Standardization and Quality in Greek banking services

Maria Melidonioti
Dept. of Business Administration, T.E.I. of Serres,
Terma Magnisias, GR-62124, Serres, Greece.
email: marmel@uom.gr

Katerina Gotzamani
Dept. of Business Administration, Univ. of Macedonia,
156 Egnatias Str., GR-54006, Thessaloniki, Greece,
e-mail: kgotza@uom.gr

Abstract
In the present article the implementation of Total Quality Management in banking services all over the world is surveyed, both from theoretical and practical perspective. First, the concepts of quality through the terms of the European Foundation of Quality Management are determined. Then the terms and the conditions in bank services are defined and the implementation of Total Quality Management in the banking sector is investigated. A case study is presented that investigates the level of quality in Greek banks by means of questionnaires that have been distributed to several bank employees. The design of the questionnaire was based on the concepts of the European Foundation Quality Management Excellence Model. Finally, the results of the analysis of the questionnaires are presented and suggestions are made for the implementation of Total Quality Management in Greek banks.

Keywords: Quality in bank sector, Total Quality Management in services, European Quality Award - EQA, European Foundation of Quality Management - EFQM.

JEL Classifications: L15

Introduction

The Greek banking sector has developed rapidly within the last ten years. In most banks, the Board of Directors is interested in applying modern management methods to improve the quality of their services and products. One of the most modern and popular methods in management is Total Quality Management, which has started to be implemented in several international banks. Despite its wide acceptance in market, the method has not attracted the researchers' adequate attention in the banking sector.

The intense competition among companies, along with the customers' demands, has turned them towards the implementation of quality management and control systems. Focusing on Quality is a primary target towards the survivability and the development of the companies (Puay, 1998).

Quality is how good a product is and it is synonymous with the high expectations of customers towards a product or a service (Garvin, 1988). Also, quality is the plenitude of characteristics and attributes of service which satisfy given needs of customers (ANSI, 1978). Moreover, quality is the ability of an enterprise to focus on the existing and expected needs of its customers, to improve its labor culture with the cooperation and development of its workers, to create relations of confidence with exterior collaborators and customers, to self-assess the systems of administration, to strengthen learning and innovation and finally, to evaluate the results of all the above (EFQM).

The European Quality Model (EQM) was based on the aforementioned principles and is indented to serve as a tool for companies' self-assessment and as a means for acquiring the European Quality Award (EQA). EQM embodies all Total Quality Management (TQM) principles, (Figure 1). TQM is a modern human-oriented management system which focuses on customers' needs and relies on team-work, and employee cooperation, continuous education and improvement (Deming, 1982). There are three steps towards TQM implementation. The Introduction step which is actually an awareness step, the Compliance step, where all procedures are made in compliance with TQM, and finally, the Integration step, during which TQM is actually embodied in business procedures (Brown, 1994).

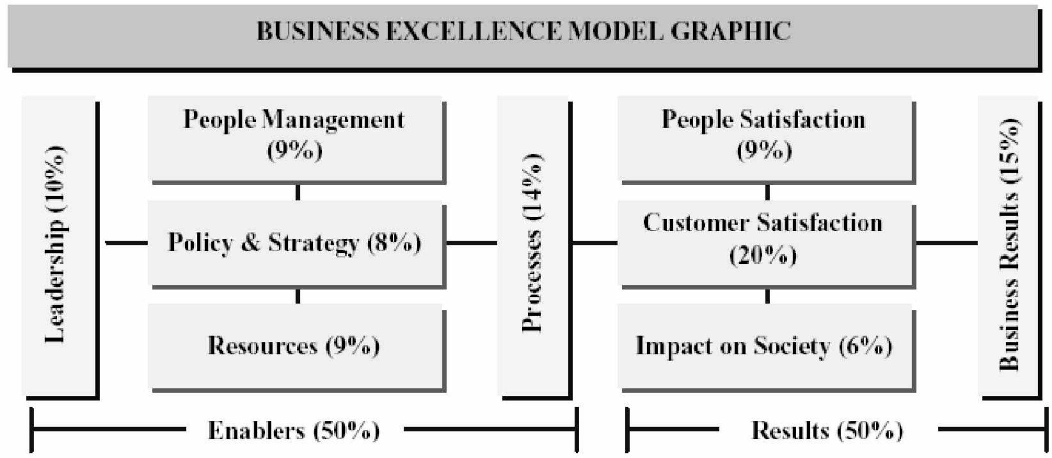

Figure 1. The original EFQM model with weights per category. Customer satisfaction gets the highest score

TQM has been reported to be positively correlated with profit, with better stock performance and with, up to 840%, rise in ROE (PIMS, 1986). Moreover, a worldwide survey by the American Institute of Quality Inc., has shown that service providing companies that have applied TQM systems, have decreased their operating costs, have improved their financial features, and now have more satisfied customers (Harrington, 1996).

