

# **TQM AS A SOURCE OF BANK PERFORMANCE AND COMPETITIVE ADVANTAGE EMPIRICAL STUDY IN JORDANIAN BANKING SECTOR**

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## **Abstract**

The study evaluates total quality management as a source of bank performance and competitive advantage in Jordanian banking sector. The design of this study has quantitative approach. Data was obtained by questionnaire instrument. The respondents in this study are the managers of bank branches. The number of population was 224 bank branches in Amman, Jordan. Random sampling was used in the study. 164 complete questionnaires were analyzed as a final sample. Two hypotheses have been developed through literature review and tested using descriptive analysis performed by SPSS. The results have confirmed that total quality management practices have positive and significant impact both on bank performance and competitive advantage.

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**Keywords:** TQM practices, bank performance, competitive advantage, banking sector, Jordan

## **Introduction**

The main objective of modern operations management approaches is to promote performance in manufacturing and servicing industries. Providing a higher quality services with lower cost as a strategy for creating and sustaining competitive position have become a strategic approach for many business organizations across the world. Hence quality has become a strategic mechanism for measuring corporate performance in today's changing environment (Hassan et al, 2012). Adoption of total quality management has become widespread among organizations during the last decades as it has been recognized as a major source of competitive advantage and long term profitability (Dale et al, 2001). It plays a vital role in the development of management practices (Hoang et al, 2006).As it has been confirmed as the most effective quality tool that can provide firms with sustainable

performance and competitive advantage since its emergence in 1980s (Reed et al, 2000).

According to Hill (2008) total quality management is considered as an approach of continuous improvement in all quality aspects of the whole processes, goods, services and employees within the firm, and it aims at adding value to the delivered products to customers through continuous development of firms processes and systems. AL-Asiri (2004) defined total quality management as a philosophy of continuous organizational development through the employment of customer satisfaction and by basing it on the permanent workers contribution in order to improve goods, services and processes. Prajogo (2005) asserted that total quality management is a process to enhance flexibility, effectiveness, and firm competitiveness to meet customer needs and expectations. Generally speaking, all perspectives mean seek for professionalism, excellence, optimize customer satisfaction through enhancing effectiveness and efficiency, and creating the suitable attitudes and controls to make prevention of defects and errors possible. In response to that Jordanian banking sector has envisioned adopting total quality management in their operations to help deliver high quality services in meeting customers' requirements with the aim of enjoying positive performance and sustainable competitive advantage. Thus, this study has emerged as an attempt to investigate the relationship between total quality management, bank performance, and competitive advantage in Jordanian banking sector.

### **Literature review**

Over the past 20 years total quality management has been proved as the key factor for organization success. However, most of business firms have moved away from the traditional practices of quality such as audit, inspection and claimed them now as a non-value adding practices (Sutter, 1996).its confirmed that total quality management is applied as an approach of continuous improvement (Hackman & Wageman, 1995). Kaynak (2000) viewed that an effective TQM approach requires a full and on going commitment from people within the firm or it will turn down in its objective of meeting customers requirements. Several studies have showed that organizations that applied TQM effectively outperform non TQM organizations in terms of communications, financial, and customer satisfaction (Boon&Ram,1998; Reed et al, 2000; Chandler&McEvoy, (2000).Various corporations have benefited from the effective implementation of total quality management especially the largest ones, such as IBM, General Motors, Motorola, Rank Xerox as they are considered as benchmarks including many whose functions have directly affected modern models of total quality management (Benavent, 2006; Jabnoun&Sedrani, 2005, Welch, 2005, Ahire & Golhar, 1996). In regard to the evolution of

TQM, Dale (2003) has suggested four stages of TQM implementation that can be recognized as inspection, quality control, quality assurance, and TQM. And he argued that inspection is known as a testing, examination, measurement and insure that goods or services meet to specific requirements. Quality control is a mechanism that's used as a part of self inspection. Quality assurance concentrates on steady improvement by systematic planning and preventing errors from happening at root cause. Finally TQM which considered as the highest level that consists of several applications of quality practices to the entire aspects of the firm involving suppliers, customers, and their integration with the key business process.

