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Bank Performance and Marketing Concept: An Empirical Investigation in the Jordanian Banks

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ABSTRACT

Bank performance, is a function of doing banking business and marketing concept, is a philosophy of doing business. This study examines the impact of the marketing philosophy on the bank functioning. That is, it examines the relationship between adoption and implementation of marketing concept by Jordanian banks and their performance. The study used an established scoring scale for measuring the adoption and implementation of the marketing concept and constructed multivariate models for testing the hypothetical relationships. The results were robust and indicate the significant, yet differential, impact of aspects of the marketing concept on bank profitability. However, there were negative correlations between adoption and implementation components. This indicates that Jordanian banks were selective in paying attention to the marketing concept components. This study suggests a logical approach for adopting and implementing the marketing concept, according to their costs and contribution into the bank's performance. Moreover, the results show that bank's profitability is dependent on some marketing concept components, and adversely influenced by other components.

Keywords: Bank Performance, Marketing Concept, Adaptation, Implementation.

1. INTRODUCTION

Globalization and market openness will mean to the Jordanian bankers an expanded role of marketing activity in the banking industry. However, such an expanded role can be justified if the returns are at least enough to cover costs. Most banks do have many product programs, sales support tools, information databases and incentive schemes, but they are not bringing these elements together to maximize service and profitability. Jordanian banks and other financial institutions have been slow to recognize the value of "marketing". This reluctance is puzzling because of the fact that banks have access to, or have the means to collect a great deal of information about their clients (which is referred to as "adopting marketing concepts"). They have not, for the most part, utilized such information as a marketing resource (which is referred to as "implementing marketing concepts"). Instead, they continue to spend the bulk of their marketing funds and efforts in trying to attract new clients.

Nowadays, market-aware bankers face dual challenges of becoming effective marketers and efficient cost cutters. Because an expanded role of marketing activity in banking operations is very costly, it can only be justified if the returns from such marketing activity are sufficient enough to cover the total costs of the increased activity. So, to become a market oriented, banks have to adopt the marketing concepts.

Building upon the conceptual framework provided by the literature on the importance of activating the marketing concepts in order to become market-driven, and by extension to financial performance, this study examines the impact of adopting and implementing marketing concept by Jordanian banks and their financial performance. The data was collected by means of interviewing top marketing executives. The results from 14 commercial banks operating in Jordan suggests that the nature of the information collected, the research vehicle used for their collection and the use made of these information are related to the adoption and implementation of the marketing concept. As a secondary data, banks financial performance was collected from their annual reports.

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2. THE MARKETING CONCEPT

Bank performance, is a function of doing banking business and marketing concept, is a philosophy of doing business. Marketing Concept (MC) is a business principle or, according to McNamara (1972), a philosophy of business management. It advocated the organizational focus on understanding and satisfying customer needs and the integration of marketing throughout the company [Gray *et al.* (2002) and Nakata (2002)]. The MC consists of three key factors:

(1) Customer satisfaction, and according to Svensson (2005) customer's customer satisfaction.
(2) Profit orientation.
(3) Integration of the marketing activities throughout all major operational areas of the firm [Reidenbach *et al.* (1986)].

Marketing orientation is an implementation phase of MC [Kohli and Jaworski (1990)] and can be measured by assessing behavior which stimulate and support the MC. Implementing the MC is said to have greater impact on firm's performance. There is growing evidence on linking the adoption and implementation of the marketing concept and its corollary market orientation, with enhanced sales, new product success, product quality and customer satisfaction, with overall firm performance and profitability, see for instance, Baker *et al.* (1999) and Caruana *et al.* (1999). Sin *et al.* (2003), for example, find that firm's marketing orientation is related positively to business performance. In addition, Nakata (2002) shows that greater adoption and implementation of MC is tied to strong organizational performance. However, there has been limited research in Jordan which examined the MC and firm performance, in general, and that of Bank's Performance (BP) in particular.

3. CONCEPTUAL FRAMEWORK

This study follows the environment-strategy-paradigm, which states that firm performance is a function of business environment and strategy pursued. Previous research suggests that differences in the market environments of different countries may influence the types of strategies developed and adopted by companies, as well as impacts of those strategies on firm performance and profitability [Sin *et al.* (2003)]. Empirical evidence for this paradigm is provided by, for example, Dadzie *et al.* (2002) and Manu (1992). This study has chosen the MC as a business strategy to be examined. The specific feature of the strategy chosen for examination has to do with marketing, particularly, with the MC of a banking business.

The conceptual framework representing the pursued strategy to be tested in this study is shown in figure (1). This model captures MC and its consequences, i.e. BP, embedded in the context of the business environment. In this context, bank activates the MC by adopting its components and implementing its contents. Adoption of the MC is a set of organizational measures and the implementation phase is a sequence of activities and organizational construct. Bank's overall performance is affected by, *inter alias*, this sequence. The model has four components, described below.

The first component of the model is the business environment, which evolves from four main systems:

(1) The legal system.
(2) The political system.
(3) Social attitudes, traditions and customs.
(4) The market conditions.

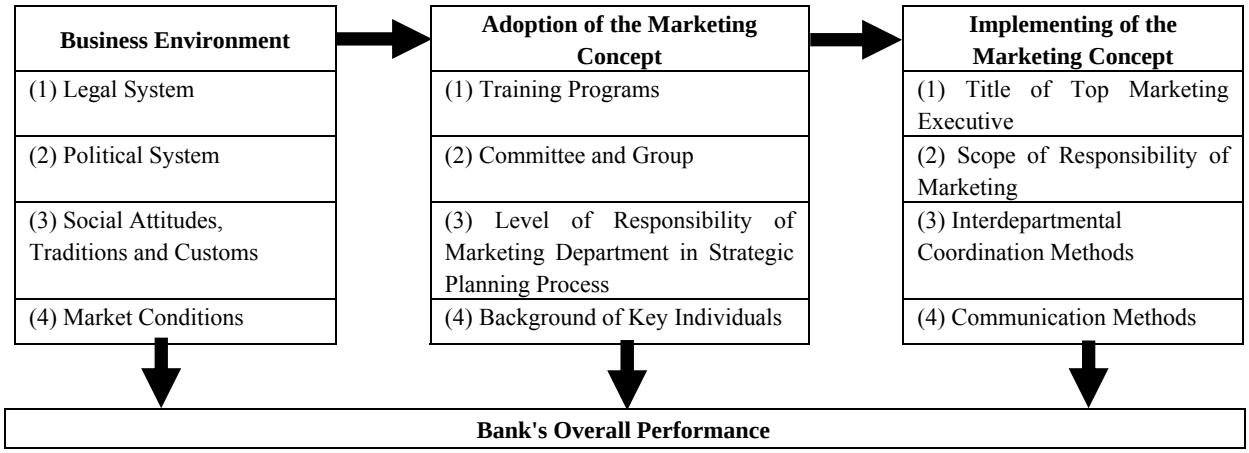

Figure 1. Conceptual Framework of Activation and Operationalizing the Marketing Concept.

