Investigating the Impact of Firm Characteristics on the Risk Disclosure Quality

Nermine S. M. Hassan
PhD in Accounting
Lecturer, Faculty of Commerce
Cairo University

Abstract

This study makes a contribution to the risk disclosure quality (RDQ) literature by offering the first study in Egypt. This study develops a framework to assess the risk disclosure quality and examines the determinants of RDQ practices. We develop a framework for analyzing the quality of risk disclosure practices. This framework is based on four criteria: "Relevance", "Understandability", "Comparability" and "Verifiability". Using a sample of the Egyptian listed companies for the period of 2006-2010 (consists of 135 observations), we find that there is an improvement in all criteria of risk disclosure quality, and the risk information is relevant and understandable to some extent, but it is less comparable and verifiable. Results of the statistical analysis revealed that the firm size and leverage level are the most important determinants of the risk disclosure quality.

Keywords: Risk Disclosure Quality– Content analysis – Firm characteristics

1- Introduction

The last few years witnessed a considerable attention of the concept of risk disclosure. The importance of risk disclosure is derived from needs of the current and potential investors to get future information that help them to make various economic decisions. Risk disclosure provides information to the users to enable them assess the risks affecting the companies' future economic performance. (Dobler, 2005b, pp. 1197-1200; Ismail and Abdul Rahman, 2011, p. 38)

Enhancing the transparency of financial reports and improving the disclosure quality is one of the corporate governance principles. The risk disclosure can play a vital role in this issue through informing investors and other stakeholders about the uncertainty surrounding the business of the company, and thus help them to make more effective decisions. (Gao, 2008, p. 13; Cabedo and Tirado, 2004, p. 182) To estimate the volume and timing of a company's future cash flows in an appropriate manner, investors need to understand the risks facing the companies and through obtaining the information about analysis of the risks affecting the companies, measures used to assess these risks, and the procedures and actions taken to manage the exposed risks (ICAEW, 2002, p. 18). This is supported by the results of the survey carried out by Solomon *et.al.*,(2000) which revealed that a strong need exists for the expansion of the risk disclosure and this will help investors to improve their investment decisions.

The adequate disclosure about the risks can lead to a reduction of the information asymmetry problem between managers and investors, resulting in a reduction of conflict of interest, which in turn leads to a reduction in agency costs, on the basis that the availability of objective and verifiable information can help shareholders to exercise their monitoring role toward managers effectively. (Uddin and Hassan, 2011, p. 60; Pedro et.al., 2008, p. 2; Dobler, 2008, p. 187; Vandemele, 2009, p. 1).

The risk information can achieve investors protection concept effectively by informing them about the problems and threats facing the company, and then can fulfill the function of early warning to them, that as well as improving their ability to manage their self-risks. (Dobler, 2008, p. 187; Gae, 2008, p. 17; Linsley and Shrives, 2005, p. 205; ICAEW, 1997, p. 8)

On the other hand, risk disclosure can help the company improve risk management (CICA, 2012, p. 2).The company that adopts a strong and accurate risk reporting approach his more able to improve the risk management process. (ICAEW, 2002, p. 21; ICAEW, 1997, p. 8).

This is also supported by the standard risk management when mentioned that risk reporting is the third step of risk management system of the company (A Risk Management Standard, 2002, p. 4). Hence, risk disclosure can serve as an important element toward a good risk management, which in turn can support the quality of management as a whole and therefore the positive impact on the reputation of the company, and its positive impact on the confidence of stakeholders in the management of the company, and the financial reports (Gae, 2008, p. 17; Epstein and Buhovac, 2006b, p. 27; Vandemele, 2009, p. 1).

Also the adequate disclosure of risks and risk management activities allows shareholders and financial analysts to evaluate the stock of the company appropriately, and forecast market values more accurately. Therefore, the availability of adequate information about the risks may prevent overvaluation of stock prices which prevents harming of reputation and survival of the business in the long run if the equity have been evaluated in an exaggerated manner. (Epstein and Buhovac, 2006a, p. 10; Dunne, et.al., 2004, As Cited in: Abram and Cox, 2007, p. 227; Desumes, 2008, p. 122)

So, the transparency of risk disclosure is important and necessary to maintain an accurate assessment of the stock prices, which in turn leads to improve the efficiency of capital markets. (Dietrich, et.al., 2001, As Cited in: Linsley and Shrices, 2006a, p. 389; Desumes, 2008, p. 122; Epstein and Buhovac, 2006b, p. 29).

Kravet & Muslu (2011)concluded that risk disclosure has an informative content, so the risk disclosure is associated positively with trading volume in capital markets, and the accuracy of the earnings prediction.

