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The impact of an integrated green management program and organizational factors on green banking, social and security factors

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Abstract

Today, one of the big challenges of banks is the greening of actions and, most importantly, maintaining social and security factors as one of their important tasks, which can increase public trust and reduce people's concern about the impact of their activities on the environment, which itself It requires extensive research that some researchers have done more or less. However, less research has considered these important issues from the perspective of the effects of the integrated green management program and internal and external organizational factors. Based on this, the current study aims to investigate the impact of integrated green management programs and internal and external organizational factors on green banking and social and security factors. The current research method is a practical and descriptive survey. The statistical population, including 400 experts on the banking system, were selected as a sample using a stratified random method. The data collection tool was a questionnaire. The results of structural equation modelling using Smart PLS software showed that the integrated green management program has a significant effect on internal organizational factors. Also, the integrated green management program has a significant impact on external organizations. In addition, internal organizational factors have a significant effect on green banking, as well as social and security factors.

Keywords: green integrated program, internal and external organizational factors, green banking, social and

security factors

 $2020~{\rm MSC};\,68{\rm M}25,\,91{\rm B}42$

1 Introduction

Banking plays a vital role in improving the level of environmental sustainability and social responsibility of investment [15]. Banks do not pollute the environment by themselves, but they are usually in a banking relationship with some investment/company projects that may be polluting in the future. Therefore, in the last decade, the banking

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sector has been trying to play a role in promoting environmental sustainability and improving social responsibility. which started operating under the title of green banking [8]. Green banking is a type of banking that pays attention to environmental and social factors while performing banking operations. This type of banking is also called ethical banking, which aims to protect the environment in addition to profitability. Also, green banking is a term that refers to methods and solutions that make banks sustainable in economic, environmental and social dimensions, and its purpose is to create banking processes and use information technology and physical infrastructure as effectively as possible, and the maximum reduction and zeroing of pollutants in the environment [13]. Banking saves people's time and money. But e-banking has a hidden advantage that is felt only at the macro level, and that is saving paper. Today, paperless banking or green banking has many fans in the world, and one of the moral and social goals of the world's big banks is to do all banking without paper [6]. On the other hand, in addition to saving time and paper, banks can attract new customers who are in favour of the environment, and these days their number is increasing around the world, to the Green Bank. Also, in addition to preserving the environment, paperless banking also reduces theft and forgery, and this is one of the other reasons that lead customers to electronic banking [5].

Today, in the world, the banking system, along with other institutions, has a responsibility and an effective role in the restoration and protection of the environment, and the expectations of environment-friendly groups in the world from the banking system are not a voluntary action, but a mandatory social duty. found [3]. The phenomenon of green banking was created with this goal in the banking systems of the world and today it has made considerable progress in theoretical and operational dimensions. The interesting thing to note is that Islamic banking is not indifferent to this issue and pays special attention to green banking under ethical banking [8]. It seems that considering the possibility of larger environmental crises in Iran, this responsibility is felt more concretely by the banking system of Iran. What is important in the meantime is that the critical conditions of the future trend of the environment in the country require that green banking is not limited to a few limited banks like the Agricultural Bank and that the entire banking network under the management of the Central Bank is a pioneer in this field and is responsible for larger roles. Until recently, environmental concerns were not considered related to the business operations of banks and financial institutions. Traditionally, the concern of the banking sector is for the environmentally destructive activities of customers, such as interference or interference in their business affairs. However, it is now recognized that dealing with the environment poses risks to their business. Although banks and financial institutions are not directly affected by environmental degradation, there are indirect costs for banks. Due to strict environmental regulations imposed by competent authorities across countries, industries must follow certain standards to conduct their business. If it fails, it leads to the closure of industries, which leads to the possibility of bank default [16]. Moving towards a thriving low-carbon economy can lead to innovation, increased productivity and the creation of new, well-paying jobs. While the effects of climate change are increasingly dangerous for the country's health, economy and environment, economists have also realized that climate change control and the development of a low-carbon economy have financial rewards. Banks can provide important leadership for the economic transformation needed, providing new opportunities for financing and investment policies as well as portfolio management to create a strong and successful low-carbon economy. Economists say that significant funding from the private sector is needed to achieve the level of investment needed to control the effects of climate change [20].

