

**THE INFLUENCE OF MANAGERIAL INNOVATION ON FIRM PERFORMANCE IN JORDANIAN
COMMERCIAL BANKS**

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Abstract.

This study aimed to examine the influence of managerial innovation on firm performance in Jordanian Commercial Banks. The study conceptualized managerial innovation as consisting from three dimensions: management practices, management processes and organizational structures. The dependent variable of the study was firm performance which was assessed through an integrated approach that combined financial and non-financial indicators: profitability, market share, returns on investment, customer satisfaction and quality of services. Data was gathered by using a questionnaire survey. The questionnaire was distributed to a sample of 200 branches' managers from branches of Jordanian commercial banks. 135 usable questionnaires were returned. Multiple and simple regression analysis were used to analyse the data. The results illustrated that managerial innovation. The study found that managerial innovation has a positive influence on firm performance in Jordanian Commercial Banks. It also found that there is positive influence between management practices, management processes and organizational structures on firm performance in Jordanian Commercial Banks. The study found that management processes dimension has the strongest influence on firm performance. Conclusion and recommendation were provided.

Keywords: Managerial Innovation, Firm Performance, Jordanian Commercial Banks

INTRODUCTION

The technology, knowledge, and innovation are the main characteristic of successful organizations in today's economy (Karlsson, Johansson & Norman, 2011). By beginnings of twenty-first century, innovation as a managerial concept has become vital asset and competitive edge for many organizations operating in rapidly changing, complex and competitive environments (Neely & Hii, 1998). Therefore, innovation as a key asset is fundamental to building an organization's competitive advantage (Hajikarimi, Hamidzadeh, Nasrin & Hashemi, 2013). Recently the importance of innovation is increasing, because organizations have realized that they live in dynamic business environment (Rowley, Baregheh & Sambrook, 2011). Thus, organizations have to respond to rapidly changing customer preferences in order to deal with available opportunities, through the adoption of new technology, opening new markets, redesigning organizational structures, and implementation different administrative practices to satisfy their customers (Birkinshaw, Hamel & Mol, 2008); Damanpour & Aravind, 2011).

Managerial Innovation (MI) which refers to an adoption and implementation of management practice (Birkinshaw & Mol, 2008), containing new administrative techniques and methods through a change in strategy, policies and organizational structure (Damanpour & Aravind, 2011), organizing and operating the organization, to achieve the goals of organizations efficiently and effectively (Ahmed & Shepherd, 2010).

Furthermore, MI is considered to be one of the most common types of innovation, because it means the development of the social system within the organization (Tanninen, Jantune & Saksa, 2008), and its relationships and related communications between individuals and their organization in surrounding environment (Damanpour & Evan, 1984), as well as management practices and relations with the development of human resources (Damanpour & Aravind, 2011).

Additionally, Managerial innovation differs from other types of innovation, whether technological innovation on the introduction of new technology or related to product attributes (Ahmed & Shepherd, 2010). MI aims at changes in management techniques and the introduction or development of methods that have a role in increasing the competitive advantage and affect to firm performance (Vaccaro, Jansen, Van Den Bosch & Volberda, 2012), as well as its relationship to changes in managers in how

to run their work, how to make decisions, how to coordinate and how to motivate subordinates (Hamel, 2006).

PROBLEM OF STUDY

Banks start to reconsider the traditional methods of competition a long time, and have re-formulation of strategies and reform of administrative systems to improve the marketing methods along with a focus on risk management and strengthen their financial positions (Al-Saffar, 2009). It also began to focus on financial innovation and human resources to be upgraded to become more able to provide services that customers need to enhance their competitiveness (Al-Ghodah & Al-Shawaagafh, 2002).

Hence, innovation enhances firm performance – defined here in terms of both financial and non-financial factors - because the output of innovative activities makes a firm more competitive and the process of innovation transforms a firm's internal capabilities (Neely & Hii, 1998), as well as design improvements increase the probability of innovation decision results in lowering performance of firms in the short run. MI facilitates successful completion of the innovation process. However, this view is similar to indicates that firms implement changes in organizational routines slowly which lead to their lower productivity (Hashi & Stojcic, 2010). Another opinion also suggests that MI has a tendency to increase firm performance by reducing administrative and transaction costs, improving workplace satisfaction and labor productivity (Oslo Manual, 2005).

The study will try to answer the following question: What is the influence of Managerial Innovation on Firm Performance in Jordanian Commercial Banks?

