regulation, professional dedication and autonomy demand. Shafer et al. (2002) stated that all the five dimensions are applicable to the management accounting profession.

Professional community affiliation represents the extent of involvement in professional activities by individuals (Hall 1968). It was argued that individuals who are more affiliated to the profession through its activities such as in attending conferences and reading journals will be more informed of improvements in the profession and more influenced by its standards (Snizek 1972). According to Cohen (2005), knowledgeable employees are likely to do better than unknowledgeable ones. Consequently, Hamid (2008) stated that firms encourage their employees to find knowledge sources that make them more knowledgeable in order to increase their productivity, skills output and intellectual capability. The quality of knowledge and capability possessed by employees who are more affiliated to the needs of the professions shall enable the BSC to be used to its fullest potential, thereby strengthening the relationship between BSC usage and organizational performance.

Social obligation as a second dimension of professionalism means that individuals are obligated to distance themselves from using accounting practices that mislead or have potential harmful results on both investors

and creditors (Shafer et al. 2002). Performance measures can be gamed by managers to have a substantial impact on both groups (Ingersoll et al. 2007). The literature is rich with research that mentions managers' motivations and incentives to manipulate performance measures (e.g., Dechow 1994; Gaver et al. 1995; Holthausen et al. 1995; Gibbs et al. 2004; Murphy 2000). Although there are motivations and incentives to manipulate performance measures by managers, Barrett et al. (2004) argued that individuals have a greater tendency to comply with request to help others for reasons of social obligation that they believe in. Thus, if an employee has more concerns on the social obligation, he would be motivated to comply more in using management systems such as BSC to be in line with investors and creditors interests. Based on these arguments, it may be implied that being socially obligated reduce employees' opportunistic behavior which in turn led to effective use of BSC, i.e. with positive impact on the BSC and performance relationship.

For *self-regulation* dimension, professionals are required to accept a commitment to provide high-quality services, which can be regulated by profession (Shafer et al. 2002). Professionals' performance must be judged by members of the profession as nonprofessional individuals are believed to be unqualified to make fair judgment. This is the belief behind the self-regulation dimension (Hall, 1968). It is important for people to know who they will be judged by. The individuals' accuracy will be improved if the judgment on their work comes from those who have the same context information (Kenny & DePaulo 1993). Based on this, it is expected that organizational performance can be enhanced since employees, who believe in self-regulation, use BSC as they tend to be more accurate in their work.

Professional dedication is the fourth dimension which refers to the willingness of individuals to do their work even if only few rewards are available (Hall, 1968). Risher (2003) stated that dedicated employees work hard because they believe in the goals of the firm. Consequently, dedicated employees are willing to put discretionary energy behind something without being monitored or supervised. As argued by Kennerley and Neely (2002), an important factor that influences evolution of performance measurement systems is the dedicated employee who can identify gaps and the need to improve performance measures. From here, it can be proposed that employees with high level of professional dedication will lead to better organizational performance through the use of BSC.

The last dimension is *autonomy demand* which indicates the desire of professionals to be free from any external pressures while making their work decisions (Snizek 1972). Accountability represents the relationship between a forum who has the right to account the actor who in turn has the responsibility to perform and may face the consequences for his actions (Bovens 2007). Consequently, the information provided by the BSC measures can be confidently relied upon as they are prepared by dedicated employees who maintain high level of work autonomy. As

such, one shall agree with Kloot (1999) who stated that performance measures are tools for accountability.

The above arguments suggest that the professionalism dimensions could enhance the implications of using BSC. The theoretical evidence thus leads to the following hypotheses:

Hypothesis 2a: Professional community affiliation moderates the relationship between BSC usage and organizational performance.

Hypothesis 2b: Social obligation moderates the relationship between BSC usage and organizational performance.

Hypothesis 2c: Belief in self-regulation moderates the relationship between BSC usage and organizational performance.

Hypothesis 2d: Professional dedication moderates the relationship between BSC usage and organizational performance.

