

Providing a Model for Information Disclosure and Transparency of Iranian Banks

Elham Chitsazan*
Mansour Momeni‡

Iraj Noravesh†

Received: 21 Feb 2019

Approved: 16 Dec 2019

The primary purpose of this research is to develop and present dimensions and components of information transparency in banks to evaluate and rank the level of information disclosure and transparency of Iranian banks, considering the environmental and native conditions of Iran. Regarding the reporting conditions and reporting environment of Iranian banks and the information needs that govern them, one can evaluate the banks on an applied level by explaining the level of disclosure and specific information transparency and then ranked it. For this purpose, firstly, the list of dimensions and components of disclosure and transparency is extracted from research, documents, and standards issued by professional banking authorities. Then after incorporation, adjustment, and summary, the final list of dimensions and components is reviewed by experts. Due to the lack of a proper model of information disclosure and transparency in Iranian banks, the best way to confirm the criteria, dimensions, and components of the model was to use the opinions of experts. The Delphi method and the one-sample t-test were used to verify the components and finally design the model. As a result, the final model consists of 11 dimensions of information transparency to evaluate and rank the level of disclosure and transparency of Iranian banks and assess the degree of compliance of the current status of disclosure and transparency of Iranian banks with the proposed model using (SEM) and the t-sample.

Keywords: Information Transparency, Transparency Model, Disclosure Elements.

JEL Classification: G35, M42

1 Introduction

Information transparency reduces transaction costs and improves economic relationships. One of the most critical areas of transparency is transparency in banking. Today, banks are the most important financial intermediaries and the largest providers of finance in economic systems around the world and are one of the main economic pillars of any country. Accordingly, the effects and

* University of Tehran Kish International Campus, Iran; iranlib1393@gmail.com
(Corresponding Author)

† University of Tehran, Iran; i.noravesh@ut.ac.ir

‡ University of Tehran, Iran; mmomeni@ut.ac.ir

consequences of their activities have a profound impact on the economy. Maintaining the health and stability of banks and their essential role in guiding the country's economy requires proper transparency. Therefore, regulating their behavior is very important to society.

For this reason, legislators and regulators in many states have long sought to make this happen by adopting various regulations. Banking inevitably requires risk-taking. Any public damage to a bank quickly spreads to the entire banking system and even to the economy. Therefore, maintaining public confidence in the banking system and preventing any failure and crisis in this system and avoiding the transfer of monetary sector problems to the real sector are the main objectives of bank supervision. Disclosure by banks and their information transparency is recognized as a mechanism to reduce asymmetries in expectations and increase the trust of actual and potential stakeholders and stakeholders. Improving access to information and updating its quality is a useful way to reduce the likelihood of a banking crisis, as well as a useful tool for improving market order (Kundid & Rogosic, 2012). Despite the overwhelming importance of disclosure and transparency in banks, there is still no comprehensive index in Iran to measure the level of disclosure and information transparency of banks based on the decision making of depositors, investors and other stakeholders. In-depth study of the transparency patterns in the relevant literature in developed countries and the documents and standards issued by international banking supervision authorities including Basel Committee and Islamic Financial Services Board, in developing countries, are the primary documents concerning subscription in this area. One of the first steps in this regard is to use the high similarity with the environmental conditions of Iran. To provide the necessary insight into the disclosure and transparency of information and the appropriate orientation to formulate and present information transparency indices for the Iranian banking network, examining patterns and indices of transparency measurement worldwide, the components and dimensions of these indices and the amount of disclosure reported by these indicators are not only useful and enlightening, but also necessary. Therefore, the primary purpose of this study is to present the disclosure and transparency components and indicators for Iranian banks to evaluate and rank the level of disclosure and transparency of Iranian banks.

2 Theoretical Foundations and Research Background

Although transparency has been described as a desirable feature of financial reporting, it has not been universally accepted as a single and comprehensive definition.

2.1 Theoretical Foundations

On this basis, and given the ambiguity of the concept of transparency, researchers have attempted to provide explicit definitions of transparency in various ways. The definitions provided for transparency are a set of related but different meanings. For example, Bushman et al. (2004) describe financial reporting transparency as broad access to relevant and reliable information about course performance, financial position, investment opportunities, leadership, value, and risk for firms that public exchange, he said. From the perspective of Lepadatu and Pirnau (2009), transparency refers to the principle of creating an environment in which information about the status quo, decision making and actions available, is visible and understandable to all market participants. According to Bushman and Flagler (2015), bank transparency can be periodically accessed by an outsider for the relevant and reliable information on the performance, financial position, business model, governance, and risks of the bank. External stakeholders include depositors, investors, borrowers, business parties, regulators, policymakers, and competitors can access this information periodically. The Basel Committee (1998), defines transparency as reliable and timely public disclosure of information that enables users to understand the performance and financial status, business activities, risk status and ways of managing it promptly. The bank should make a proper assessment.

Undoubtedly, enhancing disclosure and transparency in any banking system has several benefits. Some of the most important ones are:

(A) Increasing the ability of market participants and investors to make informed and effective decisions; (b) the health and stability of the money market; (c) Facilitating banking supervision.

The importance and benefits of appropriate disclosure and transparency of information justify the need for specific policies to measure, evaluate, and improve transparency. It is first and foremost necessary to develop a benchmark for measuring information transparency to formulate such policies. But there is no internationally accepted definition, and the concept of transparency itself is subjective, so it is complicated to measure (Fons, 1998).

2.2 Research Background

To establish transparency and disclosure indices and to use such indices to measure the level of disclosure and transparency of businesses, including banks and other firms, a great deal of research has been done so far in Iran and worldwide.

A) External Investigations

The Surf Index first was used in 1961. Examples of studies on the disclosure index are researches conducted by Firth (1984), Botosan (1997), Abd-Elsalam and Weetman (2003), Ahmed and Henry (2004), Coy and Dixon (2004), Romilly et al., (2009), (Excerpts from Hassan and Marston, 2010). A review of previous studies suggests that the information items used to construct the disclosure index varied widely. Also, the results of previous studies indicate that there are many differences in the approaches to measuring disclosure, the range of industries and countries covered, and so on. For example, since the compulsory policy is more prevalent in developing countries than in developed countries, the research conducted in these countries has focused more on the extent of disclosure compliance with mandatory disclosure items (Ali et al., 2004). A number of previous studies, such as those by Patel, Balic and Bwakira (2002), Hope (2003), Bushman et al. (2004), and Richardson, A.J., & Welker (2001), used available disclosure indices introduced by professional organizations such as Disclosure and Transparency Index, Basel Committee and Islamic Financial Services Index. These include the Standard Disclosure and Transparency Index and Poor's. Expert committees formed by the American Association of Certified Accountants to determine investor information needs the Basel Committee Index and the Islamic Financial Services Board index. Since there is no consensus on the type or number of information items that should be included in the disclosure index, many different disclosure indices have been used in previous research, and many researchers have specific research indices that they made themselves. Each of these indicators has different dimensions, areas of information, and components. Thus, while disclosure and transparency are the same for all businesses, banks are under increasing scrutiny due to their role during the crisis (cited by Siri Sophia 2013).

B) Internal Investigations

On the topic of information disclosure and transparency in Iran, most of the research has been carried out at the level of non-banks firms, which have used the ratings of the Iranian Stock Exchange as the basis for evaluating the transparency and disclosure of information to Iranian firms. Few studies have

used international models or other research to measure the level of information disclosure of Iranian firms. Yousefi Asl (2014), based on the financial transparency model of Bushman et al. (2004), used a fuzzy Delphi method to screen and validate this model from the perspective of academic and professional experts in Iran. Experts approved all the criteria of the model. Besides, further studies by them indicated that, from the experts' point of view, the gap between the current and desirable situation in each of the dimensions affecting information transparency at the level of the firms is significant. Besides, Hajian and Rahmani (2017), in practical research, formulate a conceptual matrix by examining existing literature and integrating existing indicators into different models of transparency around the world. 189 conceptual matrix extraction indices were surveyed from users of information. Finally, 128 disclosure indices were obtained to evaluate and rank the level and quality of disclosure and information transparency of listed companies in Tehran Stock Exchange.