Risk disclosure may help investors to assess the future performance of the company in a better manner, which in turn leads to a reduction in the cost of capital. (Linsley and Shrives, 2006a, p. 389; ICAEW, 1999, p. 11; Vandemele, 2009, p. 1; Epstein and Buhovac, 2006a, p. 10). Cost of equity capital is related with the expected or probable risks that the firm possess, so the transparent communication of risk information may decrease investors' uncertainty, which in turn may decrease cost of equity capital.

Studies on risk disclosure are very much an emerging area (Linsley and Shrives, 2005) and the work that has been done has concentrated on examining disclosure practices in developed countries (Linsley and Shrives, 2005; Beretta and Bozolan, 2004). There is a lack of examining risk disclosure practices of companies in developing countries in general and in Egypt in particular. The current paper provides a contribution to the risk disclosure literature in three respects. First, it develops a framework to assess RDQ which takes a less attention in the previous literature. Second, it provides the first study that evaluates RDQ in Egypt as an example of the developing countries. Third, it examines the drivers of the RDQ in those countries, which may give us more insight into how listed companies in those countries have adjusted their disclosure strategies, as demands for more transparency.

The remainder of the paper is structured as follows: Section 2 describes RDQ determinants, review previous literature, and develop research hypotheses. Section 3 develops a methodology to assess RDQ. Section 4 discusses the research design. Section 5 presents the empirical findings of the study. Finally, conclusion, limitations, and suggestions for further researches are discussed in Section 6.

2- RDQ Determinants and Hypotheses Development

In the current section, the researcher discusses the determinants or drivers that expected to impact the quality of the risk disclosure practices. These drivers include firm size, leverage, profitability, book to market ratio, and audit firm size. The researcher discusses these determinants in details in the following paragraphs.

(1) Firm Size

The firm size is the determinant that the accounting literature gave the highest support in its relationship with the behavior of accounting disclosure. The variable firm size may be an indication of some of the characteristics of the business such as competitive advantages, and its ability to incur the costs of production and distribution of financial information. Larger firms are able to incur more costs for information production and distribution. Hence, larger firms are likely to be more informative and pay more attention to improving the quality of this disclosure compared to smaller firms because of their financial resources that enable them to expand the disclosure. (Francis, et.al., 2007, p. 21; Ahmed and Courtis, 1999, As Cited in: Abraham, et.al., 2007, p. 15)
Larger firms may have the ability to afford the costs resulting from competitive harms that can result from the expansion of the disclosure compared to smaller firms (Nasir and Abdullah, 2004, p. 16).

This could lead to the reluctance of smaller firms for the expansion of disclosure and improve the quality of disclosure compared to their larger counterparts working in the same industry in order to avoid what may result in competitive harms.

On the other hand, because larger firms attract more attention of many different classes of stake holders such as stockholders, it may make them susceptible to higher political focus by the authorities supervising them (price controls, social responsibility, etc.) compared to the smaller firms (Oorschot, 2009, p. 52). According to political costs theory, the expansion of disclosure is a means of reducing political focus. (Helbok and Wagner, 2006, p. 11; Horing and Gundl, 2011, p. 10)

Larger firms may also be more susceptible to the increased problems relating to information asymmetry and agency costs compared to smaller ones. This may justify its moving towards providing more information about the quality of risk in an attempt to alleviate these problems. (Oorschot, 2009, p. 52)

Although many studies investigated the relationship between the size of the business and the RDQ; their results were mixed.

Berger and GleiBner (2006) concluded that there is a positive significant correlation between the RDQ, and market capitalization as a measure of the size of the business. While Abraham, et.al, (2007) revealed that there is a weak positive correlation between the two variables. In the same direction Chandiramani (2009); and Hanetseder (2011) found no significant impact of the firm size on the RDQ.

In contrast, some studies concluded that there is negative relationship between the RDQ and the firm size. (Fransic, et.al., 2007, pp. 23, 46; Winter, 2010, p. 58)

In the present paper, the researcher predicts that large Egyptian companies are more likely to report RDQ in their annual reports. Therefore the researcher develops her hypothesis as follows:

H1: There is a positive association between RDQ and the firm size.

(2) Firm Leverage

The firm leverage indicates the level of indebtedness of the business, which refers to the degree of financial risk that faced by the business.

Business firms perceived by the market as having high levels of leverage, are exposed to costs of control. These firms are increasingly motivated for the expansion of disclosure to reduce control costs that may be incurred by the shareholders when investing in these firms, and also to meet the needs of the creditors and lenders (Jensen and Meckling, 1976, As Cited in: Atan, et.al., 2010, p. 29).

High leverage firms may trend toward the expansion of the disclosure of the risks, due to the pressure to clarify and interpret the engines of these risks (Linsley and Shrives, 2006a, p. 391, 2006b, p. 274; Neri, 2010, p. 6), or provide a signal to interested stakeholders about how the company measures and manages such risks effectively (Abraham and Cox, 2007).