The business environment in the Hashemite Kingdom of Jordan (HKJ) can be summarized as follows: HKJ is a small, Muslim Arabic-speaking country located between the Palestinian Territories and Israel to the west, Syria to the north, Iraq to the east and Saudi Arabia to the south. It consists of approximately 92,000 km², of which 2,500 km² or 2.9% is arable. The country is resource poor, with the exception of phosphates and its highly educated population. Literacy at 91% is by far the highest in the Arab World. 38% of the population is under the age of 15. The population of the country in July 2003 is approximately 5.5 million, and the rate population growth is 2.8%. Per capita GDP is approximately $2,000 (PPP $5,000). Jordan has an open and almost totally free market economy with a *laissez-faire* approach to public policy, where everyone primarily looks out for his own interests. All banks are private corporations and public shareholdings, and government does not interfere with how business is running. Jordan has embarked on a program of reform of the economy. The legal system is independent and the banking market is becoming more sophisticated [Data source from (DOS, 2004)].

The next two components of the model have to do with the extent of the adoption of the MC and the degree to which the concept is implemented in the Jordanian banks and its impact on banks performance. This study has borrowed McNamara (1972) scale and its modification by Reidenbach *et al.* (1986), which is used for measuring the adoption and implementation of the MC. The second component of the model is the adoption of the MC. The scale shows that this aspect of the MC can be measured by four indicators of marketing activities. These are:

(1) Training programs.
(2) Committee and group membership of top marketing executive.
(3) Level of responsibility of marketing department in strategic planning process.
(4) Background of key individuals.

Table (1) provides a specific adoption scale items. The intuition behind using these measures is that banks that have more closely adopted the MC, will have restructured their operations to reflect a greater emphasis on the marketing function [Reidenbach *et al.* (1986)].

The third component of the model is the implementation of the MC. The model used in this study shows that this aspect of the MC can be measured by such items as:

(1) The title of top marketing executive.
(2) The scope of responsibility of marketing.
(3) The interdepartmental coordination methods.
(4) The communication methods.

Table (1) provides a specific implementation scale items. In addition, the table designates the scoring system used in measuring the two tenets of the MC. Once again, Reidenbach *et al.* (1986) provide detailed justification for and explanation of the measures used and the designated scores.

The final component of the model is the bank overall performance and profitability. For the purpose of this study, the net income was used as bank's profitability measure. In addition, three financial profitability ratios were calculated. These are (1) Return On Equity (ROE), (2) Return On Assets (ROA) and (3) Earnings Per Share (EPS).

4. HYPOTHESES

This study aims at investigating the empirical relationships between the MC aspects and bank performance measures. In other words, it seeks to examine the impact of adopting and implementing the MC on the profitability of the Jordanian banks.

Literature shows that the MC lies on the commitment of all members of the organization [Nakata (2002)]. Therefore, extensive MC requires that departmental communications and task coordination across firm should be more intensive. So that organization members are unified in serving customers [Kohli and Jaworski (1990)]. Hence, the adoption of the MC across organizational levels should strengthen its implementation. Thus, the first hypothesis of this study is:

H0: There is no relationship between adopting and implementing the MC.

H1: The more thoroughly adopting the MC, the more perfectly it is implemented.

Kohli and Jaworski (1990) argue that higher market orientation indicates the greater MC implementation. As the MC is implemented by means of, *inter alias*, new product/service and customer satisfaction, firm performance should improve [Sin *et al.* (2003)]. Therefore, the second hypothesis is:

H0: There is no relationship between implementing the MC and bank performance.

H2: The more perfectly implemented the MC, the higher is the bank performance.

Table (1) Marketing Concept Scoring Criteria.

Adoption Items	Score Points	Implementation Items	Score Points
(1) Training Programs		**(1) Title of Top Marketing Executive**	
(a) University executive development programs	4	(a) Vice Presidents or higher	5
(b) Special lectures (business consultants)	3		
(c) Bank meetings and conferences	1	(b) Uses the word marketing in title	5
(d) On-the-job training	1		
TOTAL POSSIBLE POINTS	**9**	**TOTAL POSSIBLE POINTS**	**5**
(2) Committee and Group Membership of Top Marketing Executive		**(2) Scope of Responsibility of Marketing**	
(a) Board of Directors	5	Three points if a functional area is very much the responsibility of the marketing executive	30
(b) Executives	4	One point if a functional area is shared responsibility of the marketing executive	10
(c) Finance	3		
(d) Asset/Liability management	2	No points if a functional area is not the responsibility of the marketing executive or if not applicable	0
(e) New product / service planning	1		
TOTAL POSSIBLE POINTS	**15**	**TOTAL POSSIBLE POINTS**	**30**
(3) Level of Responsibility of Marketing Department in Strategic Planning Process		**(3) Interdepartmental Coordination Methods**	
(a) If marketing has equal or greater responsibility than other functional departments	10	Three points if a method is frequently used	15
(b) If marketing has responsibility but not as much as other departments	5	One point if a method is not frequently used	5
(c) If marketing has no responsibility	0	No points if a method is not used	0
TOTAL POSSIBLE POINTS	**10**	**TOTAL POSSIBLE POINTS**	**15**
(4) Background of Key Individuals		**(4) Communication Methods**	
(a) One point assigned for each marketing background indicated	5	Three points if a method is frequently used	24
		One point if a method is not frequently used	8
		No points if a method is not used	0
TOTAL POSSIBLE POINTS	**5**	**TOTAL POSSIBLE POINTS**	**24**
TOTAL ADOPTION POINTS	39	TOTAL IMPLEMENTATION POINTS	79

Source: Reidenbach *et al.* (1986), Figure (1) Page 20.

However, various components of the MC might have varied impact on bank's performance. Hence, the third hypothesis is:

H0: Not all components of the MC have equal impact on Bank performance.