3 Research Methodology

This study is developmental research. This research is also applied in terms of the descriptive-survey method in terms of achievement or outcome of the study. The data collection was done by the qualitative composite method. The qualitative data were collected through content analysis of the texts and managed by expert opinion through the Delphi method. The Delphi method is conducted with the participation of those who have the necessary knowledge and expertise in the subject of research (Momeni, 2012). Considering that the Delphi method is performed with the participation of individuals who have the necessary knowledge and expertise in the research subject and due to the nature of the present research topic and the lack of appropriate model of disclosure and transparency in Iranian banks, the Delphi method was the best way to identify and confirm the criteria, dimensions, and components of this model. Accordingly, in this study, community members were categorized in the following two expert committees:

- 1) Scientific Experts: Professors of Universities;
- 2) Organizational Experts: Experts, Managers, and Experts of the Central Bank and Banks of the Country.

In this paper, which examines the dimensions and components of transparency of Iranian banks with regard to environmental and local conditions, the research question is:

What are the essential aspects and elements of information disclosure and transparency of banks from the experts' point of view in order to meet the

information needs of users, considering the indigenous and ecological conditions of Iran?

The purpose of this paper is to develop a model for the dimensions and components of information disclosure and transparency in Iranian banks, which ultimately extracted 11 aspects of transparency. For this purpose, first, by analyzing previous research, 36 indices with different dimensions were identified, and then the validity of these indices was investigated using the Delphi method. Interview with experts is required to use the Delphi method. Therefore, how to select the experts, relevant and appropriate questionnaires, along with a conceptual model for answering the questions, were designed. The Delphi method was implemented in the first, second, and final rounds. In the first round, 26 questionnaires were distributed among the experts, using indicators that they did not consider appropriate based on the single-sample t-test. In the second round of the Delphi method, the remaining indices were further analyzed, and final indices were extracted in the final round of the Delphi method.

The following will describe how to identify disclosure components in transparency indices, dimensions and information areas of transparency indices, the weight of disclosure components in transparency indices, how to select experts, conceptual model formulation, questionnaire, and structural equation modeling. The dimensions and components of information disclosure and transparency are derived from the Delphi method. Finally, using SEM and one-sample t-test, we evaluated the disclosure and information transparency status of Iranian banks under the proposed model of the study. Following on how to determine disclosure components in transparency indexes, dimensions and information areas of transparency indexes, the weight of disclosure components in transparency indexes, expert selection, conceptual model formulation, initial and secondary questionnaires, and structural equation modeling will be explained.

3.1 How to Determine the Components of Disclosure in Healing Indices

To measure transparency, researchers need specific quantitative criteria. The lack of such criteria is a major problem in many studies. The effort to measure transparency is mainly qualitative and generates several issues. First, determine whether transparency at the whole level is voluntary disclosure or whether it is based on mandatory disclosure requirements and which one should be considered. Since disclosure and transparency are abstract concepts, directly measuring the level of disclosure and transparency is very difficult

and complicated. Researchers have generally used two approaches. The first is to use disclosure level metrics and indicators developed by professional institutions or other researchers. In the second method, in spite of the different disclosure indices, many researchers have measured the level of disclosure of the firm using specific indices of their research. This self-made criterion has been formulated in various ways. Healy and Palepu (2001) believe that each of these two approaches has its limitations. Bushman and Flagler (2015) do not, however, have a single consensus framework in which a detailed and explicit conceptualization of disclosure and transparency is addressed. The Transparency Index presented by the International Financial Analysis and Research Center has also extracted 90 items from the annual reports of institutions, 70% of which were financial institutions. Other researchers, such as Yu (2005), Hossain (2009), have used the index of the Institute for Investment Research and Management.

Generally, the construction of the disclosure index is done in three stages: first, selecting the initial list of disclosure components, second, selecting the final list of disclosure components, and the third and final step, measuring the disclosure. Choosing a preliminary list of disclosure components is the critical step in building and disclosure index. However, from the perspective of Wallace and Naser (1995) and Hooks et al. (2000), there is no unified theory about the component selection process for inclusion in the disclosure index. Selecting a preliminary list of multiple disclosure components leads to an improved component selection process and reduced researcher mentality biases. Choosing the final list of disclosure components is an essential step in determining the disclosure index. Different methodologies were used to determine the definitive list of disclosure components, including submitting questionnaires to users of financial statements, conducting interviews with experts, and using the recommendations provided by accounting standards. Determining the level of disclosure and transparency is the last step in building the disclosure index. (Hussainey, 2004).

3.2 Information Dimensions of Transparency Indicators

Based on the research and studies examined in this study, the accurate and complete disclosure of financial statement items, as well as information on financial status and performance, and risk management in banks are presented in Table 1. All of the research done in this area has included the information transparency index. The next set of information that most of the bank disclosure indicators have covered in the research is related to bank board members, bank goals and strategies, ownership structure, corporate

governance, and corporate social responsibility. A comprehensive classification is presented in Table (1).

Table 1

Identified Information Dimensions in Transparency Indicators

Dimension extraction resources	Component	Dimensions and groups	row
Depressed (2000), Cho and Gary (2002), Nasser and Naseeb (2003), Bouch (2005), Nair (2003) and Cook (1993)	10	General information about the bank	1
	9	Information about board members, CEOs and senior executives	2
	11	Information about the bank's goals and strategies	3
Fezley & Whitman (2006), Lim et al. (2007), Patley & Principe (2007), Hassan (2013) and Sasho (2014).	12	Information on ethical, social and environmental issues	4
	13	Information about board payments and bonuses	5
	6	Meeting information	6
	6	Staff Information	7
Candido Rugosic (2012), Dehubi and Mamofli (2013), Ibrahim and Jaafar (2013), Hattie (2012) and Al-Gennadi (2013) and Samaya et al. (2012)	4	Corruption, bribery and combating money laundering	8
	11	Corporate Governance	9
	12	Information on the Audit Committee	10
	4	Audit information	11
	4	Disclosure of transactions with affiliates	12
Antigio Palacio del Arzoubispado (2016), Siri Sophia (2014), Lang and Lundholm (2000), Lee (2012), Information Disclosure and Transparency (Wing Committee Document (2017) and Islamic Financial Services Board Standard Information Transparency (2007)	10	Disclosure of accounting procedures	13
	6	information on capital structure and equity	14
	8	Capital adequacy information	15
	5	Deposits information	16
Standard & Poor's Institute of S&P (2002), Bhutosan (1997), Barako (2007) and Hussein & Riyadh (2007)	5	Business focus and competitive status	17
	6	Customers	18
Suleiman (2013), Murcia & Santos (2012), Hassan (2013), Algeriani & Greiko (2013), Oweer et al. (2013)	5	Related parties and transactions with them	19
	12	General information about risk management	20
	3	Information about sources of credit risk	21
	10	Credit Risk Information	22
Hussain & Hammam (2010) and Information Disclosure and Transparency (Wing Committee document (2017) and Transparency of Information Standards of the Islamic Financial Services Board (2007)	6	Credit Risk Reduction	23
	4	Information	24
	4	Liquidity risk information	25
	5	Market risk information	26
	4	Operational Risk Information	27
	4	Information on Risk Rates	27

Dimension extraction resources	Component	Dimensions and groups	row
	2	Information about contract-specific risks	28
	5	Credit Risk Information	29
Donnelly and Malekahi (2008), L-Shamri (2008), Murcia and Santos (2012), Alves et al. (2012) and Hadgden et al. (2004).	4	Currency risk information	30
	12	Financial performance information	31
	21	Financial ratios and indicators	32
	7	Basic non-financial statistics	33
	6	Disclosure of financial forecasts	34
Islamic Financial Services Standards Board (2007) and Hatie (2012)	5	Information on the religious rules	35
Hussein and Hammam (2009), Ferguson et al. (2002), Wong et al. (2008), Leontis & Whitman (2004), Alshamari (2008) and Akosa & Ksdag (2006).	25	Exact and complete disclosure of financial statement items	36
	8	Presentation of topics and management analysis	37
	7	Characteristics of information and presentation	38
	8	Others	39

Source: Research Findings

3.3 Weight of Disclosure Components in Transparency Indices

To measure the level of disclosure and transparency, different approaches have been used to determine the weight and importance of the disclosure component in the final list. Several other researchers have used both approaches and have found that the results of the weighted and unweight indices are approximately the same and do not differ significantly. These researchers include Wallace and Nasser (1995), Chow, C. W. & Wong-Boren (1987). Accordingly, and according to the arguments made in the study by Hassan (2013), the relative importance of the disclosure components in the reports provided by firms operating in different industries varies. Therefore, if the scope of research is limited to a particular industry, a balanced approach is appropriate. Since the scope of this study is unique to the banking industry, a balanced approach has been used to measure the level of disclosure and transparency of Iranian banks.

