Classification of Contributing Factors to Financial Statements Transparency Using Met analysis and Delphi-Fuzzy

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ABSTRACT

The realization and classification of contributing factors to presenting information in the market is a matter of the utmost importance. The more the transparency and the effect of capital market information on market activity, the more is the effect of capital market on economic growth. This paper aims to realize and classify the contributing factors to financial statement transparency.

The statistical population of the project is informant people with financial and non-financial reporting, including financial managers as the suppliers of financial statements, shareholders (opinion leader) as the users of financial statements, auditors' partners of audit firms, senior managers of firms, and professional academics in this field. Three main steps of the study are as follows: a) determining indices with met analysis approach; b) filtering major contributing indices to financial statement transparency using the Delphi-Fuzzy Method; and c) classifying indices. In terms of objective, this paper is practical which is carried out using the survey method within three synthetic phases along with the exploratory plan.

The obtained results of this paper show that the main factors include related information, timely information, the quality of financial reporting quality, the quality of internal control, the presence of appropriate internal controls, aligning with international standards, the quality of independent audit, country development, integrated financial reporting, and faithful presentation of information. Moreover, some factors were not significant for scholars, including firm size, financial leverage, firm liquidity, and masculinity culture, disclosure of related information along with payments to board members and CEO, and economic sanctions.

Keywords: transparency of financial statement presentation, met analysis, Delphi-Fuzzy.

1. Introduction

Financial transparency points to the actual reflection of economic performance of a firm by reporting information in financial statements. By using the financial transparency via legal, supervisory, and accounting policies, firms are accountable with the aim of assuring from awareness and supporting the investors. Chih et al. (2008) declare that financial transparency of a firm is important both for shareholders and other beneficiaries, including the staff, customers, and societies because by declining the information asymmetry, extremely transparent financial information can benefit from the advantages of information against outsiders.

Transparency is the core of modern financial reporting and the previous studies show that transparency is one of the major factors that attract the firm investors' view. According to the studies, financial reporting transparency can increase the trust of investors. On the other hand, lack of transparency can lead to pessimism and finally to the weak valuation of the firm and distrust (Barth et al., 2010; Leng & Mift, 2011; Nair et al., 2019). Moreover, information transparency plays a determining role in dealing with agency problems between investors and managers (Nair et al., 2019). In information transparency, foreign investors are more ensured of firm future (Anderson et al., 2009). It is said that traditional financial reporting generally includes historical information, shows tangible observations of firm performance and lacks the required transparency (Minnis et al., 2017). In traditional reporting, the reports of social responsibility and environment, etc., will be disclosed separately (Jensen & Mackling, 2017). These reports will be disclosed based on different purposes for some of the beneficiaries, separately (Hagins et al., 2016). Traditional financial reporting has some limitations since the aim of traditional financial reporting is not to show the value of the business firm and users have to pursue other information resources for their estimations. Users require some information about intangible assets of the firm (like strategy, business pattern, and/or technical knowledge) that most of them are currently recognizable in financial statements (Abor, 2007). Further, financial statement users want to be informed of the external environment, namely of competition status or industrial economic development of where the firm is working in. in general, users seek for more updated information than the current presented information.

The first motivational factor for conducting the study is the lack of academic studies in search of accumulating distinctive features and presenting a multidimensional criterion of financial reporting transparency to increase the descriptive power of transparency for economic consequences. In addition, the significant role of disclosure as an important dimension of each model of transparency in the process of allocating the efficiency of resources and also corporate governance can also lead to the significance of the issue. Furthermore, the classification of contributing factors to transparency can also be significant in determining standardization strategies and the investors can make optimum investment decisions by using the classification. Hence, it is expected from the present study to be able to provide some guidelines for the decisions of operational and financial analysts, Stock Exchange agents, and investment firms for choosing the optimum portfolio. Moreover, the findings of the present study can be useful for the Tehran Stock Exchange to become more familiar with listed firms on this organization and be effective for compiling dominant rules and regulations on the manner of transparent financial reporting. Thus, since capital market is one of the pillars of the financial market and plays a significant role in collecting financial and capital facilities for economic development of countries with the role of financial supply of credits required for economic firms in most of the countries, more transparent information related to the capital market and effective in market activity increase the effect of the capital market on economic development, so the present study is concerned about the following two questions:

1) What are the contributing factors to financial statement transparency?
2) How is the classification of contributing factors to financial statement transparency?