The banking sector follows this new trend in management which leads to an improvement in both services and products. The whole sector is characterized by a strong competition, the constant development of new products, a dynamic environment due to strategic alliances, large acquiring plans and mergers, and the shrinking of profit due to new competitors that enter the market. This dynamic environment also influences the Greek banking sector. Although, all banks are interested in improving the quality of their services, only few have been certified for their quality status. Some of the international companies that have acted towards this task are Goldman Sachs, City Group, Merrill Lynch Credit Corporation and the Greek Bank of Piraeus.

The paper proceeds as follows. In the next paragraph the quality characteristics of the banking services are identified. The implementation of TQM in the international banking sector is surveyed in paragraph 3, while in paragraph 4, presents the outcome of a short research in the Greek banking sector. Finally, conclusions are drawn in paragraph 5.

QUALITY CHARACTERISTICS OF BANKING SERVICES

All factors and parameters regarding service quality in general can also be applied to banking services. According to Parasuraman (1988), service quality is the size of disagreement between customer expectations and how the service is really provided. Berry (1985) identifies six factors of quality, namely reliability, trust, responsiveness, courtesy, communication and security. These were complemented with accessibility, agility, performance, honesty and availability (Johnston, 1995).

Service providing is characterized by its intangibility or lack of physical attributes of its outcome. Customers evaluate the quality of a service with regard to the element they actually experience in the course of the service delivery and, of course, on their perception of the outcome’s service quality is inseparable of production and consumption. The service quality can only be assessed against customer’s subjective, nebulous expectation and past experiences. Services are produced and consumed simultaneously therefore they cannot be stored, inventoried or inspected prior to delivery as manufactured goods are (Grönroos, 1990). In 1996, Bowersox divided service characteristics into three categories which are a) physical facilities, processes and procedures, b) employees’ behavior and professional judgment and c) reliability (Bowersox, 1996). Johnston gave the most detailed list of service’s characteristics which include, access, aesthetic, empathy, responsiveness, caring, tangible, comfort, reliability, communication, competence, courtesy, agility, adaptability, security, friendliness, honesty, responsiveness (Evans, 1999).

In particular, banking transactions suffer the direct or indirect influence of short- or long-term conditions in international money markets. Moreover, the market share is constantly shrinking due to the entrance of new competing banks. So, banks are facing a constant demand for reducing operating costs and maximizing profit margins in a dynamic international competition.

Other characteristics are the ignorance in the majority of customers about investment products, the demand for skilled employees, the need for comprehensive auditing procedures, the need to minimize transaction times, the responsibility to protect the customers, the reduction of errors and the protection of good fame. Adding to this, banks are labor intensity companies which highly involve the human factor in all processes. This is, also, the main operating cost of the company rising up to 75% of total operating cost. Last, but not least, banking transactions are highly diversified processes due to the different person that interacts every time (Ghosh, 1994).

The most difficult task is to measure customers’ needs, as they actually vary from person to person and is a function of one’s perception. Of great importance is the commitment of the client to the same bank, especially in an environment of strong competition. Client’s perception is highly influenced by the training and satisfaction of the employees, as well as fair wages. The "technical quality" in the banks, which includes the theoretical training, technical integrity, the software systems and the instruments, should keep pace with the "functional quality" that includes behaviors and relations of workers, as well as frequent contacts with customers (Grönroos, 1984).

In finance market banks are not the only competitors. Insurance, investment and securities companies also operate in the same market. The capacity of a bank in the competition, also, depends on its ability to attract new employees while keeping and motivating older ones.

Another characteristic of the banking sector is the shrinking of the profit margin with the simultaneous rise in operating cost. The latter is due to the need of attracting skilled employees and investing in IT infrastructure. Adding to these is the danger from inappropriate strategies in local and foreign markets especially during highly unstable periods.

