



The role of internal control system in improving service quality of privatized governmental banks through exploratory approach

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ABSTRACT

Conditions and challenges in the country's banking industry including the increasing intensity of competition in this industry and the quality of services have compounded the importance of assessing the current situation of the internal control systems and its role in increasing the quality of services. It should also be more vital to recognize the drawbacks in order to find new strategies to modify the system and promote it. It is of great importance to identify the factors and characteristics affecting the internal control system of the bank and the quality of services in privatized governmental banks. The statistical population of the study includes experts and banking specialists of privatized governmental banks in Hamadan province. Data collection tools included library studies and semi-structured interviews, the validity of which was validated as content validity. The test results of the model were successful and the conceptual research model was approved and Description of the conceptual model obtained in privatized governmental banks

Keywords:

Internal Control System, Service Quality, Privatized governmental Banks, Exploratory Analysis.

1. Introduction

As known, an internal control system refers to an integrated set of financial, operational, and other ongoing control processes developed and managed by the board of directors and senior management of a financial and credit institution to ensure that the objectives are met at all levels implemented. Therefore, if a financial and credit institution has an effective internal control system, it improves and promotes efficiency and effectiveness, maintaining its credibility and reputation. Of course, several functions of an effective internal control system are considered conceivable, some improving proper supervision and accountability of management and helping to spread empowering control culture, assisting in the decision-making process and effective administration of the financial and credit institution, improving related mechanisms for proper management of risks in institutional activities, strengthening control structures and activities, including segregation of duties, observing the process of obtaining licenses and approvals, resolving discrepancies and reviewing operational performance, improving control measures to prevent, identify and correct failure in time, including errors, violations and embezzlements, improving proper communication and circulation and reliable information, among all levels of financial and credit institutions, improving and improving the timely and reliable reporting and information system of the financial and credit institution to the relevant persons and authorities, and finally, ensuring that all levels of the financial and credit institution adhere to the rules, regulations, oversight requirements, guidelines and directives, and enforce them effectively. Therefore, the existence of an effective internal control system is of vital importance in a financial and credit institution in the monetary and financial markets.

On the other hand, the conditions and challenges in the country's banking industry, including the increasing intensity of competition in this industry, the quality of service so that the number of banks and financial and credit institutions has multiplied over the past few years, the occurrence of financial and credit abuses, as well as the security and confidential information of several thousand credit cards which have been revealed, have given rise to the importance of assessing the current state of internal control systems in banks in order to improve them. As the literature

review showed, the internal control system plays a vital role in improving the quality of the banking activities, improving the accountability of customers and users, helping the organization achieve performance and budget goals, improving the reliability of financial statements, improving the observance of rules and regulations, preventing the loss of resources (due to fraud, ineffectiveness, etc.) including assets and public trust are among the benefits that internal control brings with it to the banking system because it provides a secure and logical control environment for the bank. Risk assessment processes and logical control activities provides an effective information system and effective monitoring and evaluation for the bank. Therefore, considering the status of internal control systems, especially in the challenging banking industry, this issue has been selected as the subject of the present study.

2. Developing theoretical foundation Internal control systems

Internal control is a fundamental and dynamic process that constantly adapts to changes in the organization (Ognova et al., 2007). Management and employees at all levels are required to communicate with this process in order to identify risks and gain reasonable assurance of achieving the mission of the organization and its overall goals. Therefore, internal controls are a set of measures that managers take to ensure relative confidence in the proper implementation of affairs and its compliance with regulations and policies to increase the efficiency and effectiveness of operations and achieve predetermined goals (Mohammadi, 2008). The importance and position of the internal control system is quite tangible, and according to the scope of each organization, internal control also makes sense. This means that the larger the organization, the greater the need for an internal control system. Internal control refers to all measures taken by management to ensure the proper conduct of affairs in accordance with the unified economic rules and policies. Internal control is not limited to accounting and financial transactions, but covers the entire business unit and its activities. In other words, internal control is a situation in a company or institution where the work is divided in such a way that the work of each employee is

controlled and completed by another and done in such a way that each stage has a specific supervisor. Of course, the implementation and division of labor in such an institution or company requires a proper organization that defines the duties, responsibilities and powers in each department so that the duties and responsibilities of each employee working in each department can be determined. At the same time, the duties should be such that the work is not completed with the implementation of the system, but in another department, the work is completed or controlled by another specific person. This method and system of work, especially in the case of financial work, creates a situation where an employee does not do the work from the beginning to the end personally, but his work is controlled and completed by another employee and abuse is not possible except by collusion of a few people. . Therefore, the implementation of such goals in terms of the work system, in addition to the need for a proper accounting method, requires that other management processes be based on the correct methods and systems and meet the needs of the institution or company.