According to Oakland (2000) TQM can be defined as a process of meeting customer requirements that include, availability, reliability, delivery, maintainability, and cost effectiveness, among any other feature. Zairi & Youssef (1995) stressed that TQM is an approach adopted by firm in order to improve structural, attitudinal, behavioral, infrastructure and effective ways of providing products to valued customers. Sashkin & Kiser (1992) has indicated that TQM is a culture and a management approaches that imply a shift in firms vision and operations. Kanji (1990) argued that TQM is a philosophy of offering quality products at low cost to the end customer. Furthermore, to determine principles or practices of total quality management, various scholars have proposed different instruments in their works. Accordingly, Azizan (2007) has adopted 8 factors to measure the performance of TQM in an organization. These factors include customer focus, leadership, involvement of people, process approach, systems approach to management, continual improvement, factual approach to decision making, and mutually beneficial supplier relationship. Black & Porter (1996) proposed ten factors that include communication of improvement information, strategic quality management, corporate quality culture, quality improvement measurement system, team work structure, customer satisfaction orientation, supplier partnership, external interface management, people and customer management, and operational quality planning. Escrig-Tena (2004) suggested four dimensions for TQM implementation that are mutually interrelated and supporting each other that include continuous improvement, focus on people, customer satisfaction, and global vision of the firm. Flynn et al. (1994) have identified, top management support, process management, quality information, product design, customer involvement, supplier involvement, and workforce management. Motwani (2001) indicated four tools that include customer involvement and satisfaction, quality measurement and benchmarking, employee training and empowerment, and process management. Sila & Ebrahimpour (2005) have proposed, people management, customer focus, process management, information and analysis, leadership, supplier management, and strategic planning.

From the description above, it's recognized that the TQM practices are selected in accordance with the objective of each study. So, the TQM functions constructs used in this study involves, supplier management, customer focus, leadership, process management, information and analysis, people management, and strategic planning.

Performance measurement is considered as the process of quantifying the effectiveness and efficiency of action (Alaa & James, 1996). It's very significant for the effective management in firms, and it refers to how well firms can carry out there financial objectives and market oriented objectives as well (Li et al., 2006). Many studies have investigated the positive association between TQM practices and various performance measures. As they had proposed different indicators used for measuring organizational performance. Fuentes et al. (2006) measured firm performance from operational performance, market and financial performance, and employee performance. Zakuan et al. (2010) have used employee satisfaction, customer's satisfaction, and business results. Stock et al (2000) have adopted return on investment (RIO), market share, and sales. Sang (2005) suggests employee efficiency, employee turnover, employee performance, operational performance, financial performance, economic performance, customer satisfaction level, market share, profitability, and so forth. Way & Johnson (2005) noted that performance outcome measures span human resource (employee withdrawal, workforce, employee satisfaction), operational (service, productivity, quality), financial (return on investment, sales growth, profitability) and capital market (shareholder return, stock value) outcomes. Musran (2013) has identified returned on investment, market share, profit margin on sale, RIO growth, sales growth, and market share growth to measure firm performance. Based on the literature above, the corporate performance indicators adopted in this study include return on investment, sales, and market share.

