The Relationship between Business Strategy, Market Competition and the Use of the Balanced Scorecard: An Application on Jordanian Commercial Banks & Insurance Companies

Majdy I. Zuriekat and Majed A. Al-Sharari

ABSTRACT

This study aims to measure the use of the balanced scorecard performance measurement system in Jordanian Commercial Banks and Insurance Companies. This study also examines the relationship between business strategy and market competition and the use of the balanced scorecard. In order to achieve the objectives of this study, required data were collected using a questionnaire survey which was designed and developed based on the previous literature. The results based on a sample of 42 companies showed that 40% of the responding companies reported using the balanced scorecard. The results using logistic regression indicate that business strategy and market competition significantly influence the use of the balanced scorecard in Jordanian Commercial Banks and Insurance Companies. Finally, this study recommends researchers to conduct future balanced scorecard research to examine the assumptions and benefits of using the balanced scorecard.

Keywords: Business Strategy, Market Competition, The Balanced Scorecard.

1. INTRODUCTION

During the last fifteen years, the balanced scorecard became one of the leading frameworks of performance measurement. The balanced scorecard is based on four perspectives, and any further one may be added according to the information needs of the managers. Observing the whole structure, the perspectives include: financial, customer, internal business process and innovation. However, this performance framework has several advantages over the traditional performance measures. Some of these advantages include greater flexibility, evaluation of innovation and learning, and the ability to communicate key factors that drive performance (Kaplan and Norton, 1993). In addition, many of the dysfunctional consequences encouraged by traditional financial performance measures are avoided due to the broad range of performance indicators generated by using the balanced scorecard. This approach, according to Kaplan and Norton, has two characteristics: First, the measures of the scorecard should be derived from business strategy. Second, the performance measures (i.e. financial and non-financial) should be linked by using a sequential cause-and-effect logic. Based on the above argument and considering the discussion so far, Kaplan and Norton (2001) concluded that the assumptions underlying the balanced scorecard and the nature of the relationships between non-financial and financial indicators give a broad avenue for further research. The balanced scorecard can be applied in different businesses under several conditions. Examples include different competitive environments and market situations. The balanced scorecard approach is applicable in manufacturing firms as well as non-profit, government and service firms. This approach has

Received on 11/4/2007 and Accepted for Publication on 22/2/2008.

attracted much attention in the management accounting literature. The literature reveals that this approach has been implemented in different countries. Different aspects of this approach are also identified including the integration between financial and non-financial performance measures of the four perspectives, the underlying assumptions of the scorecard and a critical examination of these assumptions. It should be noted that much of the research to date has focused on a critical analysis of the assumptions of the balanced scorecard. Moreover, research adopting a contingency theory framework has been widely used in management accounting and management control system research (Dent, 1990). Closely related to the contingency theory perspective is the use of performance measurement techniques such as the balanced scorecard, economic value measurement and the causal business model (Ittner et al., 2003). The management accounting literature suggests that many contingent factors may influence different aspects of the balanced scorecard (Ittner and Larcker, 1998; Chenhall, 2003). Although, the balanced scorecard approach appears to be a widely implemented performance framework, little research has been conducted to examine the degree of using it among companies (e.g. Malmi, 2001; Speckbacher et al., 2003). This approach is always open to interpretations in terms of types of perspectives and number of performance indicators (Ax and Bjornenak, 2005). Finally, most of the balanced scorecard research has concentrated on the manufacturing sector and has also been conducted outside Jordan. This study suggests that the use of the balanced scorecard is different among companies, i.e. the way the balanced scorecard is interpreted and used is key for successful balanced scorecard companies. From here arose the question of how a company should implement and use the balanced scorecard and what are the factors that might influence to what extent it is applied.

However, in the face of the increasing interest in the balanced scorecard, this study aims to investigate to what extent the balanced scorecard is used and how Jordanian Commercial Banks and Insurance Companies view the concept in terms of contents. In addition, this study utilizes the contingency theory framework for studying the balanced scorecard through examining the impact of several contingent factors (i.e. business strategy and market competition) on the use of the balanced scorecard. This study's aim is to contribute to understanding the use of the balanced scorecard in a Jordanian setting. Such understanding is necessary to help companies improve their competitive position and achieve their organizational objectives.