2.1. Drawbacks of internal control systems

The basic premise in public debate and reporting is that internal control improves the quality of financial reporting and reduces governance problems. In this section, agency theory provides a framework for this assumption, which is to increase costs of agency (Hasas Yeganeh and Natayej Malekshah, 2006). Management can reduce agency costs through low-level regulatory actions. One possible supervision mechanism is the company's internal control system (Abdel Khalik, 1993). McMullen et al. (1996) provide two reasons why management's internal control report can improve internal controls, both of which can be explored through the monitoring mechanism and can represent agency cost. First, this internal control reporting can increase the awareness of top-level management about the company's internal control, which in turn draws more attention from top-level management to the internal control system in general. Second, internal control reporting leads to a better internal control. Proper design and deployment of internal control systems in economic units is one of the most important factors in achieving efficiency and

effectiveness of operations, promoting accountability and financial transparency, compliance with rules and regulations and helping to prevent fraud and financial abuse. Therefore, professional and legislative institutions of different countries have developed frameworks, statements and guidelines on how to establish, evaluate and report internal controls by management and audit of internal control by auditors of economic units (Ghanbarian, 2011).

Banking and financial services are considered to be an important part of the services industry (Mishkin, 2001). The outlook for financial services in the world is changing rapidly (Lundahl, Veghom and Silver, 2009). Modification, structural, and technological changes have led many to move toward a more integrated global banking environment in the global banking industry (¹ Angur, M. G., Nataraajan, R. and Jaheera, J. S. Jr, 1999). Banks are expanding across borders by offering a variety of benefits and competitive services and restructuring their services to the use of fast technology to meet the changing needs of customers. As a result of these measures, the nature of banking services and customer relations has changed. The highly competitive and rapidly changing environment in which banks are forced to operate leads them to reconsider their attitudes toward customer satisfaction and optimize service quality (Arasli, H., Mehtap-Smadi, S. and Turan Katircioglu, S, 2005). Many companies have found that consistently providing superior quality services over competitors can bring a strong competitive advantage (Horotiz, Jacques, 2001). All the things we call virtual banking today are done to achieve superior service quality. Therefore, the quality of service can be mentioned as the brainchild of banking operations (Othman and Owen, 2002).

2.2. Concept of service

Due to the variety of services, it has always been difficult to define them. What complicates this is the fact that due to the intangibility of most data and inputs, it is often not easy to understand and identify ways to perform and deliver services (Lovelak, Christopher and Lauren. Wright 2003). The word service has a wide range of features, and this feature has led to great ambiguity in its meaning in management texts (Johns, N., 1999). Gronroos (2001) defines service as: an activity or some intangible activities which are usually and not necessarily in the

interactions between the customer and the service staff and / or physical resources or goods and / or service provider systems but are provided as solution for the customer's problem Gronroos, C., 2001

2.3. Concept of quality

Quality` is a common and familiar term, and various interpretations have been made of its meaning and use. But the common denominator of all these definitions is "adaptation of goods or services to the needs and expectations of customers." Quality starts with the customer and any attention to the product or service, regardless of the customer's opinion, does not necessarily follow the quality (Fitz Simmons, James E. and Monajee, 2003). Therefore, quality is usually based on product compatibility. They define the characteristics of the customer, or the extent to which the product can meet the customer's previous expectations (Karatepe, OM, Yavas, U and Babakus, E. 2005). The concept of quality will have different meanings depending on the field of application. Thus, from the provider's (bank's) point of view, product capability is considered to be functional, and from the customer's point of view, it means satisfaction of demand (Kerin, Hartly, Berkowitz and Rudelious, 2006). Keless believes that service quality includes three dimensions: physical, situational, and behavioral. In other words, Kless believes that service quality is about focusing on what is delivered to customers, the position in which the service is provided, and how those services are delivered (Ross & Juwaheer, 2004).

2.4. Concept of service quality

Discussions about the quality of services are complex. It is very difficult to define and measure the quality of services provided by a service institution such as a bank. Evaluations show that the customer's understanding of the service is formed within the framework of his expectations. The competition between institutions and firms to gain more market share and customer satisfaction to achieve greater satisfaction has led the firms to seek a privileged position in the market and the customers to find clues to reach the best suppliers. Achieving these goals is closely related to the study of two concepts, the quality of goods and customer satisfaction, the study of which in service markets is more sensitive and important due to special features, services and is of special

importance for service providers. Banks are one of the companies and organizations that have acted in the field of providing services and its role and importance in the economy and development of the country is not hidden from anyone. Therefore, it seems that discovering the relationship between these two concepts can be effective in improving and promoting the level of services provided by banks on the one hand and gaining more customer satisfaction on the other hand, which the way to achieve can be one of the prominent issues of service organization and especially banks.

