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The effect of institutional factors on the organizational performance through performance measures of commercial banks in Libya

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Abstract

This paper aims to contribute to the literature that investigates the mediating role of performance measures in the link between institutional factors (coercive and normative pressure) and organizational performance. Using the data collected from 154 commercial bank branches in Libya, the results revealed the existence of a significant and positive association between coercive pressures and organizational performance through non-financial performance measures. However, the study found no evidence of a significant relationship between normative pressures and organizational performance through non-financial performance measures.

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Keywords: Coercive pressures; normative pressures; non-financial performance measures; organizational performance; commercial banks

1. Introduction

Organizational performance is one of the most important constructs in achieving the goals of the organization (Richard, Devinney, Yip, & Johnson, 2009). In Libya, there are weaknesses in the banking sector (Salem, 2010), particularly, the commercial banks suffer from poor performance, high levels of non-performing loans (Chamiea, Elfeturi, & Abusneina, 1997). Therefore, there have been greater attentions to performance measures by

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consultants, academics and managers to improve performance (Davila, 2000; Hoque, 2004; Said, Elnaby, & Wier, 2003).

Performance measures are the set of financial and non-financial performance measures (Ghalayini & Noble, 1996). Consultants and academics support the non-financial performance measures which focus on the success factors of long-term business such as customer satisfaction, internal business processes, innovation and learning that can lead to better organizational performance (Kaplan & Norton, 1996; Lynch & Cross, 1992; Otley, 1999). Numerous studies have investigated the non-financial performance measures practices in the manufacturing sector (Banker, Lee, Potter, & Srinivasan, 2000; Hoque & James, 2000; Ittner, Larcker, & Rajan, 1997). However, little is known about this phenomenon in the banking sector, especially in developing countries (Hussain & Gunasekaran, 2002; Munir., Perera., & Baird., 2011).

Institutional factors (coercive and normative pressure) have important implications not only for the organizational performance, but also on non-financial performance measures (Hussain & Gunasekaran, 2002). The coercive pressures are the most powerful factor in the institutional forces influences the banks to implement a performance measures (Hussain & Hoque, 2002). In addition, it has effect on bank performance through the regulations and guidelines issued by the central bank (Oliver, 1997). The normative pressures by formal education and professional associations also seem to be important institutional factors in the literature (DiMaggio & Powell, 1991).

This paper attempts to fill the gaps in the literature by investigate mediating role of non-financial performance measures on the relationship between institutional factors (coercive and normative) and organizational performance.

The remainder of the paper is organized as follows. Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 describes the research method applied. In the next section shows the findings of study. Finally, Section 5 presents a discussion of the results, limitations and conclusions.

2. **Literature review and hypotheses development**

The paper relies on the institutional theory to argue that describes the way by which particular social institutions affect the business practices, the behaviour of a company, and organizational form including the choice of performance measures (DiMaggio & Powell, 1991). In addition, this theory used as a powerful explanation for the influence of institutions factors on performance (Mizruchi & Fein, 1999). The next section discusses on the hypotheses development.

2.1. Coercive pressures, performance measures and organizational performance

Institutional factors play an important role in the process of performance measures particular in the banking sector (Hussain & Hoque, 2002). The coercive pressures have a significant effect on the non-financial measures (Hussain & Gunasekaran, 2002). The central bank as one of the coercive pressures has a positive effect on the economic performance, particularly in achieving lower inflation rates, cushioning the impact of political cycles on economic cycles, boosting fiscal discipline without any additional costs or sacrifices in terms of reduced economic growth (Laurens, 2005). Banks have increasingly been subjected to enormous pressure of their stakeholders and Central Bank to improve performance (Lapavitsas & Dos Santos, 2008).

The increased attention on performance measures by academics and consultants reflects the increased pressure to improve organizational performance (Hoque, 2004; Van der Stede, Chow, & Lin, 2006). Therefore, there are significant relationships between non-financial performance measures and organizational performance (Hoque, 2004) .

The forgoing reasoning suggests that a significant relationship between coercive pressures and organizational performance exists through the use of non-financial performance measures. Hence, this is considered as one of the main gaps in the literature. See Fig. 1.

H1. *A positive and significant association between coercive pressures and organizational performance exists through use of non-financial performance measures*.