This study measures the use of the balanced scorecard based on the most widely used approach in management accounting innovation research. This approach treats the adoption of an innovation as a categorical dichotomy (i.e. balanced scorecard users and non-users) thus treating interventions in different companies as homogeneous even though such interventions may differ substantially with respect to degree and breadth of implementation. On the other hand, the innovation used by companies may differ substantially in terms of architecture, purposes and styles of use (Shields, 1998). Moreover, this study utilizes several contingent factors, but the notion that some contingent factors that might have been relevant to this study have not been included.

The remainder of the paper is organized as follows. The following section reviews related literature. The development of research hypotheses is presented in Section 3. Section 4 presents the research method. The next section presents the descriptive analysis, followed by analyzing and testing the hypotheses. The final section presents the results and discussion.

2.LITERATURE REVIEW

The balanced scorecard approach has attracted much attention by management accounting researchers as a method of integrating financial and non-financial performance measures (Lipe and Salterio, 2000; Malmi, 2001). Since its introduction in the early 1990s, this approach has attracted a great deal of interest as a new management accounting technique. This is evidenced by the large number of publications in management journals, seminars, and workshops that have been devoted to it. Many researchers to date have focused on different aspects

of the balanced scorecard, and this has provoked a considerable amount of argument and debate. Researchers have described the balanced scorecard as a broad scope mechanism of financial and non-financial information (e.g. Otley, 1999; Laitinen, 2002).

The aforementioned literature seems to support that the balanced scorecard is widely used in companies (see for example, Norreklit, 2000; Ittner and Larcker, 2001). Moreover, in both theory and practice, quite different opinions exist on the characteristics of the balanced scorecard. Many researchers (e.g. Malmi, 2001; Speckbacher et al., 2003) have found in their empirical studies that organizations are implementing this approach in different ways. Therefore, the empirical research has to consider that the balanced scorecards' spread, content, implementation and applications are likely to vary depending on type of organizations. Thus, it can be argued that there is a need to conduct more empirical studies to investigate how, and to what extent organizations are implementing this approach.

The balanced scorecard is applicable in all types of organizations including non-profit organizations and the public sector (Hepworth, 1998; Olve et al., 1999; Johnsen, 2001). Recently, Ittner et al. (2003) found from a case study on a financial service firm that the use of performance indicators in a balanced scorecard for the purpose of compensations allowed superiors to ignore many non-financial performance indicators so that financial performance indicators became the primary determinant of compensations. Ittner et al. (2001) also found that the implementation of a balanced scorecard compensation plan in a retail bank brought no significant change in understanding the strategic objectives by the managers. A recent field study (longitudinal approach) on a Banking organizations conducted by Davis and Albright (2004) investigated whether nine Banks branches are implementing the balanced scorecard. The results showed that four branches are implementing the balanced scorecard and the remaining five are non-balanced scorecard branches. The results provided evidence that branches implementing the balanced scorecard have achieved improvements in financial performance when compared to the non-balanced scorecard implementing branches.

The balanced scorecard is a management initiative that develops performance measures based on a specific strategy, intensity of competition and the capability of organizations to adopt and implement innovation. Thus, the current study seeks to document whether the application of the balanced scorecard is related to the type of business strategy and the degree of market competition.

3.RESEARCH HYPOTHESES

Based upon the aforementioned literature, it is clear that the use of the balanced scorecard under contingency framework is not fully investigated. Therefore, this study contributes to our understanding of what factors have the significant influence on the use of the balanced scorecard. Management accounting using a contingency approach has attempted to relate a range of contingent factors with the management accounting innovation (Chenhall, 2003). Thus, it is expected that different Banks and Insurance Companies will have several management accounting systems, and therefore several factors will have different influences on these systems. The next sub-sections provide a summary of prior literature relevant to this study (which include studies on business strategy and market competition and the balanced scorecard) in order to develop the hypotheses of this study.

