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**Research Article**

# Designing A Social Audit Model to Increase the Capital Adequacy of Banks Its Impact on Reducing the Expectation Gap in Society

[1]Mokhtar Felehgari, Babak Jamshidi navid [2*] , Mehrdad Ghanbari[2], Forouzan Mohammadi Yarijani [2]
*Department of Accounting, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran Ph.D. Student,* [1]
[2] *Assistant professor, Department of Accounting, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran*
* *Corresponding author email address: jamshidinavid@iauksh.ac.ir*

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**ABSTRACT**

The aim of this research is to design an applied model for the practical implementation of social auditing in increasing capital adequacy in banks and its effect on reducing the expectation gap in society using the Grand Theory method and also its validation using the Structural Equation Modeling method. This research has a combined quantitative and qualitative approach and to collect data in the qualitative part, semi-structured interviews were conducted with 18 Iranian academic and banking experts using a purposive sampling method. In the quantitative part, the statistical population included the community of certified public accountants, from whom 336 people were selected by random sampling and the data collection method in this part was the use of a questionnaire. Our findings in the qualitative part led to the identification of the category of "social responsibility auditing in increasing capital adequacy" as a central phenomenon, which is carried out by evaluating compliance with social responsibilities in increasing capital adequacy in banks. The results of the quantitative part of the research also showed that the causal conditions of the model have a positive and significant relationship with the central phenomenon, the central phenomenon has a positive and significant relationship with strategies, the context conditions have a positive and significant relationship with strategies, the intervening conditions have a negative and significant relationship with strategies, and that strategies have a positive and significant relationship with the outcomes of the model. Finally, increasing compliance with social responsibilities in increasing capital adequacy in banks will further reduce the gap in expectations resulting from banking activities in society.

**Keywords:** Capital adequacy, social auditing, banking activities, expectations gap, grand theory,

## -1INTRODUCTION

In recent decades, with the increasing influence of organizations on the axes that constitute sustainable development, namely the economy, society and the environment, a concept called corporate social responsibility has emerged in the world of management. Corporate social responsibility, in short, means that organizations are responsible for the society in which they operate; because they use its human, natural and economic resources. According to this concept, organizations are no longer only responsible to shareholders and in fact they were not created to look at the profitability of their shareholders and based on short-term interests, but organizations are also responsible in relation to other stakeholders whose legitimate demands must be taken into account. Not considering these demands, apart from creating challenges with stakeholders, also endangers the long-term economic profitability of shareholders. Today, organizations, including banks, have realized that they must pay more attention to social issues. One of the important requirements for companies to survive in the era of globalization and achieve high market share and competitive advantage, especially moving towards a competitive economy, is to pay attention to corporate social responsibility. Social responsibility requires a broader understanding of the expectations of a society. One of the fundamental principles of corporate social responsibility is to act in accordance with the law and comply with its requirements. In addition, social responsibility includes actions beyond compliance with the law and includes the recognition of obligations to others that are not legal and mandatory. These obligations arise from shared moral

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values and other existing values (Griffin and Barney, 1992). (1) Banks play a very important role in any economic system by holding a major part of the funds in circulation in society and allocating it to different economic sectors and have a significant impact on regulating the relations and relationships of the economy of society. Given the enormous responsibility of banks in the economic development of communities, both nationally and internationally, the social responsibility of banks is more prominent than that of other firms active in the field of industry and economy, and at the same time it has a direct impact on the responsible performance of other firms. They are responsible for the problems they create for society and their social citizens.

Since customers have become a very important asset for various businesses, including banks, providing superior services to them has become of immense importance. These days, banks around the world spend millions of dollars in improving their social responsibility activities to create a stronger relationship with their customers and also to increase their reputation and credibility in the eyes of society. These changes are probably due to increasing pressure from customers and their increasing expectations for having a good relationship with banks (Azizi et al. 2018)(2).

In recent years, financial institutions have realized the breadth of social and environmental activities that can be implemented in their institutions. In addition to the role they play through the management of the impact of their performance on society, financial institutions play a vital role in encouraging and motivating their customers (real and legal) to act responsibly and reduce the adverse social and environmental impacts of their activities. Today, corporate social responsibility encompasses a broader concept than the activities of companies in the past. Social responsibility, in general, refers to the set of activities that owners of capital and economic enterprises voluntarily carry out as an effective and useful member of society. Today, all managers must make decisions and activities that are accepted by society and are consistent with its values. These values and considerations have received special attention under the title of corporate social responsibility since the second half of the twentieth century. In fact, corporate social responsibility is going beyond the minimum legal requirements that have been voluntarily accepted (Blasari3 et al. 2020)(3) .