Banking products are highly diversified and complex. Most of the times a customer should be thoroughly informed on new products in order to feel comfortable and secure. Bank employees ought to be informed and trained to make their clients believe in new types of investment. However, the majority of banking products seems nebulous and repels customers. Those that are persuaded do so because they trust the bank representative. This places the ethical burden on banks to understand the level of customer awareness and protect him from mistakes. The training of employees on customer self-management is imperative. Despite these, it is common that customers are, usually, serviced by the lowest, in the rank, employees who are often less trained and experienced. Parasuraman contacted a research on what customers believe for the services they get. During the research he interviewed fourteen top executives of four American service providing firms and, also, contacted several customers in order to measure their perception of the services they experienced. After the comparison of the two parties’ opinions he formulated a *chasm model* for service provision. He concluded that the quality of services depends on the size and direction of the chasm between the expected and the received service. It is also related with the size and direction of other chasms in the same model. The other chasms are, (Parasuraman, 1991):

a) Between customer’s expectations and the firm’s perception about customer’s needs
b) Between the perception of the firm’s Board about customers’ needs and the transformation of this perception to quality standards
c) Between the quality standards and the way that a service is actually delivered
d) Between service delivery and the communication with customers.

The chasm model was confirmed in 1994 by Blanchard and Calloway (Blanchard, 1994). Thirty six employees of a large American bank confirmed the validity of the model for the classification of personnel’s perceptions of the reasons that a service failed to be delivered properly.

The valid and on-time information is of fundamental importance for the customers who, also, function as investors in the banking market. The fundamental principle of a complete and fair informative process concerns the presentation of banking products in such a way that it constitutes a real investment or credit tool for the customers. The transparency, the reliability and the safety of banking transactions are the biggest requirement of customers. Their completion is supposed to leave in the customer a feeling of satisfaction.

Moreover, the fame of a banking institution is tested by the opinions of its clients. More specifically, Greek banks that fulfill the bigger percentage of Stock Exchange transactions owe to harmonize their transactions to the international models that are proposed by the International Organization of Securities Commission Objectives (IOSCO) and European Committee for Banking Standards (ECBS) and the Committee of European Securities Regulators (CESR).

Important role in the ascertainment of quality play the bureaucratic matters which constitute integral piece of banking contract (e.g. the certified information that a bank requires from her customers). Other important factors of quality are the height of the lending interest, the sufficient information with regard to the obligations of each contract, the height of commission that the customer pays for a banking transaction, the time that intervenes between the demand for a loan and its reception, the number of terms that constitute a contract, the possibility of direct communication of customers with educated employees (European Investment Bank, 2001), the frequency of contacts between employees and customers, (Okland, 1998), and the adaptation of services in the needs of customers (Grigoroudis, 2002). It was realized that in G. Britain 500,000 customers changed bank, against 8,000,000 that they have made the same thoughts.

Finally, the employees of a bank should be in place to correlate the economic profile of each customer with his credit objective. From their point of view, banks distinguish various levels of exterior cliental relations. These are, the candidate customers, the accidental customers, the repeated customers, the customers advertisers, the customers associates, and the customers detractors. It is easily conceivable that the last category is the one that a bank tries to avoid or minimize (Evans, 2002). Moreover, in banking there are no acceptable tolerance levels. Precision should be always 100% as it regards money and especially customer’s money. Nowadays, the use of IT is of great importance. It helps to provide a quick 7 X 24 service despite customer location. The sense of security is critical in the delivery of such services.

Banking services consist of three basic parts. The first is the "core" which is the basic service. The second is the "supporting characteristics" such as the beautiful environment, the politeness of workers etc. If the supporting characteristics exist then the customer considers that he receives the proper services as a customer. The third part is "the additional services". It is services that a customer receives above his expectations, i.e. a gift, a functional informative form, a special treatment (Spanos, 1997, in greek).

An important factor of quality is the satisfaction that the employees feel. It has been observed that this is expressed with a corresponding pleasure of customers that deal with these workers. Moreover, most banking services require contact and combined action of the customer and the employee of the bank. In this way the needs and the expectations of the customer are better clarified. Still, a well drawn banking service includes a detailed description of the successive activities that are required in order to be fulfilled. The existence, for example, of a flow chart is particularly important (Evans, 2002). We see that quality control deviates from the old fashioned procedures of preventive and suppressive audit checks and is moving towards a human-oriented attitude, one that is expressed through the bank’s commitment to its clients and values recruits and employees.

At an international level the application of TQM leads to a rise of the profitability index as well as an enhancement of the firms' competitive advantage.

Joseph Juran has proposed a "Cost of Quality" model for service provision. As regards the financial services he observes that, due to their nature, it is very difficult to apply an effective audit cycle. In order to justify a problem one has to identify the cause of improper service delivery. However, measuring service delivery is a complicated task, as it relies on subjective clues, (Figure 2). So, the causes of a problem may be attributed to random reasons. The identification of the problem is crucial in order to minimize the cost of quality that is related to pure services.