H3: All components of the MC have equal impact on Bank performance.

The importance of H3 hypothesis, if confirmed, indicates whether adopting and implementing the MC have been unjustifiably expensive. Therefore, knowing which components of the MC have greater impact on performance would suggest a more cost-effective approach for adopting and implementing the MC [Reidenbach *et al.* (1986)].

5. THE DATA

Data for the study was collected through a semi-constructed interview with top executive marketing of the 14 Jordanian commercial banks during March and April 2005. The interview was structured so as to measure how well each bank adopted and implemented the MC within the marketing department and across the bank. The study borrowed Reidenbach *et al.* (1986) scoring system, which

is a modified version of McNamara (1972). The MC scoring system is outlined in table (1), and expressed in the following equation (1):

Bank MC Score = (***ADPT*** rain + ***ADPT*** comm + ***ADPT*** mk + ***ADPT*** back) + (***IMPL*** fun + ***IMPL*** coor + ***IMPL*** corm + ***IMPL*** top) … (E1)

Where:

- ***ADPT*** is a prefix, used to indicate that this variable is used to measure the bank's adoption level of the marketing concept.
- ***IMPL*** is a prefix, used to indicate that this variable is used to measure the bank's implementation level of the marketing concept.
- ***ADPT*** rain is the variable that represents score for training programs.
- ***ADPT***comm represents score for committee and group membership of the top marketing executive.
- ***ADPT***mk represents the level of responsibility of the marketing department in the strategic planning process.
- ***ADPT***back represents the score for the marketing background of key individuals.
- ***IMPL***fun represents the score for the functional responsibility of the marketing department.
- ***IMPL***coor represents the score for interdepartmental coordination methods.
- ***IMPL***corm represents the score for communication methods.
- ***IMPL***top represents the score for the title of the top marketing executive.

In addition, the 2004 Amman Stock Exchange Company Guide was collected to calculate the banks performance measures: Return On Assets (ROA), Return On Equities (ROE) and Earnings Per Share (EPS). Also, market stock price to earnings per share (P/E) ratio was collected to investigate the market perception and valuation of the bank profitability and performance. In addition, to control for the size of the bank, various measures were collected. These include bank total assets, total equities, customer deposits, number of employees and branches, as well as bank age (how old is the bank).

6. DATA DESCRIPTION AND ANALYSIS

Table (2) summarizes the descriptive statistics of the MC Scorings for the 14 banks sample. It can be seen from the table that in terms of the adoption side of the MC scoring criteria, the average of the 14 sample banks was 23 of 39. In a percentage, this equals to (59%), with a maximum score attained by any bank of 30 (77%) and a minimum of 14 (36%). Figure (2) shows the histogram along with the relative normal distribution for the sample banks adoption scores. While the average of the implementation scores was 46 of 79 (58%), with a maximum of 79 (100%), and a minimum of 23 (29%). The distribution for the sample banks implementation scores is plotted in Figure (3). Finally, the average of the total score attained was 69 points of 118 points (59%), with a maximum of 106 (90%) and the minimum of 37 (31%). Figure (4) plots the histogram for the banks total scores.

In addition, table (2) presents the descriptive statistics of the profitability measures (during 2004) for 12 banks only, because there was no information about 2 banks in the secondary source collected for this study. Nevertheless, the table shows that although the average ROA was less than 1% and ROE was 6.74%, the average EPS was Jordanian Dinar (JD 1.24). The distributions of ROA and ROE are plotted in figures (5) and (6). These results might be explained by the high liquidity of banking system in Jordan, which indicates that more funds are reserved and not utilized in lending and investments. This led to a higher portion of banks non-earnings assets.

As for the market valuation of the banks earnings (P/E), the average (-604 times) might be considered as non-indicative, because of outliers in the sample which derive the average extremely negatively. Hence, the standard deviation is 4 times the average. However, excluding the outliers would enhance the average P/E to a positive (17 times), with minimum of (-11 times) and a maximum of (26 times).

As for the control variable, *i.e.* the bank size, the table reports four measures. These are total assets, customer deposits, number of employees and number of branches. The average total assets (customer deposits) of the 12 banks sample was JD 1713 million (JD 1379 million). Whereas, the average number of employees (branches) was 1062 person (39 branch). These figures include non-Jordanian staff and foreign branches, respectively. The table provides a break-down of these figures.

Table (3) depicts the correlation matrix for the component MC scores, and shows that the interrelationships between these variables are weak. It shows that there are only 2 significant correlations

between these variables, 14 positive correlations and 11 negative correlations. For example, ***IMPL***coor, is significantly positively correlated with ***IMPL***corm and ***IMPL***corm, is positively but not significantly correlated with ***IMPL***top. The same applies to ***ADPT***rain with each of ***ADPT***mk and ***IMPL***fun. Thus, the sample data is multicollinarity-free and all variables can be included into a multi-regression model.

Table (2) Descriptive Statistics of the MC Scorings, the profitability and size measures for the banks sample.