Social auditing seeks to determine how effective an organization's social performance has been. In other words, social responsibility auditing is an independent assessment of an organization's performance that reports on the achievement of social goals by organizations. In fact, the goal of social auditing is for companies to be accountable for the impacts they have on society and the environment and to conduct an annual social audit, similar to the annual financial audit. In fact, social auditing is a method by which companies prove the extent to which they have achieved their economic, social, and environmental goals. On a broader level, social auditing can be understood as a process that enables an organization to evaluate its performance in relation to the requirements and expectations of society (Bayat, Ali, 2008).

In the discussion of social responsibility auditing in banks, a comprehensive framework for this issue has not been presented so far, and the issue of which areas banks should be active in, to what extent each of these activities should be carried out, and ultimately for whom they should be carried out, so that auditors, users of financial statements, and society can reach a judgment and conclusion based on a specific criterion or standard that the bank has fulfilled its social responsibilities in an acceptable manner, is still vague and unknown. For auditors and society, the issue of how much a company or bank should do in each economic area, activity, or expense in order for them to reach a conclusion whether social responsibilities have been observed in this bank or not, and if so, at what level, remains an unanswered question (Tohidinia, 2018).

Also, because there is no standard framework and model in the field of social activities of banks, on the basis of which social responsibility auditing standards in banks and then binding laws and regulations for its implementation can be established, we cannot subject banks to social audits in the field of social responsibilities and ask them to be accountable to society in this regard. In this situation, banks refuse to implement social responsibilities, and even if they want to do something voluntarily, they do it according to their own taste and preferences and do not observe specific rules and regulations. As a result, the gap between the expectations of employees, customers and society from the performance of banks increases day by day and a ceiling cannot be imagined for it. Any social activity that a bank carries out, because it is not compared and measured with a specific criterion and standard, is not given the importance it should be and perhaps is not given, and society still expects more. This prevents competition among banks in fulfilling their social responsibilities, and they have no incentive to increase and improve their social activities because nothing is measured and it is not even described in a descriptive way as to how each bank has fulfilled its social responsibilities (Royaei, 2014).

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In fact, having a comprehensive framework for observing social responsibilities for each profession or specific industry, which is the banking sector we are considering here, will enable society to force banks to be accountable within that framework and scope, and ultimately presenting this model will make it clear to what level each bank has fulfilled its social responsibilities. (Vedadi et al., 2010)

Since this research leads to the introduction of standard indicators and criteria for observing social responsibilities in the field of banking activities, we can easily compare the current status and performance of banks with these desirable standards and conclude where each bank's position and rank is in the chart of the distance between society's expectations of social responsibilities from banks, and whether a bank has been able to approach these standards during the past fiscal year, which, in the first stage, can move away from the risk of being at risk in Financial crises, to move away and in the next stage, to be able to get closer to society's expectations of itself, in other words, to reduce the gap between society's expectations of the bank (Amran, 2017).

It should be noted that in most of the research that has been conducted in the past on social responsibilities in banks, more attention has been paid to presenting theoretical issues and less attention has been paid to presenting practical issues and solutions. In fact, a comprehensive framework has not been provided for it.

In this research, by presenting a model for auditing social responsibilities in banks, we seek to achieve this goal by introducing practical and practical indicators in the field of banking activities, which, in our opinion, by implementing them by banks, firstly ensures their observance of social responsibilities and leads to a reduction in financial and social crises and the gap in expectations in society. Secondly, it paves the way for the development of professional standards for social auditing by professional associations and, ultimately, the establishment of binding laws and regulations based on these standards by the government. In fact, by developing social responsibility auditing standards in the field of banking activities, a specific framework is created for the social activities of banks, and we can judge, within this framework and based on these standards, to what extent each bank has complied with social responsibilities. (Piraish et al. 2018)

## --2THEORETICAL FOUNDATIONS AND RESEARCH BACKGROUND

### 2-1The importance of social auditing and examining the capital adequacy ratio in banks

This ratio is the result of dividing the base capital by the total assets weighted by risk factors in percentage terms. This ratio was first introduced to the world's banks by the Ball Committee in 1988. In that year, the Ball Committee proposed a set of minimum capital requirements for banks, which later became known as the "Ball Pact."