This is also supported by the Winter(2010) when he concluded that the high levels of leverage may affect the quality of the disclosure of the risks based on firms with high leverage levels may expand their disclosure for the risks in order to avoid the risk of litigation if they do not disclose sufficient information about the potential risks. In contrast, Abraham, et.al., (2007)support the lack of significant correlation between the degree of financial leverage for the business and the quality of risk disclosure, which requires testing of this relationship.

In the present paper, the researcher predicts that there is a significant relationship between the level of financial leverage and the RDQ but the nature (positive or negative) of this relationship cannot be determined. Firms with high levels of leverage may seek to provide more quality information about the risks to avoid the risk of litigation. On the contrary, these firms may avoid the disclosure of risks in order to avoid the problems of adverse informative disclosure. Therefore the researcher develops her hypothesis as follows:

H2: There is an association between RDQ and firm leverage.

(3)Firm Profitability Level

More profitable firms may expand the disclosure and provide high quality information for the public to acquire a positive impression about their performance (Wang et.al., 2008).

According to the Signaling Theory, more profitable firms may have a motivation to differentiate itself from less profitable, and thus are likely to adopt a good disclosure policy for risks earlier than less profitable firms (Helbok and Wagner, 2006, p. 11) in order to provide a signal to stakeholders that increases their confidence in the business. Also the most profitable firms may have sufficient resources available to invest in systems to assess and manage such risks, which support its orientation towards a high quality risk disclosure policy. (Neri, 2010, p. 6) According to political costs theory it is expected that the most profitable firms are interested in improving the quality of disclosure of risks to reduce the political costs they may face. (Oorschot, 2009, p. 53)

On the contrary, some authors believe that the management of firms with poor performance may face a pressure to disclose extensive and comprehensive disclosure of the risks. This stems from the need for disclosure about performance engines and risks. The expanded disclosure may reflect enhancement of the management understanding of the value creation process at the firm level. (Vandemele, 2009, p. 6; Neri, 2010, p. 6; Horing and Grundl, 2011, p. 11)

Even so, the empirical results varied regarding the relationship between the profitability of the business and the quality of disclosure in general or particularly about the risks .

Francis, et.al., (2007) conclude that there is a significant positive correlation between the quality of disclosure, and the performance of the business.

On the other hand Berger and GleiBner (2006) in their study did not support the significant correlation between the quality of the disclosure of the risks, and the profitability of the business. In the same direction Oorschot (2009) found that there is a positive relationship, but not significant between the level of profitability and the risk disclosure quality.

In the present paper, the researcher predicts that there is a significant relationship between the level of profitability or performance of the firm and the RDQ but the nature (positive or negative) of this relationship cannot be determined. On one hand, the more profitable firms may be more interested in improving the RDQ compared to lower profitable firms. On the other hand, the lower profitability firms may face pressure that force them to disclose information about the risks in order to disclose information about the engines of such risks and justify the lower performance or profitability. Therefore the researcher develops her hypothesis as follows:

H3: There is an association between RDQ and firm profitability level.

(4)Book to Market Ratio

The increase of book to market ratio reflects lower growth opportunities. By the concept of contrary, the inverted ratio means higher growth opportunities that lead to increase the uncertainty level and then decrease the informative content of the risk disclosure. (Winter, 2010, p. 41).

Winter (2010) concluded that a positive relationship exists between the B/M ratio and the informative content of the risk disclosure due to the decrease of the uncertainty level and the increase of predictability.

On the contrary, Francis, et.al., (2007) reveal that there is a negative correlation between B/M ratio and the quality of disclosure. Therefore the researcher develops her hypothesis as follows:

H4: There is a negative association between RDQ and B/M ratio.

(5)Audit Firm Size

Although the management is responsible for preparation of financial statements, the audit firm may have a significant impact on the content of the annual report. (Barako, et.al., 2006, p. 110)

Big audit firms may require high levels of disclosure due to its professional reputation. (Chalmers and Godfrey, 2004, p. 100)

According to the signals theory, if the firm selects to be audited by one of the Big 4 audit firms, may be a signal to investors to accept audit firm requirements of high quality disclosure.

This means that if financial statements are audited by a high quality audit firm, they will support the investors' confidence in the overall situation of the firm risk (Neri, 2010, p. 7)based on the higher quality audit firm may emphasizes the importance of risk disclosure, which may result in a high quality comprehensive risk disclosure. (Vandemele, 2009, p. 6)

The researcher believes that audit firm size (measured as being one of the big 4 audit firms) is one of the determinants expected to affect the RDQ. The larger the audit firm, the more increased interest in preserving its professional reputation, avoiding litigation and supporting the community's trust in it. In addition, larger audit firms will be more interested in reviewing the latest versions of international accounting and auditing standards. On the other hand, being one of the big 4 may be an indicator of better audit quality. Therefore the researcher develops her hypothesis as follows:

H5: There is an association between RDQ and audit firm size.