Descriptive Statistics	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Std. Error	Kurtosis Statistic	Std. Error
ADPTRAIN	14	2	9	7.5	2.31	-1.3286	0.5974	0.7743	1.1541
ADPTCOMM	14	2	10	6.71	2.58	-0.5052	0.5974	-0.8630	1.1541
ADPTMK	14	0	10	7.14	3.78	-0.9667	0.5974	-0.3488	1.1541
ADPTBACK	14	0	5	1.79	2.12	0.6101	0.5974	-1.4220	1.1541
Adoption Scores	**14**	**14**	**30**	**23.14**	**4.94**	**-0.5988**	**0.5974**	**-0.0653**	**1.1541**
IMPLFUN	14	0	30	17.86	11.22	0.1051	0.5974	-1.8403	1.1541
IMPLCOOR	14	0	15	8.57	6.02	0.0252	0.5974	-1.7919	1.1541
IMPLCORM	14	8	24	13.71	7.96	0.6704	0.5974	-1.8384	1.1541
IMPLTOP	14	0	10	5.71	3.31	-0.1508	0.5974	-0.3102	1.1541
Implementation Scores	**14**	**23**	**79**	**45.86**	**19.37**	**0.4979**	**0.5974**	**-0.9513**	**1.1541**
Total Scores	**14**	**37**	**106**	**69.00**	**20.13**	**0.4673**	**0.5974**	**-0.5152**	**1.1541**
Net Income	12	-1,179,495	120,200,000	13,931,354	34,075,470	3.2610	0.6373	10.9006	1.2322
Stock Price	12	0.32	305	27.72	87.33	3.4627	0.6373	11.9929	1.2322
Return On Assets (ROA)	12	-1.01%	1.74%	0.53%	0.75%	-0.4970	0.6373	0.2778	1.2322
Return On Equities (ROE)	12	-2.24%	16.61%	6.74%	5.59%	-0.0934	0.6373	-0.5770	1.2322
Earnings Per Share (EPS)	12	-0.03	13.66	1.24	3.91	3.4591	0.6373	11.9748	1.2322
Price/Earnings Ratio (PE)	12	-8321.4	990.17	-603.81	2446.86	-3.3756	0.6373	11.5961	1.2322
Total Assets	14	66,830,068	15,577,112,000	1,713,268,657	4,025,498,506	3.6315	0.5974	13.3926	1.1541
Total Equities	12	-36,681,831	1,433,526,000	171,984,612	404,421,743	3.2645	0.6373	10.9147	1.2322
Customers Deposits	12	41,644,595	10,572,042,000	1,378,920,766	2,929,006,126	3.3249	0.6373	11.2864	1.2322
No. of Jordanian Staff	12	174	2727	888.58	775.34	1.2793	0.6373	1.5510	1.2322
No. of Non-Jordanian Staff	12	0	3342	349.92	956.93	3.2890	0.6373	11.0526	1.2322
Total No. of Staff	**14**	**0**	**6069**	**1061.57**	**1563.86**	**2.8314**	**0.5974**	**9.1274**	**1.1541**
No. of Local Branches	12	7	96	35.00	27.71	1.0006	0.6373	0.4727	1.2322
No. of Foriegn Branches	12	0	79	10.83	22.45	2.9859	0.6373	9.4157	1.2322
Total No. of Branches	**14**	**0**	**110**	**39.29**	**37.87**	**0.7092**	**0.5974**	**-0.8847**	**1.1541**
Bank Age	12	14	74	35.17	16.03	1.2692	0.6373	2.1187	1.2322

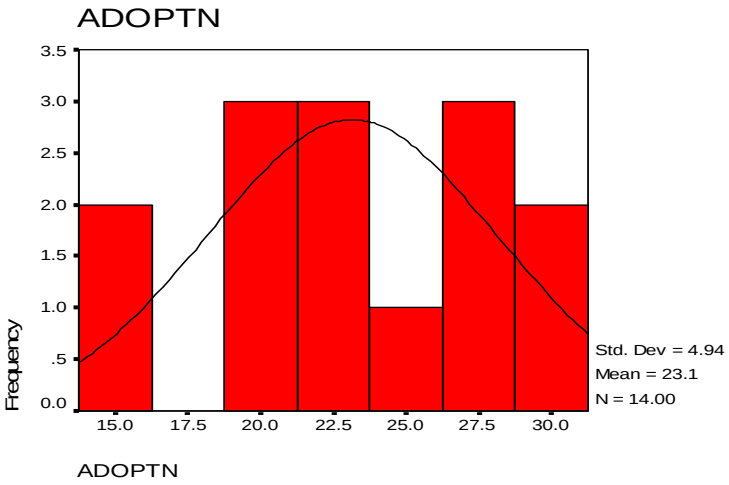

Figure 2. Histogram of the Adoption Points of the MC Scorings for the Sample Banks.

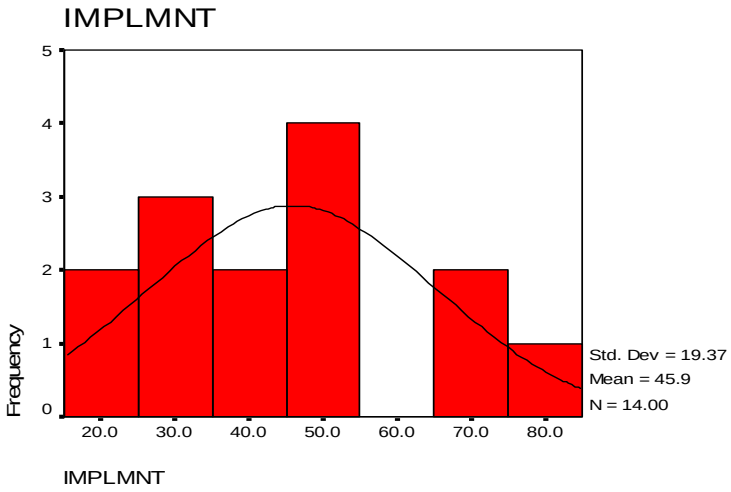

Figure 3. Histogram of the Implementation Points of the MC Scorings for the Sample Banks.

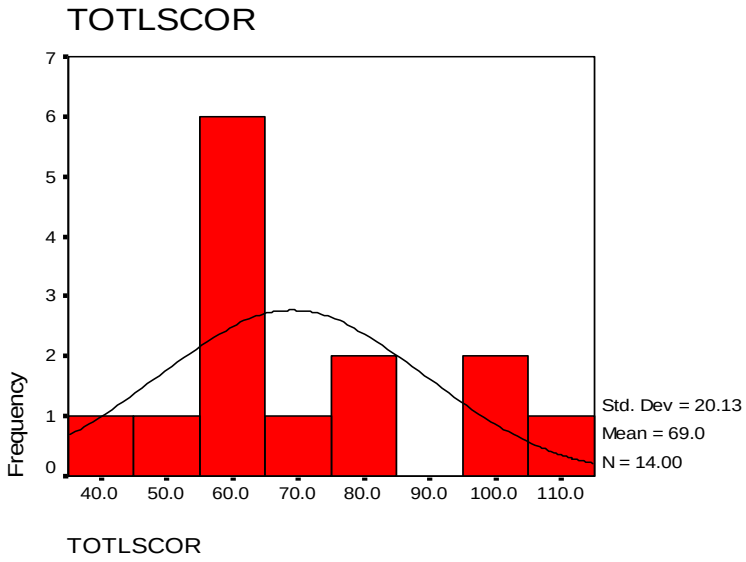

Figure 4. Histogram of the Total Points of the MC Scorings for the Sample Banks.