3.1 Business strategy and the use of balanced scorecard

Many management techniques and management accounting practices may provide benefits to organizations emphasizing either product differentiation or low-cost strategies, however, different managerial mind sets underlying differentiation and low-cost strategies may influence preferences for particular management accounting practices (Shank, 1989). Strategic choices influence the design of non-traditional results controls within the management control system. Moreover, Low-cost strategy needs other performance measurement systems compared with quality leaders and the use of non-financial performance measures may be more appropriate for a differentiation strategy compared with a low-cost

strategy (Widener, 2004). This finding is consistent with the notion of the balanced scorecard. Business strategy in terms of differentiation and low-cost strategies affects organizations' needs for management accounting innovations (Gosselin, 1997). In this vein, Olson and Slater (2002) found in their study that high-performing low-cost defenders place greater emphasis on the financial perspective than do low-performers, also they place lower emphasis on both customer and innovation perspectives than do lower performers. Whereas, high-performing differentiators place greater emphasis on the customer perspective, also they emphasize on the innovation and financial perspectives more than low-performers. Recently, Sohn et al. (2003) found that low-cost defenders place higher weight on the perspectives of financial and internal business processes than differentiators, while, differentiators place a higher weight on customer and learning and growth perspectives than low cost defenders. Thus, it can be hypothesized that:

H1: Low-cost strategy has a positive impact on the use of balanced scorecard.

H2: Differentiation strategy has a positive impact on the use of balanced scorecard.

3.2 Market competition and the use of balanced scorecard

Market competition has been used in the management accounting literature in terms of intensity of price competition and intensity of market competition. The potential determinant of the use of financial and non-financial performance measures is the organization's competition in the markets (Hoque et al., 2001). Therefore, many researchers (e.g. Ittner and Larcker, 1998; Otley, 1999) argue that multiple performance measures (i.e. financial and non-financial) are necessary not only to track the financial performance of the organization, but non-financial performance measures are also required to track customer satisfaction, innovation and the quality of services. Successful measures in these areas are essential to achieve competitive advantage. Kaplan and Norton (1993) argued that the balanced scorecard is more appropriate model under the new realities of competition. Moreover, the new report "Transforming Strategic Performance" through the balanced scorecard shows that the fast changing market and increased competition have emerged as key drivers for scorecard adoption (Anonymous, 2001). Furthermore, Banker et al. (2001) found that companies that use a balanced scorecard operate in more competitive markets and face more competitive pressures. Thus, it can be hypothesized that:

H3: Market competition has a positive impact on the use of balanced scorecard.

4.RESEARCH METHOD

It is important to conduct any study based on principles of methodology. The following sub-sections describe study design and the methods for data collections.

4.1 Research design

The population for this study is defined as all Jordanian Commercial Banks and Insurance Companies. The rationale for targeting this sector is that the issue of balanced scorecard is now receiving an increasing emphasis in the service sector. Moreover, these companies are targeted in the population because they are expected to have a well-designed management control system in general and performance measurement system in particular. In order to test our hypotheses, we used a questionnaire for the companies representing both Banks and Insurance companies operating in Jordan drawn from the Association of Banks and Jordan Insurance Federation. The number of companies provided by these two associations contained 53 Commercial Banks and Insurance Companies. Developing a good questionnaire required a series of measures that would help to achieve the objectives of the study. The basic source for determining the content of the questionnaire was the literature. This major source was identified in order to maintain and maximize the reliability and validity of the questionnaire. Most of the questions used in this study were adapted from published research. The survey is delivered to the financial officers and financial controllers of the selected organizations. Respondents included (51%) of financial officers, (36%) controllers and (13%) other respondents. On average, the respondents were working for

4 years in their current function. The data collection process resulted in 42 usable responses (a response rate of 79%) representing 19 Bank and 23 Insurance company.

4.2 Measurement of variables

The data have been gathered by using a five- point Likert-scale. Specific information on the survey instruments is provided below; representing the independent variables (business strategy and market competition) and the dependent variable (i.e. the use of balanced scorecard).

4.2.1 Business strategy

Porter (1985) identified three generic ways (i.e. differentiation, low-cost and focus) in which a business can gain and sustain competitive advantage over other businesses in the same industry. However, the present study adopts Porter's strategies (i.e. differentiation and low cost) because they are academically well accepted (Govindarajan, 1988). Porter's generic strategies combination implied that organizations should build their performance measurement systems upon financial and non-financial measures. According to Kaplan and Norton (1996), the balanced scorecard relies on the concept of strategy developed in Porter (1980, 1985).