3- Methodology

In order to assess RDQ practices, the disclosures are analyzed using four criteria. Botosan (2004, p. 289) argues that the notion of quality should be based on conceptual frameworks suggested by professional accounting bodies as they reflect a consensus on what constitutes good disclosure. The criteria used here are principally based on Conceptual Framework for Financial Reporting issued by IASB and FASB (2006, 2008, and 2010).The four criteria that are developed based on this framework and the disclosure items for each criterion are categorized as shown in table (1):

Table (1) Risk Disclosure Quality Criteria and Disclosure Items

Criteria	**Disclosure Items**
Relevance	1. Disclosure of risk Management. 2. Disclosure of risk occurrence probabilities. 3. Disclosure of the impact of risk (positive or negative, quantitative or qualitative both current and expected). 4. Disclosure of Significant risk factors and risk concentrations. 5. Disclosure of the impact of development in current activities of the company on the opportunities and threats that possess the company.
Understandability	1. Disclosure of Specific definition for each type of risk. 2. Definition of risk management. 3. Disclosure of each type of risk separately 4. Using tables, graphs and illustrations along with descriptive narrative information. 5. Definition for the measurement models used. 6. Presentation of risk information in the context of the company's strategy, business model, and past performance. 7. Presentation of risk information in the context of the company's plans and expectations for the future.
Comparability	1. Consistency in the presentation bases of risk information from period to period. 2. Include comparable risk information for year proceeds the reporting year. 3. Consistency in the measurement bases of risk from period to period. 4. Disclosure of any changes in disclosure or measurement bases and its causes and impact. 5. Disclosure of any changes in risks compared to the period before the reporting period. 6. Disclosure of any changes in risk treatment compared to the previous period. 7. Disclosure of any changes in risk management strategies compared to the previous year.
Verifiability	1. Disclosure of quantitative information about risk. 2. Disclosure of information about measurement models used. 3. Disclosure of the basic assumptions underlying the measurement models used. 4. Disclosure of the limitations of the measurement used.

4- Research Design

Model Development

In order to test the above hypotheses, the study will investigate the following models:

Model	
1	RDQ= β_0 + β_1Firm Size + + β_2Leverage + β_3Profitability + β_4B/M ratio + β_5Audit Firm + Ɛ
2	Relevance= β_0 + β_1Firm Size + + β_2Leverage + β_3Profitability + β_4B/M ratio + β_5Audit Firm + Ɛ
3	Understandability= β_0 + β_1Firm Size + + β_2Leverage + β_3Profitability + β_4B/M ratio + β_5Audit Firm + Ɛ
4	comparability= β_0 + β_1Firm Size + + β_2Leverage + β_3Profitability + β_4B/M ratio + β5Audit Firm + Ɛ
5	Verifiability= β_0 + β_1Firm Size + + β_2Leverage + β_3Profitability + β_4B/M ratio + β_5Audit Firm + Ɛ

Measuring the Variables

1. Dependent Variable (RDQ):

The researcher measured the RDQ through development of a disclosure index, which can be expressed by the following equation :

RDQ Factor = Σ Actual Score / Σ Maximum Score (24 Points)

Where :

RDQ Factor: A factor of the risk disclosure quality .

ΣActual Score: Total actual points of disclosed items.

Σ Maximum Score: Total points of Maximum disclosed items (consist of 24 points).

Each item gets the value (1) If it is disclosed, while gets the value (zero) if it is not disclosed. There are two items that get more points than (1). The first item is "the disclosure of risk management" included in the criterion of relevance. This item gets the value (zero) if it is not disclosed, and gets the value (1) if it is disclosed partially (for example if there is some disclosure about risk management procedures), while gets the value (2) if there is a detailed disclosure of the risk management (for example the disclosure of the objectives, policies, strategies, human and organizational resources allocated to risk management).

The second item is "the disclosure of any changes in disclosure or measurement bases and its causes and impact" included in the criterion of comparability. This item gets the value (zero) if it is not disclosed, and gets the value (2) because it replaces two items at the same criterion, these items are consistency in the presentation bases of risk information from period to period, and consistency in the measurement bases of risk from period to period. Table

(2) Presents number of disclosure items for each criterion and number of points allocated for each item.