In the service sector, quality assessment is performed during the service delivery process. Each customer call is considered as a moment to build trust and an opportunity to be satisfied or dissatisfied (Fitz et al., 2003). Since the role of services in everyday life became apparent, the category of "service quality" has also been considered as a key feature of competition between organizations, so that attention to service quality distinguishes the organization from its competitors and gives it a competitive advantage (Ghobadian. , A., Speller, S., and Jones, M., 1994).

2.5. Concept of banking service quality

The tendency to service quality plays an important role in service industries such as insurance, banking, etc., because service quality is critical to the survival and profitability of the organization (Stafford, MR, and et al., 1998). In the field of banking services , the quality of service is defined as a customer's opinion or attitude about the superiority of the service provided in the bank environment (Al-Hawari, M., Ward, T., and Newby, L., 2009). Providing high quality services is essential for the survival and profitability of organizations. The need to understand and improve the quality of services has been considered due to the benefits of providing high quality services such as customer retention, customer loyalty, attracting new customers, creating lasting customer satisfaction, etc. for the organization. In today's competitive world, providing high quality services is a necessity for service organizations, especially banks (Rust & Zahorik, 1993).

Study background

3. Literature review

Prentice et al. (2019) presented "The Impact of Brand Experiences and Service Quality on Customer Participation". The study is based on an existing conceptual model for customer engagement and focuses on the aviation industry, examining how customers and the company relate to customer engagement based on factors. Customer-based factors in this study include brand experience and brand love while the factors based on quality are the quality of air services. Data were collected from a European airport. The results show that customer-based factors are significantly associated with customer engagement. In experiencing a particular brand, direct and indirect effects affect customer engagement. While this experience increases the passenger brand experience, especially services provided by the flight headquarters, the quality of air services has a minimal impact on customer participation (Catherine Prentice, Xuequn Wang, Sandra Maria Correia Loureiro, 2019). Zalatar (2019) studied the gender influences of customers in understanding the quality of services from Philippine commercial banks. This article examines the quality of service of Philippine commercial banks from the perspective of their customers. This examines the importance of paying attention to the five dimensions of service quality and examines how gender differences affect customer expectations and understanding of the quality of banking services. The results of surveys and statistical tests show that gender differences affect the relative importance of five dimensions, as well as customer expectations and perceptions of service quality in banks. This research is useful in creating customer-related strategies that increase customer perception of the quality of banking services (Willy F. Zalatar, 2019).

Liu et al. (2018) presented a paper entitled Employee Quality, Monitoring Environment, and Internal Control. They examined the impact of ICEs on the quality of internal control. Using specific data from Chinese companies, they found that ICE quality had a significant effect on the quality of internal control. They examined the effect of monitoring this result and found that it had a greater impact on companies with accurate monitoring environments, especially when companies have a higher organizational control system (CSOX), organizational ownership, or more importance to internal control. Their findings suggest that ICEs play an important role

in the design and implementation of internal control systems. Their study is interesting for both senior executives who want to improve the quality of internal control of companies and officials who want to understand the mechanisms of internal control control (Chunli Liu, Bin Lin, Wei Shu, 2018).

Determining bank legal fees for internal controls and operational risk is the title of a study studied by McNulty (2017). Excessive litigation (significantly higher than counterparts) against a bank indicates operational risk, as it often indicates a lack of a strong internal control system. They examined the relationship between bank performance and poor internal control using legal fees as a proxy and found that legal costs were the main determinants of loan losses and stock returns. Banking regulators must report legal fees in call reports to help identify weakly controlled entities. The current report creates the asymmetry of unnecessary information because investors are unaware of the operational risk, which leads to a mistake in the price of bank securities (James E. McNulty, 2017).

Araqi et al. (2018) examined the "effect of major weaknesses of internal controls on investment inefficiency". The aim of this study is to investigate the effect of major weaknesses of internal controls on investment inefficiency. The research findings show that there is a significant positive relationship between major weaknesses in internal controls and investment inefficiency. In fact, the results show that the existence of major weaknesses in internal controls leads to inefficiency of investment in companies, and ultimately the need for managers to implement effective internal controls in the organization.

Kalaei and Eskafi Asl (2018) studied "The relationship between CEO strength, audit committee characteristics and quality of internal control". This study examines the relationship between audit committee characteristics and the quality of internal control, as well as the moderating effect of CEO power on their relationship. As a result, the information of 39 companies listed on the Tehran Stock Exchange has been tested in the form of Logit analysis. The results showed that among the features of the audit committee, the financial expertise of the members and the size of the audit committee have a significant relationship with the quality of internal control, and the feature of independence has not had a significant relationship with the dependent variable. The results

also showed that the power of the CEO has only a moderating effect on the relationship between the size of the audit committee and the quality of internal control.