According to the latest standards of the BALL Banking Supervision Committee, which consists of senior representatives of the central banks of the Group of 10 countries, a bank's capital should be at least 12.5% of its risk-weighted assets. The most important reason for the formation of international banking supervision statements and standards on capital requirements, known as BALL 1, 2 and 3, is preventive measures in dealing with financial crises.

The capital adequacy ratio is one of the ratios used to measure the health of the performance and financial stability of financial institutions and banks. Banks must have sufficient capital to cover the risks arising from their activities and be careful not to pass on the losses to depositors. In this regard, they must have a minimum amount of capital to cover their operational risks, which is approximately 12% of risk-weighted assets (the risk of each asset according to the nature of that asset and the level of risk associated with it) (Alizadeh et al. 1401).

For example, the risk of the fund account (cash) and the balance of bank accounts with the central bank of each country is equal to zero, but the risk of facilities granted to private individuals and legal entities is equal to 100%. The capital adequacy ratio index is considered one of the most important drivers in the process of profitability of financial institutions and banks. In line with the globalization of banking and the beginning of a new round of economic transactions, the Iranian banking system needs to carry out structural reforms and improve performance indicators, especially the capital adequacy ratio, through increasing bank capital, increasing profitability, improving the composition of assets and liabilities, reorganizing banks, paying attention to corporate governance, strengthening central bank supervision, reducing credit risk, reducing market risk, increasing asset returns, increasing return on equity, appropriate access to the stock market for financing at an appropriate rate, not financing from the withdrawal of retained earnings, appropriate management of financial leverage, and increasing liquidity. So that it achieves the

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minimum declared standard to maintain the competitive position of banks, as well as benefit from its other positive effects on the performance of the banking system, such as increasing efficiency (Saha, 2019).

According to Article 3 of the Capital Adequacy Regulation of 2003, the minimum capital adequacy ratio for all banks and credit institutions (both state-owned and non-state-owned) is set at 8 percent. This amount is based on the regulations of the Ball Committee (1), and the Central Bank may set higher limits for all or some banks and credit institutions in cases where international standards or the need to maintain the health of banks and credit institutions require it (Blasari, 2020).

One of the important factors that has been given special attention in this research is the capital adequacy ratio in the bank. In fact, this ratio is an indicator for assessing the health of the performance and financial stability of banks. Banks must have sufficient capital to cover the risk arising from their activities and be careful not to transfer the damage to depositors. As a result, they must have the minimum desired amount of capital to cover their operational risks. According to the regulations of the Ball Committee (1), the minimum capital adequacy ratio for all banks and credit institutions is set at 8 percent. However, risk management is a process in which all types of risks and threats are identified, measured and controlled. In other words, risk is inherent in banking activities and it seems impossible to practically eliminate risk from banking operations, hence the only solution is to manage it (Mohammadi, Ali, 2011).

There are four types of risk in the country's banking system.

-1Credit risk: Establishing appropriate lending structures and taking necessary precautions to protect the interests of lenders

-2Market risk: Assessing, testing and confirming the stated market risks including interest rate risk, exchange rate risk, adjustment risk and current risk.

-3Operational risk: Covering losses resulting from human error and inefficiency, failure of security measures, controls and technology, losses resulting from lack of awareness or inaccuracy of information, communications, contract and regulation enforcement risk, trust and credibility risk with control focus on mutual operations (Wu et al. 2013).

-4Liquidity risk: Estimating the bank's future liquidity needs

$$\frac{Capital\ base}{Asset-weighted\ average\ coefficients} = \text{Capital adequacy}$$

Supplementary capital + core capital = base capital

Legal reserve + paid-in capital + retained earnings + other reserves + paid-in capital = original capital

Stock investment revaluation reserve + fixed asset revaluation reserve + general partnership reserve = supplementary capital

-2-2The gap between stakeholders' expectations of banking services: The gap between expectations in auditing is the difference and gap between society's expectations of auditors and the auditors' responsibility according to auditing standards, which is called the expectation gap. For example, society believes that auditors are responsible for detecting fraud and errors in financial statements, while auditing standards state that: Because auditors' examination is based on sampling, absolute assurance cannot be given regarding the detection of all significant distortions. Legitimacy theory is also based on the assumption that an organization has a social contract with the society in which it operates. The social contract refers to the existence of a large number of explicit and implicit expectations of society regarding the way an organization operates. (Wusu and Frimpeng, 2012).