3.4 How to Choose the Experts

The first group of experts was (scientific) professors of universities in the field of accounting and financial management (preferably from public universities) and the second group of experts was organizational specialists with at least 10 years experience and at least 5 years of management experience with postgraduate and higher education (accounting preference). Managers and postgraduates in higher education (accounting preferred) were used. In the

present study, for the qualitative part (selection of Delphi specialized boards), the network sampling method (chain or snowball) is considered. To evaluate the primary indicators extracted from various sources by experienced professors and managers, some prominent university professors were first identified by judging method. The invitations were sent by email to the professors and coordinated by managers in person or by phone. After explaining the subject and research objectives, most of them agreed to participate (5 professors and 5 managers). Individuals were asked to invite other individuals appropriate for the study. In this way, 16 people were introduced by the Scientific Experts Board and 14 by the Organizational Experts. Finally, with the dropout rate, the number of faculty members reached 14, and the number of organizational experts reached 12, and the initial questionnaire form was emailed to all of them in all three stages.

3.5 Developing a Conceptual Model and a Questionnaire

In the beginning, and before the Delphi steps, we formed the initial framework, levels, and dimensions that were effective in providing information disclosure and transparency models in Iranian banks. Also, we studied the previous researches whose primary purpose was to provide information disclosure indicators that affect the information transparency of banks and other businesses, as well as documents published by international banking professional authorities. Afterward, the components were determined based on the levels and dimensions derived from previous studies, and then the components were classified according to the degree of coincidence with the designated levels to position the components at each level, so the dimensions are specified. With these placements, a more profound and independent concept was created at each level and dimension that entered the Delphi stages, explain and confirm this level. Regardless of differences in information transparency models, most of the studies reviewed use existing literature and the dimensions and characteristics of previous models to select an initial list of disclosure indices and then adjustments have been made. Therefore, in the first stage of the study, 44 previous studies were used to compile the initial list of disclosure components listed in Table 2.

Table 2
List of Studies Used To Extract the Disclosure and Transparency Components

Row	State under review	Year of Research	researcher or researcher	row	Country under review	Year of Research	researcher or researcher
1	Africa	2013	Hassan	12	International	2002	S&P Standard & Poor's Institute
2	Egypt	2012	Samaha et al	13	USA	1997	Botosan
3	Japan	1993	Cooke	14	France	2000	Depoers
4	Mexico	2016	Antiguo Palacio del Arzobispado	15	Singapore	2002	Cho and Gary
5	Finland	2014	Siiri Sofia	16	Saudi Arabia	2003	Naser and Nuseibeh
6	Canada	2000	Bewley and Li	17	Denmark	2005	Bukh
7	Taiwan	2012	Lee	18	Kenya	2007	Barako
8	European countries	2012	Sasho	19	India	2007	Hossain and Reaz
9	International	2003	Nieer	20	Qatar	2009	Hossain and Hammami
10	Croatia	2012	Candido Rugosic	21	Hong Kong	2002	Ferguson et al
11	Tunisia	2013	Dhouibi and Mamoghli	22	China	2008	Wang et al
23	Nigeria	2013	Ibrahim and Jaafar	34	Greece	2004	Leventis and Weetman
24	Malaysia	2012	Htay	35	Kuwait	2008	Al-Shammari
25	Saudi Arabia	2013	Al-Janadi	36	Turkey	2006	Aksu and Kosedag
26	Egypt	2013	Soliman	37	Malaysia	2006	Ghazali and Weetman
27	Brazil	2012	Murcia Santos	38	Australia	2007	Lim et al
28	Bangladesh	2013	Hassan	39	Italy	2007	Patelli and Prencepe
29	Italy	2013	Allegrini and Greco	40	Ireland	2008	Donnelly and Mulcahy
30	Turkey	2013	Uyar et al	41	Kuwait	2008	Al Shemri
31	Qatar	2010	Hossain and Hammami	42	Brazil	2012	Donnelly and Mulcahy
32	Switzerland	2017	Basel Committee on Banking Supervision(43	Portugal and Spain	2012	Alves et al
33	Malaysia	2007	Islamic Financial Services Board (IFSB)	44	developing countries	2004	Hodgdon et al

Source: Research Findings

In this study, to formulate a comprehensive transparency model, both the level of disclosure and the quality of information disclosure have been considered, and the indicators selected include both mandatory and optional information. The final list of disclosure components and indices was prepared in two steps. In the first step, some of the indices and components in the initial list overlapped, with the disclosure of one index also indicating the disclosure of another index or referring to a common concept, under a single heading in the model. Accordingly, all indices and components were examined in this respect, and those overlapping indices and components were combined. By studying these models, information transparency indices and components were extracted. Next, given the long list of disclosure indices and components, some of which were used only by one or two researchers in the disclosure models and were of little use- the frequency of 3 as the number of significant repeats. Selected indices and components were repeated at least 3 times in models available in the literature.

Table 3

List of Final Dimensions of Disclosure and Transparency used in the Secondary Questionnaire

Row	Dimensions and groups	Number of information subgroups	Number of components
1	General information	2	13
2	Activity environment information	2	13
3	Capital information and capital adequacy	2	10
4	Financial statement information	3	25
5	Performance information	2	19
6	Upcoming Information	-	3
7	Risk management	4	45
8	Religious rule	-	4
9	Corporate governance	4	38
10	Social Responsibility Information	4	31
11	Features and disclosure	2	13

Source: Research Findings

This method has also been used by some researchers such as Barako (2007), Samaha et al. (2012). Finally, after performing the steps described above, the resulting indices in 11 dimensions, as described in Table 3, were completed through a questionnaire among 26 members of the two groups of scientific and organizational experts coordinated by e-mail and it was in

person. In the first part of the survey, while introducing the research topic, the purpose, the problem statement, the necessity of the research and the concepts were explained to the respondents. Then the indices and components of each dimension were individually questioned and determined. It was also possible to combine, remove, or add indices and dimensions at this stage.

3.6 How to Collect Data

Data collection was done in three stages. Firstly, the information disclosure and transparency components from existing literature and documents published by international banking authorities were selected and extracted as the first part of the data. At this stage, the data collection method was in libraries. The data at this stage included 42 disclosure and information transparency models for banks and other firms, and two documents published by the Basel Committee Banking Supervisory Committee, and the Islamic Financial Services Board, which included information disclosure and disclosure components of the model presented in the research. Secondly, to formulate a conceptual model and to propose a model for the scientific and organizational experts, the data were collected and analyzed by the Delphi method. Thirdly, to evaluate the degree of compliance of the existing disclosure and transparency situation in Iranian banks with the proposed model and the disclosure status of the components above among the banks, several investors and capital market analysts, bank directors and bank supervisors were selected, and secondary questionnaires were sent to them. A total of 250 questionnaires were sent online by e-mail to respondents among whom 176 completed the questionnaire. A printed version of the questionnaire was sent to 135 respondents, among whom 92 completed questionnaires were delivered through repeated surveys of the researcher. A total of 268 questionnaires were completed, received and used for statistical analysis in the next section.

3.7 Structural Equation Modeling

The structural equation model can be generalized to factor analysis. Factor analysis is a theory test model in which the researcher begins his analysis with a previous hypothesis. Many attempts have been made to examine variables consistency over the last decade. One of these is a promising approach in the field of structural equation modeling or multivariate analysis with current variables. One of the methods of structural equation modeling is partial least squares method. The partial least squares method, also introduced in the regression modeling discussion with PLS, is one of the multivariate statistical

methods that can be used despite some limitations, such as the uncertainty of the response variable distribution, the presence of low observations, or the presence of a random variable. Among the explanatory variables, one or more of the response variables were modeled simultaneously against several explanatory variables. In the present study, for the reasons mentioned above, version 2 of the software PLS is used to formulate the structural equation model (Hooman, 2012).