Fenderski and Grayley (2018) presented "the effectiveness of internal controls and the risk of falling stock prices." In high-quality internal control companies, due to the effective monitoring on managers' behavior, managers' ability to hide bad company news is limited, which in turn reduces spreading bad news to the market and, thereby reducing the company's stock price falling risk. Therefore, based on this argument, this study examines the relationship between the effectiveness of internal control and the risk of falling stock prices of companies. The research findings show that the effectiveness of internal control reduces the risk of falling stock prices of companies. The research findings, while filling the research gap in this area, can be useful for investors, capital market lawmakers, and auditors of decision-making auditing market regulation.

Araqi Mohammad Reza, Jahanshad Azita, Mostofi Amir (2018) "The Impact of Major Weaknesses on Internal Controls on Investment Inefficiency" *Financial Accounting and Auditing Research*. Tenth Year / No. 13 / Summer 31. Pages 341 - 361

TAVANGAR Hamzeh Kalaei Afsaneh, Eskafi Asl Mehdi (2016) "The Relationship between Managing Power, Audit Committee Characteristics and Internal Control Quality" *Financial Accounting and Auditing Research*. Tenth Year / No. 38. Pp. 187-207

Fenderski and Grayley (2018) "Effectiveness of Internal Controls and Risk of Falling Stock Shares" *Financial Accounting and Auditing Research*. Tenth Year / No. 38. Pages 169-186

Taghavi Fard Mohammad Taghi, Bavandpouri Shokoofeh (2016) examined the provision of a web-based decision support system to measure the quality of e-government services in the Alborz Province Registry Organization. In this study, the presentation of a web-based decision support system for measuring the quality of e-government services was examined and the study population is Alborz province's civil registry site. According to the completed questionnaires about the main hypothesis that the respondents' satisfaction with the quality of electronic services of the Civil Registry Site, 50% of the

respondents are in the group of satisfied with e-government services and there is a relative satisfaction with the site's services. The results of the binomial test show that trust with 20% of dissatisfied people and support and interaction with citizens with 60% of dissatisfied people in the society have the lowest and highest values.

The results also showed that a total of 16 of the 43 indicators surveyed did not have acceptable quality. In the next step, once for 16 indicators that had a small score in the survey from the users' point of view and once for 27 accepted indicators separately, based on 2 factors, cost and effectiveness were examined and the opinions of experts for both factors entered the system. The final result was given to the user for each item according to the rules of the fuzzy system, and then these items were arranged according to the output from the most important to the least important, and finally the mentioned program was successfully implemented on the web.

4. Methodology

Due to the design and explanation of the research model and the novelty of the research title in terms of subject and position, it is necessary for the researcher to use the opinions and guidelines of academic elites and experts of the banking system in an optimal way. Therefore, after consulting with respected professors, supervisors, consultants and a number of experts, it was decided that a panel of experts consisting of two sections; experienced experts in banking system and academic elite - professors of accounting -. In fact, similar to what happens in panel creation in the Delphi method, there was an agenda at work. In this research, using literature and background of the subject and reviewing the theoretical foundations and conducting exploratory interviews, a total of nineteen main factors in designing the research model were identified. Then, with the guidance of the university supervisor and using the snowball technique, the researcher formed a panel of experts, consisting of banking experts and academic elites.

The right number of panel members is very important. Due to the importance of correct and relevant selection of panel members and its important impact on research outputs, it was tried to select panel members with special sensitivity and to avoid any random and possible sampling. For this purpose, sampling of snowballs was used at this stage. In the

process of selecting a sample, qualitative researchers can use the snowball sampling method in which a research participant directs us to other participants or snowballs. Thus, the panel with the participation of 15 experts was created by 5 academic elites - faculty

members and professors of the University Accounting Department - and 10 banking system experts - experienced and skilled managers and deputies. In this study, two-step Delphi is used. The coordinates of the panel are presented in Table 1:

Table 1: coordinates of interview question distribution

Return %	Return no(person)	Number of distributions(person)	Distribution date	audience	stage
0.68	15	22	2019/07/22	Panel of experts	first
0.71	25	35	16 - 20 august1398	Panel of experts	second

Interviews with experts - exploratory interviews - have played an important role in explaining the subject and issue of the research, introducing specialized sources and references, clarifying the research path and

drawing a suitable perspective for the researcher during the research. The total number of interviews was about 27 hours during 15 sessions.