The dimensions of business strategy were operationalized in this study by indicating the position of each company relative to its leading competitors in the areas of service prices, service costs, percent of income spent on research and development, service quality and service features. This measure for business strategy is derived from Govindarajan (1988). Based on the two dimensions of business strategy, it was decided to separate the items into two strategies. The first two items (service prices and service costs) attempted to measure low cost strategy, while the last three items (percent of income spent on research and development, service quality and service features) measure differentiation strategy. Based on Lee and Miller's (1996) method of measuring low-cost strategy, reverse scoring for the items of low- cost strategy items were used to identify this strategy. In addition, the Cronbach's alpha for low-cost strategy was 0.68 and for differentiation strategy was 0.74, indicating good levels of reliability (Hair et al., 1998).

4.2.2 Market competition

It has been argued that price, product/service, and marketing or distribution channels as factors comprising the market competition. Other studies (e.g. Hoque et al., 2001) have extended the aforementioned factors by incorporating other competitive dimensions such as new entrants in the market and competitors' strategies. Therefore, the dimensions of market competition were operationalized in this study, these include price, new service development, marketing, market share, competitors' actions and number of competitors. In addition, the Cronbach's alpha for market competition was 0.84, indicating a good level of reliability.

4.2.3 The use of balanced scorecard

According to Mooraj et al. (1999, p. 489), the balanced scorecard implementation process relies on both formal and informal processes, however, each company has a unique balanced scorecard. Moreover, the use of balanced scorecard is problematic and that the literature lacks an optimal way to determine the degree to which balanced scorecard has been implemented by companies. However, researchers (e.g. Hoque and James, 2000) have measured the level of use of balanced scorecard in their surveys by asking the respondents to indicate the extent to which several financial and non-financial performance measures were used based on Kaplan and Norton's original four perspectives. Other studies (e.g. Ittner et al., 2003) have measured the level of use of balanced scorecard in their surveys by asking the respondents to self-specify whether their companies operated a balanced scorecard in their performance measurement system.

Following Ittner et al. (2003), a seven-point scale is used to measure the implementation stage of the balanced scorecard, where 1 = not considered, 2 = implemented and abandoned, 3 = considering, 4 = approved for implementation, 5 = implementing now, 6 = used, and 7 = used extensively. An essential core element of balanced scorecard use is the number of perspectives. Thus, financial, customer, internal business process, and learning

and growth perspectives were used in this study. In addition, employee, quality and community perspectives were added in this study based on the argument raised by Kaplan and Norton.

Finally, it should be noted that this measure treats the adoption of an innovation as a categorical dichotomy (i.e. balanced scorecard users and non-users); thus treating interventions in different companies as homogeneous even though such interventions may differ substantially with respect to degree and breadth of implementation.

5.RESULTS

This part of the study has two sections. First section reports the descriptive statistics, and the second one presents the results related to hypotheses testing using analytical statistics.

5.1 Descriptive statistics

Information relating to the characteristics of the responding companies is presented in Table (1).

Table. 1 Characteristics of the responding firms

1. Number of employees	Frequency	Percent
101-300 employee	9	21%
301-500 employee	16	38%
501-600 employee	7	17%
More than 600 employee	10	24%
Total	**42**	**100**

2. Annual sales turnover	Frequency	Percent
less than 1 million JDs	2	5%
1 million JDs – less than 5 million JDs	18	43%
5 million JDs – 10 million JDs	13	31%
More than 10 million JDs	8	19%
Not responded	1	2%
Total	**42**	**100**

To identify the balanced scorecard implementation stage, Table 2 shows the responses of the sample about the extent to which balanced scorecard is used as a performance measurement system.

Table 2. State of balanced scorecard implementation stages (n = 42)

State of implementation	Number of respondents	Percent
1. Not considered	14	33%
2. Implemented and abandoned	-	-
3. Considering	11	26%
4. Approved for implementation	-	-
5. Implementing now	2	5%
6. Used	15	36%
7. Used extensively	-	-
Total	**42**	**100%**

The table shows that 33% of the sample had not considered the balanced scorecard as a performance measurement system. The analysis of balanced scorecard implementation stages as shown in the above table reported that 26% of the sample had considered implementing this concept. The balanced scorecard implementation rate is 40.5% (n = 17). It consists of the sum of rows 5, 6 and 7 of Table (1). It can be concluded from the above analysis that the balanced scorecard is slightly popular in the Banks and Insurance companies in Jordan. In their writings, Kaplan and Norton (1996) indicated that there are several types of perspectives frequently used by companies. The perspectives used by the balanced scorecard companies are presented in Table (3).