Also, climate change is the most complex problem that the world is facing. Throughout the world, continuous efforts have been made to measure and reduce the risk of climate change caused by human activities. Many countries of the world have accepted the necessary commitments to reduce climate change. As citizens of socially responsible companies, Iranian banks have a major role and responsibility in completing the government's efforts to significantly reduce carbon emissions. Although banks are considered environmentally friendly and do not have much impact on the environment through their "internal" operations, the "external" impact on the environment through the activities of their customers is significant. The banking sector is one of the main sources of financing industrial projects such as steel, paper, cement, chemicals, fertilizers, power, textiles, etc., which causes the most carbon emissions. Therefore, the banking sector can play an intermediary role between economic development and environmental protection, to promote environmentally sustainable investment and social responsibility. "Green banking" refers to banking business that is carried out in such areas and is carried out in a way that helps to reduce the overall external carbon emissions and domestic carbon footprint. To help reduce foreign carbon emissions, banks should finance green technology and pollution reduction projects. Although banking is never considered as a polluting industry, the current scale of banking operations due to high energy use (such as electricity, air conditioning, electronic/electrical equipment, information technology, etc.), the carbon footprint of banks, paper waste has significantly increased the lack of green buildings, etc. Therefore, banks should adopt technology, processes and products that lead to a significant reduction of their carbon footprint as well as developing a sustainable business [5]. It should also be kept in mind that today, in the world, the banking system, along with other institutions, has a responsibility and an effective role in the restoration and protection of the environment, and the expectation of environment-friendly groups in the world from the banking system is not

as a voluntary action, but as A mandatory social duty has emerged [21]. In order to achieve their green goals, banks need a coherent green management program so that they can reduce waste solids and recycle them in buildings and vehicles through the management of energy, water, raw materials, equipment and paper consumption [11]. Of course, there are other factors that some of the past researchers such as Shahbandarzadeh, Aracil, Bose, Úbeda, Herath and Hossain which they consider as internal and external factors [2, 4, 11, 12, 19, 25]. Organizations say they can be effective on green banking and social and security factors. Because the actions of the organizations themselves are influenced by such factors that should be studied in order to become green. Most of the researchers have investigated internal and external organizational factors without considering some important internal dimensions, i.e. research and development, creating and implementing necessary changes, and extra-organizational dimensions, especially culture-building based on issues and factors, which is a research gap. Because ignoring each of these aspects can make it difficult for banks to become green and maintain social and security factors. Therefore, the current research aims to investigate the impact of integrated green management programs and internal and external organizational factors on green banking and social and security factors.

2 Literature

2.1 Green banking

Today, Iran's environmental challenges have become one of the concerns. The unpleasant process of destruction of forests and green pastures, drying up of rivers and lakes, significant reduction of underground water, air pollution in big cities, production of greenhouse gases, erosion and destruction of soil, reduction of biodiversity and all kinds of animal species, genetic manipulation of food and the problem of waste sectors an important part of this tragedy is nature in the country [10]. Obviously, protecting the environment and preventing practices that harm these God-given blessings require comprehensive attention and support. Today, in the world, the banking system, along with other institutions, has a responsibility and an effective role in the restoration and protection of the environment, and the expectations of environment-friendly groups in the world from the banking system are not a voluntary action, but a mandatory social duty. found [21]. The phenomenon of green banking was created with this goal in the banking systems of the world and today it has made considerable progress in theoretical and operational dimensions. The interesting thing to note is that Islamic banking is not indifferent to this issue and pays special attention to green banking under ethical banking. It seems that considering the possibility of larger environmental crises in Iran, this responsibility is felt more concretely by the banking system of Iran. What is important in the meantime is that the critical conditions of the future trend of the environment in the country require that green banking is not limited to a few limited banks like the Agricultural Bank and that the entire banking network under the management of the Central Bank is a pioneer in this field and is responsible for larger roles. The rapid expansion of green banking in the global banking scenario is due to the recognition of the important role that banks can play in protecting and reducing the dangerous effects of industrialization on our society. The internal operations of the bank and the financing of unstable industries have a profound effect on determining the use and distribution of resources in society. For this reason, the International Finance Corporation (IFC) has identified the need for environmental, social and governance (ESG) practices by banks. Green banking is Screening and managing environmental and social (E&S) risks as part of banks' decision-making processes and granting green loans through supporting businesses and industries with a positive impact on the environment and society [5]. Green banking also offers innovative green products to support activities that are not harmful to the environment and to help preserve the environment. Its purpose is to use a bank's resources responsibly, avoid corruption and prioritize the environment and society [23].