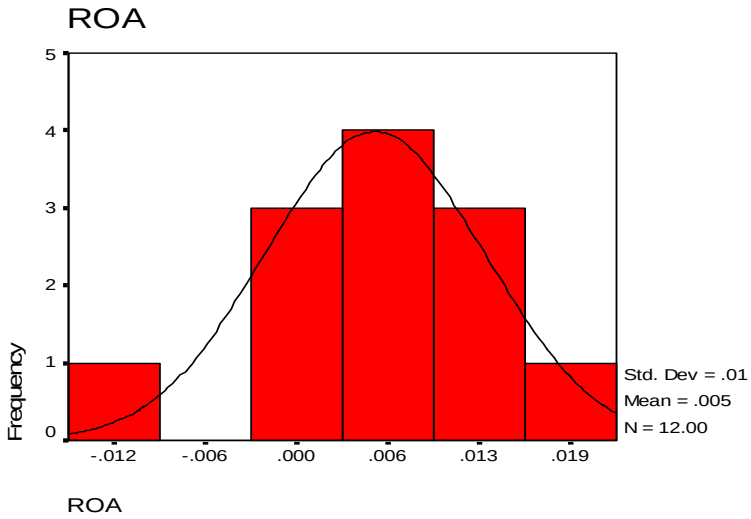

Figure 5. Histogram of the Return On Assets (ROA) of the Sample Banks.

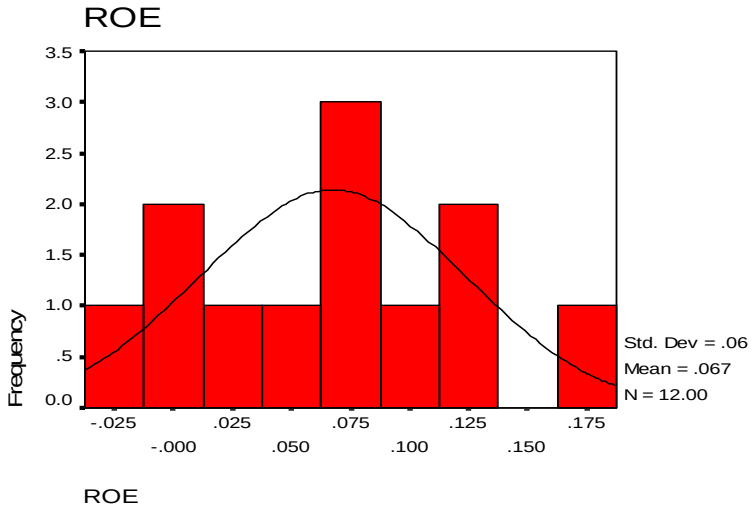

Figure 6. Histogram of the Return On Equities (ROE) of the Sample Banks.

Table (3) The Correlation Matrix for the Component MC Scores.

Correlations	N	ADPTRAIN	ADPTCOMM	ADPTMK	ADPTBACK	IMPLFUN	IMPLCOOR	IMPLCORM	IMPLTOP
ADPTRAIN	14	100%							
ADPTCOMM	14	-13%	100%						
ADPTMK	14	44%	-52%	100%					
ADPTBACK	14	-9%	-29%	11%	100%				
IMPLFUN	14	34%	-34%	39%	4%	100%			
IMPLCOOR	14	-19%	29%	-19%	3%	24%	100%		
IMPLCORM	14	-37%	27%	-23%	-14%	15%	***57%****	100%	
IMPLTOP	14	0%	29%	-29%	2%	-6%	6%	***53%****	100%

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

7. MODELS AND RESULTS

In order to test the research hypotheses, multi-regression models were adopted and applied on the relevant data. The following model tests H1. That is whether the implementation of the MC is associated with adopting the MC by the sample banks.

Total Implementation Score = f (Total Adoption Score), hence

Total Implementation Score = $\alpha + \beta 1$ Total Adoption Score + $\beta 2$ Total Assets + ε (E2)

where (α) represents the intercept, ($\beta 1$ and $\beta 2$) are coefficient of variation for the independent variables, total adoption score and the control variable, *i.e.* bank's total assets.

Table (4) shows the result of testing H1, and clearly indicates that the null hypothesis of H1 is rejected as the relationship between the total implementation score, and the total adoption one is insignificant and negative. In fact, the correlation between these two variables is found to be minimal at 3% and not significant.

Table (4): The Multi-regression Model Relating Total Implementation Score to Total Adoption Score and Bank's Total Assets

Total Implementation Score = $\alpha + \beta 1$ *ADPTN* + *$\beta 2$ Bank Total Assets* + ε

H1-a	Dependent Variable: **IMPLMNT**		
Independent Variables:	Standardized Coefficients **Beta**	**t**	**Sig.**
(Constant) Unstandarized		2.057	0.064
ADPTN	-0.102	-0.374	0.716
ASSETS	0.501	1.833	0.094
F	1.685		
Sig.	0.230		
R Square	23%		
Adjusted R Square	10%		
Durbin-Watson	1.51		

The rejection of the above model (E2), might lead to argue that the total implementation score might be explained by the adoption components of the MC, rather than the total adoption score. Accordingly, the following model is suggested.

Total Implementation Score = α + β1 ***ADPT***train + β2 ***ADPT***comm + β3 ***ADPT***mk + β4 ***ADPT***back + β5 Bank Total Assets + ε …… ….. (E3)

where (α) represents the intercept, (β1, β2, β3, β4 and β5) are coefficient of variation for the independent variables, which are defined in equation (E1), and the control variable, *i.e.* bank's total assets.

Table (5) Multi-regression Model Relating Score to Adoption Components and Bank's Total Assets.

Total Implementation Score = α + β1 *ADPT*train + β2 *ADPT*comm + β3 *ADPT*mk + β4 *ADPT*back + β5 Bank Total Assets + ε

H1-b	Dependent Variable: **IMPLMNT**		
Independent Variables:	Standardized Coefficients **Beta**	**t**	**Sig.**
(Constant) Unstandarized		1.981	0.083
ADPTrain	-0.306	-0.859	0.415
ADPTcomm	-0.231	-0.587	0.573
ADPTmk	0.155	0.407	0.694
ADPTback	-0.211	-0.650	0.534
ASSETS	0.688**	1.941	0.088
F	0.771		
Sig.	0.596		
R Square	33%		
Adjusted R Square	-10%		
Durbin-Watson	1.38		

** Significant at 10% level of significance.

Table (5) reports the results of model E3 and indicates the same conclusion of model E2. As reported in table (3), there were no significant correlations between the implementation components and those of the adoption. Thus, hypothesis H1, that the more thoroughly adopting the MC the more perfectly it is implemented, is rejected. This conclusion is contradicting that of Kohli and Jaworski (1990).