According to this theory, even corporate profits are a comprehensive or complete measure of organizational legitimacy. However, it is very clear that society's expectations have undergone fundamental and significant changes in recent years, and to meet these new expectations, companies must pay attention to the human, environmental, and social consequences and impacts of their activities in their business and respond favorably to them. If organizations fail to observe this concept of "social contract" and are unable to meet society's expectations, it may lead to the company being sanctioned by society (such as limiting financial capital and labor or reducing demand for the company's products) and

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consequently losing its legitimacy. The loss of legitimacy of companies from society's perspective creates many problems, restrictions, and obstacles for them, and as a result, even the goal of maximizing their profits as an absolute performance from the shareholders' perspective will not be achieved. As a result, according to the concept of legitimacy theory, it can be stated that social auditing is a tool that legitimizes the organization by evaluating and comparing the organization's value system with the general value system. The legitimacy theory states that organizations and companies can continue to exist as long as society considers them legitimate and gives them legitimacy. Therefore, society becomes aware of the implementation of social responsibilities when the implementation of these responsibilities by the organization is subject to social auditing and then the results of this audit are reported to the society. This increases the reputation and credibility of the organization in the eyes of public opinion. Therefore, social auditing is a process that enables a business unit to evaluate and justify environmental, economic, and social benefits and limitations. It is clear that an organization implements social auditing to create value and achieve the goals it has committed to (Sepasi et al., 2014).

## -3RESEARCH METHODOLOGY

This research is applied in terms of purpose and field in terms of data collection. In this qualitative research, the statistical population includes banking and academic experts who have a PhD in one of the fields of accounting, management and economics. Using purposive sampling, semi-structured interviews were conducted with 18 of them to collect information. And to analyze the information in this section, the grounded theory method, which is carried out in three stages of open coding, axial coding and selective coding, has been used, and finally, the social audit model in increasing capital adequacy in banks has been developed and designed.

In the quantitative part, the statistical population included the country's certified public accountants in 1401, from which 336 people were selected using random sampling and used to collect information from a questionnaire designed by the researcher in consultation with the supervisors and consultants and consisting of 102 questions, in such a way that 3 questions were considered for each component.

Thus, 15 questions were considered for the category of causal conditions of the model, which includes 5 components, 21 questions for the category of central phenomena, which includes 7 categories, 21 questions for the category of strategies, which includes 7 components, 12 questions for the category of intervening conditions, which includes 4 categories, 12 questions for the category of context conditions, which includes 4 components, and finally 21 questions were considered for the category of consequences, which includes 7 components. In the quantitative part, the structural equation method was used to analyze the data and validate the model using Smart PlS and SPSS software (Strauss and Corbin 1 2008).

-4Research questions

The main research question in the qualitative part:

How does the social responsibility audit model increase the capital adequacy ratio in banks?

The main research question in the quantitative part:

Do the indicators and practical factors of social audit in increasing the capital adequacy ratio in banks that are identified during the development of the model in this research reduce the gap between expectations of banks' activities in society?

-5Research hypotheses in the quantitative section

1- The causal conditions of the model have a positive and significant relationship with the central phenomenon. 2- The central phenomenon of the model has a positive and significant relationship with the strategies. 3- The strategies of the model have a positive and significant relationship with the outcomes. 4- The intervening conditions of the model have a negative and significant relationship with the strategies. 5- The conditions of the model's context have a positive and significant relationship with the strategies. 6- Compliance with social responsibilities has a positive and significant relationship with increasing the capital adequacy ratio in banks by reducing the gap of expectations resulting from the activities of banks in society.

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-6Research findings

To analyze the data in the qualitative section, the continuous comparative analysis technique of Strauss and Corbin (2008) or the grounded data method has been used in a systematic way, which includes three stages of open coding, central coding, and selective coding. The grounded theory approach is a type of qualitative research method that inductively employs a series of systematic procedures to develop a theory about the phenomenon under study.

In order to present the research model, the perspectives of 18 experts were used. In terms of gender, 15 were male and 3 were female. In terms of age, 3 were under 35 years old, 3 were between 35 and 45 years old, and 12 were over 45 years old. In terms of education, all 18 had a PhD. Finally, in terms of work experience, 5 had between 10 and 20 years old, and 13 had more than 20 years of work experience. In the quantitative section, the perspectives of 336 certified accountants were used. In terms of gender, 56 were female and 280 were male. In terms of education, 136 had a master's degree and 200 had a PhD. In terms of work experience, 86 had between 10 and 20 years old, and 250 had more than 20 years of experience. In the initial stage of the research and before the interview began, six open questions were considered. In the open coding stage, 650 codes were identified. (Amani et al., 2012).