Table 3. Type of perspectives used in the balanced scorecard (n = 17)

Type of perspectives	Frequency	Percent
Financial	17	100%
Customer	13	76%
Internal business process	11	65%
Learning and growth	8	47%
Employee	6	35%
Quality	11	65%
Community	2	12%

Table (3) shows that all of the balanced scorecard companies use the financial perspective, and most of them also use customer, internal business process and quality perspectives. The table also shows that the balanced scorecard companies moderately use learning and growth and employee perspectives in their scorecards. Interestingly, only two companies use the community perspective. Thus, it should be recognized at the outset that companies may use the original perspectives suggested by Kaplan and Norton, and may also use different perspectives. To elaborate more on the details of balanced scorecard companies, Table 4 shows the number of perspectives used by the responding companies.

Table 4. Number of perspectives used in the balanced scorecard

Number of perspectives	Frequency	Percent
Three perspectives	3	18%
Four perspectives	9	53%
Five perspectives	3	18%
Six perspectives	2	11%
Total	**17**	**100%**

It can be noted from the above table that only 18% of the balanced scorecard companies use three perspectives in their scorecard, more than fifty percent of the balanced scorecard companies use only four perspectives, and 29% of the balanced scorecard companies use more than four perspectives. Therefore, it can be concluded that the number of performance perspectives used in the balanced scorecards are situational.

5.2 Hypotheses testing

To test the hypotheses, logistic regression analysis is used to examine the statistical differences in the

responses for balanced scorecard users and non-users, and to explore the relationship between low-cost strategy, differentiation strategy, market competition and the use of balanced scorecard. The output of the logistic regression model indicates that chi-square value is 17.62 ($P < 0.05$). This value is significant, which means that the overall model is predicting display rule understanding significantly better than it was with only the constant included. The chi-square model is an analogue of the *F* statistic for the linear regression sum of squares. Moreover, the Hosmer and Lemeshow value is not significant ($P > 0.05$). This result, according to Hair et al. (1998), indicates that the model does differ significantly from the observed data, thus the logistic regression model is suitable to test the hypotheses. The Cox & Snell R^2 indicates that the logistic regression model explains 32.8% of the variance in balanced scorecard use. However, the output of the logistic regression analysis is presented in Table (5).

Table 5. Logistic regression for the contingent factors influencing the use of the balanced scorecard

Independent variables	B	Wald	p-value	TOL	VIF
Constant	26.14	5.76	0.023	-	-
Low cost	3.52	6.32	0.010	0.642	1.102
Differentiation	2.46	4.06	0.032	0.784	1.321
Market competition	4.34	6.98	0.008	0.586	1.136
Chi-square	17.62				
Sig.	0.00				
Hosmer & Lemeshow	1.52				
Sig.	0.87				
Cox & Snell R^2	0.328				

Multicollinearity causes a problem for logistic regression, since it can affect the parameters of a regression model. SPSS does not have an option for producing collinearity diagnostics in logistic regression. However, Field (2000) suggests to use the Variance Inflation Factor (VIF) and the tolerance values (TOL) to test for multicollinearity (i.e. used in multiple regression analysis). The analysis of the Variance Inflation Factor (VIF) showed no values that exceed the generally accepted maximum level of 10 (an indication of high levels of multicollinearity) and the tolerance values showed no values less than the maximum level of 0.2 (also an indication of high levels of multicollinearity). Thus, no support was found for the existence of multicollinearity between independent variables. In addition, there are several decision rules for accepting or rejecting study hypotheses in logistic regression. The most important basis for accepting or rejecting the hypotheses is the wald statistics (i.e. it is analogue to t-test in multiple regression) which show whether the beta coefficient for each predictor is significantly different from zero (Field, 2000).