2.2 Social and security factors of green banking

Currently, awareness and commitment to environmental issues are growing and all industries have taken fundamental steps in this field. Financial institutions and banks are also, directly and indirectly, effective in solving environmental problems, including measures such as the development of electronic banking services, environmental risk orientation and management, financing of projects, and culturalization of green banking services [17]. But it should be kept in mind that protecting the environment will not be possible only with financing; Rather, all institutions of the country, both public and private, have a duty in this field; However, in addition to all these activities, paying special attention to green banking can be useful to an optimal extent [14]. If banks have a comprehensive green framework or program, they can go through the social responsibility of the bank towards the environment, directing facilities towards environmental protection, green policies and adapting the bank to the environment, not only traffic. and reduce the number of people coming to the bank, but most importantly, increase the public's trust in their activities and create stability and security in the bank in terms of reducing theft [11]. In this regard, Bukhari

stated in his study that paperless banking, in addition to protecting the environment, also reduces theft and forgery, and this is one of the other reasons that lead customers to electronic banking [5].

2.3 Integrated green management program

The growth and development of companies at the global level, despite contributing to the economic prosperity of societies, brings negative social and environmental effects at the global level. Compared to other companies, banks play a key role in institutionalizing social and environmental responsibility in societies. Since banks are in charge of monitoring and controlling the flow of capital, providing financing facilities for projects and insurance measures, they are able to exert influence on the functioning of businesses under their support and force companies to respond to social and environmental problems caused by Do Your Own Business. In this regard, banks' non-compliance with social and environmental responsibility can bring significant investment and credit risks for them [22]. Also, nowadays, banks are one of the main consumers of energy due to their central building, regional offices and branch network. Computer systems, ATMs and other technologies play an important role in exploiting resources, especially electricity consumption, which can have a negative impact on the environment [18]. Accordingly, banks need a coherent green management plan to implement their green goals. Researchers such as Bose, Ubeda, Herath, and Hossain, these programs include the management of energy consumption, water, raw materials, equipment and paper, reduction of waste solid materials and their recycling in the building [4, 11, 12, 25]. vehicles and means of transport have been announced by all executive bodies and public non-governmental institutions and institutions within the framework of the relevant laws [23]. For example, Herath and Ubeda showed that this program includes aspects such as the bank's social responsibility towards the environment, which helps in urban reconstruction and modernization of the transport fleet [11, 25]. It supports environmentally friendly activities, interacts with other organizations to protect the environment, and considers environmental protection as an organizational duty and promotes environmental protection. Ubeda [25] also includes the development of green banking, which deals with the development of human resources, the expansion of electronic services, reducing paper consumption, making banking services offline, knowing that one of the other dimensions of the green program is the integrated management of the bank's adaptation to the environment, which It includes the compatibility of organizational design with the environment, administrative waste management, reducing fuel and energy consumption, employing an environmental expert, proper insulation, and using renewable and clean energy and devices [4]. Another dimension is directing facilities towards environmental protection, which includes paying attention to climatic conditions in the assessment of facilities, directing facilities towards environmental protection, requiring customers to have environmental standards, environmentally friendly plans, supporting villagers and using It is renewable energy. Finally, there is the green policy, which deals with the development of green industries, support for start-ups or environmentally friendly companies, and reduction or elimination of paper consumption [13].

2.4 Internal and external factors of green banking

Organizations, as social systems, are continuously influenced by a series of internal and external factors. Organizations that are established to produce goods or provide services have a certain level of communication with the society according to their size, goals and scope of operation. At the same time, it should be noted that external factors have a dynamic and variable nature. The environmental factors of any organization are the origin of any kind of organizational change and transformation. From this point of view, any movement in the organization should be aimed at external factors. Today's environment of organizations is without a doubt, the most changing, effective factor in organizations. The boundaries between organizations and industrial and service sectors are changing, and various political, social, economic and technical developments make organizations forced to take measures and decisions to prepare themselves to adapt to changing environmental factors (at any moment).