2. Theoretical principals and literature review

2.1. Financial reporting transparency

Transparency is the convergence of different branches of information and their transference to different groups of beneficiaries when they require the

information. Lack of transparency is the intentional prevention from getting access to information, incorrect presentation of information, or inability of the market in ensuring from the sufficiency of relatedness and information quality (Vishwanah & Kaufmann, 1999). Some of the scholars consider transparency as a single concept of disclosure in reports (Barrosan et al., 1977). Some other views point to information setting, including rules and regulations, supervisory boards, analysts that can affect the information transparency. These factors can lead to the decline of information asymmetry proposed in the agency theory (Bushman, Pitroski, & Smith, 2004). In fact, one of the major objectives of accounting information is to lower such information transparency (Cahan et al., 2005). Transparency can be a powerful tool for creating trust among citizens of a society. Transparency is vital for the economy because it can improve resource allocation and is dealing directly with efficiency and economic growth. Lack of transparent information in the market causes the increase of transaction cost and market failure. Hence, in most of the recent failures of the capital market lack of transparency is one of the contributing factors (Dipiazza & Eccles, 2002). Transparency lowers market uncertainty about immediate decisions of law-makers and finally increase the predictability of monetary policies and efficiency of financial markets. Lack of transparent information in the financial markets is a determining factor for the entrance of considerable volume of external investments and immediate outflow of them in case of occurrence of a crisis (Organization for Economic Co-operation and Development, 2004). Transparency and appropriate disclosure that lead to the decline of information asymmetry are an inseparable part of corporate governance of firms, so based on the conducted studies firms with more transparency have more value in the market than other firms (Benjamin, Hermalin, Michael, and Weisbach, 2007).

2.2. Tax reporting, the mechanisms, legal institutions and financial statement transparency

According to Vish, Onath, and Kaufmann (1999), transparency can be achieved at least in three ways (Edmit & Flicher, 2000):

- Improving legal mechanisms and/or regulations related to more disclosure
- Designing security measures for limiting ethical risk through more disclosure
- Establishing legal and law-maker institutions for solving inevitable problems of financial markets

The topic of tax reporting and emphasizing the strength of this section with the support of legal mechanisms contribute to financial reporting transparency. Mary Margarethe Frank et al. (2009) find a strong and positive relationship between aggressive tax reporting and its relationship with aggressive financial reporting. One of the other important results of the present study is to assess two facets of aggressive financial reporting and aggressive tax reporting on future return rate of stocks. Within a study, entitled international rules for measuring uniform book profit and loss of tax, Danial Shaviro (2009) figures out that uniform traditional presentation has led, to a great extent, to the withdrawn of definition of taxable Profit and financial accounting profit.

2.3. Financial statement transparency and stock liquidity

One of the contributing factors to decision-making is appropriate and related information to the topic of decision. In case the required information distributed asymmetrically among the individuals, different results can be achieved concerning the same topic (LaFond & Watts, 2006). According to theoretical opinions and prior studies (Barth et al., 2010; Lang & Maffett, 2011), information asymmetry and nontransparent environment lead to different inappropriate consequences, including the increase of transaction costs, market weakness, low liquidity, and generally the decline of obtained profit from transactions in the capital market. Negative effectiveness of firm value derived from information asymmetry encourages different sections of a firm to create mechanisms for realizing the contributing factors to information transparency and decline of information asymmetry (LaFond & Watts, 2006).