Nevertheless, the main hypothesis (H2) behind this study is that bank performance is subject to adopting and implementing marketing concept. In other words, bank profitability, represented by its net income, is a function of the component marketing concept scores. Thus, the following multi-regression model (equation E4) is used to test this hypothesis:

Bank Performance = f (Marketing Concept), hence

Bank Profitability = f (Adoption and Implementation of MC), thus

Bank's Net Income = α + β1 ***ADPT***train + β2 ***ADPT***comm + β3 ***ADPT***mk + β4 ***ADPT***back + β5 ***IMP***fun + β6 ***IMP***coor + β7 ***IMP***corm + β8 ***IMP***top + β9 Bank Total Assets + ε …(E4)

where (α) represents the intercept, (β1, β2, β3, β4, β5, β6, β7, β8 and β9) are coefficient of variation for the independent variables, which are defined in equation (E1), and the control variable, *i.e.* bank's total assets.

Table (6) indicates the multi-regression model relating the net income to scores of the sample banks on all marketing concept components.

It can be seen from the table (6) that model E4 has generated a multi-regression coefficient, which statistically explains 99.965% of the variance in net income (Adj-R^2 = 99.965%). The model is significant at 5% level for almost all of the independent variables as well as the control one. ***IMPL***coor, interdepartmental coordination methods, was not significant but at 20%. Thus, the model confirms the null hypothesis of H2, that banks that evidence greater levels of adoption and implementation of the MC have higher net income.

Support for the third null hypothesis is also evident in model E4. Table (6) reveals that not all MC components have equal impact on bank performance. Bank's profitability is dependent on the following MC components:

- Training programs ***(ADPT***train).
- Interdepartmental coordination methods ***(IMPL***coor), however not significant.
- Communication methods ***(IMPL***corm).

Bank's net income adversely influenced by the following MC components:

- The committee and group membership of the top marketing executive (***ADPT***comm).
- The level of responsibility of the marketing department in the strategic planning process (***ADPT***mk).
- The marketing background of key individuals (***ADPT***back).
- The functional responsibility of the marketing department (***IMPL***fun).
- The title of the top marketing executive (***IMPL***top).

Table 6. The Multi-regression Model Relating the Net Income to Scores of the Banks on MC Components and Total Assests.

Bank's Net Income = α + β1 *ADPT*rain + β2 *ADPT*comm + β3 *ADPT*mk + β4 *ADPT*back + β5 *IMPL*fun + β6 *IMPL*coor + β7 *IMPL*corm + β8 *IMPL*top + β9 Bank Total Assets + ε

H2	Dependent Variable: **NETINCOM**		
Independent Variables:	Standardized Coefficients **Beta**	**t**	**Sig.**
(Constant) Unstandarized		8.382	0.014
ADPTRAIN	0.082*	8.036	0.015
ADPTCOMM	-0.262*	-14.251	0.005
ADPTMK	-0.048*	-3.981	0.058
ADPTBACK	-0.066*	-6.212	0.025
IMPLFUN	-0.223*	-9.051	0.012
IMPLCOOR	0.018	1.919	0.195
IMPLCORM	0.166*	10.588	0.009
IMPLTOP	-0.135*	-7.029	0.020
ASSETS	1.154*	52.377	0.000
F	3469.893		
Sig.	0.000		
R Square	99.994%		
Adjusted R Square	99.965%		
Durbin-Watson	2.751		

* Siginificant at 5% level or less.

Instead of net income, other performance measures for the sample banks were used in E4. These include market stock price, EPS, ROE and ROA. Appendix (A1) reports the multi-regression results and shows that none of the MC components can explain these alternative performance measures. However, stock price and EPS models were fit as the multi-regression coefficient statistically explains 100% of the variance in stock price (Adj-R^2 = 100%) and EPS (Adj-R^2 = 99%). Nevertheless, these two models were not significant at 5% level for any independent variable, but not the control variable.

Bank Size Effect

An independent variable was used to control for the size-effect of the bank in all hypothetical models E2, E3 and E4. That is the total assets of the banks. Tables 4, 5 and 6 of the multi-regression results indicated that the total assets variable was significant in controlling for the size-effect as well as in explaining the bank's profitability. The correlation between banks profitability (net income) and size (total assets) was (99.2%) highly positive and significant at 1% level.

Replacing the total assets by its customer deposits as a size measure of a bank has produced similar results as shown in table (6), and reported in appendix (A2). However, other size indicators, such as: bank age, number of branches and number of employees were also employed, and the multi-regression results are presented in appendix (A2). None of these variables can be considered as an effective size measure in terms of the relationship between MC and bank performance.

Large Banks versus Small Banks

Schuster (1984) advocated that total-asset is the most effective measure of bank size. The sample banks were divided into two groups, according to their size. Large banks were defined as those whose total assets amount to (JD 1 billion) or more and small banks were those with less than (JD 1 billion). Then, E3 and E4 were applied to each sample. The results for both samples were almost identical. Appendix (A3) reports the results for large banks and appendix (A4) for the small banks. Appendix (A3-a) and (A4-a) show the results of testing H1 for large banks and small banks, respectively. The hypothesis is rejected in both samples. There wasn't any adoption component that might enhance the implementation of MC. These results might be explained by the limited number of banks in each sample (n = 6).

On the other hand, appendix (A3-b) and (A4-b) represent the results of testing H2 for large banks and small banks, respectively. Once again, due to the limited number of banks in each sample (n = 6), hypothesis H2 is rejected in both samples. There wasn't any MC component that might explain bank's profitability.

8. SUMMARY AND CONCLUSIONS

This study has attempted to contribute further to the knowledge concerning marketing concept and bank performance by applying an established model to 14 banks in Jordan. The study has used McNamara (1972) scale and its modification by Reidenbach *et al.* (1986) for measuring the adoption and implementation of the marketing concept. The results were robust and indicate the significant, yet differential, impact of aspects of the marketing concept on bank profitability. The level of adoption and implementation of the marketing concept explained 99.97% of the variance in banks net income. Taking into consideration the size-effect, banks total

assets was used as a control variable and found to be a significant factor in explaining the examined relationship. However, splitting the sample according to size into two sub-samples (large and small banks) produced immaterial results as there were no enough data in each sub-sample.