The main axis in the analysis of organizations from a systemic point of view is the compatibility of two series of internal and external factors for the continuity and dynamism of organizations. Organizations obtain the materials and energy needed to continue their activities from the surrounding environment as (input) and after performing operations, they return the result to the environment in the form of (output) and in the form of goods or services. Accurate recognition of extra-organizational factors and adoption of appropriate policies to deal with them is one of the strategic goals of management in organizations of different societies at the beginning of the 21st century. Considering the quantity and quality of influence, environmental factors play a role in the growth or stagnation of organizations' activities, and in the meantime, the characteristics of the organizational factors determine the limits and gaps of the effects [4]. organizations are going green. Because greening is directly related to people's health, and if an organization can reduce the negative environmental consequences of its activities, it can increase public trust, reduce traffic, and increase stability and security [11]. In this regard, some researchers have stated that internal

organizational factors include attention to the review and pathology of administrative bureaucracy, organization agility, attention to environmental considerations in interactions with customers, inclusion of environmental values in the strategy document, development of non-attendance services, Reducing the number of branches, digitizing affairs, hiring talented manpower and studying the experiences of other countries and banks, external organizational factors include the review and revision of upper-level documents and culture building (issues and agency) with indicators such as the approval of laws to protect The environment is the government's support for green banking, teaching the concepts of green banking, explaining the advantages of green banking, creating the need for green banking in customers, social networks and public media [4, 11].

2.5 Experimental background

Hajjaran identified the components of innovative green banking based on biological ethics to obtain a sustainable competitive advantage [10]. The research method in the present research was qualitative. The community of the present research was formed by banking industry experts. The results showed that 25 components were accepted as influential components in innovative green banking based on bioethics to gain sustainable competitive advantage in the banking industry, among them quality, product innovation, demand conditions, environmental innovation and customer integration in The process of green innovation was identified as the most important influential component in innovative green banking models based on bioethics to gain sustainable competitive advantage. Conclusion: The results of the research have shown that the most important influential components in innovative green banking based on bioethics to gain a sustainable competitive advantage include quality, product innovation, demand conditions, environmental innovation and customer integration in the green innovation process. Hafezi identified and prioritized factors affecting the performance of green banking using the FAHP technique [8]. The results showed that the factors affecting the performance of green banking in this research were: organizational policy, organizational culture, daily operations, employees and customers. Herath and Herath examined the impact of green banking activities on customer satisfaction and proposed a conceptual model of customer satisfaction on platform banking [11]. The results showed that security and trust features, ease of use, value creation features, and environmental and social issues of green banking activities can affect customers' overall satisfaction. David investigated consumer behavior and its impact on the green banking approach in the Sri Lankan banking sector [20]. The findings of the research showed that consumer behavior had an effect on the average level of acceptance of the green banking approach. The results of the hypothesis test showed that there is a positive relationship between consumer behavior and the intention to adopt the green banking approach in Sri Lankan commercial banks. The analysis showed that ICCI banks and SBI banks are the two banks that provide major green banking services to their customers.

3 Conceptual model

The present study, in line with previous researches, in order to examine the integrated green program and internal and external factors on green banking and social and security factors, a model is shown in Figure 1.

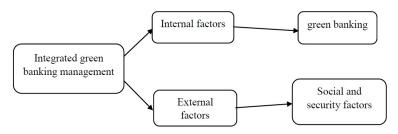


Figure 1: Research conceptual model

4 Hypotheses

- 1. The integrated green management program has a significant impact on internal organizational factors.
- 2. The integrated green management program has a significant impact on external organizational factors.
- 3. Internal organizational factors have a significant effect on green banking.
- 4. Internal organizational factors have a significant impact on social and security factors.
- 5. External organizational factors have a significant impact on green banking.
- 6. External organizational factors have a significant impact on social and security factors.

5 Research methodology

The research method of this study is applied. The research strategy was a descriptive survey. The statistical population consisted of bank experts who were selected based on the limitlessness of the statistical population through Morgan's table, 400 people were selected as a sample by stratified random method. The results showed that the structural model has a strong fit. At this stage, a questionnaire based on the designed model was created to evaluate and fit the developed model, and then the developed model was examined in the field for fitting. In order to evaluate the measurement model of the research, exploratory factor analysis, confirmatory factor analysis, convergent validity, divergent validity, composite reliability and Cronbach's alpha reliability were used and in order to fit the model, the GOF criterion was used. PLS software was used for data analysis.

6 Findings

6.1 Testing measurement models

In order to measure validity, there are various methods, and in this research, due to the fact that the research variables are composed of several dimensions (components), the confirmatory factor analysis test has been used. Therefore, the KMO index and Bartlett's test have been used. Based on these two tests, the data are suitable for factor analysis when the KMO index is greater than (0.6) and close to one and the sig of Bartlett's test is less than (0.05). The output of these tests for each questionnaire is presented in Table 1.