2.4. Cultural dimensions and financial statement transparency

Along with more complications and legalization of the economy, the number of users of such information has increased. Hence, the distinct feature of the accounting profession is to accept the responsibility against public people (Mackling, 2001). The conducted accurate studies by Stock Exchange Commission have shown that a considerable volume of accounting frauds by auditors and accountants on nontransparent reports have been carried out in firms, like San Dant, San Beem, and Lionet (Byrnes, 2009). Information transparency, either in the state-owned sector or in the general sector, is important and general responsibility is the cornerstone of all financial reports that lead to the increase of information transparency (Babajani, 2011). What is observable in studies is the effect of culture on information transparency. Hofstede (2007) defined the culture as cumulative planning of mind that separate the members of a human group from the other group. Accounting is under the effect of cultural, political, and economic settings of different countries. In terms of environmental factors, especially culture, it affects the human element of accounting and culture affects the accounting policy through norms and dominant values on accounting (Doupink & Salter, 1995).

2.5. Admitting international standards and transparency

The selected accounting standards of a firm have a considerable effect on accounting information quality and the amount of transparency. There are various studies that substantiate the useful impact of international accounting standards on information setting quality and information transparency (Hail & Leuz, 2009). Moreover, an extensive proportion of accounting literature considers the application of international accounting standards as an index for more transparency of financial reporting at firm level (Disk et al., 2009). The study of Disk et al. (2008) show that mandatory admission of international accounting standards only bears positive effects in the capital market for those countries where firms are motivated enough to be transparent and such an obligation is guaranteed executively.

2.6. Independent and local audit quality and appropriate and transparency internal controls

Financial reporting auditing presents significant interests in all steps of analysis and commercial reporting. Such interests can be enhanced through high-quality audit, such that they can lower the agency costs, increase the response, and trust and lead to more accurate evaluation of data, creation of transparent setting, facilitation of unification, and synchronization of international reporting standards and increase the efficiency of regulatory and content tests for local auditors (Bizaro, 2011). Different studies have increasingly pointed to internal controls and local auditing (e.g. the report of Blue-Ribbon Commission, Ramsay Report: Sarbanes-Oxley Act, 2002). Such an emphasis is to some extent due to the outbreak of extremely well-known and egregious frauds, including adjusted profit and loss statements (Larcker et al., 2004). In addition, academic studies find a direct relationship between corporate governance weakness and bad quality of financial reporting, earnings manipulation, fraud in financial statements, and weak internal controls (e.g. Dechow et al., 1996; Beasley, 1996; Mack Molen, 1996).

2.7. Financial reporting synchronization and transparency

Pistoni et al. (2018) show that the quality of integrated reporting is low. Loproit et al. (2018) reveal that voluntarily reporting setting and unified reporting lead to the growth of performance stability and transparency. Moreover, unified performance has a higher value connection. Sotipan (2017) indicates that unified reporting leads to the enhancement of financial performance and environmental transparency of firms. Martinez (2016) expresses that unified reporting is associated positively with firm value and future cash flows by improving transparency but it has no significant effect on information asymmetry and capital cost. Ablaroser and Austin (2016) notice that unified reporting affects the unified thought between risk, opportunity, and strategy and risk disclosure and opportunities.

2.8. Market analysts and transparency

Frijns et al. (2018) posit that investors and analysts have probably major conflicts due to different

interpretations from signals. Hence, such a conflict is due to mutual interpretation of investors and has a significant effect on information transparency. Moreover, presenting trustful information contributes to transparency. It is worth mentioning that transparency literature is in search of a bunch of direct evidence concerning the mechanisms that economic consequences of transparency are derived from, but in case some variables like admitting international standards, auditor selection, earnings smoothness, and analysts tracking are used as an index for financial reporting transparency, determining this fact that the documented results either derived from such factors or other spontaneous events is not an easy task. To date, attempts related to the accumulation of different transparency criteria have not been general, so creating powerful and accurate transparency criteria in this area would be an appropriate action (Lang and Maffett, 2010). ity information (Lang et al., 2011).

2.9. Social responsibility and transparency

The prior studies on social responsibility reporting suggest that disclosure of such items can be an effective indigenous variable for transparency (Cui et al., 2018). Halley et al. (2001) state that firms disclose management analysis report and other reports via financial reports, including financial statements, attached notes, and social responsibility reports and enhance transparency. In addition, some firms disclose the information voluntarily through some methods, including management predictions, presentation, and telephone conferences of
analysts, journals, internet websites, and other corporate reports.