2.2. Normative pressures, performance measures and organizational performance

Normative pressures such as the experience of professionals influence on use and design of performance measures (Hussain & Hoque, 2002; Munir., et al., 2011). Furthermore, there is a significant association of the institutional factors with organizational performance (Oliver, 1997; Zhu & Sarkis, 2007).

Many researchers have empirically reported that non-financial performance measures have a positive influence on the financial performance of the organizations with respect to long-term profitability (Banker, et al., 2000; Van der Stede, et al., 2006). In addition, there are arguments that banks possess a comprehensive system of performance measurement, especially non-financial performance measures that can improve their performance (Fakhr, Menacere, & Pegum 2009).

The above reasoning also suggests that a significant relationship between normative pressures and organizational performance exists through the use of non-financial performance measures. Hence, this is considered as one of the major gaps in the literature. See Fig. 1.

H2. *A positive and significant association between normative pressures and organizational performance exists through use of non-financial performance measures*.

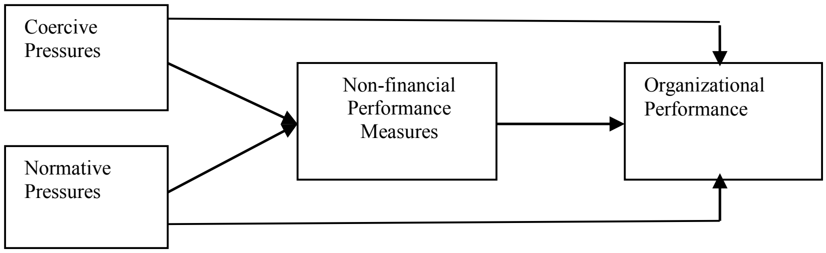

Fig.1.Research framework.

3. Research method

Data were collected using questionnaire survey during a two-month period. Questionnaires were delivered to branch managers of Libyan commercial banks. In Libya, there are 489 commercial branches (CBL, 2012) and a sample size of 217 branches was used. A total of 154 usable questionnaires were received, with a response rate of 70 %, were used for analysis of the findings. The existence of possible response bias between the early and late responses was undertaken by a t-test. It was found that there were no significant differences in the results between the early and late responses.

3.1. Measurement of variables

3.1.1 Coercive pressures

In line with the previous studies (Ke, Liu, Wei, Gu, & Chen, 2009; Teo, Wei, & Benbasat, 2003), this study focuses on measures regulatory control of the central bank by adapting four items: supervision, legislation, encouragement and maintenance. These items are modified to suit the research setting which is the banking sector in Libya. The items are measured using a five-point scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree." It explains the degree of pressures on organization. The mean score for the construct is 3.40, and the standard deviation is 0.77. The Cronbach Alpha coefficient is 0.78.

3.1.2 Normative pressures

In this study, the normative pressures were measured through three items: various sources, participation in workshop, and participation in training (Ke, et al., 2009; Teo, et al., 2003), and are modified to suit the research setting which is the banking sector in Libya. These items are measured using a five-point scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree." It explains the degree of pressures on organization. The mean score for the construct is 3.23, and the standard deviation is 0.77. The Cronbach Alpha coefficient is 0.74.

3.1.3 Non-financial performance measures

Non-financial performance measures the different parts of the organization's operations, through the use of the instruments developed by Kaplan and Norton (1996); Lee and Yang (2011). The items are based on the three dimensions of the balanced scorecard, which are customer's satisfaction, internal business process, and innovation and learning. The respondents are asked to indicate each performance measure currently used by management in their branches for performance measurement across the 12 items. These items are measured using a five-point scale ranging from 1 " not at all "to 5 " To a very great extent." The mean score for the construct is 3.23, and the standard deviation is 0.64. The Cronbach Alpha coefficient is 0.90.

3.1.4 Organizational performance

Organizational performance was measured using an instrument developed by Khong & Richardson (2003), Ringim (2012). The questionnaire asked the respondents to assess their organization's performance over the past 3 years across the 6 items. These items are measured using five-point Likert-type scale, ranging from 1 (Decrease significantly) to 5 (Increase significantly). The mean score for the construct is 3.51 and the standard deviation is 0.62. The Cronbach Alpha coefficient is 0.88, indicating a satisfactory internal reliability for the scale.

4. Findings

Pearson correlation coefficients for all variables are presented in Table 1. Coercive and normative pressures can be termed as the independent variables since they are not influenced by any other variables in the model. The non-financial performance measures and organizational performance are both dependent variables since coercive and normative pressures in the model affect these variables. The relationships between the variables are specified by path coefficients which are equivalent to standardized b coefficients.