Table 2: coordinates of interviews

time	Interview number	date
Approximate time(hour)	No of interview	Date of implementation
12	6(credit unit)	23 july 2019
8	5(banker)	26 july 2019
7	4(lecturers)	30 july 2019
27	15	total

Detailed results related to the implementation of the first stage of the questionnaire distribution are given in Table 3. In this table, the name of the agent, the number of responses, the mean, the standard deviation,

the order of importance of each factor based on the mean of the responses along with the minimum and maximum values of the factors are listed.

Table 3: Detailed statistical description of the first stage results

row	factors	maximal	minimal	Priority of responses in terms of averages	sd	average	No of responses
1	Adhering to rules and guidelines	7	3	1	1/18	6/32	25
2	Confirming the routines in financial system	7	3	16	1/32	6/08	25
3	Benchmarking for safety of operations in banking units	7	2	8	1/39	6/12	25
4	Internal control ongoing in all banking affairs	7	5	43	0/57	6/64	25
5	Internal control makes it possible to reach financial goals	7	6	23	0/49	6/36	25
6	Internal control as a barrier to know multiple incomes	7	1	12	2/15	5/16	25
7	Lack of internal control leads to reduce gain and stakeholders` satisfaction	7	1	17	1/26	6/08	25
8	Internal controls must be established regarding the bottlenecks	7	6	26	0/37	6/84	25
9	Improves supervision and feasibility	7	6	52	0/50	6/60	25
10	Internal control prevents intentional mistakes	7	1	4	1/66	6/00	25
11	Internal control limited the loss of banking units	7	5	48	0/59	6/52	25
12	Internal control increases efficiency	7	5	51	0/56	6/68	25
13	Internal control leads to identify hidden revenues	7	4	9	0/82	6/40	25

row	factors	maximal	minimal	Priority of responses in terms of averages	sd	average	No of responses
14	Internal control improves trust and security	7	4	19	0/71	6/56	25
15	Internal control provides effective communication and information	7	4	14	0/91	6/40	25
16	Effective information channels are necessary for internal control	7	6	28	0/28	6/92	25
17	Powerful control culture is necessary for internal control	7	6	11	0/48	6/68	25
18	Internal control helps to reduce errors and saves time	7	5	21	0/71	6/40	25
19	Internal control prevents financial terrorism	7	6	38	0/50	6/60	25
20	Internal control improves the confidentiality of financial reports	7	6	42	0/50	6/40	25
21	Internal control helps to finalize the reports exactly on time	7	5	39	0/59	6/52	25
22	The reporter should be unknown	7	4	25	0/78	6/12	25
23	The reporter should have feedback of his report and have enough security	7	6	40	0/46	6/72	25
24	Internal control helps to remove the drawbacks of auditing	7	5	45	0/69	6/32	25
25	Internal control helps to improve efficiency	7	5	47	0/58	6/44	25
26	Internal control helps to validate internal auditing information	7	6	49	0/48	6/68	25
27	Internal control helps to reduce costs and repetitive operations	7	5	50	0/73	6/12	25
28	Internal control helps to more carefully audit	7	5	13	0/58	6/56	25
29	Internal control helps to recognize the potential conflicts	7	4	15	0/86	6/36	25
30	Independent internal control can not prevent violation	7	1	18	2/13	3/96	25
31	Control does not tend to prevent cheating	7	1	20	2/29	4/16	25
32	Internal control helps to discover the drawbacks faster	7	5	34	0/74	6/28	25
33	Internal control reduces the risk of banking operations, reputation risk and other risks	7	1	5	1/87	5/40	25
34	Internal control helps to audit more exactly	7	4	29	0/87	6/40	25
35	Internal control reduces the supervision and auditing costs	7	4	35	0/91	6/36	25
36	Internal control increases productivity	7	5	24	0/75	6/32	25
37	Internal control helps the bank to have a good face	7	1	36	1/62	6/16	25
38	The more the information, the more definite the decisions	7	5	32	0/77	6/52	25
39	Internal control reinforces the bank to prosper	7	5	46	0/65	6/48	25
40	Internal control assures the operations implemented correctly but not at all-comprehensive satisfaction of managers	7	4	37	0/92	6/44	25
41	It is easy to access staffs' information	7	4	44	0/97	6/12	25
42	Effective information channels exist in bank	7	5	3	0/71	6/52	25
43	Encrypted codes are defined to access the private documents in electronic memories	7	5	22	0/52	6/76	25
44	Qualified staffs are recruited	7	5	27	0/90	6/16	25
45	Formal and informal training, meetings and in-service monitoring are necessary to do controlling	7	5	41	0/65	6/44	25
46	Internal control leads to better and more quality services and customers' satisfaction	7	5	2	0/83	6/24	25
47	Internal control facilitates receiving services and deposits	7	5	7	0/65	6/44	25
48	The authenticity of information is vital	7	6	10	0/49	6/64	25
49	Internal control prevents possible losses	7	5	33	0/65	6/44	25
50	Internal control helps to present the services better and faster	7	6	6	0/51	6/44	25
51	Internal control increases managers and customers' trust	7	6	31	0/49	6/64	25
52	Brand of bank is important in delivering service	7	6	30	0/48	6/68	25