Table 1 the extracted concepts from the literature review

Accounting information disclosure	Lang, Maffett,(2011); Acharya, Pedersen (2005).
Admitting international standards	Lang, Maffett (2010).
Avoiding uncertainty in the firm	Doupink and Salter (1995). Hofstede, Hofstede (2007).
Conflict of interests between firm managers and shareholders	Bhattacharya, Daouk, Welker, (2003), OECD Principles of Corporate Governance (2004). Zhai, Wang. (2016).
Corporate governance quality	Nairb, Muttakina, Khana, Nava Subramaniama, Somanathb (2019), Byard, Li,& Weintrop (2006), Ramsay, (2001). McMullen,(1996). Klein, (2002).
Culture of humanism	Doupink and Salter (1995). Hofstede, Hofstede (2007).
Culture of responsiveness in society	Lys, Naughton, and Wang. (2015). Gray, and Vint (1995).
Disclosing information related to payments and advantages of board members	Zhai, Wang (2016). Petra (2007).
Disclosing nonfinancial activities within separated reports	Campbell, Chen, Dhaliwal, Lu, and Steele. (2014).
Disclosure of capital cost	Bhattacharya, Daouk, Welker, (2003), Jinbu Zhai, Yutao Wang. (2016). Lang, Lins, Maffett, (2010), Acharya, Pedersen, (2005). OECD Principles of Corporate Governance (2004).
Disclosure of firm performance	Minnis, Michael and Sutherland, Andrew, (2017), Hopwood, Unerman, J. and Fries. (2010).
Ethical principles and honesty of the firm staff	Allison McClintic Marion. Gale Cengage, (2001), Byrnes (2002).
Financial reporting synchronization	Haijing. (2011), International Accounting Standards Board (2010),
Firm liquidity	LaFond, Watts, (2006). Lang, Maffett, (2011).
Firm size	Zhai, Wang. (2016). Petra,(2007). Nairb, Muttakina, Khana, Subramaniama, Somanathb (2019).
Firm value	Ohlson, (2005), LaFond, Watts,(2006).
Healthy competitive space	Cheng, Man and Yi. (2013). Grullon, Michaely, (2012).
Independent audit quality	Bizarro (2011). Bolue, Maham,Goodarzi.(2010).
Individualism against collectivism	Doupink and Salter (1995). Hofstede, (2007)
An initial acquaintance of beneficiaries with financial statement concepts	International Accounting Standards Board (2010), Gray, and Vint (1995).
Legal institutions and policy-makers to resolve financial market	Vishwanath, Kaufmann(1999).

problems	
Legal mechanisms related to disclosure	Vishwanath, Kaufmann(1999).
Local audit quality	Jinbu Zhai, Yutao Wang. (2016). Bizarro. (2011). Dechow, Sloan, R.G., & Sweeney. (1995). Beasley, (1996). McMullen. (1996).
Political economy	Lys, Naughton, and Wang (2015).
Power distance infirm	Doupink and Salter (1995). Hofstede, Hofstede (2007).
Predictability of liquidity	Lang, Maffett(2011), Acharya, Pedersen, (2005). Qin, (2008). Brunnermeier, Pedersen. (2009). Lang, Lins, Maffett, (2010). Pangano, Paolo, (2012). Fetch, Roland, Philipp, (2014), Gerace, Qigui, , Gary, Willa, Z. (2015).
Presenting information related to different firm risks	Lang, Maffett(2010). Acharya, Pedersen, (2005). Pistoni, Songini. and Bavagnoli. (2018). Brunnermeier, Pedersen. (2009).
Presenting related information	International Accounting Standards Board (2010),
Presenting reliable information	International Accounting Standards Board (2010), Benjamin. Hermalin, ichael. Weisbach. (2007).
Records of board members	Benjamin. Hermalin, ichael. Weisbach. (2007).Petra, (2007).
Security measures to limit the ethical risk through more disclosure	Vishwanath, Kaufmann. (1999).
The short-term inclination toward a long-term inclination	Hofstede, Hofstede (2007) Gray and H. Vint (1995).
Social responsibility reporting	Blue Ribbon Committee (1999). Cui, Jo, Na (2018)
Staff efficiency	Solomon, Solomon, Norton, and Joseph. (2000).Zhai, Wang. (2016).
Tax reporting	Scholes. Wilson, and Wolfson, (1990), Lisowsky. (2009), Manzon, Gil , and George . Plesko, (2002), Shaviro(2008),
The presence of analysts in the market	Frijns, Huynh, Tourani-Rad., Westerholm, P., (2018), Nairb, Muttakina, Khana, Subramaniama, Somanathb (2019), Lang, Lins, Maffett, (2010), Lang, Maffett(2011), Bolue, Maham, Goodarzi,(2010). Healy, Palepu, and Ruback, (1992).
The presence of appropriate and sufficient internal controls	Dechow., Sloan & Sweeney. (1995). Beasley. (1996). McMullen, (1996).
The presence of political connections	Campbell, Chen, Dhaliwal, Lu and Steele. (2014).
The quality of financial reporting	Blue Ribbon Committee (1999). International Accounting Standards Board (2010), Healy, Palepu, and Ruback,(1992).
Timely presentation of information	International Accounting Standards Board (2010), Francis, Olsson, & Schipper. (2008).
Trustful presentation of information	Healy, Palepu, and Ruback, (1992). Francis, Olsson, & Schipper. (2008), Nairb, Muttakina, Khana, Subramaniama, Somanathb (2019), Frijns, Huynh, Tourani-Rad, Westerholm (2018),