4 Research Findings

4.1 Descriptive Statistics

Information on population census indices for sample individuals are listed in Table 4.

Table 4
Descriptive Result of Demographic Variables

Variable	Groups	Abundance	Percentage
Age	35	37	%14
	50-35	91	%34
	50	140	%52
	sum	268	100
Education	Bachelor	37	%14
	Master	150	%56
	Ph.D.	81	%81
	Sum	268	100
Work experience	Less than 5	29	%11
	Between 5-10	64	%24
	Between 10-15	40	%15
	Between 15-20	64	%24
	More than 20	71	%26
	total	268	%100

Source: Research Findings

The results in Table 4 show that out of the 268 participants in the study, 14% were Bachelor's holders, 56% were Master's holders, and 30% were PhDs and above. In this study, 14% of people had a Bachelor's degree, 56% had a Master's degree, and 30% had a doctorate or higher. Also, 11% were less than 5 years, 24% between 5 and 10 years, 15% between 10 and 15 years, 24% between 15 and 20 years and 26% over 20 years and 14% less than 35 years, 34% between 35 and 50 years old and 52% were over 50 years old.

Table 5
Descriptive Indices for Model Variables

Variables	Average	Median	S.D.	Normality indices	
				Skew	Elongation
General information	2.781	3	0.899	-0.687	-0.148
Goals and Strategies	2.886	3	1.041	-0.654	-0.702
Business focus and competitive status	2.838	3	0.911	-0.606	-0.287
deposits	2.964	3	1.019	-0.763	-0.484
Regulatory Capital Structure	2.454	2.256	0.987	0.006	-0.992
Capital adequacy ratio	2.521	3	1.047	-0.161	-1.175
Facilities	2.914	3	1.066	-0.651	-0.801
Investment	3.7	3	0.919	-0.042	-0.903
Others	2.844	3	1.139	-0.606	-1.049
Audit	2.842	3	1.121	-0.604	-1.003
Related parties and transactions with them	3.019	4	1.177	-0.687	-1.13
Financial situation	2.971	3	0.837	-0.647	0.066
Profitability	2.79	3	0.874	-0.546	-0.226
Non-financial performance information	3.029	3	1.042	-0.734	-0.685
General items	2.933	3	1.003	-0.506	-0.867
Sources of Credit Risk	2.848	3	1.017	-0.47	-0.877
Reduce credit risk	2.962	3	1.16	-0.717	-0.985
General items	2.695	3	1.184	-0.381	-1.375
Reduce liquidity risk	3.038	3	1.117	-0.877	-0.632
Market risk	3.2	4	1.06	-1.054	-0.253
operational risk	2.952	4	1.304	-0.654	-1.387
Board structure	3.105	3	1.055	-0.963	-0.316
Factor structure	3	3	1.074	-0.759	-0.701
Board payouts and bonuses	2.638	3	1.048	-0.196	-1.137
Board Payments and Bonuses	2.571	3	1.055	-0.117	-1.179
Meeting	2.552	3	1.177	-0.146	-1.471
Ownership structure and equity	2.632	3	1.172	-0.268	-1.415
Ethical issues	3.171	3	1.042	0.428	-0.996
Social Issues	2.8	3	1.013	-0.491	-0.813
Environmental issues	2.676	3	1.014	-0.268	-1.004
Corruption, bribery and money laundering	2.895	3	0.929	-0.521	-0.534
Staff	2.876	3	1.199	-0.611	-1.192
Customers	3.048	4	1.18	-0.882	-0.801
Accounting Principles and Procedures	3.905	4	0.815	-0.366	-0.349
Information features and how to submit	2.724	3	0.686	-2.128	2.623
General information	2.834	3	0.723	-0.603	0.221
Activity environment information	2.901	3	0.803	-0.603	-0.254
Capital information and capital adequacy	2.488	2.5	0.855	-0.075	-0.812
Financial statement information	3.164	3	0.531	-0.36	-0.56
Performance information	2.93	3	0.658	-0.451	-0.253
Upcoming Information	2.476	3	1.093	0.4	0.113
risk management	2.947	3	0.542	-0.472	-0.196
Corporate governance	2.829	2.75	0.602	-0.433	0.125

Religious rule	2.371	3	0.912	-0.191	-0.242
Social Responsibility Information	2.911	3	0.518	-0.364	0.21
Features and how to disclose	3.314	3.5	0.429	-0.689	2.026
General information	2.781	3	0.899	-0.687	-0.148
Goals and Strategies	2.886	3	1.041	-0.654	-0.702
Business focus and competitive status	2.838	3	0.911	-0.606	-0.287
Deposits	2.964	3	1.019	-0.763	-0.484
Regulatory Capital Structure	2.454	2.569	0.987	0.006	-0.992
Capital adequacy ratio	2.521	3	1.047	-0.161	-1.157
Facilities	2.914	3	1.066	-0.651	-0.801

note. Number of data points in all variables is 268. Source: Research Findings

The higher the mean values of the model variables, the lower the valuation indicate, and the lower level is indicating the lack of transparency of the index. Since the Skewness and Kurtosis of the normal distribution are equal to zero, the Skewness and Kurtosis near zero represent the normality of the data distribution. Also, if the Skewness and Kurtosis of a variable are less than 1 and greater than 1, that variable distribution will not be normal. The results show that the research variables can be considered as normal.

4.2 Delphi Results

Given the choice of a five-point Likert scale (1 to 5) for the questions that constitute the research variables, the values of respondents' opinions should be examined to clarify whether the mean of their answers differ significantly on average from 4 (the score is the norm)?

After calculating the mean of the answers and standard deviation to make sure that the mean of the responses is significantly different from the average score of (4) (this is the normal score), a one-sample t-test was used. The test examines the hypothesis on the mean of the population at the α error level and is used to detect whether or not a variable (s) is in effect or to determine the validity or invalidity of the study. In addition to the t-test, two CVR (Content Validity) and CVI were used. Lawshe's method devised a widely used method for content validation and developed a formula called content validity. This method measures the extent to which the evaluators or reviewers agree that a particular item is "appropriate or essential" (Momeni, 2012).

$$CVR = \frac{N_e - N / 2}{N / 2}, CVI = \frac{N_e}{N} \quad \text{Lawshe's method}$$

CVI, CVR: Content validity ratio; Ne: The number of evaluators or reviewers who state the item is "essential or useful"; N: The total number of

reviewers. Response aggregation and summary of first and second round responses are reported in Table 6.

A) The Results of the First Round of the Delphi Method

Table 6
Results of the First Round of the Delphi Method

Content validity			One-sample t-test results			Components
CVR	CVI	Sig	T	Standard deviation	Average	
100%	100%	0.000	4.629	0.50839	4.4615	General information about the bank
85%	92%	0.000	5.839	0.50383	4.5769	Information about the bank's goals and strategies
92%	96%	0.000	6.872	0.48516	4.6538	Information about board members, CEOs and senior executives
100%	100%	0.000	6.872	0.48516	4.6538	Staff Information
100%	100%	0.000	6.872	0.48516	4.6538	Information about board payments and bonuses
92%	96%	0.000	5.401	0.50839	4.5385	Meeting information
92%	96%	0.000	4.629	0.50839	4.4615	Corruption, bribery and combating money laundering
100%	100%	0.000	4.629	0.50839	4.4615	Corporate Governance Information
92%	96%	0.000	7.500	0.47068	4.6923	Information on the Audit Committee
100%	100%	0.000	10.247	0.40192	4.8077	Audit information
15%	58%	0.000	-2.309	0.67937	3.6923	Disclosure of transactions with affiliates
85%	92%	0.000	13.844	0.32581	4.8846	Disclosure of accounting procedures
100%	100%	0.000	6.325	0.49614	4.6154	Information on capital structure and equity
85%	92%	0.000	9.129	0.42967	4.7692	Capital adequacy information
100%	100%	0.000	4.282	0.50383	4.4231	Deposits information
85%	92%	0.000	5.401	0.50839	4.5385	Business focus and competitive status
100%	100%	0.000	5.401	0.50839	4.5385	Customers
92%	96%	0.000	6.872	0.48516	4.6538	Related parties and transactions with them
100%	100%	0.000	6.325	0.49614	4.6154	General information about risk management
100%	100%	0.000	5.401	0.50839	4.5385	Information about sources of credit risk
92%	96%	0.000	4.629	0.50839	4.4615	Credit Risk Information
100%	100%	0.000	6.872	0.48516	4.6538	Credit Risk Reduction Information
85%	92%	0.000	4.282	0.50383	4.4231	Liquidity risk information
77%	88%	0.000	6.325	0.49614	4.6154	Market risk information
100%	100%	0.000	6.325	0.49614	4.6154	Operational Risk Information
31%	65%	0.095	-1.735	1.01754	3.6538	Information on Risk Rates
31%	65%	0.232	-1.224	0.80096	3.8077	Information about contract specific risks
23%	62%	0.013	-2.669	1.02882	3.4615	Credit Risk Information
46%	73%	0.032	-2.273	0.60383	3.7308	Currency risk information
100%	100%	0.001	3.953	0.49614	4.3846	Financial performance information