Next, axial coding was carried out as the second stage of analysis in grounded theory. In this stage of coding, the relationship of other categories with the axial category can be realized in six dimensions, which are the axial phenomenon, causal conditions, background conditions, intervening conditions and consequences. The indicators of the social audit model in increasing the capital adequacy ratio in banks extracted from the interviews using the grounded theory method are presented in Table 1.

Table 1: Research model indicators

| Concepts | Subcategory | Category | Dimensions |
|---|---|---|---|
| -1Has this bank taken appropriate measures to increase capital from shareholders' cash contributions in the past fiscal year?<br>-2Has this bank taken appropriate measures to increase capital from asset revaluation in the past fiscal year?<br>-3Has the bank taken appropriate measures to increase capital from accumulated reserves in the past fiscal year? | Evaluating the bank's desirable and timely actions to increase capital | Social auditing in increasing capital adequacy ratio in banks | Axial Phenomenon |
| -1Has this bank been successful in increasing the ratio of assets to total assets of the banking network in the past fiscal year?<br>-2Has this bank been successful in increasing the ratio of net profit to total net profit of the banking network in the past fiscal year?<br>-3Has this bank been successful in increasing the ratio of deposit attraction to total deposits attracted in the banking network in the past fiscal year? | Evaluating the bank's performance in increasing its market share | | |

| Concepts | Subcategory | Category | Dimensions |
|---|---|---|---|
| -1Did this bank conduct a customer credit check for all payment facilities in the past fiscal year?<br>-2Did this bank obtain valid and sufficient collateral and guarantees for all payment facilities in the past fiscal year?<br>-3Did this bank insure all of its payment facilities in the past year? | Review of bank actions in reducing credit risk | Social auditing in increasing capital adequacy | پدیده محوری |

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| | | | |
|---|---|---|---|
| -1Has the bank been successful in managing its non-interest expenses in the past fiscal year?<br>-2Has the bank been successful in attracting low-cost individuals?<br>-3Has the bank been successful in reducing non-performing loans in the past year? | Evaluation of bank performance in reducing the cost of money | ratio in banks | |
| -1Has the bank been successful in reducing non-performing assets in the past fiscal year?<br>-9Has the bank been successful in reducing high-risk assets in the past fiscal year?<br>-10Has the bank been successful in reducing the ratio of non-performing assets to total assets? | Evaluation of bank actions in optimizing asset mix | | |
| -1Has this bank met the standard in the ratio of loans disbursed to total deposits in the past year?<br>-2Has this bank been successful in increasing the immediate ratio in the past year?<br>-3Has the bank been successful in collecting cash receivables in the past year? | Review of bank actions in liquidity management | | |
| -1 Have there been any desirable measures taken in this bank in the past year to increase the efficiency of its human resources?<br>-2Has the performance of the internal control system been desirable in the bank in the past year?<br>-3Have there been any desirable measures taken in this bank in the past year to increase the productivity and efficiency of banking software and hardware? | Review of measures to reduce operational risk | | |

Finally, after extracting 6 dimensions through analyzing categories, subcategories, and concepts through open coding, axial coding, and selective coding, the research model was designed and formulated as follows.

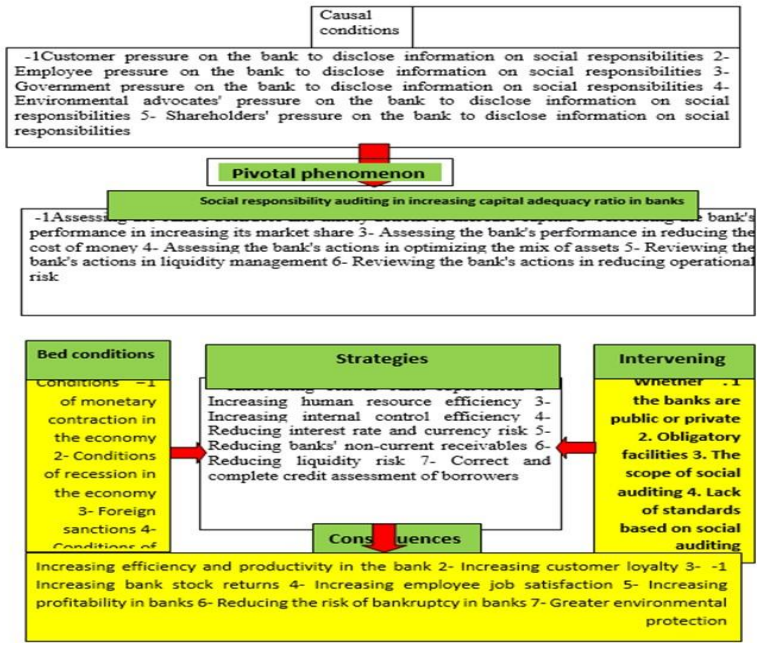


Figure 1-1 Final research model for implementing social auditing in increasing capital adequacy ratio in banks