3. Research method

This paper is practical, in terms of objective and is among those descriptive studies that are carried out using the survey method in three phases and mix method along with exploratory plan. The major objective of this paper is to determine the contributing factors to financial statement transparency. Three main steps of the study are as follows: a) detecting indices using the met analysis approach, b) filtering key indices that affect financial statement transparency using the Delphi-Fuzzy method, and c) classification of indices. Initially, a questionnaire is designed with 42 questions and the subjects were asked to introduce the contributing factors to transparency, if they know any, in addition to the said factors. Among the total participants, a total number of 120 other factors, including financial leverage, governmental institutions in society, declining conflict of interests between managers and shareholders, the presence of private media, country development, the presence of supporting laws for investors, private ownership in the economic system was defined by the subjects and the final major questionnaire of the study designed with 54 questions.

The statistical population of the study, in the first step, comprises all scientific and reliable local and international articles during 1990-2018 in the financial statement transparency area that was collected using a no probable sampling method and by applying multiple filtering processes. In the second stage, (Delphi-Fuzzy) and third stage (classification), the opinions of 41 professionals were used. The statistical population of the present study involves financial and nonfinancial reporting informants, including financial

managers as financial statement suppliers, investors as the users of financial statements, audit firm auditors, senior managers of firms, and professional academicians in this field. In this paper, the library and survey method are used for collecting data and information. Furthermore, this paper is deductive, in terms of data collection and inference and retrospective, in terms of the research plan. Met analysis: met analysis or meta-research collect the obtained data from different studies and analyze them as a dataset. By collecting and analyzing considerable proportion of data, the chance of trusting to results goes up, remarkably.

Delphi-Fuzzy Technique

Delphi-Fuzzy method is used to unify the opinions of scholars and screen the indices to determine the main indices of financial statement transparency. Hence, first, the opinions of scholars were collected using triangular fuzzy numbers as follows:

Eq. (1)

$$\hat{W}_k = (a_k, b_k, c_k)$$

Where

W_k is a fuzzy number for K index. Minimum evaluation (a_k), average evaluation (b_k), and maximum evaluation (C_k) of scholars. Hence, center-of-gravity method that indicates the value (Sk index for K is as follows:

Eq. (2)

$$s_k = \frac{a_k + b_k + c_k}{3}$$

Finally, given the following conditions, the appropriate indices will be selected:

- ✓ If $s_k \geq \boldsymbol{\lambda}$, K index is accepted.
- ✓ If $s_k < \boldsymbol{\lambda}$, k index is rejected.

Descriptive statistics of the study

Table 1 shows the information of descriptive statistics of participants. As can be seen, total number of participants is 41, among whom 23 people are male and 18 are female. Demographic information of them, including type of educational degree and age are shown in Table 2.