LITERATURE REVIEW

Managerial Innovation - Concepts and Definitions

Organizations need to emphasize in innovation not only to facilitate their own performance and growth, but also to contribute to economic development and improve people's lives (Ahlstrom, 2010). MI refers to the adoption and implementation of management practice (Birkinshaw & Mol, 2008). It contains new administrative techniques and methods through a change in strategy, policies and organizational structure (Damanpour & Aravind, 2011), to organizing and operating the organization, ultimately to achieve the goals of organizations efficiently and effectively (Ahmed & Shepherd, 2010).

Birkinshaw and Mol (2008:829) defined MI as "the generation and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals". MI is further defined as "new approaches to devise strategy and structure of tasks and units, modify the organization's management processes and administrative systems, motivate and reward organizational members, and enable organizational adaptation and change " (Damanpour & Aravind , 2011: 429). Hamel (2006:75) defined MI as "a marked departure from traditional management principles, processes, and practices or a departure from customary organizational forms that significantly alters the way the work of management is performed ". Also, Vaccaro et al., (2012: 33) define MI as "new managerial processes, practices, or structures that change the nature of managerial work".

It's notable that the diversity of MI terms is one of the most important problems facing the researchers (Rogers, 1998). After reviewing the innovation literature, this study found that MI has several idioms that are used interchangeably. According to Kimberly (1981) Managerial Innovation, is referred to as, Organizational Innovation. Williamson (1975); Edquist, Hommen and McKelvey (2002) and Sanidas (2005) used the term Administrative Innovation, Daft (1978); Damanpour and Evan (1984); Gosselin, (1997); Ravichandran (2000) and Tanninen et al. (2008) used the term Management Innovation. However all previous terms have considerable degrees of shared meaning (Rowley et al., 2011).

Dimensions of Managerial Innovation

For the purpose of this study, three dimensions of Managerial Innovation were identified from the literature review as components of MI term according to previous studies to measure it, such as Hamel (2006), Birkinshaw et al. (2008), Damanpour and Aravind (2011), Vaccaro et al. (2012), Dodgson, Gann

and Phillips (2013), Phillips (2013), Hecker and Ganter (2013) and Khanagha, Volberda, Sidhu and Oshri (2013).

Organizations manage innovation by creating supportive practices, processes and structures (Dodgson et al., 2013). Managerial Innovation reflects changes in the way management work is done, in practices (i.e., the routines that turn ideas into actionable tools); involving a departure from traditional processes (i.e., what managers do as part of their jobs); in structure (i.e., the way in which responsibility is allocated) (Volberda et al., 2013).

Management practices

Vaccaro et al. (2012) distinguished Management practices as changes in what managers do as part of their job in the organization, which includes setting new rules and associated procedures. This may also result from the assignment of work to someone (i.e. task) and the duty to perform such piece of work (i.e. function). While Mol and Birkinshaw, (2009) and Birkinshaw et al. (2008) explained Management practices refers to what managers do as part of their job on a day-to-day basis – setting objectives and associated procedures, arranging tasks and functions, developing talent, and meeting different demands from stakeholders. Phillips (2013) defined a managerial practice as a bundle of behavioral routines, tools, and concepts to accomplish a certain task. Organizations differ greatly in their readiness to adopt new innovation practices. Also, new practices may lack political, technical, or cultural fit making adoption unlikely without adaptation of the practice. The adoption of new innovation practices may therefore require a careful analysis of the fit of the new practices and a strategy for managing misfit to ensure extensive and high fidelity adoption that results in the maximum benefit. Finally Innovation occurs when individual practices and the organizational strategies to support them are integrated with the larger social structure (Dodgson et al., 2013).

Management processes

According to Birkinshaw et al. (2008) and Hamel (2006) as the management processes refers to the routines that govern the work of managers, drawing from abstract ideas and turning them into actionable tools, which typically include strategic planning, project management, and performance assessment among others . But Vaccaro et al. (2012) focused to how work is performed and include changes articulated in routines that govern the work of people as well as how compensation is set up. This may be illustrated by changes in management systems or changes in what is expected of people, which outcomes and behavior are rewarded and which are not, which relate to the way people are compensated.

Organizational structure

The way which organizations arrange communication, align and harness their member's efforts, which provide the context in which work is performed. These items relate to changes in communication structure as a sign of different ways of doing things, for instance by allowing different constituencies to exchange information. Additionally, the formal structure of the organization could be changed to bring about changes in communication, autonomy, and discretion (Vaccaro et al., 2012), (Birkinshaw et al., 2008; Hamel, 2006).