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After presenting the research model, the structural equation modeling method was used to validate the model with the help of Smart PlS software. A structural equation model consists of two components: a structural model that specifies the causal structure between latent variables (construct) and a measurement model that defines the relationship between latent variables and observed variables (questions, indicators, items, measures).

| 1-1 Measurement Model Fit (External) |
|---|
| 1-1-1Index Reliability: Cronbach's Alpha, Composite Cronbach's Alpha (Composite Reliability) |
| 1-1-2Convergent Validity: Factor Loading Coefficients, Construct AVE Coefficients |

The external (measurement) model was evaluated based on three indicators of convergent validity, composite reliability, and Cronbach's alpha. A summary of the results of the measurement model fit assessment is presented in Table 2.

Table 2. Fit assessment of the measurement part of the research model

| Cronbach's alpha | Combined Reliability (CR) | AVE value | Number of items | Model Categories |
|---|---|---|---|---|
| 850/ . | 945/0 | 771/ . | 15 | Causal Conditions |
| 863/ . | 954/0 | 741/ . | 21 | Focused Phenomenon |
| 844/ . | 933/0 | 681/ . | 21 | Strategies |
| 871/ . | 961/0 | 873/ . | 12 | Intervening Conditions |
| 850/ . | 940/0 | 805/ . | 12 | Contextual Conditions |
| 884/ . | 973/0 | 820/ . | 21 | Consequences |

The average variance extracted (AVE) shows the correlation of a construct with its indicators, and the higher this correlation, the greater the fit. Fornell and Larker believe that convergent validity exists when the AVE is greater than 0.5. Convergent validity exists when the CR (composite reliability) is greater than 0.8. Also, the CR must be greater than AVE. In this case, the condition of convergent validity will also exist. According to Table 2, the average variance extracted (AVE) is greater than 0.5, so the convergent validity is confirmed, and because Cronbach's alpha and composite reliability of all variables are greater than 0.7, all variables are also confirmed in terms of reliability.

Internal model fit: In the internal model section, the relationship between the latent variables of the research is examined.

| 1.2Structural (internal) model fitting |
|---|
| 1-2-1Z-values or t-values 1-2-3 R2 criterion (coefficient of determination) |
| 1-2-2Effect size criterion (2f ) 1-2-4 Q2 criterion (Stone-Geiser criterion) |
| 1-2-5VIF criterion (variance inflation) |

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Table 3- Collinearity indices, direct effects of the internal research model

| Effect size (f2) | Direct effect | | | | | Colinear (VIF) | Route |
|---|---|---|---|---|---|---|---|
| | Confidence interval | | Values | | | | |
| | 5/97 % | 5/2 % | sig | T | B | | |
| 960/6 | 954/0 | 914/0 | 001/0 | 60/103 | 936/0 | 1 | Causal conditions -> Central phenomenon |
| 084/1 | 527/0 | 144/0 | 001/0 | 319/3 | 34/0 | 38/1 | Central phenomenon -> Strategies |
| 076/1 | 119/0- | 463/0- | 002/0 | 067/3 | 273/0- | 064/1 | Intervening conditions -> Strategies |
| 159/1 | 523/0 | 215/0 | 001/0 | 62/4 | 361/0 | 75/1 | Contextual conditions -> Strategies |
| 670/5 | 941/0 | 899/0 | 001/0 | 31/81 | 920/0 | 1 | Strategies -> Consequences |

The first criterion for examining the internal model is to examine the collinearity of the variables. For this purpose, the tolerance index and the variance inflation factor (VIF) are used. A tolerance level of less than 0.2 (VIF higher than 5) indicates collinearity between the variables. As the results of Table 3 show, the condition of non-collinearity is met.