Cost of quality comprises of four parts:

- External Failure Cost: it is associated with defects found after the customer receives the product or service, e.g. processing customer complaints, customer returns, warranty claims, product recalls.
- Internal Failure Cost: it is the cost associated with defects found before the customer receives the product or service, e.g. imprecise reports, scrap, rework, re-inspection, re-testing, material review, material downgrades.
- Inspection (appraisal) Cost: cost incurred to determine the degree of conformance to quality requirements, e.g. periodic measuring, evaluating or auditing both services and processes.
- Prevention Cost: is the cost incurred to prevent (keep failure and appraisal cost to a minimum) poor quality, e.g. new product review, quality planning, process reviews, quality improvement teams, education and training.

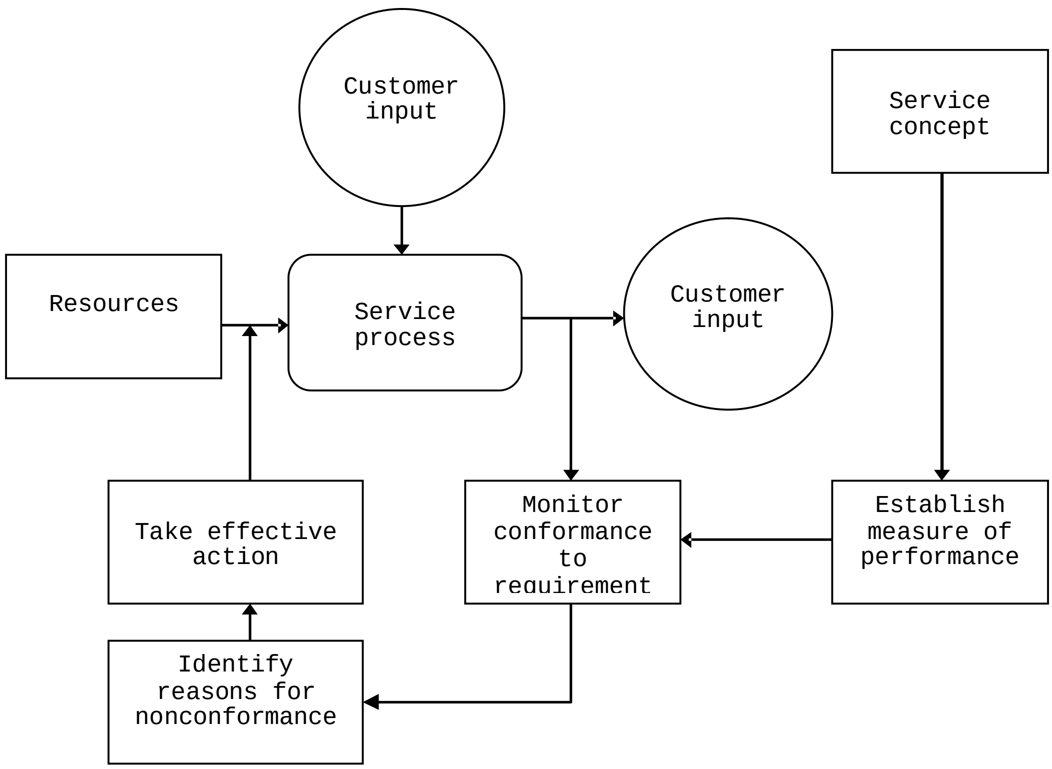

Figure 2. A Model for the control of how services are delivered

Measures that should be taken are the establishment of standard quality levels, the gathering of basic information about the delivery of services, the identification of any process as the responsibility of all participants, the recognition and award of success, the use of proper validation tools, team-work for identifying and analyzing causes, the allocation of resources to combat the weak-spots. A key point is to do this study on a regular basis and evaluate constantly the performance (Evans, 2002). Finally, the bank's capital should be rationally managed, while tools should be developed in order to identify and control financial risk.

The application of TQM in international banks.

Only few financial institutions and firms have been certified for Quality by the relevant international bodies. Nevertheless, many of the leaders in the banking sector apply TQM principles in all business processes. Some particular examples are given below.

Goldman Sachs is a leading global investment banking, securities and investment management firm with more than 25.000 employees and operations in more than twenty countries worldwide. Its target is to remain a distinguished international investment bank. Its culture coincides with TQM principles and is expressed through the banks' commitment to its clients. Other values are teamwork, integrity, meritocracy, professional excellence and entrepreneurial spirit, a consistent measure for evaluating recruits and employees, and a commitment to creating an environment that values diversity and promotes inclusion. Additionally, the people of Goldman Sachs take very seriously their responsibility to the communities in which they live and work. 55% of the company's share is hold by its employees. So, their interests coincide with those of the firm. Although it has not been certified for Quality, the firm applies TQM principles with remarkable results (Goldman Sachs web site).