Business strategy and the use of balanced scorecard (H1 and H2)

The statistics relating to hypotheses H1 and H2 reveal that both dimensions of business strategy (i.e. low-cost strategy and differentiation strategy) have significant effect on the use of balanced scorecard with betas of 3.52 and 2.46, respectively (wald statistics = 6.32 and 4.06, respectively). Thus, the findings of the logistic regression model indicate that hypotheses H1 and H2, which predict a direct relationship between each dimension of business strategy and the use of balanced scorecard, were supported at 0.05 significance level. Therefore, both hypotheses are fully accepted.

Market competition and the use of balanced scorecard (H3)

The statistics relating to hypothesis H3 reveal that market competition has a significant effect on the use of balanced scorecard with a beta of 4.34 (wald statistics = 6.98). Thus, the findings of the logistic regression model indicate that hypothesis H3, which predicts a direct relationship between market competition and the use of balanced scorecard, is supported at the 0.05 significance level. Therefore, hypothesis H3 is fully accepted.

6. RESULTS AND DISCUSSION

This paper critically evaluates from both descriptive and analytical point of view the relationship between several contingent factors and the use of balanced scorecard. Despite its popularity, only 40% of the responding companies had declared implementing the balanced scorecard approach. An essential feature of balanced scorecard approach is the type of performance perspectives. However, the results indicate that the majority of the balanced scorecard companies are using the first three perspectives of Kaplan and Norton's scorecard (i.e. financial, customer, and internal business process). The balanced scorecard companies also use additional perspectives (i.e. innovation, employee, and quality). These results support the idea that companies are using different types of performance perspectives that mainly cope with their objectives. Thus, it can be concluded that the content of the balanced scorecard are different between companies.

The results of the study show that both dimensions of business strategy (i.e. low cost and differentiation) have significant impact on the use of balanced scorecard. A major strength of the balanced scorecard approach is the emphasis it places on linking performance measures with business strategy. Academic studies (e.g. Mooraj et al., 1999; Ahn, 2001) confirm the role of this approach in strategy implementation and communication. In this vein, Veen-Dirks and Wijn (2002) indicate that the choice of balanced scorecard perspectives depends on the strategy chosen, and the scorecard has been developed not to serve strategy formulation but to implement it, because the role of the balanced scorecard in strategy formulation is bounded. However, different companies experience different sets of managers' decisions to adopt and use management accounting innovation (Gosselin, 1997). The results show that market competition has a significant effect on the use of balanced scorecard. The result is consistent with what Kaplan and Norton (1993) concluded. This result is also consistent with the empirical work by Banker et al. (2001) who found that companies implementing the balanced scorecard operate in competitive markets and face high competitive pressure. However, one could argue that companies are using the balanced scorecard as a call for the increasing level of market competition. Another explanation for the significant relationship is that companies facing high competition might invest in costly management accounting systems when it can be clearly demonstrated that such decisions will yield positive short-term returns.

In conclusion, this study contributes to the existing balanced scorecard literature by providing evidence of the use of the balanced scorecard in Jordanian Commercial Banks and Insurance Companies. This study has empirically investigated the relationships between several potential exploratory factors and the use of balanced scorecard. Thus, several important insights into issues relating to the balanced scorecard were concluded.

This study contributes to the management accounting literature by providing some guidance for future balanced scorecard research. A comparison study between balanced scorecard companies in both Banks and Insurance Companies would sustain in obtaining a more complete picture on the application of the balanced scorecard in the service sector. A goal of future research should be to continue investigating the balanced scorecard in other sectors in Jordan. Future research may also consider developing alternative measures of the use of balanced scorecard in surveys. Finally, this study has not incorporated organizational effectiveness to examine whether the fit between the identified exploratory factors and the use of balanced scorecard has any effect on

organizational effectiveness. Thus, future research may assess the effectiveness from applying the balanced scorecard. In addition, future research to examine the improvement in performance within companies before and after the implementation of balanced scorecard is also considered to be appropriate.

The results of this study have some useful practical implications for managers in Jordanian Commercial Banks and Insurance Companies. Managers should consider paying more attention to analyzing and linking their performance indicators with business strategy in order to increase and enhance their company's ability to achieve the required objectives. Managers should give increasing emphasis to tracing both financial and non-financial performance of their companies in order to achieve competitive advantage in highly intensive competitive markets.