Table (2): Risk Disclosure Index Items

Risk Disclosure Criteria	**No. of Disclosure Items**	**No. of Points Allocated for Disclosure Index Items**
Relevance	5	6
Understandability	8	7
Comparability	7	6
Verifiability	4	4
Total	**24**	**24**

2. Independent Variables

The independent variables are measured as shown in table (3):

Table (3) Measurement of Independent Variables

Independent Variables	Measurement
1- Firm size	Natural log of total assets at the end of each period.
2- Leverage	Total debt (liabilities) to equity ratio.
3- Profitability	Return on total assets.
4- B/M ratio	Book value / market value of the share at the end of each period
5- Audit firm size	Dummy variable gets the value (1) if the audit firm linked with one of the international big 4 firms, and gets the value (0) otherwise.

Population and Data

The study conducted explores risk disclosures quality for the years 2006 to 2010 by analyzing the annual reports and reports of Board of Directors of a sample of 27Egyptian listed companies covers 12 sectors as shown in table (4). The financial statements and reports of the Board of Directors are obtained from Egypt for Information Dissemination Company. Thus the sample consists of 135 observations.

Table (4): Sample Distributed According to Market Sectors

Industry Sector	No. of Companies	%
Banking	3	11.1%
Basic Resources	1	3.7%
Chemicals	2	7.4%
Construction and materials	5	18.6%
Financial services excluding banks	1	3.7%
Food and Beverage	1	3.7%
Healthcare and pharmaceuticals	4	14.8%
Industrial Goods and Services and Automobiles	2	7.4%
Oil and Gas	1	3.7%
Personal and Household Products	1	3.7%
Real State	3	11.1%
Telecommunications	3	11.1%
Total	**27**	**100%**

Descriptive Analysis

Table (5) present descriptive statistics for the independent and dependent variables of the selected sample. It is noted that there is a wide range of RDQ. At the level of the index of the RDQ, the maximum value of the index was0.67, while the lowest value was zero. As well as a wide range of RDQ at the level of sub-dimensions, for example, relevance index ranges between zero and one.

However, it is noted that there is a considerable variation in the practice of the selected sample, both at the level of the general index of the RDQ or at the level of sub-dimensions, where the average index of 0.36. As shown in Table (5) the risk information is more relevant and understandable to some extent, where the average index of relevance and the understandability were 0.45 and 0.50 respectively. While the risk information is less comparable and verifiability, where the average index of comparability, and verifiability were 0.22 and 0.24, respectively.

As appeared from the table that about 52% of the selected firms are audited by the audit firm linked with the international Big 4 audit firms.

Table (5): Descriptive Statistics of the Variables

Variables	Minimum	Maximum	Mean	Standard Deviation
RDQ aggregated Factor	Zero	0.67	0.36	0.117087
Relevance Index	Zero	1	0.45	0.19917
Understandability Index	Zero	0.75	0.50	0.13954
Comparability Index	Zero	0.50	0.22	0.10236
Verifiability Index	Zero	1	0.24	0.30614
Firm Size	7.42	10.92	9.22	0.977664
Leverage	0.057	14.026	2.46	3.2908
Profitability	0.40	69.69	10.95	10.13846
B/M value ratio	0.003	4.11	0.65	0.674
Audit Firm Size	zero	1	0.52	0.502

5- Empirical Findings

Figure (1) indicate that there is an evolution in the RDQ during the study periods, where an average RDQ aggregated index is 0.43 in 2010 compared to 0.29 in 2006, representing an increase of 48%. In spite of the increase in the levels of RDQ during the study period, but it is at very low levels; where the average RDQ index over the five years does not exceed 0.43, which indicates low levels of RDQ significantly between the disclosing firms.

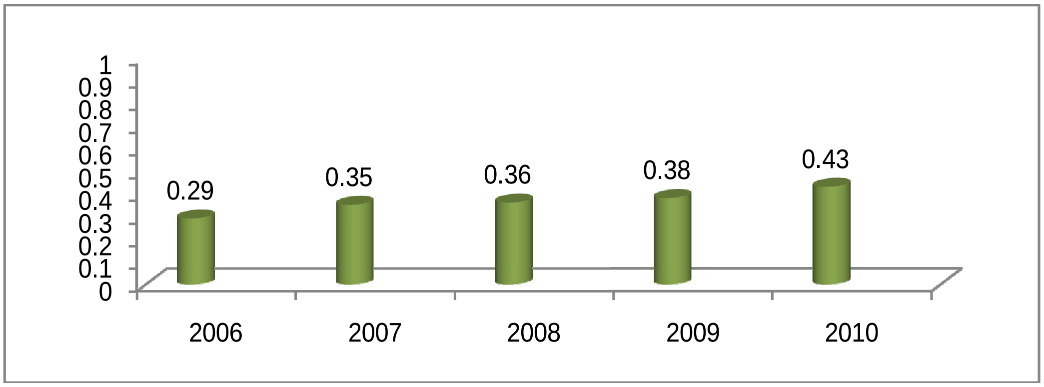

Figure (1): Evolution of RDQ Index

An analysis of the sub-dimensions of the RDQ, it is appeared from Figure (2) that is the index of each dimension (criterion) of RDQ increases during the study period, and the information of risk disclosed is more relevant and understandable to acceptable level, where the relevance and understandability index is 0.56 in 2010. On the contrary, the information of risk is less comparable and verifiability, where the mean of comparability and verifiability index was 0.25 and 0.24, respectively.