Unexpectedly, there were negative correlations between adoption components and implementation ones. This indicates that Jordanian banks are selective in paying attention to the marketing concept components. They might emphasize one type of the marketing concept (e.g. adoption) and ignore the other (*i.e.* implementation), and vice versa. As long as the bank profitability is enhanced by such strategy, not all components of the marketing concept have equal impact on bank performance. The results of this study have suggested that Jordanian banks know which components of the marketing concept have greater impact on performance, and follow more cost-effective approach for adopting and implementing the marketing concept.

As this study follows the environment-strategy-paradigm, the results confirm previous research in that differences in the market environments of different countries may influence the types of strategies developed and adopted by companies, as well as impacts of those strategies on firm performance and profitability.

Bank Management Implications

The Jordanian banking market has become more and more competitive, with new international entrants and developed financial markets. Banks should seek to adopt stronger marketing orientation. This study suggests that such a strategy can have greater impact on their profit. In addition, the results indicate a logical approach for adopting and implementing the marketing concept, according to their costs and contribution into the bank's performance.

Moreover, the results of this study show that bank's profitability is dependent on the following marketing concept components: training programs, interdepartmental coordination methods and communication methods. But adversely influenced by the following components: the committee and group membership of the top marketing executive, the level of responsibility of the marketing department in the strategic planning process, the marketing background of key individuals, the functional responsibility of the marketing department and the title of the top marketing executive.

9. RESEARCH IMPLICATIONS

This study has not directly relates the Jordanian Dinars spent on each marketing concept components with the bank profit. Although these costs might be reflected in marketing concept scores, it might be a worthwhile to investigate such relationship. Also, as the scoring system is a subjective system, the Dinar value might be more objective in measuring the adoption and implementation of marketing concept.

Appendixes:

Appendix (A1) The Multi-regression Model Relating a Bank Performance Measure (Stock Price, EPS, ROE and ROA) to Scores of the Banks on MC Components and the Control Variable (Bank's Total Assets)

Bank Performance = $\alpha + \beta 1\ ADPT\text{train} + \beta 2\ ADPT\text{comm} + \beta 3\ ADPT\text{mk} + \beta 4\ ADPT\text{back} + \beta 5\ \text{IMPfun} + \beta 6\ \text{IMPcoor} + \beta 7\ \text{IMPcorm} + \beta 8\ \text{IMPtop} + \beta 9\ \text{Total Assets} + \varepsilon$

Dependent Variable:	Stock Price			EPS			ROE			ROA		
Independent Variable:	Standardized Coefficients			Standardized Coefficients			Standardized Coefficients			Standardized Coefficients		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant) Unstandarized		2.900	0.101		2.358	0.142		1.445	0.285		2.155	0.164
ADPTrain	***-0.119***	-3.534	0.072	-0.115	-2.486	0.131	0.020	0.028	0.980	0.048	0.164	0.885
ADPTcomm	-0.135	-2.239	0.155	-0.165	-1.996	0.184	-1.989	-1.611	0.248	***-1.785***	-3.393	0.077
ADPTmk	0.042	1.049	0.404	0.050	0.910	0.459	0.555	0.682	0.566	0.801	2.311	0.147
ADPTback	-0.053	-1.518	0.268	-0.068	-1.426	0.290	-1.013	-1.419	0.292	-0.797	-2.619	0.120
IMPLfun	-0.102	-1.255	0.336	-0.135	-1.214	0.349	-1.838	-1.110	0.383	-1.708	-2.420	0.137
IMPLcoor	0.099**	3.253	0.083	0.106	2.548	0.126	0.418	0.670	0.572	0.623	2.341	0.144
IMPLcorm	-0.048	-0.930	0.450	-0.034	-0.480	0.679	0.767	0.728	0.542	0.667	1.488	0.275
IMPLtop	-0.093	-1.478	0.278	-0.108	-1.249	0.338	-0.954	-0.741	0.536	-0.449	-0.819	0.499
Total Assets	**1.168***	16.144	0.004	**1.194***	12.051	0.007	1.822	1.231	0.344	1.460	2.314	0.147
F	321.18			171.28			0.55			4.01		
Sig.	0.00			0.01			0.78			0.22		
R Square	100%			100%			71%			95%		
Adjusted R Square	100%			99%			-59%			71%		
Durbin-Watson	2.68			2.70			2.73			2.50		

(*) Siginificant at 5% level or less, and *(**) at 10%.*

Appendix (A2) The Multi-regression Model Relating Net Income to Scores of the Banks on MC Components and a Control Variable (Bank Age, No. of Branches, No. of Employees, and Customer Deposits)

Net Income = α + β1 *ADPT*rain + β2 *ADPT*comm + β3 *ADPT*mk + β4 ADPTback + β5 IMPfun + β6 IMPcoor + β7 IMPcorm + β8 IMPtop + β9 **Control Varia**

Dependent Variable:	Bank Age			No.of Branches			No.of Employees			Customer Deposits		
	Standardized Coefficients			Standardized Coefficients			Standardized Coefficients			Standardized Coefficients		
Net Income	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant) Unstandarized		-2.005	0.183		-2.870	0.103		0.522	0.654		4.124	0.054
ADPTrain	0.161	0.442	0.702	1.726	2.047	0.177	-0.149	-0.669	0.572	0.059	2.299	0.148
ADPTcomm	0.351	0.483	0.677	**1.588****	2.839	0.105	-0.286	-0.752	0.531	**-0.303***	-6.341	0.024
ADPTmk	-0.334	-0.814	0.501	-1.066	-2.601	0.121	-0.040	-0.173	0.879	-0.047	-1.544	0.263
ADPTback	0.219	0.472	0.684	**0.896****	2.813	0.107	-0.079	-0.370	0.747	**-0.085****	-3.100	0.090
IMPLfun	0.645	0.681	0.566	**1.842****	3.596	0.069	-0.165	-0.342	0.765	**-0.247***	-3.930	0.059
IMPLcoor	-0.069	-0.133	0.906	-1.970	-2.117	0.169	0.235	1.006	0.420	0.046	1.922	0.195
IMPLcorm	0.008	0.010	0.993	0.537	1.070	0.397	0.055	0.200	0.860	**0.160***	4.092	0.055
IMPLtop	0.391	0.446	0.699	**1.326****	3.101	0.090	-0.133	-0.349	0.761	**-0.153****	-3.144	0.088
Control Variable	0.295	0.356	0.756	-2.209	-1.915	0.196	1.209	2.513	0.129	**1.192***	20.876	0.002
F		2.47			6.94			10.29			553.17	
Sig.		0.32			0.13			0.09			0.00	
R Square		92%			97%			98%			100%	
Adjusted R Square		55%			83%			88%			100%	
Durbin-Watson		1.91			2.87			1.69			2.45	