85%	92%	0.000	5.000	0.50990	4.5000	Financial ratios and indicators
100%	100%	0.001	3.638	0.48516	4.3462	Basic non-financial statistics
100%	100%	0.000	5.000	0.50990	4.5000	Disclosure of financial forecasts
100%	100%	0.000	6.325	0.49614	4.6154	Information on religious rule
85%	92%	0.000	5.401	0.50839	4.5385	Exact and complete disclosure of financial statement items
31%	65%	0.029	-2.309	0.67937	3.6923	Presentation of topics and management analysis
100%	100%	0.000	7.500	0.47068	4.6923	Characteristics of information and presentation
8%	54%	0.000	-4.244	0.64689	3.4615	Others

Source: Research Findings

In the first stage of implementation of the Delphi method, 26 questionnaires were distributed among experts, and after 12 days of follow-up and at least three re-readings, finally, 26 questionnaires were collected. Cronbach's alpha coefficient for the first round was 0.887. At this stage, indicators with a mean lower than 4 or whose mean t-value was within the critical range (significance level exceeded 0.05) are eliminated from the first round and not entered into the second round. The indices with a mean value above 4 and significance level less than 0.05 remained. To remain in the second round, in addition to the t-test, the CVR and CVI were also used. Indices with a CVR of less than 0.37 and a CVI of less than 70% were omitted from the first round and did not enter into the second round. Overall, the results of the first round showed that the following indices did not meet all three requirements for staying in the second round, and therefore the second round of the Delphi method was re-implemented without these indices. Indicators include disclosure of transactions with affiliates; information on rate of return risk; information on specific contractual risks; information on counterparty credit risk; information on currency risk.

B) The Results of the Second Round of Delphi Implementation

Table 7
Second Round Results

Content validity		One-sample t-test results				Components
CVR	CVI	Sig	T	Standard deviation	Average	
100%	100%	0.000	5.675	0.504	4.583	General information about the bank
92%	96%	0.000	7.474	0.464	4.708	Information about the bank's goals and strategies
92%	96%	0.000	6.782	0.482	4.667	Information about board members, CEOs and senior executives

100%	100%	0.000	7.474	0.464	4.708	Staff Information
100%	100%	0.000	15.906	0.282	4.917	Information about board payments and bonuses
92%	96%	0.000	6.191	0.495	4.625	Meeting information
92%	96%	0.000	4.796	0.511	4.500	Corruption, bribery and combating money laundering
100%	100%	0.000	12.689	0.338	4.875	Corporate Governance Information
100%	100%	0.000	6.782	0.482	4.667	Information on the Audit Committee
92%	96%	0.000	15.906	0.282	4.917	Audit information
100%	100%	0.000	8.307	0.442	4.750	Disclosure of transactions with affiliates
92%	96%	0.000	4.796	0.511	4.500	Disclosure of accounting procedures
92%	96%	0.000	12.689	0.338	4.875	Information on capital structure and equity
83%	92%	0.000	10.724	0.381	4.833	Capital adequacy information
100%	100%	0.000	10.724	0.381	4.833	Deposits information
100%	100%	0.000	5.675	0.504	4.583	Business focus and competitive status
100%	100%	0.170	1.416	10.238	6.958	Customers
92%	96%	0.000	12.689	0.338	4.875	Related parties and transactions with them
92%	96%	0.000	10.724	0.381	4.833	General information about risk management
100%	100%	0.000	9.349	0.415	4.792	Information about sources of credit risk
92%	96%	0.000	10.724	0.381	4.833	Credit Risk Information
83%	92%	0.000	4.796	0.511	4.500	Credit Risk Reduction Information
83%	92%	0.000	5.675	0.504	4.583	Liquidity risk information
92%	96%	0.000	7.474	0.464	4.708	Market risk information
92%	96%	0.000	10.724	0.381	4.833	Operational Risk Information
100%	100%	0.000	6.191	0.495	4.625	Information on Risk Rates
100%	100%	0.000	4.796	0.511	4.500	Information about contract specific risks
100%	100%	0.000	4.796	0.511	4.500	Credit Risk Information
92%	96%	0.000	5.675	0.504	4.583	Currency risk information
92%	96%	0.000	6.782	0.482	4.667	Financial performance information
92%	96%	0.000	5.675	0.504	4.583	Financial ratios and indicators
92%	96%	0.000	6.191	0.495	4.625	Basic non-financial statistics
100%	100%	0.000	4.796	0.511	4.500	Disclosure of financial forecasts
100%	100%	0.000	4.796	0.511	4.500	Information on religious rule
92%	96%	0.000	5.675	0.504	4.583	Exact and complete disclosure of financial statement items
92%	96%	0.000	6.782	0.482	4.667	Presentation of topics and management analysis
92%	96%	0.000	5.675	0.504	4.583	Characteristics of information and presentation
92%	96%	0.000	6.191	0.495	4.625	Others

Source: Research Findings

At this stage, 26 questionnaires were distributed among the experts. After two weeks of follow-up and at least three re-readings, 24 questionnaires were finally collected. At this stage, the indicators that were eliminated from the survey by experts in the first round were excluded, and this time the questionnaire was provided to the experts without considering these indicators. For the remainder of the final model of all three T-test conditions, the CVI index is higher than 70%, and the CDV value is greater than 37% (for a 24-person sample at least 37% is required). Cronbach's alpha coefficient for the second round was 0.806. The results of the second round show the significance and validity of all remaining indices and all factors can be incorporated into the final model, thus ending the Delphi method's dual rounds.

C) Final Implementation of the Delphi Method

In this study, the Kendall coefficient was used to determine consensus among panel members in addition to central indices, including mean and standard deviation, one-sample t-test, CVI and CVR. The implementation of the Delphi method shows that the consensus of the panel members has been reached and that the rounds can be repeated. Considering the level of significance less than 0.05, Kendall's coefficient of agreement was significant, and there was a 95% confidence level between experts at both stages.

Table 8

Final Summary of the Delphi Method Implementation

The second round of the Delphi method	The first round of the Delphi method
Kendall's W=0/366	Kendall's W=0/315
Chi-square=28/709	Chi-square=22/442
Sig=0/001	Sig=0/001
Alpha=0/806	Alpha=0/887

Source: Research Findings

Comparing the results of the present study with previous studies, since each of the indices in this model has at least three previous information transparency models and is selected from all the indices studied, there is a concordance between the results of this study and the research conducted by Lee (2012), Arsov and Naumoski (2014) and other researches in this study. However, in terms of eliminating some of the indicators, including information on the rate of return risk from the experts' point of view, contrary to their inclusion in previous studies, the specific conditions and characteristics of the Iranian banking industry are referred to. With the passage

of the Usury-Free Banking Act of 1983, the banking principles and rules of the Iranian banking system are based on which the rate of return on contracts is fixed and is not floating. However, according to Ruby's banking rules, interest rates on contracts are not fixed and can be adjusted according to the customer's credit status during the term of the contract. Besides, the contract-specific risk index has been extracted from research by researchers in countries such as Qatar, Malaysia, and Saudi Arabia, whose dual banking system includes both mechanical and Islamic banking. However, since the law governs the banking system does not accept interest, and only the principles and rules of non-usury banking apply to the Iranian banking system, from experts' point of view, the disclosure of contract risk information is irrelevant. Also, since the overseas activity of Iranian banks is very limited, the majority of Iranian banking activities is carried out in Rials, so from the experts' point of view, the disclosure of monetary risk information is not necessary. In the international banking literature, bank entities and affiliated entities are referred to as related entities, since an index of related entities and transactions with them is set separately, from the experts' point of view, no disclosure was required for disclosure of transactions with affiliates.