Table 2. Information of descriptive statistics of participants

Gender	Age/education	PhD	PhD student	Bachelor's degree	Master's degree	Total	Percentage from total
Female	Between 25-30			1	3	4	9.8%
	Between 30-35	1	3	1	2	7	17.1%
	Between 35-40	2	1		2	5	12.2%
	Between 45-50				1	1	2.4%
	Between 50-55				1	1	2.4%
	Total female	3	4	2	9	18	43.9%
Male	Between 25-30			2	1	3	7.3%
	Between 30-35	2			3	5	12.2%
	Between 35-40	4		1	1	6	14.6%
	Between 45-50	6			1	7	17.1%
	Between 50-55		1		1	2	4.9%
	Total male	12	1	3	7	23	56.1%
Total		15	5	5	16	41	100.0%
Percentage from total		36.6%	12.2%	12.2%	39.0%	100.0%	

3. The results of Delphi-Fuzzy method

In the first step, we analyzed the literature systematically to get familiar with the contributing factor to financial statement transparency. Various databases (SCOPUS, JSTOR, ProQuest, and Science Direct), including electronic journals were assessed to collect the related articles. A set of keywords (transparency, financial statements, reporting) were selected for realizing articles related to the topic of the study. After limiting the number of discovered articles, we assessed the journals based on the rate of citation. The sampling method in the first phase is based on having access to articles as well as discovering related and reliable articles in nonprobable type. Within the process, first, we analyzed the "abstracts", then "contents" of the articles. After analyzing the content

of articles, a set of indices were determined. The qualitative content analysis which is different from quantitative content analysis, is a tool for study on scientific journals and written relationship among them with the aim of determining key ideas and existing themes in texts. In qualitative content analysis, the scholar tries to explore the existing area and theme in analyzed texts and classify them by extracting key sentences related to the study (Bryman & Bell, 2007).

In this paper, met analysis is used as a statistical technique, through which first, we collected all published articles related to the topic of transparency using the keywords of transparency, financial statement, reporting, and met analysis in local and international journals. A total of 89 studies was selected as the basis of entering the met analysis. To gather the information, met analysis worksheet is provided and information related to study was encoded in the worksheet. In this paper, the coefficient of correlation is selected as the estimator of impact size in each study. After entering the data to the Software and analyzing the sensitivity, the impact size of variables was calculated in two publication methods of the funnel diagram. According to the results of Table 1, the mean combined impact size of studies in the model of fixed effects was 0.721 and 0.602 in the random effects model which are significant at 0.01 level. According to the Cohen criterion, for interpreting the scientific significance of the impact size, the impact size values of 1, 0, 0.3, and 0.5 are the amount of low, medium, and high impact size. Hence, the mean obtained combined impact size for the variables of transparency is high in both models.

In the following, the Delphi-Fuzzy method is used for screening and determining the main indices. Hence, the opinions of 41 scholars were collected by using linguistic scale questionnaire and triangular-fuzzy numbers ($\hat{W}_k = (a_k, b_k, c_k)$ by comparing five dotes of Table 3.

Table 3. Obtained information from the implementation of Delphi-Fuzzy method

Index No.	Question	Fuzzy removal	(acceptance/rejection)
1	Disclosing firm value	0.762195	Acceptance
2	Disclosing annual financial performance via profit and loss	0.760163	Acceptance
3	Disclosing capital cost of the firm	0.739837	Acceptance
4	The presence of appropriate human connections in organizations	0.672764	Acceptance
5	Regulating ethical principles among senior managers of the organization	0.75	Acceptance
6	Disclosing the records of board members	0.699187	Acceptance
7	Through the synchronization of financial reporting, information related to the board	0.719512	Acceptance
8	An initial acquaintance of beneficiaries with financial statement concepts	0.721545	Acceptance
9	Presenting reliable information	0.79065	Acceptance
10	Related information	0.833333	Acceptance
11	Timely information	0.831301	Acceptance
12	Information disclosure	0.678862	Acceptance
13	Disclosing information related to payment and advantages of board members and firm CEO	0.644309	Rejection
14	Disclosing nonfinancial activities in separate reports	0.715447	Acceptance
15	Disclosing corporate governance mechanisms	0.778455	Acceptance
16	The presence of legal mechanisms related to disclosure	0.768293	Acceptance
17	Security measures for limiting ethical risk via more disclosure	0.75813	Acceptance
18	The presence of legal institutions and law-makers for resolving financial market problems	0.703252	Acceptance
19	The presence of healthy competitive space	0.727642	Acceptance
20	Independent audit quality	0.817073	Acceptance
21	Internal audit quality	0.823171	Acceptance
22	Disclosing information related to tax prices and firm performance	0.735772	Acceptance
23	Presenting information related to different firm risk	0.75	Acceptance
24	Financial reporting synchronization	0.73374	Acceptance