Table 1. Correlation matrix for all variables.

Variables		Coercive Pressures (CP)	Normative Pressures (NP)	Non-Financial Performance Measures (NPM)	Organizational Performance (OP)
Independent Variables	CP	1			
	NP	.317**	1		
Mediator	NPM	.375**	388**	1	
Dependent Variable	OP	.288**	.101	.439**	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Hypothesis 1 assumes that there is an indirect effect of coercive pressures on organizational performance acting through the use of non-financial measures. The results presented in Table 2 show that there is a significant direct effect between coercive pressures and organizational performance. In addition, the β value = 0.229 which indicate that this relationship is positive ($t = 3.707$, $P < 0.01$). From the results, there is also an indication of the significant indirect effect ($t = 2.097$, $P < 0.05$) of coercive pressures on organizational performance acting through the use of non-financial measures. The β value (0. 134) is found to decrease thus, suggesting support for the hypothesis H1.

Hypothesis 2 assumes that there is an indirect effect of normative pressures on organizational performance acting through the use of non-financial measures. The results presented in Table 2 show that there is an insignificant ($t = 0.129$, $p > 0.10$) direct effect between normative pressures and organizational performance.

However, the β value = 0.009 which indicates that the relationship is positive. On the other hand, the indirect effect of normative pressures on organizational performance acting through the use of non-financial measures is found to be insignificant (t= -1.444, P> 0.10) and the β value (-0.093)indicate a negative direction. Therefore, these findings fail to support the hypothesis H2.

Table 2. Summary of the results of mediating test.

Predictors variables	Non-financial Performance Measures (NPM)	Organizational Performance (OP)	NPM and OP
Coercive Pressures	0.234****	0.229***	0. 134**
Normative Pressures	0.251****	0.009	-0.093
R2	0.221	0.083	0.221
Adj. R2	0.211	0.071	0.205
F change	21.463****	6.835***	14.183****

Note: * $P < 0.10$,** $P < 0.05$,*** $P < 0.01$,**** $P < 0.001$

5. Discussion and conclusions

This paper examines the links among the coercive pressures, normative pressures, the use of non-measures for performance measurement, and organizational performance. To test these relationships, the study surveyed 154 branches of Libyan commercial banks. The paper used a framework of institutional theory to examine the study phenomena.

The results suggest a significant relationship between coercive pressures and non-financial performance measures for performance measurement. This result is consistent with the previous studies (e.g., Hussain & Gunasekaran, 2002; Munir et al., 2011). In addition, the relationship between coercive pressures and organizational performance are found to be significant and positive which is also consistent with theory and the previous studies (e.g., Lapavitsas & Dos Santos, 2008; Oliver, 1997). The results suggest that the indirect relationship between the coercive pressures and organizational performance acting through the use of non-financial performance measures are positively significant. Thus, the non-financial performance measures can be used as mediating effect between coercive pressures and organizational performance. Therefore, this result supports the hypothesis 1.

In contrast, the results of this study find no support for the hypothesized significant and positive relationship between normative pressures on organizational performance acting through the use of non-financial performance measures. The insignificant direct effect between normative pressures and organizational performance could be attributed to the restriction of regulations and guidelines issued by the Libyan central bank and the absence of competition between the banks (Fakhr, et al., 2009). This reflects the influence of professional associations and level of education on bank's performance. However, this result is not consistent with the previous studies (Oliver, 1997; Zhu & Sarkis, 2007). In addition, insignificant indirect effect and negative direction of normative pressures on organizational performance acting through the use of non-financial measures were also found. Therefore, the non-financial performance measures cannot be used as mediating effect between normative pressures and organizational performance. Thus, this result fails to support the hypothesis 2.

This study contributes in filling the gaps in the accounting literature by investigating the mediating role of non-financial performance measures in the relationship between institutional factors (coercive and normative) and organizational performance. However, this study is not without constraints. First, organizational performance was measured using a questionnaire asking the managers to self-assess the performance of their organization (banks), which may lead to bias. Second, this study focuses on Libyan environment, but it is possible that banks in other settings differ from their counterparts in Libya. This may be so because of the size of the Libyan economy, the nature of competition, legal and regulatory constraints, the nature of economic and policies that may differ among countries. Thus, future research may be useful to compare the results of this study with the results that relate to banks in the developed countries.

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