# Firm Size As Company's Characteristic and Level of Risk Disclosure: Review on Theories and Literatures

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#### **Abstract**

The objective of this study is on past literature reviews of risk disclosure and firm-specific characteristic (firm size) which can influence the level of risk disclosure, while there are several firms' characteristics which influence the level of disclosure. The main issues in this study based on the review of literature are on the subject of firm size and theories, measurement of the firm size and finding out the importance of firm size on the level of risk disclosure in annual reports. International reviews have been covered in this study. It is realized that the firm's characteristic such as firm size has different quality and quantity for various countries. However, the most studies that found a positive relationship between firm size and the level of risk disclosure and firm size can influence the risk disclosure level.

**Keywords:** Firm Size, Disclosure, Level of Risk Disclosure

## 1. Introduction

An essential aspect of a research into a business activity must include the firm size. Agency theory highlights the fact that the bigger a firm is the higher the monitoring and agency costs will be due to the asymmetrical information. According to Souissi and Khlif (2012), larger firms have stronger motivations to disclose more information. Watson, Shrives, & Marston, (2002) added that for larger firms, especially listed firms that have easy access to direct financing based on their amount of disclosures, it assists in the reduction of the level of uncertainty regarding the firm's performance.

Another theory know as the legitimacy theory suggests that disclosure can be used as possible tool by large firms to decrease regulations pressures from governments (political costs) and from environmental conscious organizations (Watson et al., 2002).

Kasznik & Lev (1995) and Lang & Lundholm (1993) claimed that a positive and significant association exists between disclosure and size; this is based on the possibility of economies of scale (Field, Lowry, & Shu, 2005). Research by Watson et al. (2002) proved that it is much cheaper for larger firms to offer voluntary disclosures as opposed to smaller firms. Some of the direct costs that will be incurred through voluntary disclosure include the cost associated with getting the information together and later disseminating it and this exercise may also result in competitive disadvantage as an indirect cost (Field et al., 2005). They also add that since the risk of litigation for smaller firms is much less, this works as a deterrent for them to disclose a lot of their information in their annual reports as the benefits do not substantiate the cost incurred.

Based on these theoretical discourses, the relationships between firm size and the level of transparency is said to be positive. As such the focus of the literature review covered the area of risk disclosure and firm size factors based on various theories propagated by various researchers and also by various countries.

For next sections of study we provide two theoretical perception for Firm size (Economic and Accounting) and also method of measuring the firm size which is main focus of this study. And finally we provide the literature review base on previous studies and our focus is on the method of measuring firm size to determinate on level of risk disclosure and discussion on that.

## 2. Theoretical Framework and Method of Measuring the Firm Size

#### 2.1 Economic Theories base on Firm Size

There are three fields of categorization according to literature which act as the main determining factors of firm size namely, organizational, technological, and institutional theories (Kumar, Rajan, & Zingales, 1999). This categorization is subject to if the theory is based on the process of control, environmental influences, or production functions.

## 2.1.1 Organisational Theories

The Organizational theories are further divided into sub-sections namely the transaction and contracting costs and the hierarchy of the firm. These theories found in the economy literature concentrate on the type of transaction cost that exists in the market and also inside the firm and one the main criteria here is the size of the firm.

## 2.1.1.1 Contracting Cost Theories

Contracting cost theories start by stating the business operation and nature of the firm according to Coase (1937) research into the type of business in the firm. Coase (1937) studied the reasons for the existence of a firm and discovered that the transaction costs in the market were the reason behind the development of the firm. A firm comes into existence when the cost producing a product in-house is lower than the costs incurred in the market to establish short term contracts. Alchian and Demsetz (1972) extended on this research by adding the mechanisms that elaborate on the reason for management of cost of resources remain low in a firm in comparison to these resources in the market's allocation. Firms are able to manufacture products efficiently compared to the market as they specialize in producing certain products. According to Alchian and Demsetz (1972), in the long run, firms have developed better ways of optimising their production with high technology and current techniques and have garnered best practices of combining their resources and skills so that it's also cost efficient compared to the market.

#### 2.1.1.2 Transaction Cost Theories

Coase's (1937) developed the transaction cost theory which suggests that costs incurred by the organization among firms do not amount to zero as the assumption made in the economy theory and in fact this should be taken into account when explaining the establishment of certain types of economic firms. The transaction cost theory for firms is not very different from the cost of coordination theory as described above; however, the concentration here is on internal costs of the companies as opposed to comparison of costs among firms. The transaction cost theory focuses on the impacts of the business operation's transaction costs especially in areas where investments were made to be relation-specific by the economic players (Verwaal & Donkers, 2002).