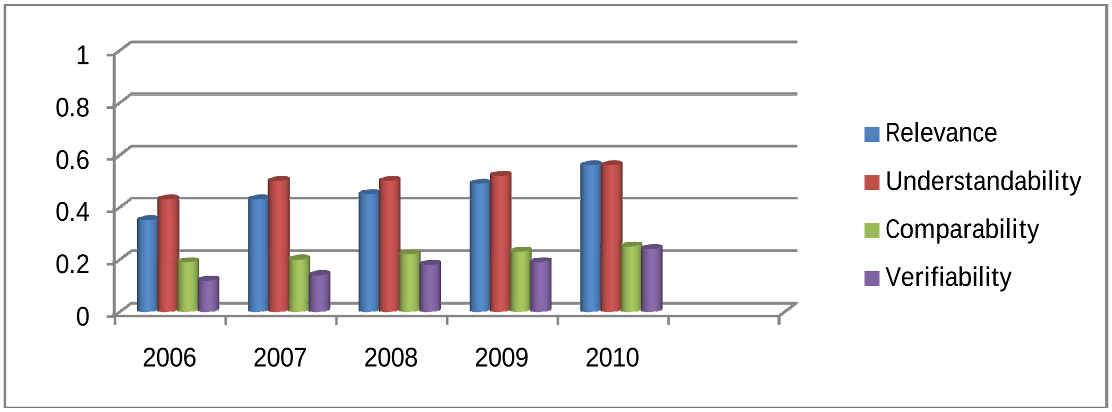

Figure (2): Evolution of RDQ Criteria

Regression Results

Table (6) shows that all models except relevance model are statistically significant.

Table (5) Regression Results

Variables	Aggregated RDQ Index		Relevance		Understandability		Comparability		Verifiability	
	Sig.*	**T**	**Sig.***	**t**	**Sig.***	**t**	**Sig.***	**t**	**Sig.***	**t**
Firm Size	.000	3.997	.027	2.232	.000	3.801	.008	2.703	.001	3.303
Leverage	.007	-2.725	.063	-1.872	.002	-3.152	.338	-.961	.124	-1.549
Profitability	.312	-1.015	.701	-.385	1.00	-.001	.128	-1.531	.059	-1.902
B/M ratio	.706	-.378	.419	-.811	.715	-.366	.414	-.820	.189	1.319
Audit firm Size	.988	.015	.703	-.382	.959	.051	.611	-.510	.253	1.149
R^2	.209		.073		.213		.095		.251	
Adjusted R^2	.178		.037		.183		.060		.222	
Sig.	.000		.080		.000		.023		.000	

***significant at 5% level**

In the aggregated RDQ Factor, the coefficient estimate on the firm size is positive and statistically significant, suggesting that larger firms are disclosing more quality information about their risks. This supports our first hypothesis. Also the coefficient estimate on the leverage is negative and statistically significant, suggesting that the firms with high level of leverage tend to disclose low quality information about their risks. This also supports our second hypothesis.

For the individual models, firm size is positive and statistically significant for understandability, comparability, and verifiability, indicating that the larger firms are disclosing more understandable, comparable, and verifiable information about their risks than the smaller ones. Also Leverage level is negative and statistically significant only for understandability model, indicating that the firms with high level of leverage are reporting less understandable information about risks than low level firms.

For both aggregated RDQ Factor model and individual models, the researcher did not find any association between profitability, B/M ratio, and audit firm size and RDQ, suggesting that the third, fourth, and fifth hypotheses are all rejected.

6- Conclusion, Limitations, and Suggestions for Further Researches

This study is undertaken in Egyptian environment. The researcher developed index to measure the quality of risk disclosure consisting of 24 points based on four criteria: relevance, understandability, comparability, and verifiability. The researcher also investigated the main determinants or drivers of the Egyptian listed firms to disclose more quality information about risks. Results of the statistical analysis revealed that the firm size and leverage level are the most important drivers of the risk disclosure quality. The researcher found that all other variables (i.e. profitability, book to market value, and audit firm size) do not drive RDQ in Egyptian context.