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Table4. General statistical description of the results of the first stage

6.3000	Total average
6.3462	Total median
6.77	Total mode
.37541	Total sd
-.317	skewness
-1.005	Elongation coefficient
1	minimal
7	maximal

As can be seen in the two tables above, the average of the total scores assigned to fifty-two factors is 6.30, and with the exception of four internal control factors that prevent multiple incomes from remaining unknown, independent internal control does not prevent violations. The goal of control is not to prevent fraud, and internal control reduces the risk of banking operations and the risk of fame and various types of bank risks. Other factors have averaged more than 6. The distribution of the mean distribution of the total score of the factors along with normal curve is as follows.

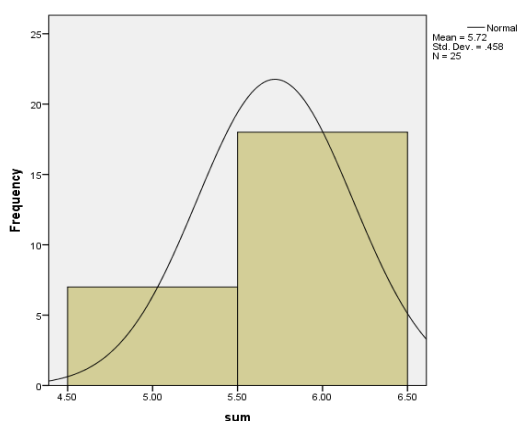


Fig 2: scattering histogram of total mean of seven-item spectrum scores

As shown in Table 1, a survey of panel members was conducted in two stages to design the conceptual model and formulate the final items. In the first stage, the nineteen factors extracted from the theoretical basis and the literature review were distributed among panel members in the form of a questionnaire .Having calculated the scores obtained from each factor, fifty-two new components were identified by exploratory factor analysis. In the second step, the proposed items designed to measure the underlying factors of each of the emerging components were presented to the members in the form of a closed questionnaire, and finally with the help of the software SPSS (version 20) and the tests of the principal component analysis, Bartlett test of sphericity, Kisser-Mir-olkin, the final and agreed items of the panel experts were developed.

5. Results

Exploratory factor analysis has been used in order to analyze research data, statistical inference and understanding conceptual relationships in research structures. Factor analysis is a technique used to identify possible unknown variables.

There must be three main conditions for accepting a factor load. In fact, the existence of any of these main conditions is necessary and vital for accepting the factor load, and violating any of them will lead to the non-acceptance of factor analysis (Mo'meni and Faal Qayyumi, 2010). These three main indicators are: KMO test index, preferably above 0.5.

The results of the Barlett test of sphericity are statistically significant.

The value of the correlation coefficient matrix determinant is greater than zero.

Factor analysis is acceptable if the above conditions are met. In factor analysis, one must first make sure that the available data can be used for analysis. In other words, the number of data should be appropriate for factor analysis

Factor analysis is done in different ways. In this study, considering that it is necessary to know the components that affect the internal control and the quality of services, the method of analysis to the principal components of this work has been done. The matrix of the principal components is found in various forms of rotation, of which the Warimax test is the most appropriate method for identifying the most effective components. To select the number of components, the amount of variance explained by

them is considered important. The components selected must have a specific value greater than 1. Also, the number of accepted components must have a relative cumulative frequency of more than 0.5. This method is the main method of selecting the number of components.

The results of experimental factor analysis tests (analysis of the principal components and varimax), Bartlett sphericity, Kaiser-Mir-Ulkin and analysis of variance, which is the basis for preparing and designing the conceptual model of research and regulation of the second stage and the survey from the panel experts were analyzed. Due to the long table of main components and varimax rotation, only the adequacy tests of the model and the variance explained by each component in the rotated matrix have been shown.

The results of experimental factor analysis tests (analysis of the principal components and varimax), Bartlett's Test of Sphericity, Kaiser-Meyer-Olkin and analysis of variance, which are the basis for preparing and designing the conceptual model of research and regulation of the second stage questionnaire and

survey of panel experts has been analyzed and due to the long table of principle components and varimax rotation, only Measure of Sampling Adequacy and the variance explained by each component in the rotated matrix matrix have been shown.