Table 1: KMO and Bartlett test for questionnaire questions

KM	0.745	
	χ^2	4939.273
Bartlett's test	Degrees of freedom	2775
	Sig	0.001

According to Table 1; The KMO index in the present study is equal to 0.745 and above the value of 0.6, which is an acceptable figure and indicates that the selected sample is sufficient to perform factor analysis.

6.2 Findings of confirmatory factor analysis

The results showed that the factor load of no question of the questionnaire is less than 0.5. Therefore, no question will be excluded from the analysis. Also, Cronbach's alpha for all constructs is above 0.7, which shows high convergence validity. It also states that the constructs (hidden variables) have high validity for the model fit. In addition, the composite reliability values for all structures are reported to be higher than 0.7, which shows that the structures have good composite reliability. To check the convergent validity, the Average Variance Extracted Index (AVE) has been calculated. Convergent validity exists when composite reliability is greater than 0.7 and AVE is greater than 0.5. Also, composite reliability should be greater than AVE. According to the results of the confirmatory factor analysis, all the above three conditions have been met, so the questionnaires of this destination have convergent validity.

6.3 Structural equation modeling

In this section, using PLS software, the effect of integrated green management program and internal and external factors on green banking and social and security factors will be discussed.

Data can be seen as a variable

$$X: U \to X$$
 where $x \in X$ (6.1)

Appears with probability P[X = x]

Data are encoded by strings (words) over an alphabet \sum .

A code is a function

$$C: X \to \sum$$
 (6.2)

C(x) is the code word associated with x.

Length of the code word is written as

Expected length of a code is

$$l(C) = \sum_{x \in \chi} l(C(x)) \mathbb{P}[X = x]. \tag{6.3}$$

The concatenation of code words

$$C(x_1, ..., x_k) = C(x_1)C(x_2)...C(x_k)$$
(6.4)

The code word of the empty string is the empty string itself:

$$C(\varepsilon) = \varepsilon \tag{6.5}$$

6.4 Investigating the impact of the integrated green management program on internal and external factors

Diagram 1 shows the results of the analysis related to the impact of the integrated management green program on internal and external factors. In addition, diagram 2 shows the t-scores related to each of the relationships in model 1.

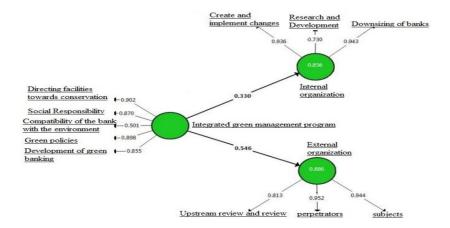


Diagram 1: The test of the impact model of the integrated green management program on internal and external organizational factors

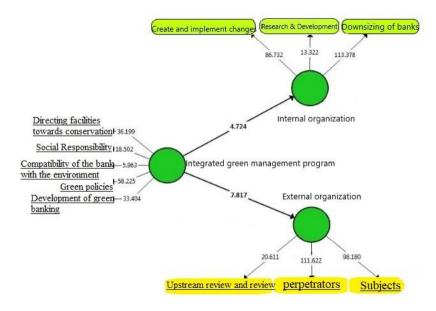


Diagram 2: T-scores related to the model test of the impact of the integrated green management program on internal and external organizational factors

As diagram 2 shows, the value of T corresponding to each of the coefficients of the mentioned path is greater than the critical value at the level of 0.05 (1.96). Therefore, all these coefficients are significant at the 0.05 level.

Table 2: Path coefficients and t-scores related to the model of the impact of the integrated green management program on internal and external organizational factors

Path	Path Coefficient	T statistics	The significance	Conclusion	R^2	Q^2
			level			
Integrated green management program	0.330	4.724	0.001	Affirmation of	0.856	0.611
\rightarrow internal organizational factors				relationship		
Integrated green management program	0.546	7.817	0.001	Affirmation of	0.886	0.679
\rightarrow external factors				relationship		

As can be seen from Table 2, the rate for internal factors is equal to 0.856 and for external factors is 0.886, which is considered strong. According to Table 2, the rate for internal factors is equal to 0.611 and for external factors is 0.679, which is considered strong. Therefore, it can be said that the studied structural model is of good quality and the observed values are well reconstructed, and the studied model has a high predictive ability and can predict the endogenous variable.