REFERENCES

Ahn, H. 2001. Applying the balanced scorecard concept: An experience report. ***Long Range Planning***, 34(4): 441-461.

Anonymous. 2001. Balanced scorecard is fast becoming a must have process for corporate change. ***Management Services***, 45(8): 5-6.

Ax, C. and Bjornenak, T. 2005 .Bundling and diffusion of management accounting innovations-the case of the balanced scorecard in Sweden. ***Management Accounting Research***, 16(1): 1-20.

Banker, R., Janakiraman, S. and Konstans, C. 2001. .Balanced scorecard: linking strategy to performance. FEI, Research Foundation.

Chenhall, R. 2003 .Management control systems design within its organizational context: findings from contingency-based research and directions for the future. ***Accounting, Organizations and Society***, 28(2/3): 127-168.

Chow, C., Haddad, K. and Williamson, J. 1997. .Applying the balanced scorecard to small companies. ***Management Accounting (USA)***, 79(2): 21-27.

Davis, S. and Albright, T. 2004 .An investigation of the effect of balanced scorecard implementation on financial performance. ***Management Accounting Research***, 15(2): 135-153.

Dent, J. 1990 .Strategy, organization and control: Some possibilities for accounting research. ***Accounting, Organizations and Society***, 15(1/2): 3-25.

Field, A. 2000 .***Discovering Statistics using SPSS for Windows-Advanced Techniques for the Beginner***. (London: Sage Publications).

Gosselin, L. 1997 .The effects of strategy and organizational structure on the adoption and implementation of activity-based costing. ***Accounting, Organizations and Society,*** 22(2): 105-122.

Govindarajan, V. 1984 .Appropriateness of accounting data in performance evaluation: An empirical examination of environmental uncertainty as an intervening variable. ***Accounting, Organizations and Society***, 9(2): 125-135.

Govindarajan, V. 1988 .A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy. ***Academy of Management Journal***, 31(4): 828-853.

Hair, J., Anderson, R., Tatham, R. and Black, W. 1998 .***Multivariate Data Analysis***. 5th edition, (Upper Saddle River, NJ: Prentice-Hall).

Hepworth, P. 1998 .Weighing it up-a literature review for the balanced scorecard. ***Journal of Management Development***, 17(7/8): 559-563.

Hoque, Z. and James, W. 2000 .Linking balanced scorecard measures to size and market factors: Impact on organizational performance. ***Journal of Management Accounting Research***, 12: 1-17.

Hoque, Z., Mia, L. and Alam, M. 2001 .Market competition, computer-aided manufacturing and use of multiple performance measures: An empirical study. ***British Accounting Review***, 33(1): 23-45.

Ittner, C. and Larcker, D. 1998 .Innovations in

performance measurement: trends and research implications. ***Journal of Management Accounting Research,*** 10: 205-238.

Ittner, C. and Larcker, D. 2001 .Assessing empirical research in managerial accounting: a value-based management perspective. ***Journal of Accounting and Economics***, 32(1/3): 349-410.

Ittner, C., Larcker, D. and Randall, T. 2003 .Performance implications of strategic performance measurement in financial services firms**.** ***Accounting, Organizations and Society***, 28(7/8): 715-741.

Johnsen, A. 2001 .Balanced scorecard: theoretical perspectives and public management implications. *Managerial Auditing Journal*, 16, 6: 319-330.

Kaplan, R. and Norton, D. 1993 .Putting the balanced scorecard to work. ***Harvard Business Review***, 71(5): 134-147.

Kaplan, R. and Norton, D. 1996 .***The balanced scorecard***. (Harvard Business School Press).

Kaplan, R. and Norton, D. 2001 .Transforming the balanced scorecard from performance measurement to strategic management. ***Accounting Horizons***, 15(1): 87-104.

Laitinen, E. 2002 .A dynamic performance measurement system: evidence from small Finnish technology companies. ***Scandinavian Journal of Management***, 18(1): 65-99.

Lee, J. and Miller, D. 1996 .Strategy, environment and performance in two technological contexts: Contingency theory in Korea. ***Organization Studies***, 17(5): 729-750.

Lipe, M. and Salterio, S. 2000 .The balanced scorecard: Judgmental effects of common and unique performance measures. ***The Accounting Review***, 75(3): 283-298.