Path coefficients (B): The second criterion for evaluating the internal model is the path coefficients, which are used to examine their significance using the autocorrelation procedure. This coefficient has a value between -1 and +1, and its value of zero means the absence of a linear causal relationship between the two latent variables, a positive value means a direct relationship, and a negative value indicates an inverse relationship. To examine the significance of the path coefficient, the t-statistic is used, which must be greater than 1.96. When the correlation of the variables is identified, a significance test must be performed. In this study, the autocorrelation method was used, which yields the t-statistic. Figure 2 shows the t-values for evaluating the structural part of the model, and considering that all the actual numbers on the paths are higher than 1.96, this indicates the significance of the paths, the suitability of the structural model, and the confirmation of all the research hypotheses.

In Table 3, the effect size of each of the effects It has also been shown that according to these results, it is observed that the size of the effect of causal conditions on the pivotal phenomenon and strategies on outcomes is greater than the rest of the paths with values of 6.96 and 5.67, respectively.

Coefficient of Determination (R2) criterion (Prediction Accuracy of the Model): The next criterion, which is the most common criterion for evaluating the internal model, is the coefficient of determination (R2), which indicates the prediction accuracy of the model (how much of the changes in the dependent variable are measured by the independent variable) and is a value between [1 and 0]. The higher the value of the coefficient of determination related to the endogenous constructs of the model, the better the model fits. Three values of 0.19, 0.33 and 0.67 are considered as the criterion values for weak, medium and strong values, respectively (Chain, 1998). As the results of Table 4 show, the coefficient of determination of outcomes is 0.851, strategies is 0.894 and phenomenon is 0.894. The axial value of 0.873 has a strong value.

Stone-Geisser Q2 criterion (model predictive power): The $Q^2$ index was introduced by Stone and Geisser (1975) and determines the predictive power of the model in the dependent variables. This criterion is calculated by the Blindfolding procedure, in which data points in the determinants of endogenous variables are omitted and the parameters are estimated using the remaining points. A Q2 value greater than zero for a given endogenous latent variable indicates a good fit of the path model predictor for this particular construct. If the Q2 index value is positive, it indicates that the model fit is favorable and the model has adequate predictive power (Hensler et al., 2009: 303). The results of this criterion are presented in Table 4 and are favorable.

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Table 4- R2 and Q2 values of latent variables

| $Q^2$ | $R^2$ | متغیر |
|---|---|---|
| 622/0 | 873/0 | پدیده محوری |
| 586/0 | 894/0 | راهبردها |
| 672/0 | 851/0 | پیامدها |

Examination of the overall model (goodness of fit index):

After evaluating the measurement and structural models, the overall model (the sum of the measurement and structural models) should also be examined. For this purpose, Tenenhaus et al. (2004) have introduced the GOF index. $GOF = \sqrt{\overline{R^2} * \overline{Communality}}$

Table 5- Overall model fitting results with GOF criterion

| GOF | Communality | $R^2$ | Component |
|---|---|---|---|
| 731/0 | 597/0 | 873/0 | Axial Phenomenon |
| | 543/0 | 894/0 | Strategies |
| | 698/0 | 851/0 | Consequences |
| | 612/0 | 872/0 | Average |

As can be seen in Table 5, the GOF criterion value was equal to 0.731 and more than 0.36, which indicates a strong fit of the overall research model (Habibi et al., 1401).

Inferential statistics of research hypotheses:

Path coefficient (B) and P VAL: To confirm the research hypotheses or confirm the paths in the structural equation modeling method, partial least squares, the autocorrelation method was used, which yields the t statistic.

At the 5% error level, if the bootstrapping statistic t-value is greater than 1.96, the observed correlations (path coefficients B) are significant. If the t values are greater than 1.96, it indicates the correctness of the relationship between the structures and, as a result, the research hypotheses are confirmed at a confidence level of 95%. The results obtained in Table 3 indicate that with 95% confidence, causal conditions have a positive and significant effect on the central phenomenon, the central phenomenon has a positive and significant effect on strategies, intervening conditions have a negative and significant effect on strategies, context conditions have a positive and significant effect on strategies, and strategies also have a positive and significant effect on outcomes.

-Hypothesis 6: Observing social responsibilities in increasing capital adequacy in banks has a positive and significant relationship with reducing the gap in expectations resulting from the activities of banks in society.