Another international financial service providing firm is Citigroup. It is an international financial conglomerate with operations in consumer, corporate, and investment banking and insurance. It is the merging of Citibank, Citifinacial and Solomon Smith Barney and has some 200 million customer accounts in more than 100 countries. It is the most profitable financial firm today. The International Financing Review, the Fortune, the Wall Street Journal, the Financial Times and other authoritative financial journals have declared Citigroup as Bank of the year both in 1999 and 2000. It keeps being honored and awarded by different institutions all over the world. The firm has penetrated the Asian, European and Latin American markets developing as the banking model for the 21 century. Although it has not been awarded for TQM it applies its principles in all of its processes (Citigroup web site).

In 1997 Merrill Lynch Credit Corporation (MLCC) was awarded the Malcolm Baldrige National Quality Award for its position in the financial sector. Merrill Lynch Credit Corporation (MLCC) first began operations in 1981. Its singular focus was providing financing to customers by offering a new, highly innovative credit product - home equity credit lines. Today, powered by intimate knowledge of its customers' needs and a systematic, data-driven approach to performance excellence, MLCC offers a diverse line of credit products and services. At the heart of MLCC's aggressive strategy is the conviction that quality service is not a goal, it is an imperative to achieving growth objectives (Merrill Lynch web site).

In 1999 the winner of the European Quality Award was Banca International d’ Andora I Banca Mora, while in 2003, the Abudabi National Bank won the country’s Quality Award.

On April 2003, five divisions of Piraeus Bank, were awarded with EFQM's (European Foundation Quality Management) prize "Committed to Excellence". The five divisions that were awarded are the following: Human Resources, e-Banking, Marketing, Legal and IT Department. The bank is the only Greek bank award with EQA so far.

In order to emphasize the importance of ethics and society in Quality assessment we will stress the results of a research conducted for Kuwait Finance House (KFH), one of the largest Islamic banking groups. In particular, Islamic law prohibits *usury*, the collection and payment of interest, also commonly called *riba* in Islamic discourse. Generally, Islamic law also prohibits trading in financial risk (which is seen as a form of gambling). In addition, Islamic law prohibits investing in businesses that are considered *haram* (such as businesses that sell alcohol or pork, or businesses that produce un-Islamic media). In the late 20th century, a number of Islamic banks were created, to cater to this particular banking market. Through the research it was concluded that banks should focus on religious factors in order to improve both services and products. Restrained by the aforementioned ethics, banks should be loyal to Islamic law, should apply both written and oral agreements between them and the customers and should enhance reliability and their commitment to customers’ needs. Islamic banks must therefore pay attention to the trends in banking industry today, and start to think strategically by providing high quality products and services to satisfy their customers. The study indicates that it is important for Islamic banks to put cultural differences at the front when adopting service quality (SQ), and suggests a new model to measure SQ called CARTER which is based on 34 items (Othman, 2001).

The case study

The aim of the present case study is to investigate level of quality in Greek banks as perceived by their employees. The research was done by means of closed form questionnaires answered by 115 employees distributed in five banks and in different levels in hierarchy.

The structure of the questionnaires was based on the concepts of the European Foundation Quality Management Excellence Model. Questions were divided into two main categories. The first part refers to “how” operations are managed while the second part refers to the “outcome” of these operations (Melidonioti, 2005).

The following quality criteria are included in the first part; the numbers in parentheses indicate the number of questions regarding the corresponding criterion:

1 Leadership, which assesses the managers’ capacity to develop systems that enhance quality for customers and employees, (4)
2 Strategic planning, which examines the targets, the politics, and the existence of decision support systems, (3)
3 Human resources, which identifies the level of participation, constant development and support of the employees, (3)
4 Partnership and resources, which examines how the resources of the company are managed, (3)
5 Process management, which assesses the rational design and management of the processes according to customer demand, (5).

The second part examines the companies' results related to:
1 The customers, (5)
2 The employees, (2)
3 The society, (1), and finally
4 The critical business performance results, (5).