(*) Siginificant at 5% level or less, and *(**) at 10%.*

Appendix (A3-a) The Multi-regression Model Relating Large BanksTotal Implementation Score to Adoption Components

Large Bank Total Implementation Score = α + β1 *ADPT*rain + β2 *ADPT*comm+ β3 ADPTmk + β4 ADPTback + ε

H1 - Large Banks	Dependent Variable: **IMPLMNT**		
Independent Variables:	Standardized Coefficients		
	Beta	**t**	**Sig.**
(Constant) Unstandarized		2.634	0.119
ADPTrain is constant and deleted from the analysis.			
ADPTcomm	-0.094	-0.233	0.837
ADPTmk	-0.856	-2.125	0.168
ADPTback	0.128	0.336	0.769
F	1.665		
Sig.	0.397		
R Square	71%		
Adjusted R Square	29%		
Durbin-Watson	2.56		

Appendix (A3-b) The Multi-regression Model Relating Large Banks Net Income to Scores of the Banks on MC Components

Large Bank's Net Income = α + β1 *ADPT*rain + β2 *ADPT*comm + β3 *ADPT*mk+ β4 *ADPT*back + β5 *IMP*fun + β6 *IMP*coor + β7 *IMP*corm+ β8 *IMP*top + ε

For the final model with dependent variable NETINCOM, the variance- covariance matrix is singular. Influence statistics cannot be computed

H2 - Large Banks	Dependent Variable: **NETINCOM**		
Independent Variables:	Standardized Coefficients		
	Beta	t	Sig.
(Constant) Unstandarized	.	.	.
ADPTRAIN is constant and deleted from the analysis.			
ADPTCOMM	-0.103	.	.
ADPTMK is constant and deleted from the analysis.			
ADPTBACK	-0.018	.	.
IMPLFUN	0.344	.	.
IMPLCOOR is constant and deleted from the analysis.			
IMPLCORM	0.765	.	.
IMPLTOP is constant and deleted from the analysis.			
F	.		
Sig.	.		
R Square	100%		
Adjusted R Square	100%		
Durbin-Watson	2.91		

Appendix (A4-a) The Multi-regression Model Relating Small BanksTotal Implementation Score to Adoption Components

Small Bank Total Implementation Score = α + β1 *ADPT*rain + β2 *ADPT*comm+ β3 ADPTmk + β4 *ADPT*back + ε

H1 - Small Banks	Dependent Variable: **IMPLMNT**		
Independent Variables:	Standardized Coefficients		
	Beta	**t**	**Sig.**
(Constant) Unstandarized		-0.340	0.756
ADPTrain	0.026	0.055	0.960
ADPTcomm	0.838	0.909	0.430
ADPTmk	1.110	1.487	0.234
ADPTback	-0.024	-0.041	0.970
F	0.674		
Sig.	0.653		
R Square	47%		
Adjusted R Square	-23%		
Durbin-Watson	1.166		

Appendix (A4-b) The Multi-regression Model Relating Small Banks Net Income to Scores of the Banks on MC Components

Small Bank's Net Income = α + β1 *ADPT*rain + β2 *ADPT*comm + β3 *ADPT*mk + β4 *ADPT*back + β5 *IMP*fun + β6 *IMP*coor + β7 *IMP*corm + β8 *IMP*top + ε

For the final model with dependent variable NETINCOM, the variance- covariance matrix is singular. Influence statistics cannot be computed

H2 - Small Banks	Dependent Variable: **NETINCOM**		
Independent Variables:	Standardized Coefficients		
	Beta	**t**	**Sig.**
(Constant) Unstandarized		.	.
ADPTRAIN is constant and deleted from the analysis.			
ADPTCOMM is constant and deleted from the analysis.			
ADPTMK	0.969	.	.
ADPTBACK	-0.927	.	.
IMPLFUN is constant and deleted from the analysis.			
IMPLCOOR	0.119		
IMPLCORM	-0.050	.	.
IMPLTOP	0.574	.	.
F	.		
Sig.	.		
R Square	100%		
Adjusted R Square	100%		
Durbin-Watson	1.61		

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أداء البنوك والمفهوم التسويقي: اختبار تطبيقي للبنوك الأردنية

محمد محمود العجلوني *

ملخـص

تختبر هذه الدراسة تأثير فلسفة التسويق على وظائف البنوك وأدائها من حيث ان أداء البنوك يعتمد على الأعمال المصرفية، وان المفهوم التسويقي يعبر عن فلسفة أداء الأعمال؛ وذلك من خلال اختبار العلاقة بين تبني وتطبيق المفهوم التسويقي في البنوك الأردنية وأداء هذه البنوك. ولهذه الغاية، فقد استعانت الدراسة بأحد النماذج المعروفة لقياس تبني وتطبيق المفهوم التسويقي، بالإضافة إلى بناء نموذج إحصائي متعدد لاختبار العلاقة المفترضة بين المفهوم التسويقي والأداء المصرفي. وقد جاءت النتائج الإحصائية لتؤكد، بدرجة معنوية عالية تأثير مظاهر المفهوم التسويقي على أداء البنوك الأردنية، وبشكل مغاير، فقد ظهرت علاقات ارتباط سلبية بين مكونات تبني تطبيق المفهوم التسويقي ومكوناته فيما بينها. وهذا قد يعني أن البنوك الأردنية اختارت أو ركزت على تبني بعض مكونات المفهوم التسويقي وتطبيقها وليس كلها. حيث أظهرت النتائج أن ربحية البنوك اعتمدت على بعض مكونات المفهوم التسويقي وتأثرت سلباً بالبعض الآخر. ولهذا، فقد اقترحت الدراسة نموذجاً لتبني المفهوم التسويقي وتطبيقه بحسب تكلفة هذه المكونات من جهة، ومدى مساهمتها في أداء البنك من جهة ثانية.

الكلمات الدالة: أداء البنوك، المفهوم التسويقي، تبني المفهوم التسويقي، تطبيق المفهوم التسويقي.

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