There are several practical implications of the current study for academic and practitioners. The study contributes to the accounting literature in general, and specifically to the literature on risk disclosure. It provides empirical evidence from the Egyptian business environment (one of the developing countries) that there is some improvement in RDQ during the study period but at a very low level. The current study provided empirical evidence that the risk information is relevant and understandable to some extent, but it is less comparability and verifiability. The findings of our research can be beneficial for the disclosing company itself, and for the supervising bodies. The disclosing company can use our RDQ criteria employed in the current study to improve the quality of its disclosure system about risk.

The capital market authority or bodies of accounting standards setting may use the findings of the current study to provide guidance on best practices. One limitation of the current study is that its sample is only 27 Egyptian listed companies. This is due to the difficulty of obtaining data in an emerging economy. The smaller limited number of companies makes it difficult to draw broad conclusions, so the researcher cannot generalize the results.

Further exploratory research could be undertaken to investigate the views of the stakeholders of financial statements to propose additional dimensions to assess RDQ that are not considered in the present study, based on the actual informational needs of the users. Conducting interviews with users (for example investors or financial analysts, etc.) would be very useful in refining the weighting of the risk disclosure quality items to reflect user perceived importance.

It might be of interest to make further comparative studies in Egypt and other environments to evaluate RDQ. Finally it might be of interest to examine to which extent the risk disclosure provides valuable information to the stock market through – for example – investigating the impact of RDQ on the cost of equity capital.

References

A Risk Management Standard. 2002. published by AIRMIC, IRM, ALARM, Available at: www.theirm.org/publications/documents/Risk_Management_Standard_030820.pdf

Abraham, S. and P. Cox. 2007. Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports, The British Accounting Review, 39: 227-248.

__________, A. Solomon, and J. Stevenson. 2007. A Ranking of Risk Disclosure in UK Annual Reports, WorkingPaper. Available at: http://www.nottingham.ac.uk.business/rmgic/Risk&FinancialAccounting_Abraham_Solomon_Stevenson.pdf.

Atan, R., E.N.S. Maruhun., and W.H.W. Abdul Kadir. 2010. Annual risk reporting of listed companies in Malaysia, Journal of Modern Accounting and Auditing, 6(8): 26-37.

Barako, D. G., Hancock, p. and Izan, H. Y. 2006. Factors Influencing Voluntary Corporate Disclosures by Kenyan Companies, Corporate Governance, 14(2): 107-125.

Berger, T., and W. GleinBner. 2006.Risk Reporting and Risks Reported: A Study on German HDAG-listed Companies 2000 to 2005, Paper presented at the 5th International Conference on Money, Investment & Risk, Nottingham, 1-3 November 2006, Available at: http://ssrn.com.

Botosan, C. A. 2004. Discussion of a framework for the analysis of firm risk communication", The International Journal of Accounting, 2004, 34: 289 – 295.

Cabedo, D. J., and J. M. Tirado. 2004. The disclosure of risk in financial statement, Accounting Forum, 28: 181-200.

Canadian Institute of Chartered Accountants (CICA). 2012. Guidance on Improved MD&A RISK REPORTING: A Review of Advanced Practices in the Management's Discussion and Analysis of Annual Reports.

Chalmers, K. and J. Godfrey. 2004. Reputation costs: The impetus for voluntary derivative financial instrument reporting, Accounting, Organizations and Society, 29(2): 95-125.

Chandiramani, G. 2009. QUALITY OF RISK REPORTING, Unpublished Master Thesis, School of Economics, ERASMUS UNIVERSITY ROTTERDAM.

Desumes, R. 2008. CORPORATE RISK REPORTING: A Content Analysis of Narrative Risk Disclosures in Prospectuses, Journal of Business Communication, 45(2): 120-157.

Dobler, M. 2005b. National and international developments in risk reporting: May the German Accounting Standard 5 lead the way internationally? German Law Journal, 6(8): 1191-1200. Available at: www.germanlawjournal.com/pdf.vol06No08/pdf_vol_06_No_08_1191-1200_ Developments_Dobler.pdf/

__________. 2008. Incentives for risk reporting – A discretionary disclosure and cheap talk approach, The International Journal of Accounting, 43: 184-206.

Epstein, M., and A. R. Buhovac. 2006a. The Reporting of Organizational Risks for Internal and External Decision- Making, Published by CMA & AICPA.

__________ and _________. 2006b. Organizational risk reporting for internal and external decision making, CMA Management, 80(7): 26-30.

____________________. 2006. Financial Accounting Series, "PRELIMINARY VIEWS", Conceptual Framework for Financial Reporting :Objective of Financial Reporting and Qualitative Characteristics of Decision-UsefulFinancial Reporting Information, Financial Accounting Foundation.