Hypothesis 2e: Autonomy demand moderates the relationship between BSC usage and organizational performance.

RESEARCH METHOD

SAMPLE AND DATA COLLECTION

The diversity on the product market, in technological processes and cost structure requires manufacturing companies to place greater concern on the BSC (Jusoh et al. 2008). Driven by this factor and considering the significant contribution of Malaysian manufacturing firms towards the economy, the sector was chosen for this study. The Federation of Malaysian Manufacturers (FMM) directory year 2012 listed 2389 companies, distributed into several industries. A random sampling using excel program was undertaken to select sub-samples from 10 groups that were divided based on their respective industry. In order to enhance the reliability of the questionnaire, a pre-test was carried out through obtaining a feedback on the measures of constructs. The list of items was assessed by a panel of five academicians from the Accounting School and among practitioners. The respondents were asked to inspect the items and give feedback on the validity of items and their relevance to the intended constructs. This allows assessing face and content validity of the scales. Based on the respondents' perceptions, several comments on the consistency of the items with their constructs, the items wording and the ease of items interpretation were considered in the final version of the questionnaire. Following this, 1000 questionnaires were mailed to CFOs of Malaysian manufacturing firms. Since the data collected requires information on the BSC usage and professionalism managers associated with the use of BSC, the CFOs are thus

likely to be the most knowledgeable persons in the firm regarding these matters. A total of 115 questionnaires were returned and five questionnaires were excluded as unusable responses. The remaining 110 responses were used in the analysis of this study, making a usable response rate of 11 %. The low response rate for a mail-survey is quite common in the Malaysian domain (Jusoh et al. 2008). This may be due to the sensitive and confidential nature of the information.

MEASUREMENT OF VARIABLES

Professionalism is considered as a multilevel variable that can be conceptualized at different levels (Beam 1990). The study argued that the average of professional orientation of staff members constitutes an acceptable measure of an organizational level phenomenon. In this study, Hall's (1968) professionalism scale as modified by Snizek (1972) was adopted to capture five dimensions of professionalism. These dimensions are professional community affiliation, social obligation, belief in self-regulation, professional dedication and autonomy demand. The respondents were asked to evaluate statements relating to the five dimensions of professionalism practices, using a five-point Likert scale (1= very poorly and 5 = very well). Some items with negative wordings were reverse coded in order to preserve the measure of dimension. To measure **BSC usage**, the instrument from Hoque and James (2000) was adopted. The respondents were asked to rate the extent to which each item is used to evaluate performance based on the five-point Likert scale (1= not at all and 5 = to a great extent). The questions reflected the four perspectives of performance which are financial, customers, internal business process and learning and growth. Finally, the scale used to measure **organizational performance** was adopted from Shafer et al. (2002) that includes five items reflecting organizational performance which are return on investment, margin on sale, capacity utilization, customer satisfaction and product and service quality. Using a five-point Likert scale (1= below average and 5= above average), the CFOs were asked to indicate their firm's position compared to competitors based on these five dimensions.

FINDINGS

Table 1 presents a profile of respondents of the final sample. Majority of the respondents possess Bachelor's degree (43.6 %) followed by Master's degree (24.5 %) and Professional qualification (21.8 %). This suggests a good level of the respondents' professionalism since formal education is considered as a part of the structural aspect of professionalism (Hall 1968). In addition, the majority (81 %) of the respondents had more than five years' experience. In terms of industry, the highest response rate was received from iron, steel and metal industry (13.6 %) followed by chemicals and chemical industry (10 %). The lowest response rate was from Furniture and wood products industry (2.7 %). The results show that large firms were

TABLE 1. Profile of respondents (N=110)