The five banks have different profiles. The first one, Bank-A, is a large public bank that holds a great share of the Greek banking market. The second bank, Bank-B, is, also, a large bank, it has a very dynamic profile, and, until recently, was under public administration. The third bank, Bank-C, is a public bank with strong social profile, expecting to be acquired by a private group. The fourth bank, Bank-D, is a new private bank with a very dynamic profile. Finally, the fifth bank, Bank-E, is a public bank.

One way Analysis of Means (ANOM) was applied in order to compare the answers of the banks. Statistics software Minitab was used for the analysis. ANOM is a graphical analog to ANOVA that tests the equality of population means (Nelson, 1974) in its question. There are some important differences between ANOM and ANOVA, however. The hypotheses they test are not identical. ANOVA tests whether the treatment means are different from each other; ANOM tests whether the treatment means differ from the grand mean. The Grand Mean, $\overline{\overline{X}}^{(q)}$, for each question, q, is the total mean for all samples, that is:

$$\overline{\overline{X}}^{(q)} = \frac{n_1\overline{x}_1^{(q)} + n_2\overline{x}_2^{(q)} + \ldots + n_k\overline{x}_k^{(q)}}{n_1 + n_2 + \ldots + n_k},$$

where in our case k=5 (the number of banks) and the superscript (q) denotes the question number in the questionnaire. So, the mean, $\overline{x}_k^{(q)}$, for each question and for each bank was compared with the Grand Mean for that question among all banks. The null hypothesis is that all means are equal with the Grand Mean for each question. Confidence intervals were calculated which are proportional to the inverse of the sample size, n_k. If $\overline{x}_k^{(q)}$ lays within the confidence intervals then it is considered equal to the total mean, else it is considered different. We were interested to see the trend for each bank, that is if its means are above or below average.

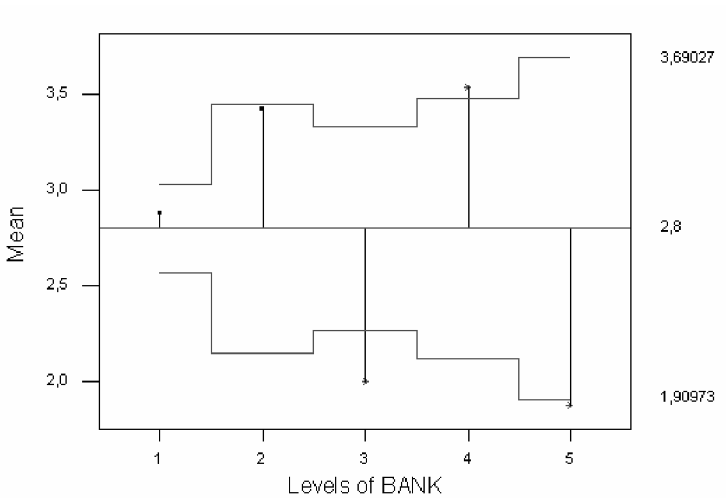

Figure 3. An example of one-way ANOM chart

An example of one-way ANOM chart for one of the questions is shown in Figure 3, with banks used as the factor. It shows, for one question, the mean opinion of the employees per bank. The line drawn at Mean=2.8 is the Grand Mean for the question. Dots that are connected with vertical lines to the grand mean level show the mean answer per bank. Crooked lines that have been drawn above and below the grand mean show the upper (UCL) and the lower (LCL) confidence level. Wherever samples are larger the confidence interval is narrower.

The outcome of the case study is summarized in Table 1 and is described next in more detail. As regards the “leadership” criterion it is concluded that only the employees of Bank-A and Bank-D witness a culture of continuous improvement and recognize the administration’s efforts to inspire visions, to set targets and to provide a code of ethics. According to the category of “politics and strategic planning” the employees’ opinion place the private bank way ahead. They witness the application of strategic plans that support quality. Moreover, the politics are under constant revision and development according to present and future needs and expectations, and according to measurements about its operation. The criterion of “human resources management” gets an analogous assessment. The employees of the private bank place their bank in the first place, showing that they feel that their efforts are recognized and any fresh ideas are adopted by the bank’s administration. Bank-A, Bank-B and Bank-D show better performance than the others regarding the criterion of “resources and operations management”. The same employees recognize the Board’s efforts for rational design of business processes. They, also, agree that there is an error prevention system and a system for critical processes identification. The last two commends correspond to the criterion of “critical business performance results”

The three banks (Bank-A, Bank-B and Bank-D) lead the others in the criterion that measures the results to customers. They develop and use customer satisfaction measurement systems; they collect customer complaints and work towards their elimination; they are trying to identify the characteristics of critical services; they design and develop new products. The private bank is ranked first in the development and management of human resources, while the Board recognizes and awards the employees’ efforts. As regards their social image, Bank-A and Bank-C are very active. Finally, Bank-A, Bank-B and Bank-D have a system to systematically track financial data and errors as well as complaints and employee satisfaction. So, they are ranked first in the category of critical business performance results.