4.3 Structural Equation Modeling Results

In the confirmatory factor analysis model, numbers or coefficients are divided into three categories. The first category is called the fourth-order measurement equation, which is the relationship between transparency and its eleven dimensions (fourth-order factor loads). The third category is the relationships between the variables of the eleven main dimensions and their sub-components (third-order factor loads), the second category is the relationships between some of the components and their sub-scales (second-order factor loads). This model tests all second-, third- and fourth-order measurement equations (factor loads) using t-statistics. At the 5% error level, the significant test values greater than or equal to 1.96 or less than -1.96 indicate the significance of the relationships between the indices and their corresponding variables. The calculated t values for each of the factor loads and path coefficients are above 1.96. Therefore, the validity of the questionnaire for measuring the concepts is shown to be valid at this stage.

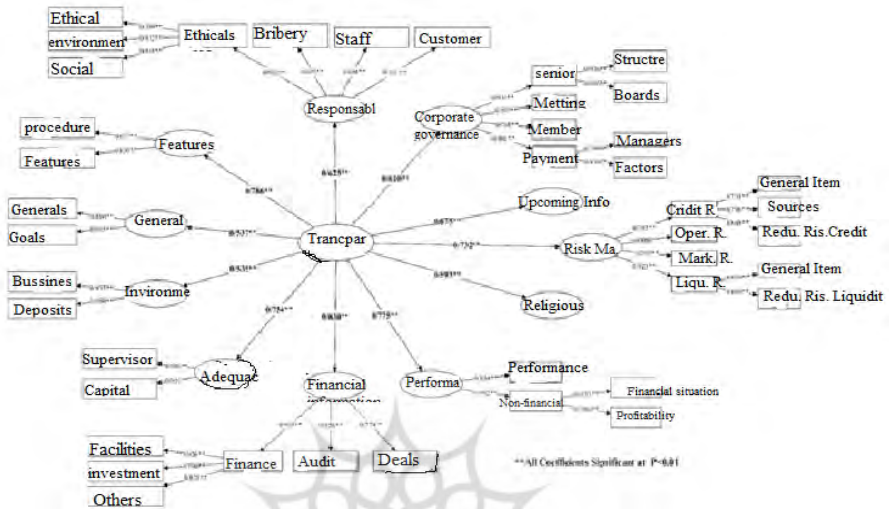


Figure 1. Structural Equation Model in Standard Coefficient Estimation. Source: Research Findings

The results of factor loadings for different variables revealed that:

- 1) For the general information variable, all indices and components had a factor load greater than 0.5 and at 95% confidence level ($t > 1.96$). It is recalled that an index having a larger factor load may be more important in measuring the component.
- 2) For activity environment information, all 13 indices had a factor load greater than 0.5 and a 95% confidence level ($t > 1.96$). Second-order factor loadings were significant and verified at both 95% confidence levels for both dimensions of activity environment information.
- 3) For capital environment information and capital adequacy, all 10 indicators have factor loadings greater than 0.5 and a 95% confidence level ($t > 1.96$). The second-order factor loadings were significant and verified at both 95% confidence level for both dimensions of capital information and capital adequacy.
- 4) For financial statement information, all 25 indices have factor loadings greater than 0.5 and a 95% confidence level ($t > 1.96$). The second- and third-order factor loadings were significant and verified for all three components of financial statement information at 95% confidence level.

- 5) For performance information, all 19 indices had factor loadings greater than 0.5 and a 95% confidence level ($t > 1.96$). The second- and third-order factor loadings for both dimension components of performance information were significant and confirmed at 95% confidence level.
- 6) For the two dimensions of futures information and religious sovereignty, all 7 indices had factor loadings greater than 0.5 and 95% confidence level ($t > 1.96$).
- 7) For risk management, all 45 indices had a factor load greater than 0.5 and a 95% confidence level ($t > 1.96$). The second and third-order factor loadings for all four components were significant and confirmed at 95% confidence level.
- 8) For corporate governance, all 38 indicators have a factor load greater than 0.5 and at 95% confidence level ($t > 1.96$). The second and third-order factor loadings for all four components were significant and confirmed at 95% confidence level.
- 9) For social responsibility information, all 31 indices had a factor load greater than 0.5 and a 95% confidence level ($t > 1.96$). The second and third-order factor loadings for all four components were significant and confirmed at 95% confidence level.
- 10) For the characteristics and the way information was disclosed, all 13 indices had factor loadings greater than 0.5 and 95% confidence level ($t > 1.96$). Second-order factor loadings for both components were significant and confirmed at 95% confidence level.

In the following, we examine the structural model fitting results. This index shows the concordance between the quality of the structural model and the measurement model and is equal to:

$$GOF = \sqrt{AVE} \times \sqrt{R^2} = 0.815 \times 0.899 = 0.732$$

The high index of goodness of fit indicates a model fit of 0.4. The value of the fit index is 0.732 and is greater than 0.4 and shows a good fit to the model. The data of this study are well-fitted to the theoretical structure and structure of the research, indicating that the questions are consistent with the theoretical concepts.

Also, the three values of 0.02, 0.15, and 0.35 for the CV Com index provide low, medium, and high quality for the measurement model, respectively. The results of this test are presented in Table 4-5. As can be seen, for all the variables in the study, this index is positive, and the total average of this index is 0.558 indicating good and high quality of measurement model.

Table 9
Measurement Model Quality Test Results

Common mean	Hidden variables	Common mean	Hidden variables
0.419	board payments and bonuses	0.543	General information
0.566	payments senior executives	0.582	goals and strategies
0.650	Payments board members,	0.619	Business focus and competitive status
0.675	Meeting	0.606	Deposits
0.582	capital structure and equity	0.713	Regulatory Capital Structure
0.412	Ethical, social and environmental issues	0.684	Capital adequacy
0.813	Ethical	0.517	Financial information
0.542	social	0.646	Facilities
0.766	environmental	0.763	Investment
0.837	bribery money laundering	0.687	Others
0.508	Staff	0.563	Audit information
0.631	Customers	0.653	Related parties and transactions with them
0.614	accounting procedures	0.442	Financial performance information
0.465	Characteristics of information and presentation	0.585	Financial situation
0.446	General information	0.545	Profitability
0.544	Activity environment information	0.744	Non-financial performance information
0.635	Capital information and capital adequacy	0.342	Credit Risk
0.383	Financial statement information	0.579	General items
0.429	Performance information	0.492	Sources of Credit Risk
0.690	Upcoming Information	0.590	Reduce credit risk
0.237	risk management	0.477	Liquidity risk
0.775	Religious rule	0.513	General items
0.370	Corporate governance	0.649	Reduce Liquidity risk
0.336	Social Responsibility Information	0.421	Market risk
0.523	Features and disclosure	0.484	Operational Risk
0.157	Transparency	0.484	structure and operating board
0.558	General average	0.514	board members
		0.677	senior executives

Source: Research Findings

4.4 Results of Single-Sample t-Test Results

For this part of the research, the one-sample mean test (t-test) was used. This test is used for quantitative variables and is used in some cases to detect whether or not a variable (s) is in effect. For example, this test is used to examine whether or not all variables of research have a particular impact on a

given phenomenon so that if the mean of each variable were above a certain limit, that variable would be considered effective in the phenomenon. (Momeni, 2012) This test is also used to check the status of each of the research variables. Thus, scores above 3 mean transparency of the index understudy and scores below 3 mean transparency of the index understudy. The results of this test are as described in Table 10:

Table 10
T-test results -One example

Result of transparency evaluation	Sig	T statistics	Standard deviation	average	Fourth level	Third level	3
Lack of transparency and down	0.014	-2.492	0.899	2.781	General information		General information
Moderate transparency downwards	0.263	-1.125	1.041	2.886	goals and strategies		
Moderate transparency downwards	0.072	-1.819	0.911	2.838	Business focus and status	competitive	Environmental activity information
Moderate transparency downwards	0.716	-0.365	1.019	2.964	Deposits		
Lack of transparency and down	0.000	-5.665	0.987	2.454	Regulatory Capital Structure		Capital information and capital adequacy
Lack of transparency and down	0.000	-4.687	1.047	2.521	Capital adequacy		
Moderate transparency downwards	0.412	-0.824	1.066	2.914	Facilities	financial information	Financial statement information
Optimum transparency	0.000	7.808	0.919	3.700	investment		
Moderate transparency downwards	0.163	-1.405	1.139	2.844	Others		
Moderate transparency downwards	0.153	-1.441	1.121	2.842	Audit		
Moderate transparency downwards	0.869	0.166	1.177	3.019	People and deals with them		
Moderate transparency downwards	0.727	-0.350	0.837	2.971	Financial situation	Financial performance information	Performance information
Lack of transparency and down	0.016	-2.457	0.874	2.790	Profitability		
Moderate transparency Upward	0.779	0.281	1.042	3.029	Non-financial information	performance	
Moderate transparency downwards	0.497	-0.681	1.003	2.933	General items	Credit Risk	risk management
Moderate transparency downwards	0.128	-1.535	1.017	2.848	Sources of Credit Risk		

Moderate transparency downwards	0.737	-0.337	1.160	2.962	Reduce credit risk		
Lack of transparency and down	0.010	-2.639	1.184	2.695	General items	Liquidity risk	
Moderate transparency Upward	0.728	0.349	1.117	3.038	Reduce Liquidity risk		
Moderate transparency Upward	0.056	1.934	1.060	3.200	Market risk		
Moderate transparency downwards	0.709	-0.374	1.304	2.952	Operational Risk		
Moderate transparency Upward	0.311	1.017	1.055	3.105	Board structure	structure and operating board	Corporate governance
Moderate transparency	1.000	0.000	1.074	3.000	senior executives		
Lack of transparency and down	0.001	-3.538	1.048	2.638	Board Payments and bonuses	Payments and bonuses	
Lack of transparency and down	0.000	-4.163	1.055	2.571	Payments executives	senior	
Lack of transparency and down	0.000	-3.898	1.177	2.552	Meeting		
Lack of transparency and down	0.002	-3.213	1.172	2.632	capital structure	and equity	
Moderate transparency Upward	0.095	1.686	1.042	3.171	Ethical issues	Ethical, social and environmental issues	Social Responsibility
Lack of transparency and down	0.046	-2.022	1.013	2.800	Social issues		Information
Lack of transparency and down	0.001	-3.271	1.014	2.676	environmental issues		
Moderate transparency downwards	0.251	-1.155	0.929	2.895	bribery money laundering		
Moderate transparency downwards	0.292	-1.059	1.199	2.876	Staff		
Moderate transparency Upward	0.680	0.414	1.180	3.048	Customers		
Optimum transparency	0.000	11.378	0.815	3.905	accounting procedures		Features and disclose
Lack of transparency and down	0.000	-4.123	0.686	2.724	Characteristics presentation		
Lack of transparency and down	0.020	-2.359	0.723	2.834	General information		Transparency
Moderate transparency downwards	0.210	-1.263	0.803	2.901	Activity environment information		
Lack of transparency and down	0.000	-6.139	0.855	2.488	Capital and capital adequacy		
Optimum transparency	0.220	1.235	0.531	3.064	Financial statement information		
Moderate transparency downwards	0.279	-1.087	0.658	2.930	Performance information		
Lack of transparency and down	0.000	-4.912	1.093	2.476	Upcoming Information		
Moderate transparency downwards	0.318	-1.003	0.542	2.947	risk management		
Lack of transparency and down	0.004	-2.919	0.602	2.829	Corporate governance		

Lack of transparency and down	0.000	-7.062	0.912	2.371	Religious rule
Moderate transparency downwards	0.082	-1.757	0.518	2.911	Social Responsibility Information
Optimum transparency	0.000	7.509	0.429	3.314	Features and disclosure

Source: Research Findings

5 Conclusion and Suggestion

The results of this study indicate that from experts point of view, the indicators and components of disclosure and transparency can be classified into 11 dimensions as described in Table (3). These indicators and elements are extracted from the models of international information disclosure and transparency and the documents and standards issued by International Banking Authorities. Concerning the purpose of the research, which is to formulate and present a model of information disclosure and transparency in Iranian banks with the environmental and local conditions of Iran, it can be claimed that the mentioned indices enjoy a comprehensive and inclusive dimension. And various indicators available in multiple models offered by international researchers and documents published by international professional authorities were applying expert opinions through their surveys, reporting conditions, information needs, and reporting environment of Iranian banks. Their rule has also been taken into consideration. Since each of the indices in this model has at least three previous information transparency models and has been selected from all of the indices studied, so the results are consistent with the results of Lee (2012), Arsov and Naumoski (2014) and Nair (2005).

Also, disclosure of some indicators, including information on the rate of return risk, contract-specific risk index and monetary risk, despite being included in studies by researchers in countries such as Qatar and Malaysia, the Iranian banking industry has not needed it, depending on the circumstances and from the experts' point of view. The results of the present study confirm all aspects, groups, and components of information contained in the proposed model (as described in Table 3) from external users. In this regard, the results showed that among the indicators and information dimensions mentioned in the model, the information disclosed in the financial statements is first of all importance, followed by the characteristics and the manner of disclosure. The relevant information, the importance of capital performance and information and capital adequacy rank second, third, and fourth.

In this respect, the results of the present study are consistent with those of Srairi and Ben Douissa (2014), Dehubi and Mamofli(2013), Ibrahim and Jaafar (2013), and Htay (2012), respectively. The level of transparency of banks in Finland, Tunisia, Nigeria, and Malaysia has been evaluated, reviewed, and matched. Considering the rank and importance of the three intelligence mentioned above groups, its subgroups, in addition to their relatively high relevance to previous research, are also harmonized with documents and standards issued by International Banking Authorities such as the Basel Committee and the Islamic Financial Services Board. As defined by the Basel Committee's definition of transparency, it is necessary for the bank to provide timely, accurate, relevant and sufficient disclosure of quantitative and qualitative information so that users can conduct a proper assessment of their activities, and find out the bank's risk status.

In this regard, the disclosed information must be based on the principles of effective measurement and use such aspects in appropriate ways. According to the disclosure standard issued by the Islamic Financial Services Board, the timeliness of disclosure is one of the most important qualitative features emphasized by Islamic banks for information disclosure. Besides, from the point of view of external users, the compliance rate of disclosure of these indices at the level of Iranian banks is in favorable condition, respectively. Banks were required to prepare financial statements and accompanying notes in a format communicated by the Central Bank under the Central Bank Notification Form from 2014. According to the Financial Statements Information Group in Iranian banks, the disclosure and information transparency status has been rated at a favorable level. But given the inadequacy of some prudential items and ratios, the inappropriate profitability situation, the lack of capital and capital adequacy ratios, and the maintenance of international standing and brokerage relationships with foreign banks, the Iranians banks are reluctant to provide comprehensive information on their profitability, performance, and capital adequacy ratios in their databases.