According to the data analysis, it was found that the Spearman correlation coefficient between the two variables of observing social responsibilities in increasing capital adequacy in banks and reducing the gap of expectations resulting from the activities of banks in society is 0.725 and with a p value (significance) of 0.001, which is less than the significance level, so at this level the hypothesis of no relationship is rejected and as a result there is a significant relationship between observing social responsibilities in increasing the capital adequacy ratio in banks and reducing the gap of expectations resulting from the activities of banks in society. This relationship is positive and direct. Table

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6 - Spearman correlation test statistics related to the relationship between observing social responsibilities in increasing capital adequacy in banks and reducing the gap of expectations resulting from the activities of banks in society

| Reducing the Expectations Gap from Banks' Activities in Society | | | | | Variable |
|---|---|---|---|---|---|
| Relationship type | Existence of a relationship | Spearman | | | |
| | | Number | Meaningfulness | Correlation coefficient | |
| Direct | Yes | 336 | 001/0 | 725/0 | Adherence to social responsibilities in increasing capital adequacy ratio in banks |

## CONCLUSION AND DISCUSSION:

The aim of this research is to identify practical indicators for the practical implementation of social auditing in increasing the capital adequacy ratio in banks and its effect on reducing the expectation gap in society. Therefore, in the qualitative part that led to the design of the model, the category of social auditing in increasing the capital adequacy ratio in banks was identified as a central phenomenon. This type of auditing is carried out by examining and evaluating the activities of banks to increase the capital adequacy ratio in 7 subcategories, which include 1- evaluating the bank's desirable and timely actions to increase capital 2- evaluating the bank's performance in increasing its market share 3- reviewing and evaluating the bank's actions in reducing credit risk 4- evaluating the bank's performance in reducing the cost of money 5- evaluating the bank's actions in the optimal mix of assets 5- reviewing the bank's actions in liquidity management 6- reviewing the actions in reducing operational risk.

In general, if banks can increase capital through their own appropriate and timely actions from retained earnings, asset revaluation, or partners' cash contributions so that they can advance their development plans more quickly and gain a greater market share, and observe the standard ratio of their costs to their resources with forward-looking and responsible planning, and thus manage the bank's liquidity efficiently, they should reduce their risky and stagnant assets and move towards attracting cheap deposits so that they can support the country's production by paying long-term facilities at low rates. They should also conduct a complete customer credit check for their loans and receive valid documents and guarantees according to the Central Bank's rules, and carry out effective and timely activities to increase the level of satisfaction of their employees so that they can reduce internal control costs and, in turn, increase the level of efficiency and productivity of employees, and also have appropriate planning for the timely collection of their non-current receivables. It can be concluded that banks have fulfilled their social responsibilities in increasing capital adequacy.

But in the quantitative part of the research, in order to validate the social audit model in increasing capital adequacy in banks, the structural equation method was used with the help of SmartPLS and SPSS software, which in fitting the external model, the factor loading was more than 0.5 in all cases and the t-statistic was more than 1.96. Also, the average variance extracted in all structures is more than 50%, which indicates appropriate validity. Therefore, the constructs have been measured correctly, Cronbach's alpha and composite reliability in all constructs are greater than 80%, and composite reliability is also greater than the average extracted variance, which indicates appropriate reliability and, as a result, appropriate fit of the external model. However, in assessing the fit of the internal model, the first criterion for examining the internal model is the collinearity of the variables, for which the variance inflation index was used, as shown in Table 3. The condition of non-collinearity has been met. The second criterion for evaluating the internal model is the path coefficients, which are values between -1 and +1, and the autocorrelation procedure has been used to examine their significance. The t-statistic was used to examine the significance of the path coefficient, and this statistical value was greater than 1.96. Given that all the actual numbers on the paths are higher than 1.96, this indicates that the paths are significant, the structural model is appropriate, and all the research hypotheses are confirmed. (Daviri et al., 2013).

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Therefore, the results showed that the causal conditions of the model have a positive and significant relationship with the central phenomenon, the central phenomenon has a positive and significant relationship with strategies, the context conditions have a positive and significant relationship with strategies, the intervening conditions have a negative and significant relationship with strategies, and that strategies have a positive and significant relationship with the model outcomes.

Also, in order to examine the fit of the internal model, two other criteria were used, namely the coefficient of determination and the Stone Geiser criterion, both of which are calculated for the dependent variables and indicate the accuracy of the model's prediction (how much of the changes in the dependent variable are measured by the independent variable). As the results of Table 4 show, the Stone Geiser index is positive and the coefficient of determination of outcomes is 0.851, strategies is 0.894, and the axial phenomenon is 0.873, which have strong values. As a result, the internal model also has a good fit, and finally, the GOF index introduced by Tenenhaus et al. (2004) was used for the overall fit of the research model. As can be seen in Table 5, the value of the GOF criterion was equal to 0.731 and more than 0.36, which indicates a strong fit of the overall research model.

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