Dimension	Category	Number	%
Education level	Secondary school	2	1.8
	Diploma certificate	9	8.2
	Bachelor's degree	48	43.6
	Master's degree or higher	27	24.5
	Professional qualification	24	21.8
Experience	Below 5 years	3	2.7
	5 -10	24	21.9
	11-15	33	30.0
	16 – 20	31	28.1
	More than 20	19	17.2
Industry	Chemicals and chemical	11	10.0
	Electrical and electronic	7	6.4
	Food and beverage	10	9.1
	Furniture and wood related	3	2.7
	Iron, steel and metal	15	13.6
	Machinery and equipment	10	9.1
	Paper, printing, packaging and labeling	9	8.2
	Pharmaceutical, medical equipment	2	1.8
	Rubber and plastic	8	7.3
	Textile, clothing, footwear and leather	4	3.6
	Other manufacturing	31	28.2
Number of employees	Below 100	25	22.7
	100-199	25	22.7
	200- 299	13	11.8
	300- 399	7	6.4
	400 employees or more	40	36.4

more responsive since companies with 400 employees and above gave the highest response rate of (36.4 %).

EXPLORATORY FACTOR ANALYSIS (EFA)

Factor analysis was conducted to address the concerns over similarities and differences between items used to measure professionalism dimensions. Specifically, an EFA was undertaken to examine the extent to which the instrument was measuring employees' professionalism when adopted in Malaysian manufacturing companies. The analysis reduced 20 professionalism items to 11 and loaded only onto three components with Eigen-values greater than one and total variance percentage 53.18 (Table 2). These items were inspected against initial measures and three dimensions which are professional community affiliation, social obligation and professional dedication were subsequently identified (Hall 1968). Although the statistical analysis could not provide the same number of dimensions as Hall's initial work, it has been argued that the professionalism concept has been difficult to define (Cushing 2012). In fact, a more recent study (Said, Amir & Maelah 2017) aggregated the measure of professionalism in Malaysian manufacturing firms, along the dimension of high and low professionalism. Thus, based on the data analyzed in this study and reference to the theory, the three dimensions are considered sufficient and will be used for further analysis.

DESCRIPTIVE STATISTICS

Table 3 presents descriptive statistics for all variables. This includes the means and medians as central tendency's measures, the standard deviation as a measure of dispersion and the Cronbach's Alpha for reliability estimates. The results show that reliability for all variables were above the lower limits of acceptability for exploratory research, generally recognized to be around 0.50 to 0.60 (Nunnally 1994).

HYPOTHESES TESTING

The first hypothesis in this study proposed that BSC usage has direct positive relationship with organizational performance. To analyze, a simple regression analysis was utilized. Based on the analysis, a significant and positive relationship between BSC and organizational performance was found ($\beta = 0.475$ at $p \leq .01$) suggesting support to Hypothesis 1.

Hypotheses 2 predicts that employees' professionalism moderates the relationship between firms' BSC usage and their organizational performance. A moderated regression was conducted to examine the moderating relationships. The results of the tests are shown in Table 4.

Regarding H2a, H2b and H2d, it is hypothesized that professional community affiliation, social obligation and professional dedication moderate the relationship between BSC usage and organizational performance. As shown in

TABLE 2. Summary of the EFA

Items	Components		
	Professional community affiliation	Social obligation	Professional dedication
Subscribe and systematically read, journals and other professional publications of multiple performance measures.	.746		
Attend and participate in meetings for management control systems.	.894		
Engage in the interchange of ideas with peers from other firms.	.789		
Difficult to be enthusiastic about the kind of work that they do.	.674		
Believe that management accounting systems are essential to the welfare of society.		.610	
Believe that the importance of performance measures is sometimes overstated.		.496	
Believe that not enough people realize how vital multiple performance measures are in organization.		.711	
Believe that any weakening of the role of performance measures would be harmful to the public		.739	
Gratified (thankful) when they see the dedication of their fellow peers.			.730
Believe that it is encouraging to see a management accountant who is idealistic about his or her work.			.662
Would stay in management accounting even had to take slight pay cut.			.502
KMO Value	.731		
Bartlett's Test	.000		