6.5 Investigating the influence of internal organizational factors on green, social and security banking

Diagram 3 shows the results of the analysis related to the influence of internal organizational factors on green, social and security banking. In addition, diagram 4 shows the t-scores related to each of the relationships in model 3.

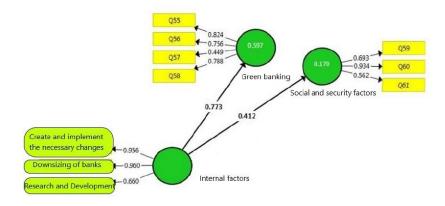


Diagram 3: Model test of the influence of internal organizational factors on conditions and results

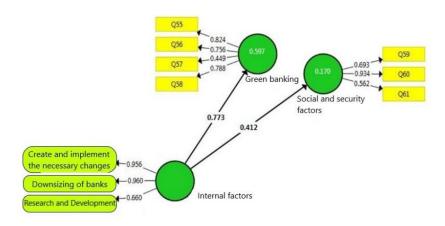


Diagram 4: T-scores related to the model test of the influence of internal organizational factors on conditions and results

As diagram 4 shows, the value of T corresponding to each of the coefficients of the mentioned path is greater than the critical value at the level of 0.05 (1.96). Therefore, all these coefficients are significant at the 0.05 level.

In Table 3, the values and for the components of conditions and results can be seen. As it is clear from the data in the table, these values are estimated at a weak and moderate level. The reason for this is the prediction of criterion variables by a forecaster.

Table 3: Path coefficients and t-scores related to the model of the influence of internal organizational factors on green banking and social

and security factors

Path	Path Coefficient	T statistics	The significance	Conclusion	R^2	Q^2
			level			
Internal organization \rightarrow social and se-	0.412	6.458	0.001	Affirmation of	0.170	0.279
curity factors				relationship		
Internal organization \rightarrow green banking	0.773	31.155	0.001	Affirmation of	0.597	0.519
				relationship		

6.6 Examining the impact of external organizational factors on green banking and social and security factors

Diagram 5 shows the results of the analysis related to the impact of extra-organizational factors on green, social and security banking. In addition, diagram 6 shows the t-scores related to each of the relationships in model 5.

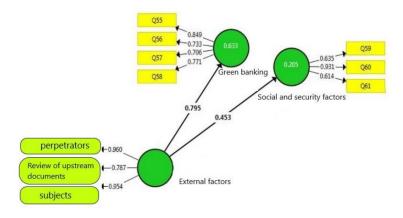


Diagram 5: Model test of the influence of external factors on conditions and results

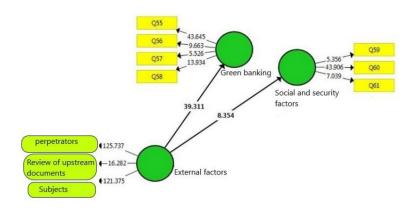


Diagram 6: T-scores related to the model test of the influence of extra-organizational factors on green banking and social and security factors

As diagram 6 shows, the value of T corresponding to each of the coefficients of the mentioned path is greater than the critical value at the level of 0.05 (1.96). Therefore, all these coefficients are significant at the 0.05 level.

Table 4: Path coefficients and t-scores related to the model of the influence of extra-organizational factors on conditions and results

Path	Path Coefficient	T statistics	The significance	Conclusion	R^2	Q^2
			level			
Internal organization → social and se-	0.453	8.354	0.001	Affirmation of	0.205	0.291
curity factors				relationship		
Internal organization → green banking	0.795	39.311	0.001	Affirmation of	0.633	0.539
				relationship		

In Table 4, the values R^2 and Q^2 for the components of conditions and results can be seen. As it is clear from the data in the table, these values are estimated at a weak and moderate level. The reason for this is the prediction of criterion variables by a forecaster.

6.7 The coefficient of determination (R^2)

The basic criterion for evaluating the endogenous variables in the path model is the coefficient of determination. This index shows how many percent of endogenous variable changes are made by exogenous variables. The values of 0.19, 0.33, and 0.67 for the endogenous (dependent) variables in the structural (internal) path model are described as weak, moderate, and significant, respectively. But if the endogenous variable is under a few (one or two) exogenous variables, the average values of the coefficient of determination are also acceptable. In table 5, the endogenous and exogenous variables and the corresponding determination coefficient values are presented.