Malmi, T. 2001 .Balanced scorecards in Finnish companies: A research note. ***Management Accounting Research***, 12(2): 207-220.

Miles, R. and Snow, C. 1978 .***Organizational strategy, structure, and processes***. (New York: McGraw-Hill).

Mooraj, S., Oyon, D. and Hostettler, D. 1999 .The balanced scorecard: a necessary good or an unnecessary evil? ***European Management Journal***, 17(5): 481-491.

Norreklit, H. 2000 .The balance on the balanced scorecard-a critical analysis of some of its assumptions. ***Management Accounting Research***, 11(1): 65-88.

Olson, E. and Slater, S. 2002 .The balanced scorecard, competitive strategy, and performance. ***Business Horizons***, 45(3): 11-16.

Olve, N., Roy, J. and Wetter, M. 1999) .***Performance Drivers: A Practical Guide to Using the Balanced Scorecard***. (John Wiley & Sons, Chichester, England).

Otley, D. 1999. Performance management: a framework for management control systems research. ***Management Accounting Research***, 10(4): 363-382.

Porter, M. 1985.***Competitive Advantage: Creating and Sustaining Superior Performance.*** New York: Free Press.

Shank, J. 1989. Strategic cost management: New wine or just new bottles? ***Journal of Management Accounting Research***, 1: 47-65.

Shields, M. 1998. Management accounting practices in Europe: A perspective from the states. ***Management Accounting Research***, 9(4): 501-513.

Sohn, M., You, T., Lee, S. and Lee, H. 2003. Corporate strategies, environmental forces, and performance measures: a weighting decision support system using the k-nearest neighbour technique. ***Expert Systems with Applications***, 25(3): 279-292.

Speckbacher, G., Bischof, J. and Pfeiffer, T. 2003. A descriptive analysis on the implementation of balanced scorecards in German-speaking countries. ***Management Accounting Research***, 14(4): 361-387.

Veen-Dirks, P. and Wijn, M. 2002. Strategic control: Meshing critical success factors with the balanced scorecard. ***Long Range Planning***, 35(4): 407-427.

Widener, S. 2004. An empirical investigation of the relation between the use of strategic human capital and the design of the management control system. ***Accounting, Organizations and Society***, 29(3/4): 377-399.

العلاقة بين مدى استخدام بطاقة الأداء المتوازن وكل من استراتيجية الشركة ودرجة المنافسة: دراسة تطبيقية على البنوك التجارية وشركات التأمين الأردنية

مجدي عيسى زريقات وماجد عادل الشرايري

ملخـص

تهدف هذه الدراسة الى قياس مدى استخدام البنوك وشركات التأمين الاردنية لبطاقة الأداء المتوازن (Balanced Scorecard)، كما وتهدف هذه الدراسة أيضا إلى تحديد أثر مجموعة من العوامل على استخدام هذه البطاقة. وتقيس هذه الدراسة ايضا العلاقة بين استراتيجية الشركة ودرجة المنافسة في الأسواق ودرجة استخدام بطاقة الأداء المتوازن. ولتحقيق أهداف هذه الدراسة تم جمع البيانات المطلوبة بواسطة استبانة صممت وطورت بعد الرجوع الى أدبيات الدراسة. وباستخدام عينة مكونة من 42 بنكاً وشركة. أظهرت النتائج أن 40% من العينة يطبقون بطاقة الأداء المتوازن ولكن بطرق مختلفة، كما بينت النتائج ايضا وباستخدام (Logistic Regression) أن استراتيجية الشركة ودرجة المنافسة في الأسواق تؤثر إيجاباً على استخدام بطاقة الأداء المتوازن في البنوك وشركات التأمين الأردنية. وقد أوصت الدراسة بتوجيه الباحثين لدراسة مجالات أخرى في موضوع بطاقة الأداء المتوازن وخاصة فروض هذه البطاقة والتركيز على المنافع المترتبة على استخدامها.

الكلمات الدالة: استراتيجية الشركة، درجة المنافسة، بطاقة الأداء المتوازن.

* Department of Economics and Financial Sciences, Faculty of Planning and Management, Al-Balqa' Applied University, Jordan.

تاريخ استلام البحث 2007/4/11، وتاريخ قبوله 2008/2/22.