Index No.	Question	Fuzzy removal	(acceptance/rejection)
25	Staff efficiency	0.693089	Acceptance
26	The integrity of the firm staff	0.747967	Acceptance
27	The presence of appropriate and sufficient internal controls	0.821138	Acceptance
28	Admitting international standards	0.821138	Acceptance
29	The presence of analysts in the capital market	0.686992	Acceptance
30	Predictability of stock price liquidity	0.654472	Acceptance
31	Corporate governance quality	0.794715	Acceptance
32	The quality of financial reporting quality	0.825203	Acceptance
33	Trustful presentation of information	0.804878	Acceptance
34	Financial reporting integrity	0.810976	Acceptance
35	Power distance in firms	0.672764	Acceptance
36	Humanism culture	0.54065	Rejection
37	Individualism against collectivism	0.70122	Acceptance
38	Short-term inclination against the long-term inclination	0.707317	Acceptance
39	Avoiding uncertainty infirm	0.731707	Acceptance
40	The presence of political connection infirm	0.684959	Acceptance
41	The presence of economic and currency fluctuations	0.676829	Acceptance
42	Increase in economic sanctions	0.607724	Rejection

After determining minimum (ak), mean (bk), and maximum (Ck) evaluation of scholars from indices with center-of-gravity method ($s_k = \frac{a_k+b_k+c_k}{3}$), the value of (Sk) of each index is determined. Finally, if $s_k \geq \lambda$ of index K is accepted and if $s_k < \lambda$ of index K is rejected. If the threshold value is high, a few numbers of indices will remain, so the threshold value is considered as $\lambda = \cdot/65$ because minimum mean of "significant" value is (0.05) and maximum "normal" value is (0.7), so those indices with values lower than 0.65 are eliminated.

The obtained information from the implementation of Delphi-Fuzzy method about the questionnaire of the study is presented in Table 4. As can be seen, the questions were asked from the participants and each one answered verbally in five spectrums given the intellectual backgrounds and these answers were converted to fuzzy numbers and high limit, low limit, and average of each answer is determined for each question. The next step is fuzzy-removal using the above three-limit mean and the obtained numbers were compared with the threshold number (65%) and each fuzzy-removal number higher than threshold number has been accepted as the agent and the remaining were rejected.

4. Conclusion and recommendations

Traditional financial reporting generally comprises historical information and show tangible evidence about firm performance, such that the profit and loss statement is the most robust and currently the most comparable source of information for investors (Menis et al., 2017). Financial transparency of a firm is not only important for shareholders but other beneficiaries, including the staff, customers, and societies because by lowering the information asymmetry it leads to financial stability in presenting extremely transparent financial information (Chih et al., 2008). This is while the previous studies were concentrated on the evaluation of financial transparency derivers through a conceptual lens of agency, institution, and signaling (Leuz et al., 2003; Coh, 2007; Pisnell et al., 2005). Few studies were also concentrated on the manner of determining transparency factors in financial statements. Atkins (2006) argues that extremely transparent financial disclosure can be a corporate social responsibility element. Hence, it is expected from committed firms to present social responsibility to be in accordance with the ethical stance of beneficiaries and show more transparency in their financial reports. The main factor, however, is that managers may exploit social responsibility disclosure, opportunistically (Pirero et al., 2008). Financial reports