Table 5 shows the adequacy of the data for the analysis of the exploratory factor, which includes the KMO test index and the value of the Bartlett sphericity test index. The size of the KMO test index is higher than 0.5 and is preferably acceptable; Therefore, the analysis of variance within the data can be performed. The Bartlett sphericity test is also acceptable and significant at 99% confidence level. Also, the value of the correlation matrix determinant is greater than zero. From a statistical point of view, other indicators necessary for model design are also acceptable according to the above table; Because the variance explained by each component in the rotated matrix shows the adequacy of the factors (due to the length of time, we have ignored the presentation of the Varimax rotation table).

Table 5: results of Bartlett sphericity test, KMO test

0.539	Test index KMO	
445.511	Chi square value	Bartlett sphericity test
231	Degree of freedom	
0.000	index	

Table 6: The variance explained by each component in the rotated matrix

Total variance %	Variance %	Eigenvalue(total variance)	components
37.7	37.7	19.608	first
50.1	12.4	6.458	second
59.9	9.81	5.102	third
67.2	7.31	3.803	fourth
74.0	6.76	3.519	fifth
79.4	5.44	2.831	sixth
83.78	4.31	2.245	seventh
87.70	3.92	2.040	eighth
91.20	3.496	1.818	ninth
93.99	2.791	1.451	tenth
96.20	2.209	1.148	eleventh

In other words, the factors that the researcher has deduced from the theoretical foundations and exploratory interviews, in the form of eleven emerging components, cover about 96% of the factors affecting the research topic, which is highly acceptable in the analysis of exploratory factor and from a statistical point of view. As shown in the tables below; The highest eigenvalue for the first component is 19.608. The eigen value of the second component is 6.458, the eigenvalue of the third component is 103.5, the eigen value of the fourth component is 3.803, the eigenvalue of the fifth component is 3.519, the eigenvalue of the sixth component is 2.831, the eigenvalue of the seventh component is 2.245, the eighth component is 0.240, the eigenvalue of the ninth component is 1.818, and the eigenvalue of the tenth component is 1/451 and the eigenvalue of the eleventh component is 1/148. Table 7 shows the results of the second stage test, separately for the components and factors, and in combination. For example: as seen, the bank internal control system, which consists of seven factors: control process, monitoring, control activities, information channels, culture, risk reduction, trust and security. The information in this table is used

specifically to design the conceptual model of the present study.

As can be seen in Table 5, in the second stage of the survey of panel experts, the lowest value (minimum) in the internal control dimension based on the average score of the items related to the dimension of information channels of the internal control components (4480.5) and the highest (maximum) value of the average score is then assigned to the "culture" factor (6/56).

Considering the average scores allocated to the sub-set factors of service components, it is also observed that the "trust and security" component has the lowest (minimum) average scores (6.42) and the "commitments" component has the highest (maximum) average scores (6.76). Considering the average and high level of scores allocated to the fifty items related to the eleven factors extracted from the theoretical foundations of the research by the panel experts, the adequacy of the mentioned items for the final test of the conceptual research and measurement of emerging eleven components are confirmed.

Table 7: Descriptive, comparative and combined statistics of components and their factors in the second stage

priority of components**	Mean of factor score *	factors	components
6	6/3556	Control process	Internal control
5	6/4120	supervision	
3	6/5244	Controll activities	
11	5/4480	Information channels	
2	6/5600	culture	
10	5/7733	Risk reduction	
4	6/4200	Trust and security	
1	6/7600	commitment	services
9	6/0400	security	
8	6/0800	Bank prestige	
7	6/1200	Customer's satisfaction	
The mean of scores allocated to four items of the each fifty factors Priority of components in terms of mean of scores allocated to subset factors			

6. Research Conceptual Model

Using the extracted factors from the theoretical foundations of the research and the results of the two-stage survey of panel experts in the form of two

dimensions and eleven components, the model is determined as follows.