Therefore, the disclosure status of the intelligence group has been evaluated for the characteristics and modes of disclosure, performance and capital, and the ratio of capital adequacy from the respondents' point of view and the lack of transparency. Risk management information groups, futures information, social responsibility information and activity environment information, religious governance, general information, and corporate governance are ranked fifth to eleventh respectively. With Al Jenadi (2013), Suleiman (2013) Murcia and Santos (2012), Hassan (2013), Algeriani and Greiko (2013) and Oyer et al. (2013), Fazli and Whitman (2006), Hussain and

Hammamy (2010), respectively, on the level of banks' transparency, the countries of Saudi Arabia, Egypt, Brazil, Bangladesh, Italy, Turkey, Malaysia, and Qatar have measured and matched. Besides, the disclosure of information about these groups in the standards of disclosure and transparency of information published by the Basel Committee document and the Islamic Financial Services Board has also been emphasized. Unfortunately, despite the level of importance of these indicators and their components, the degree of compliance of the disclosure of recent indicators among Iranian banks are at low levels, and the lack of transparency have been evaluated from the perspective of external users. Factors such as lack of knowledge and expertise in measuring the importance of risks associated with banking operations including credit risk, liquidity, operational and market risk, lack of accountability culture and understanding of social responsibility dimensions, lack of strategy and plan long-term, non-establishment of corporate governance mechanisms by board members and senior executives of banks, the lack of clients, especially depositors with the concepts and banking literature are the most important reasons cited in this regard. Since the lack of transparency in the banking network has always been one of the challenges of the banking industry in recent years, this has endangered the stability and soundness of the banking system through inadequate reflection of risks of capital status and capital adequacy ratios, non-performing claims and the identification of undisclosed profits, which have caused considerable problems for the bank-based economy of Iran.

Indicators and components of the information transparency presented in the proposed model, which is the product of the opinions of a large number of banking experts and specialists, can be used as a practical basis for evaluation and rating in the present situation where the rating agencies are not active in Iran. The level of disclosure and information transparency of Iranian banks by outsourced users, especially depositors, is to make informed economic decisions and implement plans. Besides, researchers can use the proposed model in conducting academic research to address issues such as determining factors affecting banks' information transparency as an efficient and comprehensive basis.

References

- Ali, M. J., Ahmed, K., & Henry, D. (2004). Disclosure Compliance with National Accounting Standards by Listed Companies in South Asia. *Accounting and Business Research*, Vol. 34(3), 183-199.

- Antturi, S. (2013). Usefulness of Banks' Financial Reports in a Time of Crisis: Evidence from Corporate Customers of Banks in Finland.
- Arsov, s. and Naumoski, A. (2014). Transparency and Disclosure Practices in Selected Post Transition Economies. *European Journal of Business and Management*, 6(16), 43-67.
- Arsov, S., & Naumoski, A. (2014). Transparency and Disclosure Practices in Selected Post Transition Economies, *European Journal of Business and Management*, Vol.6, No.16.
- Barako, D. G. (2007). Determinants of Voluntary Disclosures in Kenyan Companies Annual Reports. *African Journal of Business Management*, Vol. 1(5), 113-128.
- Basel Committee on Banking Supervision (BALL COMMITTEE) (1998). Enhancing Bank Transparency, Bank for International Settlements, Switzerland.
- Basel Committee on Banking Supervision, (June 2004). International Convergence of Capital Measurement and Capital Standards, pp. 175-190.
- Bushman, M., & Flagler, K. (2015). Transparency, Accounting Discretion, and Bank Stability, *Economic Policy Review*.
- Bushman, R. M., Piotroski, J., Smith, A., & bark, T. (2004). What Determines Corporate transparency? *Journal of Accounting Research*, Vol. 42(20), 207-252.
- Chow, C. W. & Wong-Boren, A. (1987). Voluntary financial disclosure by Mexican corporations. *The Accounting Review*, Vol. 62, 533-541.
- Dehubi, R. and Mamofli C. (2013). Determinants of Voluntary Disclosure in Tunisian Banks's Reports Research. *Journal of Finance and Accounting*, 4, 80-94.
- Fons, S. J. (1998). *Improving Transparency in Asian Banking Systems*, Paper presented at "Asia: An Analysis of Financial Crisis Conference" sponsored by the Federal Reserve Bank of Chicago and the International Monetary Fund.
- Hajian, N., & Rahmani, A. (2017). Providing Information Transparency Rating Index for Companies Listed in Tehran Stock Exchange. *Modern Research in Accounting and Auditing*, No. 3. [In Persian]
- Hassan, M. (2013). The Influence of Corporate Governance Structures on Compliance with Mandatory IFRS Disclosure Requirements in the Jordanian Context. *International Journal of Research in Business and Social Science*, Vol. 2, 2147 - 4478.
- Hassan, O. A., & Marston, C. (2010). *Disclosure Measurement in the Empirical Accounting Literature - A Review Article*, (Working Paper No. 10-18).
- Hattie, S. N. N. (2012). The Impact of Corporate Governance on the Voluntary Accounting Information Disclosure in Malaysian Listed Banks. *Global Review of Accounting and Finance*, 3, 128-142.
- Healy, P. M., & Palepu, K. G. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics*, Vol. 31, 405-440.
- Hooks, J. (2000). *Construction of a Disclosure Index to Measure Accountability* (Ph.D. Thesis). University of New Zealand. Massey.

- Hooman, H. A. (2012). *Structural Equation Modeling Using LISREL Software*. Fourth Edition, Tehran: Samt Publications.
- Hope, O. -K. (2003). Disclosure Practices, Enforcement of Accounting Standards and Analysts' Forecast Accuracy: an International Study. *Journal of Accounting Research*, Vol. 41(2) (May), 235-272.
- Hossain, M, Hammami, H. (2009). Voluntary Disclosure in the Annual Reports of an Emerging Country: The Case of Qatar. *Advances in Accounting*, Vol. 25(2), 255–265.
- Hussainey, K. S. M. (2004). *A Study of the Ability of (Partially) Automated Disclosure Scores to Explain the Information Content of Annual Report Narratives for Future Earnings* (Ph.D. Thesis). University of Manchester.
- Ibrahim, K. & Jaafar, H. (2013). *Advances in International Accounting Corporate Governance and Disclosure on Segment Reporting: Evidence from Nigeria*. The Global Business and Finance Research Conference, Taipei Taiwan.
- Islamic Financial Services Board (IFSB), (2007). Disclosures to Promote Transparency and Market Discipline for Institutions Offering Islamic Financial Services (Excluding Islamic Insurance Takaful Institutions and Islamic Mutual Funds).
- Kundid, C., & Rogosic, A. (2012). E-Transparency of Croatian Banks: Determinants and Disclosure Contents. *Economic Research - Ekonomska Istrazivanja*, Vol. 25, 87.
- Lang, M., & Lundholm, R. (2000). Voluntary disclosure and equity offerings: reducing information asymmetry or hyping the stock. *Contemporary Accounting Research*, 17(4), 623-669.
- Lee, Y. B. (2012). A Study of Evaluation Criteria for Disclosure and Transparency. *The Journal of American Academy of Business*, Vol 17 (2), 139-146.
- Lepadatu, G. V., & Pirnau, M. (2009). Transparency in Financial Statements (IAS/IFRS). *European Research Studies*, Vol XII, Issue (1).
- Momeni, M. (2012). *Statistics and its Application in Accounting and Management*. Third Edition, Tehran: Samt. [In Persian].
- Naser, K., & Nuseibeh, R. (2003). Quality of Financial Reporting: Evidence from Listed Saudi Nonfinancial Companies. *The International Journal of Accounting*, Vol. 38, 41-69.
- Patelli, L. & Prencipe, A. (2007). The Relationship between Voluntary Disclosure and Independent Directors in the Presence of a Dominant Shareholder. *European Accounting Review*, Vol.16, 5-33.
- Samaha, K., Dahawy, K., Hussainey, K., & Stapleton, P. (2012). The Extent of Corporate Governance Disclosure and Its Determinants in a Developing Market: The Case of Egypt, *Advances in Accounting*, Vol.28, 168-178.
- Srairi, S., and Ben Douissa, I.. (2014). Factors Influencing Bank Transparency: Case of Emerging Markets. *British Journal of Economics, Management & Trade*. 4(4), 523-540.

- Wallace, R. O., & Naser, K. (1995). Firm-Specific Determinants of The Comprehensiveness of Mandatory Disclosure in the Corporate Annual Reports of Firms Listed on the Stock Exchange of Hong Kong. *Journal of Accounting and Public Policy*, Vol. 14, 311-368.
- Yousefi Asl, F. (2014). Explaining the Transparency Model of Financial Reporting. *Empirical Accounting Research*, No. 14. [In Persian].
- Yu, F. (2005). Accounting Transparency and the Term Structure of Credit Spreads. *Journal of Financial Economics*, Vol. 75, 53-84.