Managerial innovation reflects all three facets of management innovation scale, focusing on what managers do, how they do it, as well as the organizational context in which work is performed (Hecker & Ganter, 2013). For management innovation to occur, the implemented change should include novelty in the way the organization is managed by means of new practices, processes, or structures, including their associated techniques (Khanagha et al., 2013).

Hamel (2006) defined management innovation as departure from traditional management principles, processes, and practices that alters the way the work of management is performed. Put simply, management innovation changes how managers do what they do'. As innovations in organizational form, practices, processes, or techniques, management innovations constitute the rules and routines by which work gets done inside organizations (Birkinshaw et al., 2008; Damanpour & Aravind, 2011). Managerial practices and structures as diffusing from one place to another than as being independently constructed in each location . The flow of practices from one country to another seems driven by performance gaps, where firms and entire business communities seek to learn from success (Strang & Kim, 2009).

The Perspectives of Managerial Innovation

According to literature of Managerial Innovation, there are important perspectives in studying managerial innovation including a rational perspective, institutional and network perspective, organizational cultural perspective, and fad and fashion perspective (Damanpour & Aravind, 2011). Four key perspectives of Managerial Innovation in the literature are introduced as:

- (1) An institutional perspective that focuses on the socioeconomic conditions in which new management ideas and practices take shape.
- (2) A fashion perspective that focuses on the dynamic interplay between users and providers of management ideas.
- (3) A cultural perspective that focuses on how an organization reacts to the introduction of a new management practice.
- (4) A rational perspective that focuses on how management innovations—and the individuals who drive them—deliver improvements in organizational effectiveness. The treatment of management innovation throughout this study remains close to the rational perspective. This perspective assumes that new practices, processes, or structures are deliberately introduced by key individuals within organizations in order to improve the organization's performance (Birkinshaw et al., 2008; Vaccaro et al., 2012).

Process of Managerial Innovation

The process of innovation is frequently described as consisting of four essential steps, starting with the conception of an idea, which is proposed, then a decision is made to adopt, and finally the innovation is implemented (Daft, 1978), but the process of managerial innovation is different which Birkinshaw and Mol (2006) are first to identify five phases for the generation of managerial innovations:

- (1) Dissatisfaction with status quo, mainly from the inside of the company.
- (2) Inspiration, usually from the outside.
- (3) Invention, triggered by a combination of dissatisfaction and inspiration.
- (4) Validation, from both inside and outside.
- (5) Diffusion to other organizations.

Birkinshaw et al. (2008) proposed a four-phase managerial innovation process. They integrated the fourth phase and fifth phase in one phase:

- (1) Motivation is concerned with the facilitating factors and precipitating circumstances that lead individuals to consider developing their own management innovation.
- (2) Invention is an initial act of experimentation out of which a new hypothetical management practices emerges.
- (3) Implementation is the technical process of establishing the value of the new management innovation in a real setting.
- (4) Theorizing and labeling is a social process whereby individuals inside and outside of the organization make sense of and validate the management innovation to build its legitimacy (Birkinshaw et al., 2008).

Managerial innovation and Firm Performance

The influence of managerial innovation on various performance matrices inside the innovation firm . Damanpour and Aravind (2011) explained that performance of firm is inducted by synergistic use of the organization's internal resources, including technological and managerial knowledge resources, leading to the innovation. In addition to the benefits of management innovation to society as a whole , in terms of improvements of such things as productivity or quality of work life (Birkinshaw & Mol, 2008).

Performance is the ability of an organization to cope with all four systemic processes (inputs, outputs, transformations, and feedback effects) relative to accomplish its goals (Damanpour & Evan, 1984). The importance of innovation is due to its impact on the performance of the firm; to sustain performance requires continuous innovation (Roger, 1998). Impacts of innovations on firm performance range from effects on sales and market share to changes in productivity and efficiency (Oslo Manual, 2005). Hence, managerial innovation enhances firm performance because the innovative activities make a firm more competitive and transforms a firm's internal capabilities (Neely & Hii, 1998).