___________________. 2008. Financial Accounting Series, Exposure Draft, Conceptual Framework for Financial Reporting : The Objective of Financial Reporting and Qualitative Characteristics of Decision-UsefulFinancial Reporting Information.

____________________. 2010a. CONCEPTUAL FRAMEWORK, Statement of Financial Accounting Concepts No. 8, Conceptual Framework for Financial Reporting, Chapter 1, The Objective of General Purpose Financial Reporting, and Chapter 3, Qualitative Characteristics of Useful Financial Information, (September), a replacement of FASB Concepts Statements No. 1 and No. 2.

Francis, J., D. Nanda, and P. Olsson. 2007. Voluntary Disclosure, Earnings Quality, and Cost of Equity, Working Paper.

Geo, W. 2008. Readability in Risk Reporting: An analysis of Chinese overseas listing companies, University of Nottingham, Unpublished master dissertation in risk management.

Hanetseder, S. 2011. Quality and Determinates of Risk Reporting- Evidence from Germany and Austria, Working Paper, Available at: http://www.papers.ssrn.com/

Helbok, G. and C. Wagner. 2006. Determinants Of operational Risk Reporting in the Banking Industry, Working paper, Available at: http://www.papers.ssrn.com/

Horing, D., and H. Grundl. 2011. Investigating Risk Reporting Practices in the European Industry. Available at: http://www.papers.ssrn.com/

Institute of Charted Accountants in England and Wales,(ICAEW). 1997. Financial reporting of risks: proposal for a statement of business risk, London.

____________. 1999. No Surprises: The Case for Better Risk Reporting, London.

____________.2002. No Surprises: Working for Better Risk Reporting, Balance Sheet, 10(4): 18-21.

International Accounting Standard Board (IASB). 2010b. IASB and US FASB complete first stage of conceptual framework. Available at: http://www.ifrs.org/News/Press+Releases/First+stage+CF+completed.htm

Ismail, R., and R. Abdul Rahman. 2011. Institutional Investors and Board of Director's Monitoring Role on Risk Management Disclosure Level in Malaysia, the IUP Journal of Corporate Governance, (2): 37-61.

Kraver, T., and V. Muslu. 2011. Informativeness of Risk Disclosures in Corporate Annual Reports, Working Paper, Available at: http://papers.ssrn.com/

Linsley, P. M., and P.J. Shrives. 2005. Transparency and the disclosure of risk information in the banking sector, Journal of Financial Regulation and Compliance, 13(3): 205-214.

_____________, and ________. 2006a. Risk reporting: A study of risk disclosures in annual reports of UK companies, The British Accounting Review, 38: 387-404.

__________ , ____________, and M. Crumpton. 2006b. Risk disclosure: An exploratory study of UK and Canadian banks, Journal of Banking Regulation, 7(3/4): 268-282.

Nasir, N. M., and S. N. Abdullah. 2004. Voluntary Disclosure and Corporate Governance among Financially Distressed Firms in Malaysia", Financial Reporting, Regulation and Governance, 3(1).

Neri, L. 2010. The informative Capacity of risk disclosure: Evidence from Italian Stock market, Available at: http://www.ssrn.com/

Oorschot, L. V. 2009. Risk reporting: An analysis of the German banking industry, Unpublished Master thesis, Erasmus University Rotterdam.

Pedro, J. G., P. M. Solano and J. P. Sanchez-Ballesta. 2008. Financial Reporting Quality and Corporate Cash Holding, Working Paper. Available at: http://www6.fe.uc.pt/pfn2008/UserFiles/pdf/573.pdf

Solomon, J. F., A. Solomon, S. D. Norton, and N. L. Joseph. 2000. A CONCEPTUAL FRAMEWORK FOR CORPORATE RISK DISCLOSURE EMERGING FROM THE AGENDA FOR CORPORATE GOVERNANCE REFORM, British Accounting Review, 32: 447-478.

Uddin, M. H., and M. K. Hassan. 2011. Corporate Risk Information in Annual Reports and Stock Price Behavior in the United Arab Emirates, Academy of Accounting and Financial Studies Journal, 15(1): pp. 59-84.

Vandemele, V. 2009. Management Risk Reporting Practice and their Determinants: A study of Belgian listed firms. Available at http://www.doclib.uhasselt.be/dspace/bitstream/1942/9392/2/corporateriskB.pdf

Wang, K., O. Sewon, and M. C. Claiborne. 2008. Determinants and consequences of voluntary disclosure in an emerging market: Evidence from China, Journal of International Accounting, Auditing and Taxation, 17: 14-30.

Winter, C. 2010. Risk Reporting and the IPO coalition: The influence of lawyer, auditor and underwriter quality on risk disclosure quality, Unpublished Master Thesis, Maastricht University, School of Business and Economics.