Achieving better organizational performance requires successful efficient and effective use of firm resources and competencies with the aim of creating and sustaining competitive advantage locally and globally. Competitive advantage can be defined as a status that organization achieved when it outperforms its competitors in such marketplace (Kleiman, 2000). Porter (1985) and cited by Reed et al (2000) asserted that there are two types or models of competitive advantage which are installed in the in economic theory. The first one is the market based model which involves the cost and differentiation and argues that market uncovers inefficient organizations particularly those that do not offer products for which consumers are prepared to pay premium price. And it's driven by factors that are external to the firm such as threats and opportunities. The second one is the resource based model which focuses on the firms resources and is driven by factors internal to the

firm. Divergent views exist to describe competitive advantage based on different goals of studies. Tracey et al (1999) have investigated competitive advantage from the aspect of, price, cost, delivery, flexibility and quality. Robberts (2003) had proposed lower cost, differentiation, innovation, and growth. Shu & Ta chien (2007) have evaluated competitive advantage by four dimensions, reduced dependency, knowledge transfer, technology development, and technology transfer. (Chiang 2004; Lee 2000) have adopted low cost, and differentiation as competitive advantage dimensions. ( Suhong et al, 2006; Lakhali et al., 2006; Li et al, 2006; Musran, 2013) have found a positive correlation between total quality management and competitive advantage that consist of, delivery dependability, cost or price, time to market, and product innovation. Based on the literature review, this study has investigated delivery dependability, cost or price, time to market, and product innovation as a competitive advantage dimensions.

Table1. Multiple linear regression analysis to test the impact of TQM on bank performance and competitive advantage in Jordanian banking sector.

Hypothesis	Relationship	R	R2	F	SIG(F)	$\alpha$	B	DESCRIPTION
H1	QM → OP	0.881	0.823	86.20	0.000	0.812	0.428	SUPPORTED
H2	QM → CA	0.792	0.761	82.60	0.002	0.798	0.404	SUPPORTED

### Research hypotheses

After reviewing literatures, this quantitative study provides the following hypotheses:

H1. Total quality management (TQM) practices has impact on organizational performance

H2. Total quality management (TQM) practices has impact on competitive advantage

### Research method

Questionnaire survey was used to collect primary data from the research sample. Respondents were branch managers, operation managers, and quality managers as they have the best knowledge about the operation and quality management in bank. The information about the banks was obtained from the 2012 annual report of Jordanian central bank. The population of this study consisted of 16 Jordanian bank. As many as 224 bank branches were surveyed in the capital Amman. The questionnaires were submitted directly by researcher to bank sample. A total of 176 questionnaires were received until the end of survey, and after deep investigation a number of 12 questionnaires were found unfit for analyzation. Therefore, a total of 164 questionnaires were used in the analyzation which considered as the study sample. Questionnaire survey was used to collect primary data from the research sample. The questionnaire was in four segments. Segment A captured information about the respondents, such as information regarding,

their organizational tenure, education, gender, and length of service in banking industry. Segment B captured information on total quality management practices (supplier management, customer focus, leadership, process management, information and analysis, people management, and strategic planning). Segment C tackled questions on organizational performance dimensions (return on investment, sales, and market share). Segment D tackled questions on competitive advantage, respectively (delivery dependability, cost or price, time to market, and product innovation). In answering the questionnaire, the respondents were asked to indicate their responses to the questions on a five point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items used in the study were adapted from different studies (Sila,& Ebrahimpour ,2005; Stock et al 2000; Musran, 2013; Black & Porter 1996; Motwani, 2001). The instrument was pilot tested using 40 employees from population. It has showed high validity as the correlation values of indicators to total correlation ranged from 0.62-0.91  $>0.50$  (Wu, 2005). Reliability of constructs was tested with Cronbach's Alpha as suggested by Hair et al. (1998), the values for Cronbach's Alpha ranged from 0.74-0.96  $> 0.60$ . Thus, it can be concluded that the instrument used in this study was valid and reliable.