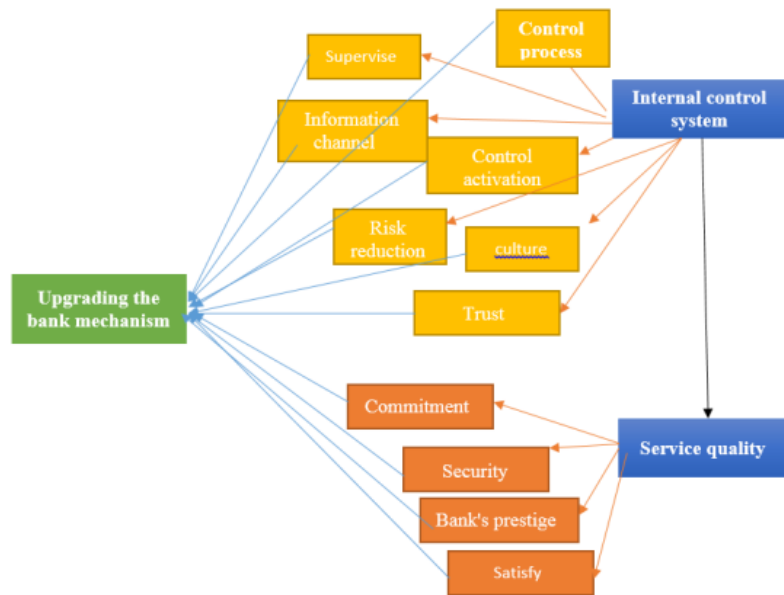


Fig 2: Research conceptual model Explanation of Research conceptual model

7. Discussion and conclusion

The conceptual research model suggests that the three components of information channels, trust and security and culture, are the components of this study, compared to the Sarbanes–Oxley Act, which includes the control process, control activities, monitoring and risk reduction, the three components of information channels, trust and security, and culture are obtained in this research. The current culture of the country can play a decisive role in the implementation or non-implementation of internal controls in companies by the most important component of this system; a human being. In determining the control risk, the auditor must pay special attention to the issue of culture, in order to be able to determine this risk more accurately.

Accepted auditing standards require auditors to assess the internal control structure and determine the control risk in the audit process. To assess the internal control structure, the auditor must gain knowledge of the environment and control activity - which is influenced by cultural factors. Culture includes ethical and behavioral criteria, the way to transfer these criteria to employees and to strengthen and strengthen them in practice, and shows the reality that occurs;

increasing culture in maintaining the internal control system is one of the components to improve service in the bank. On the other hand, the more communication there is between the staff and the customers in the bank and the more information is directed through the right communication channels, the better services will definitely be provided to the customers. According to a 2010 study, trust in customers is at the forefront of what banks are eager to invest in security. Hacking a credit card may not cost much, but its public trust is very valuable. Other important factors in this regard are financial issues, legal requirements and customer demand, respectively. In some cases, information security is common to all areas, but banks cannot ignore or underestimate any of them. The issues that banks need to pay more attention to are: authentication, accuracy, accessibility and confidentiality, process management that is process-based, access control and physical security, each with its own considerations. Risk management should be considered when designing each of these factors. The issue of education and awareness is very important, and it is emphasized in all security guidelines and standards. Compliance with legal requirements, business continuity, privacy and reliability are other things that banks can take steps to improve their

services. Formal and informal training is another factor that helps both the proper internal control and the provision of services in the right direction, to fulfill both their obligations to customers and a golden star called Prestige. As the bank name in the brand. If internal control leads to increased bank performance, the benefits are obvious. Internal controls persuade the bank to spend its resources just for the purposes of the bank and to minimize the risk of misuse of resources. Internal controls also prevent financial irregularities by quickly discovering issues. In addition, strong internal controls can prevent bank employees from being accused of any irregularities or misuse of the budget. Internal control also has disadvantages. If internal controls are poorly planned or implemented, it may lead to employee frustration or disinterest. In addition, a very tightly designed internal control system can hardly lead to the development and sustainability of the banking system. Perhaps the biggest downside to internal control is that bank auditors may become overly dependent on the internal control system because it makes easier for them to control errors and fraud. The findings of the study can be considered in line with the findings of Prentice et al. (2019), Liu et al. (2018), McNulty (2017) and to some extent by study of Taqavi Fard Mohammad Taghi, Bavandpour Shokoofeh (2016).

The goals of internal control go beyond fraud and theft. Properly covered, it will withstand a great deal of adverse conditions. Audits prove the bank's compliance with relevant laws and regulations, protect the bank's resources from losses due to mismanagement, and maintain financial data or reliability. Each of the main components has sub-components that are essential for the proper operation of the main component. If the sub-components are incomplete, the primary components will not work properly or will be weak and the entire internal control system will be negatively affected. For example, analytics should be created in accounting systems to ensure that data is processed properly. Finally, the following suggestions from this study and analysis in 10 cases are suggested as follows:

- 1) Make sure tasks are separate
- 2) Development of adequate physical control of assets
- 3) Define risk in the bank
- 4) Timely error correction
- 5) Develop written policies and procedures

- 6) Make corrections regularly
- 7) Review and approve trends and transactions
- 8) Keep enough backup documents
- 9) Provide adequate training to employees
- 10) Evaluate your internal bank control

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