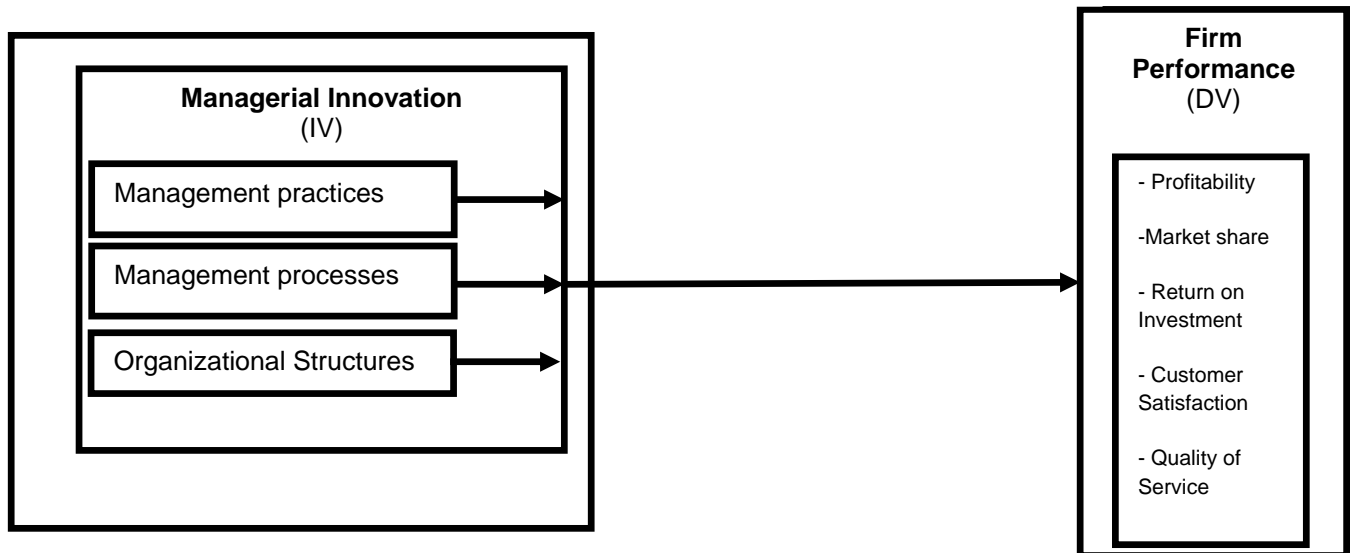
The most of previous studies adopted only financial indicators to measuring firm performance, but it is not enough, so it must use non-financial indicators through an integrated approach (Hansen & Wernerfelt, 1989). According to Bergin-Seers and Jago (2007) recommended to use a combine financial and non-financial indicators. After reviewing previous studies, the study adopted operational definition for measuring firm performance as the sum of financial and non-financial measures that assess organization's performance. Financial measures refer to the extent to which the organization performs

in relative profitability, market share and return on investment. Non-financial measures refer to the extent to which the organization performs in relative customer satisfaction and quality of service (Uzkurt et al., 2013; Tseng et al. (2008; Daugherty et al., 2011; Liao et al., 2010).

CONCEPTUAL FRAMEWORK

According to previous studies such as Hamel (2006), Birkinshaw et al. (2008), Damanpour and Aravind (2011), Vaccaro et al. (2012), the study proposed conceptual framework contains the managerial innovation as independent variable and firm performance as dependent variable. Figure (1) shows the model of study.

Figure 1: Proposed Conceptual Framework



Study Hypotheses

Based on the study problem and the literature review, the following hypotheses were developed in their null form to examine the influence of managerial innovation on firm performance in Jordanian Commercial Banks.

Main Hypothesis:

H01: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on firm performance in Jordanian Commercial Banks.

Sub-hypotheses:

H01a: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of Management Practices on firm performance in Jordanian Commercial Banks.

H01b: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of Management Processes on firm performance in Jordanian Commercial Banks.

H01c: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of Organizational Structures on firm performance in Jordanian Commercial Banks.

H01d: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on profitability in Jordanian Commercial Banks.

H01e: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on market share in Jordanian Commercial Banks.

H01f: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on return on investment in Jordanian Commercial Banks.

H01g: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on customer satisfaction in Jordanian Commercial Banks.

H01h: There is no positive statistically significant influence at ($\alpha \leq 0.05$) of the managerial innovation on quality of service in Jordanian Commercial Banks.

RESEARCH METHODOLOGY

Sampling Design

The study used a quantitative approach to determine whether or not managerial innovation (the independent variables), can influence on firm performance (the dependent variables), in Jordanian Commercial Banks. The population of this study includes all branches of Jordanian commercial banks in Amman region. 342 branches, this constitutes 60% of the all number of branches in all Jordanian Commercial banks.