Table 5: Exogenous, endogenous and R^2 related variables

Assessment	R^2	Relevant exogenous variables	Endogenous variable
Strong	0.927	Green coherent green program	Internal and external factors
weak	0.236	Internal and external factors	Green banking and social and security factors

6.8 Predictive correlation index or Q^2 Aston Geisser

Table 6: Predictor correlation index (Q^2 Stone Geisser) for endogenous variables

Predictive ability of the model	Q^2 Stone Geisser	Endogenous predictor variable	Predictor exogenous variables
Strong	0.814	Internal and external factors	Green coherent green program
Medium	0.300	Green banking and social and security factors	Internal and external factors

According to table 6, the amount of Q^2 is evaluated for the endogenous variables of green program, consistent management and internal and external organizational factors, and moderate for green banking and social and security factors. Therefore, it can be said that the studied structural model is of good quality and the observed values are reconstructed well, and the studied model has good predictive ability and can predict the endogenous variable.

Another indicator for fit introduced by Tenenhaus et al. [24] is the general fit criterion (GOF), which is calculated by calculating the geometric mean of the mean of the share and R^2 is calculated as follows.

$$GOF = \sqrt{\overline{communality} \times \overline{R^2}}$$
 (6.6)

This index also acts like the fit indices of the Lisrel model and is between zero and one, and values close to one indicate the appropriate quality of the model. Of course, it should be noted that this index does not examine the degree of fit of the theoretical model with the collected data, just like the chi-square based indices in Lisrel models. Rather, it examines the overall forecasting ability of the model and whether the tested model was successful in predicting the endogenous variables or not.

Table 7: The results of the overall fit of the model with the GOF criterion

$\overline{R^2}$	$\overline{communalities}$	$GOF = \sqrt{communality} \times \overline{R^2}$
0.621	0.446	0.533

As can be seen in table 7, the average value of Communalities is 0.446 and the average value of R is 0.621, and according to the formula, the standard value of GOF is equal to 0.533. It is greater than the criterion value of 0.36 and shows the appropriate power of the model in predicting the endogenous current variable of the model.

7 Discussion and conclusion

As the results showed, according to the first and second hypotheses, the results showed that the integrated green management program has a significant effect on internal and external organizational factors. This result is in agreement with the research results of [1, 2, 4, 7, 9, 10, 11, 12, 17, 21, 25] are similar. Therefore, it is suggested that in order to

strengthen the social responsibility of banks towards the environment, it is better to help with urban reconstruction, help modernize the transport fleet, create the irreplaceability of the environment, support environmentally friendly activities, interact with other organizations for protection from the environment, define environmental protection as an organizational task and promote environmental protection. In order to strengthen the development of green banking, address issues such as human resource management, expanding electronic services, reducing paper consumption, and making banking services offline. In order to increase the compatibility of the bank with the environment, address issues such as the compatibility of organizational design with the environment, administrative waste management, reducing fuel and energy consumption, employing an environmental expert, proper insulation, and the use of clean energy and renewable means. In order to protect the environment, it includes directing the facilities towards environmental protection things such as paying attention to the climatic conditions in the evaluation of the facilities, requiring customers to have environmental standards, and environmentally friendly plans, supporting the villagers, to buy mobile phones and computers, to use renewable energies, develop green industries, support start-ups or environmentally friendly fertilizers, reduce or eliminate paper consumption.

According to the third and fourth hypotheses, the results showed that internal organizational factors (creation and implementation of necessary changes, downsizing of banks and research and development) have a significant impact on green banking and social and security factors. This result is in agreement with the research results of [2, 4, 11, 12, 21, 25] are similar. Therefore, it is recommended that to strengthen internal factors, review and diagnose the administrative bureaucracy, make the organization more agile, to environmental considerations in interactions with customers, to include environmental values in the strategic document, to develop non-attendance services, to reduce the number of branches, and to digitize affairs, hiring talented human resources and paying attention to studying the experiences of other countries and banks.

According to the fifth and sixth hypotheses, the results showed that extra-organizational factors (examination and revision of upstream documents and culture building) have a significant impact on green banking and social and security factors. This result is in agreement with the results of the factual research of [1, 9, 12, 17, 19] are similar. Therefore, in order to strengthen external factors, it is recommended to approve environmental protection laws, support the government for green banking, teach the concepts of green banking, explain the advantages of green banking, and create a need for green banking in customers, social networks and public media.

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