In general, the first bank, Bank-A, which is a very large public one shows satisfactory performance in the application of quality methods, although it is ranked below the grand mean as regards human resources management. So, a proper improvement should be made towards this direction.

The same observations stand, also, for the second bank, Bank-B. The third bank, Bank-C, outperforms the others with its results to society. In fact, its profile since its establishment was to support the economically weaker and was able to do that due to its strictly public character. Only lately is it moving towards a more competitive and aggressive attitude. The private bank, Bank-D, seems ready to face competition and claim a share of the market. Its small size makes it rather flexible to adapt to changes and adopt new ideas. Things are not so optimistic for the last bank, Bank-E. The bank is stuck to its totally public character and does not seem ready to follow the evolution in the sector.

Table 1: The trend of each bank per question. Arrows indicate position relative to the Grand Mean. Double arrows indicate position outside confidence intervals. Minus signs indicate absolute equality with the Grand Mean

Criteria		Bank-A	Bank-B	Bank-C	Bank-D	Bank-E
Leadership	Question 1	▲	▼	▼	▲	▼
	Question 2	–	▼	▼	▲	▼
	Question 3	–	▲	▼	▲	▼
	Question 4	–	▲	▼	▲	–
Strategic planning	Question 5	–	–	▼	▲	▼
	Question 6	▲	▲	▼▼	▲	▼
	Question 7	▲	▲	▼▼	▲	▼
Human resources	Question 8	▲	▼	▼▼	▲▲	▼
	Question 9	▲	▼	▼	▼	▼
	Question 10	▼	–	▲	▲▲	▼
Partnership & resources	Question 11	▲	▲	▼	▲	▼
	Question 12	▲	▲	▼▼	▲▲	▼
	Question 13	▲	▲▲	▼▼	▲	▼▼
Process management	Question 14	▲▲	▲▲	▼▼	▲	▼
	Question 15	▲	▲▲	▼	▲▲	▼
	Question 16	▲	▲▲	▼	▲	▼▼
	Question 17	▲	▲	▼	▼	▼
	Question 18	▼	▲	▼	▲	▼
Results to customers	Question 19	▲	–	▼	▲	▼
	Question 20	▲	▲	▼▼	▲	▼
	Question 21	▲	▲	▼	▲	▼
	Question 22	▲	▲	▼▼	▲▲	▼
	Question 23	▲	▲	▼▼	▲▲	▼
Results to employees	Question 24	▼	▲	▼	▲▲	▼
	Question 25	▼	▲	▼	▲▲	▼
Results to society	Question 26	▲	▼	▲	▼	▼
Results to critical business performance	Question 27	▲▲	▲	▼▼	▲	▼
	Question 28	▲	▲	▼▼	▲	▼
	Question 29	▲	▲	▼▼	▲	▼
	Question 30	▲	▲	▼	▲	▼
	Question 31	▲	▲	▼▼	▲	▼

It is concluded that despite their size and public character the first two banks are aware of the necessity in applying quality methods. They hold a large share of the market which they want to maintain. Quite similar is the attitude of the private bank which is aware of TQM principles. Although it is rather new in the market, it invests on employees, respects its customers, and administers its finance rationally. In other words, it is establishing foundations for its future evolution and development.

The two smaller public banks are not in a state to apply TQM. They are very far from applying process management as well as human resources management. They have to react very fast towards their restructure, under the pressure of competition.

It should be pointed out that most of the questionnaires come from the first bank. That means that the Grand Mean, to which everybody was compared, is actually dominated and set by the answers of its employees. This is not a problem since most companies benchmark their performance comparing it with the market leader.

It should be stressed out that collecting more questionnaires, particularly from private banks, was very difficult due to cautiousness about the study's use. Competition restrains companies from applying information about their operation freely.

Conclusions

From our short research stems that Greek banks follow the example of the European and American banks towards the adoption of TQM. However, the pace towards complete adaptation should be accelerated. The application of a human-oriented management system, such as TQM, seems to be an imperative for their survivability. The banks that will dominate Greek market in the years to follow will be the ones that will manage to win this bet. Greek banking groups with long tradition in the Greek market seem to be willing to adapt to changes in order to keep their leading position. They take the risk of restructuring and keep precedence over their competitors.