Hence, according to Krijcic and Morgan (1970) tables for determining 191 branches were selected to serve as the sample. Therefore, 200 was the total number of questionnaires administered. The study sample is stratified random sampling which is consisting from 200 branches' managers. So, 200 questionnaires were distributed to branches' managers of Jordanian commercial banks in Amman region which is considered representative and acceptable sample size for the purposes of statistical analysis. A close ended questionnaire was developed for primary data collection, based on the related literature, and the available former studies. The questionnaire contained the following parts: a covering letter which aimed to encourage respondents to participate in answering the questions with an explanation of the response method and reassurance to them that the provided information is used for scientific research purposes only. The first part included questions regarding the personal characteristics; the questions in this part were primarily of a classification nature and aimed at providing a proper background of the respondents. The second part raised questions regarding managerial innovation dimensions (management practices, management processes and organizational structures). Lastly, the third part contained questions about firm performance. The study utilized Likert seven-point scale, some of the questions in the questionnaire were adapted and developed from different previous studies; Vaccaro et al. (2012), Mol and Birkinshw (2009), Wong (2013), Gunday, Ulusoy, Kilic and Alpkam (2008), Uzokurt, Kumar, Kimzan and Eminoglu ,(2013), Tseng, Kuo and Chou (2008), Daugherty, Chen and Ferrin (2011) and Liao, Wang, Chuang, Shih and Liu (2010), the rest were developed in a way that suits this study.

Table (1) below states the number of questionnaires distributed. Out of 200 questionnaires only 135 were usable as 60 copies were unreturned and 5 copies were eliminated either because failing to pass the criteria, or for being incomplete.

Table 1: Summary of Response Rates

Distributed questionnaires	200
Unreturned	60
Incomplete / rejected	5
No. of responses	135
Response rate	(135/200) 67.5%

DATA ANALYSIS

Validity and Reliability

The instrument was tested for content validity and the items used in the questionnaire were assessed by four academic referees from different Jordanian universities in addition to one referee from USA, all of them whose full knowledge and experiences were sufficient in the field of business administration. Many modifications were applied to the original questionnaire based on their comments and suggestions.

The values provided in table (2) tell the influence of managerial innovation on firm performance in Jordanian Commercial Banks reflects a very good reliability. The values ranged between (0.867) for Management practices and (0.943) for Managerial Innovation (independent). It was (0.893) for the Firm performance (dependent) and was (0.952) for the overall questionnaire items.

Table 2: Reliability Analysis Results for the Managerial Innovation and Firm Performance in Jordanian Commercial Banks using Cronbach Alpha

No.	Variables	No. of Items	Reliability
1	Management practices	5	0.867
2	Management processes	5	0.874
3	Organizational Structures	5	0.920
	Managerial Innovation (Independent)	15	0.943
	Firm performance (Dependent)	5	0.893
	Total Questionnaire	20	0.952

Hypotheses Results

The hypotheses were tested as per the rule of thumb to accept the hypothesis if its calculated (F) value was higher than its tabulated value. Results of analysis for testing the hypothesis are shown in table (3).

Table 3: Summary of Results

No. of Hypothesis	Independent variable	Dependent variable	r	R2	F	Sig(f)	β	t	Sig(t)	Result
H01	Managerial Innovation	Firm Performance	0.720	0.519	143.39	0.000	0.706	11.97	0.000	Rejected
H01a	Management Practices	Firm Performance	0.560	0.314	60.80	0.000	0.529	7.79	0.000	Rejected
H01b	Management Processes	Firm Performance	0.707	0.500	133.16	0.000	0.580	11.54	0.000	Rejected
H01c	Organizational Structures	Firm Performance	0.670	0.448	108.10	0.000	0.573	10.39	0.000	Rejected
H01d	Managerial Innovation	Profitability	0.573	0.328	64.90	0.000	0.718	8.05	0.000	Rejected
H01e	Managerial Innovation	Market share	0.551	0.304	58.00	0.000	0.572	4.61	0.000	Rejected
H01f	Managerial Innovation	Return on Investment	0.622	0.387	83.82	0.000	0.706	9.15	0.000	Rejected
H01g	Managerial Innovation	Customer Satisfaction	0.588	0.346	70.39	0.000	0.688	8.39	0.000	Rejected
H01h	Managerial Innovation	Quality of Service	0.681	0.463	114.77	0.000	0.849	10.71	0.000	Rejected