transparency can increase the trust of investors' society and on the other hand, non-transparency can bring about pessimism and misconduct and finally result in a weak valuation of a firm and uncertainty. Such uncertainty brings about information risk for market practitioners and extensive access to related and documented information about period performance, financial position, investment opportunities, strategies, values, and risks of transacted firms is referred to as financial transparency (Bushman, Pitroski, Smith, 2004). One of the contributing factors in decision-making is to provide appropriate information related to the topic of decision. In case the required information is distributed asymmetrically among people, different results would be yield about the same topic (LaFond & Watts, 2006). Since capital market is one of the pillars of financial market and plays a significant role in collecting financial and capital facilities for economic growth of countries and provides the required credits of the economic firms throughout the world countries, more transparent information related to the capital market and effective in the market activity enhance the effect of capital market on growth and economic development, as well. The negative effect of firm value which is derived from information asymmetry encourages different sections of a firm to design some mechanisms for the realization of contributing factors to information asymmetry and declining information asymmetry (LaFond & Watts, 2006). On the other hand, given the topic of corporate governance and financial reporting quality in developed countries, the focus is on certain corporate governance mechanisms, including ownership concentration, managers' ownership (Balesta and Meca, 2005), board independence (Petra, 2007), audit quality (Agrawal & Chandha, 2005).

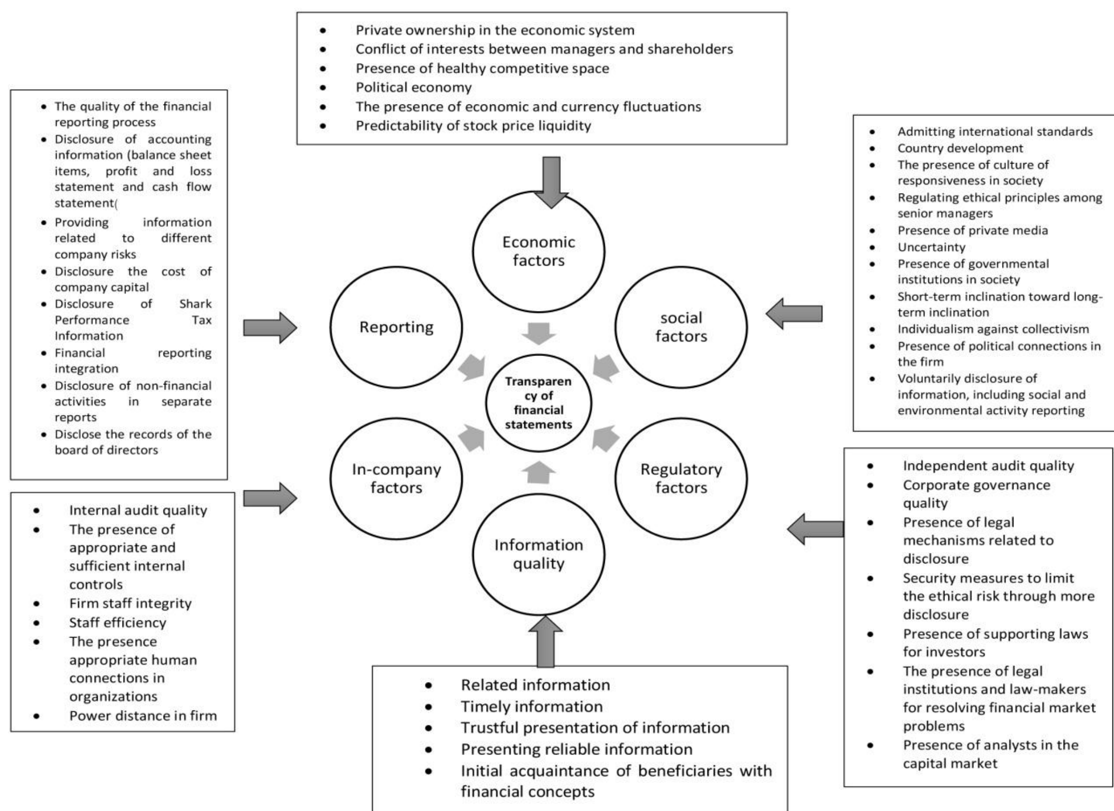

Figure1. Model of contributing factors to financial statement transparency

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