Summarizing the necessary steps for improving quality in the banking sector one can refer some of the following:
- The Board of Directors should adopt visions, set targets and design strategies that are quality oriented
- The technological infrastructure of the bank should be fully exploited and should be integrated into the strategic planning
- Instruments for the measurement of customer satisfaction should be developed
- Cooperation with customers should be constant
- Improvement of human resource management should be continuous
- All levels of operation should be constantly self-assessed
- Of great advantage is the participation in international quality contests. Advertisement, restructuring and self-assessment can be reported among the advantages.

References

American National Standards Institute, 1978, *Quality Systems Terminology* (ANSI)/ASQC A3-1978, Milwaukee, American Society for Quality Control.
Bank of Piraeus: http://www.winbank.gr (Last accessed 14-09-2006)
Berry L.L., Zeithaml V.A., and Parasuraman P., 1985, "Quality Counts in Service, Too," *Business Horizons*, 28(31).
Blanchard R.F. and Galloway R.L., 1994, "Quality in retail banking," *International Journal of Service Industry Management*, Vol 5.
Brown M.G., Hitchcock D.E. and Willard M.L., 1994, *Why TQM fails*, Irwin Professional, Illinois and New York.
Bowersox D. J., and Closs D. J., 1996, *Logistical Management*, McGraw-Hill, New York.
Citigroup web site: http://www. citigroup.com (Last accessed 14-09-2006)
Deming W. E., 1982, *Productivity and Competitive Position*, Massachusetts Institute of Technology, Center of Advanced Engineering Study, MA.
EFQM web site: http://www.efqm.org (Last accessed 14-09-2006)
European Investment Bank, 2001, "Code of good administrative behaviour for the staff of European Investment Bank in its relations with the public."

Evans J. R., Dean J. W., Jr., 1999, *Total Quality: Management, Organization and Strategy*, (2d ed.), South-Western College Pub.
Evans J. R., and Lindsay W. M., 2002, *The Management and Control of Quality*, (5th ed.), South-Western.
Garvin David A., *Managing Quality,* The free press, New York, 1988.
Ghosh B.C., Mak Tzi Ling, 1994, "Total Quality Management in Services," *Total Quality Magazine*, 6(4), 34-41.
Goldman Sachs web site: http://www.goldmansachs.com
Grigoroudis, E., Politis Y., Siskos Y., 2002, "Satisfaction benchmarking and customer classification: An application to the branches of a banking organization," *International transactions in operating research*, 9, 599-618.
Grönroos C., 1984, "A Service Quality Model and its Marketing Implications," *European Journal of Marketing*, 18(4).
Grönroos C., *Service Management and Marketing-Managing the Moments of Truth in Service Competition*, Lexington Books, Lexington, MA, 1990.
Harrington J. H., 1996, "National traits in TQM principles and practices," *The TQM Magazine*, 8(4).
Johnston R., 1995, "The Determinants of Service Quality: Satisfiers and Dissatisfiers", *International Journal of Service Industry Management*, 6.
Melidonioti M., 2005, *Quality in banking services: a survey for its application in Greek banks*, M.Sc. Thesis, Greek Open University, Patras, Greece. [in Greek]
Meril Lynch web site: http://mlcc.ml.com/MLCCClient (Last accessed 14-09-2006)
MINITAB Statistical Software, Release 13.0 Student, Minitab Inc. 2000
Nelson L.S., 1974, "Factors for the Analysis of Means," *Journal of Quality Technology*, 6, 175–181.
Oakland J. S., 1998, "The customer satisfaction and business results," *TQM*, 9, 185.
Othman, AbdulQawi, and Owen L, 2001, "Adopting and measuring customer service quality (SQ) in Islamic banks: a case study in Kuwait Finance House," *International Journal of Islamic Financial Services,* 3(1).
Parasuraman A., Zeithaml V. A., and Berry L. L., 1998, "SERVQUAL: A multi-item scale for measuring consumer perception of service quality," *Journal of Marketing*, 20(1).
Parasuraman A., Berry L. L., and Zeithaml V. A., 1991, "Refinement and reassessment of the SERVQUAL scale," *Journal of Retailing*, 67.
PIMS Letter on Business Strategy, The. No. 4, Cambridge, MA: Strategic Planning Institute, 1986.
Puay S. H., Tan K. C., Xie M., and Goh T. N., 1998, "A comparative study of nine national quality awards," *The Total Quality Magazine*, 10(1).
Spanos Ant., 1997, [in greek: Σπανος Αντωνιος, 1997, «Η ποιοτητα στις υπηρεσιες», *Quality Forum*]