TABLE 3. Descriptive statistics

Variables	Mean	Median	S.D.	Cronbach's Alpha
Professional community affiliation (AFFIL)	3.663	3.750	.374	.633
Social obligation (SOCl)	3.550	3.625	.524	.501
Professional dedication (DEDI)	3.439	3.333	.506	.642
BSC	3.882	3.925	.620	.921
Organizational performance	3.881	4.000	.607	.825

Table 4, there is a positive and significant interaction ($\beta = 0.189$ at $p \leq .05$) between social obligation and BSC to improve organizational performance. This indicates that the relationship between firms' BSC usage and their performance is enhanced with employees' social obligations. The results therefore, support H2b. However, the standardized coefficients of the interactions between professional community affiliation and professional dedication with BSC usage on organizational performance were positive but not significant. The data thus suggest no support for hypotheses H2a and H2d.

DISCUSSION AND CONCLUSION

An important issue raised in prior studies is the need for support from employees at all levels to ensure the successful implementation of BSC (see Ayoub et al. 2012). This study draws on contingency framework to provide empirical evidence on the moderating role of staffs' professionalism

on the relationship between BSC usage and organizational performance. Considering the mixed evidence found in the literature on the impact of BSC usage to performance, this study was initiated by testing the direct relationship in the Malaysian manufacturing companies. The finding indicated that BSC usage do improve organizational performance. This evidence confirmed prior research such as Hoque and James (2000) and Davis and Albright (2004) who found that firms which used BSC outperformed those who did not. Technically, since BSC provides both financial and nonfinancial information, it introduces efficient means to help managers to act in a manner desired by the firm's owners.

Regarding professionalism dimensions, the results however suggest that only the social obligation dimension, improves the relationship between BSC and organizational performance. To some extent, the result of this study implicates the role of staffs' professionalism in enhancing the relationship between BSC usage and organizational

TABLE 4. Results of hypothesis 2

	Step 1	Step 2	Step 3
	β	β	β
Main-effect			
BSC	.425**	.401**	.412**
Moderators			
AFFIL		.282*	.301*
SOCI		.263*	.271*
DEDI		.087	.186*
Interaction terms			
BSC * AFFI			.023
BSC * SOCI			.189*
BSC * DEDI			.011
Adj R ²		.215	.214
F	12.245	6.516	4.613

β standardized regression coefficient for each variable.

* $p \leq .05$, ** $p \leq .01$

performance. The finding is consistent with prior research suggesting that social obligated employees want to be in line with investors and creditors interests, thus, they comply more in using management systems. Nevertheless, the findings for the other two professionalism dimensions indicate that the interactions between professional community affiliation and professional dedication with BSC do not necessarily enhance organizational performance. A possible explanation for these unexpected results could be attributed to the work commitment of managers in Malaysian large manufacturing firms, which prevents them from spending more time for their profession and to therefore get more involved in work than required. It appears that the dimension of professionalism that strengthens the BSC and performance relationship is related to staffs' concern for those outside the company rather than enhancing their own career. The implications of employees work commitment towards professionalism, may be studied in future research. As the study focus on manufacturing firms, it is possible that including professional service firms, may lead to different findings. Compared to manufacturing, employees' commitment in service firms where human factors are the main emphasis, may have strong implications to management practices. Future studies may wish to validate the findings of this study through application in other sectors or to include firms' organizational culture in understanding the behavior of the employees. The limitation associated with the use of data based on FMM directory in 2012 should be noted. While it was acknowledged that employees' present views may guide future action, the snapshot of the perception may be biased towards certain unusual event. Additionally, the low response rate could expose the results to the risk of response bias, thus, having larger sample would definitely enhance the findings of this study. Moreover, the singular focus on BSC as one variable may also influence the results.

BSC is probably more complex than one variable since ideally, it represents four perspectives, financial, customer, internal business process and learning and growth. Nevertheless, a significant contribution of this study is that it provides the empirical evidence on the importance of BSC usage in improving performance across Malaysian manufacturing firms. More importantly, the findings of this study indicate the role of employees' professionalism, specifically the social obligation dimension, as significant in enhancing the relationship between BSC usage and organizational performance.

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