## Results and discussion

Data was analyzed through descriptive statistical methods with mean, standard deviation, percentage, Pearson correlation coefficient, T-test and regression. The results of descriptive statistics indicated general agreement of the respondents to total quality management. The mean values ranged from highest 4.62 to lowest 3.86. The results for strategic planning indicated highest conformity (Mean = 4.62, Standard Deviation = .74); and supplier management as lower indicator (Mean = 3.86, Standard Deviation = .66); corporate performance, return on investment indicated highest conformity (Mean = 4.02, Standard Deviation = 0.70) and sales as lower indicator (Mean = 3.48, Standard Deviation = 0.61); competitive advantage, cost/price indicated highest conformity (Mean = 4.22, Standard Deviation = 0.71) and product innovation as lower indicator (Mean = 3.68, Standard Deviation = 0.64).. The mean score and standard deviation reflected conformity of respondents' perception about these strategies. The results of the multiple linear regression analysis in table (1) are indicating support for all the hypotheses. The results support hypothesis 1, as correlation coefficients was (0.812) suggest a high positive association of total quality management practices with corporate performance. The f value (86.20) indicate that there is a significant relationship of total quality management practices with corporate performance as the value of the significance level (0.000) related to f value was less than 0.05 suggesting the presence of the relationship. The

value of R<sup>2</sup> shows how much the independent variable to explain the variance of the dependent variable (corporate performance), upon this idea total quality management explains 82 % of the variance of corporate performance. The statistical significance of hypothesis 1 confirms that the implementation of total quality management practices may directly improve the firm long run financial and marketing performance. Hypothesis 2 also supported, as the correlation coefficients was (0.798) suggest a high positive association of total quality management practices with competitive advantage. The f value (82.60) indicate that there is a significant relationship of total quality management practices with competitive advantage as the value of the significance level (0.000) related to f value was less than 0.05 suggesting the presence of the relationship. The value of R<sup>2</sup> shows how much the independent variable to explain the variance of the dependent variable (competitive advantage), upon this idea total quality management explains 76 % of the variance of competitive advantage. The statistical significance of hypothesis 2 means that the implementation of total quality management practices may provide the firm with competitive advantage on cost, time to market, innovation, and dependability dimensions. Generally, top management in Jordanian banking sector have recognized total quality management as the most priority for the survival and competition of their banks. And they endorsed to engage their banks to TQM implementation at all level of their banks. The positive results provided concrete evidence concerning the success of total quality management and its effect on bank performance and competitive advantage in Jordanian banking sector. TQM is considered as a process of managing to enhance the, flexibility, efficiency, competitiveness and effectiveness of the entire firm. Quality control, quality assurance and quality management are all embodied in total quality management together with all other management activities. This requires firms at all levels to commit to the standard operation procedure in order to ensure that every aspect of its activity is aligned to satisfy customer needs and expectation. TQM also, if practiced effectively, it may provide the firm with variety of advantages such as improved people efficiency and machines, fewer errors & defects, continuous improvement of processes and products, better problem solving, improved customer satisfaction, better customer understanding, cost saving and profitability improvement, and improved internal communication. The proper implementation of TQM overall the firm is considered as a strategic weapon that can be used to outperform competitors in the marketplace. Thus, the effective implementation of TQM practices is a valuable asset in any organization and may produce positive corporate performance and become as a great source of competitive advantage. In a nutshell, total quality management practices, mostly, has been associated directly with improved corporate performance and sustainable

competitive advantage. Accordingly, these findings are in conformity with (Fuentes et al, 2006; Zakuan et al, 2010; Stock et al, 2000; Lakhali et al., 2006; Li et al, 2006; Musran, 2013) results.

## **Conclusion**

The contribution of total quality management as a key factor for organization success in the past several has been well recognized and acknowledged. The objective of this study was to test the relationship between total quality management practices, corporate performance and competitive advantage in Jordanian banking sector. Previous studies asserted a positive and significant effect of total quality management on organizational performance and competitive advantage, and my study empirically confirmed the findings of those studies. In a nutshell, this study has been conducted in Jordanian banking sector and found a positive association between total quality management practices, bank performance and competitive advantage. Bank management shall ensure that investing substantial resources in adapting and implementing total quality management practices in their operations would be valuable to create and sustain superior bank performance.

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