DISCUSSION

The study found that; there is positive statistically significant influence of managerial innovations on firm performance in Jordanian Commercial Banks. This result is consistent with previous studies in terms of the influence and direction. Uzku et al. (2013) found that in the banking sector, organizational culture and management innovation have a direct and positive effect on the firm performance dimensions. Also, Mol and Birkinshaw (2009) found that managerial innovation is positively related with firm performance in the form of productivity growth. Additionally, Salim and Sulaiman (2011) revealed management innovation is positively related to company performance, which is measured in terms of both market and financial metrics and it support that management innovation has a significant influence on firm performance. Management innovation practices have a major role in the changes in organizational as well as market performance which is consistent with Qureshi, Dar and Khan (2008). But Hao, Kasper and Muehlbacher (2012) found the influence of managerial innovation in performance is not significant in China because the effect of technological innovation is bigger than managerial innovation on performance.

This study also measured the managerial innovation dimensions (i.e. management practices, management processes and organizational structures) have a positive and significant influence on firm

performance in the Jordanian commercial banks. Such findings are consistent with previous studies (e.g. Uz Kurt et al. (2013), Salim and Sulaiman (2011), Mol and Birkinshaw (2009) and Hao et al. (2012).

The results of study indicate that among the three variables; management process ($\beta = 0.580$, $t=11.57$) had the highest and most significant standardized beta coefficient, which indicates that management processes was the most important variable in predicting firm performance. The other important predictors in descending order were organizational structures ($\beta=0.573$, $t=10.39$) and management practices ($\beta=0.529$, $t=7.79$). That indicates the banks with high focus on management process which consist a changes articulated in operation that related to customers and changes in management systems or changes in what is expected of people within routines, than others of managerial innovation dimensions.

The study found a positive statistically significant influence of the managerial innovations on firm performance components (i.e. profitability, market share, ROI, customer satisfaction and quality of services) in Jordanian Commercial Banks. This is consistent with Uz Kurt et al. (2013), Qureshi et al. (2008); they found that management innovation has a direct and positive effect on the firm performance dimensions (profitability and market share). Also, Linderman, Schroeder, Zaheer, Liedtke and Choo (2004) and Daugherty et al. (2011); they found management innovation can increase the customer satisfaction and ROI. Finally, these findings consistent with Liao et al. (2010) that management innovation has a positive effect on the quality of services. The quality of service was the most important variable from firm performance components'. The other important predictors in descending order were profitability, return on investment, customer satisfaction and market share. That indicates the banks with high focus on the quality of services as an important non-financial firm performance indicator

RECOMMENDATIONS

According to the results of study, the following recommendations are suggested. First, banks should pay more attention to managerial innovation and its key elements, because of its great importance in achievement of firm performance. Also, banks should enhance its efforts to improve its managerial innovation alongside technological innovation. In addition, banks should support its attention to managerial innovation by making reviews regularly in management practices through the development and renewal procedures and regulations that govern their work, as well as its make changes to develop strategies regularly, in addition to organizing decision-making processes through continuous development of responsibilities and tasks. Banks should support its attention to managerial innovation by adopting permanent reviews in management processes through the development of internal administrative systems that compared to competitors, in addition to the development of compensation of employees. As well as; banks should support its attention to managerial innovation by renewing and developing organizational structures regularly to facilitate communication and coordination between functions and increases teamwork. Finally, banks should be to pay more attention to customer satisfaction and to improve the provided quality of service, because that it's components of non-financial firm performance along with profitability, market share and return on investment.

CONCLUSIONS

The main purpose of this study was to examine the influence managerial innovation on firm performance within the commercial banks in Jordan. In order to achieve objectives of study a sample was selected and surveyed through a questionnaire. The independent variable was managerial innovation that consists of three dimensions; management practices, management processes and organizational structures. The dependent variable was firm performance that consists of financial and non-financial indicators; profitability, market share, ROI, customer satisfaction and quality of services.

This study is consistent with most previous studies but not all which have been studied in different countries and in different sectors. The findings of study concluded that there is positive statistically significant influence of managerial innovations on firm performance in Jordanian Commercial Banks. However, this study also measured the managerial innovation dimensions (i.e. management practices, management processes and organizational structures) have a positive and significant influence on firm performance. Finally, the study found a positive statistically significant influence of the managerial innovations on firm performance components (i.e. profitability, market share, ROI, customer satisfaction and quality of services) in Jordanian Commercial Banks.

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