#### 2.1.2 Technological Theories

There are a few basic assumptions that are understood in the formation of technological theories in the firm; they are that the firm is a learning and adaptive organization that reacts to external shocks according to its goals and visions of reaching these goals (McConnell, 1979). The fundamental understanding in this theory is that the size of the firm is determined by the market's size. Additionally, it is understood that the focus is on the firm's specialization in that larger firms are supported by larger markets which in turn enhances their specialization. The individual employee's specialization is also then in proportion to the size of the firm proportional to firm size (Kumar et al., 1999).

According to Lucas Jr (1978), the production function based on the neoclassical theory describes the distribution of the firm size. The framework is according the management's talent which is distributed among agents in the market and even here the management's talent is in direct link to the firm's size.

#### 2.1.3. Institutional Theories

According to Kumar, Rajan & Zingales (1999), institutional theories concentrate on the impacts of the environmental and institutional macroeconomic nature on the size of the firm. This part of the study is further divided into two sections that cover the regulatory and financial theories which act as hindrances to the firms. This theory acts hand-in-hand with the organizational and technological theories and together can assist in establishing a formidable theory in the formation firm's size.

#### 2.2 Firm size Measurement (Methods)

The firm size measurement can be carried out in several methods namely through sales, employees, assets or value add features. Normally, those using the technological theory based on economy of scale derived from capital inputs would use only sales figures or assets to for the measurement purpose. It has been found that sales and assets are not particularly apt methods of measurement for size; the main issue would be how agency, transactions and the range of costs impact the profits. Costs are normally related to the fundamental way the organisation is controlled by a hierarchy more than just the value of physical assets. According to (Kaen & Baumann, 2003) in fact measuring the employees enrolment and value added measurement are a better choice in measuring the size of the firm in organizational theories rather than sales or assets.

The value added measurement is beneficial as it encompasses the complicated framework of a firm. Normally, this complication is related to the requirement of highly talented workforce and a higher measure of coordination and cost controls. It is also understood that the cost controls in terms of contracts and monitoring is higher for larger and complicated businesses (Kaen & Baumann, 2003).

The drawback of value added measurement is the difficulty of measuring quantitatively. However, as an example if the value added proponent is linked to the product with employee input, then, employee enrolment in that area can be utilized for measuring the value added component. Another reason for utilising employee enrolment is that cost controls and coordination are more associated with each employee's value added measure and the total employee enrolment. Lastly, according to Kaen and Baumann (2003), in the theory of critical resources, suggest that in order for company's knowledge to stay within the company, the higher the number of staff, the higher the chances of company secrets being exposed.

### 3. Accounting Theories and Risk Disclosure Base on Firm Size

Size is one of important determinant of finding disclosure level and it has been used in many studies which focus on disclosure (Abd-Elsalam & Weetman, 2003; Abraham & Cox, 2007; Aljifri, 2008; A. Amran, Bin, & Hassan, 2009; Botosan, 1997; Chow & Wong-Boren, 1987; Depoers, 2000; Firth, 1979; Meek, Roberts, & Gray, 1995; Oliveira, Rodrigues, & Craig, 2011; Raffournier, 1995; Singhvi & Desai, 1971). They tested the relationship between disclosure(various kind) and company size. Although most prior studies support a positive relationship, there is an indistinct theoretical source for such a relationship.

The trend of association may be either positive or negative. Some past studies which find a negative association between firm size and level of disclosure (Aljifri, 2008; Aljifri & Hussainey, 2007; Gray, Kouhy, & Lavers, 1995; Kou & Hussain, 2007; Mak, 1996; Ng, 1985); these studies, therefore, did not support a positive relationship between size and disclosure. While the studies focus on risk disclosure and Size (Abraham & Cox, 2007; A. Amran et al., 2009; Beretta & Bozzolan, 2004; Elzahar & Hussainey, 2012; Hassan, 2009; Konishi & Ali, 2007; Lajili, 2007; Linsley & Shrives, 2006; Mohobbot, 2005; Oliveira et al., 2011; Rajab & Handley-Schachler, 2009) found no negative relationship at all and these study support a positive relationship between size and risk disclosure.

The theories which can support the size are agency theory and capital need theory. Disclosure costs, such as the cost of amassing and dissemination of information, are higher for smaller firms (Lang and Lundholm, 1993). Smaller firms may not acquire the required resources for congregation and presenting the wide array of information (Buzby, 1975). However, this argument may not hold correct in all cases in particular when in view of the rapid growth in systems of information technology.

The percentage of outside capital tends to be higher for larger companies and agency theory suggests agency costs (monitoring costs) increase with the amount of outside capital (Jensen & Meckling, 1976) and hence reduce information asymmetries between managers and shareholders (Chow & Wong-Boren, 1987; Firth, 1979; Inchausti, 1997); and create a strong demand for their securities (Buzby, 1975). The demand for information by analysts could be greater on larger firms (Firth, 1979; Hossain, Tan, & Adams, 1994; Schipper, 1991).

Larger listed firms involve stronger incentives to become discloser more information to get better their corporate standing and public representation since non-disclosure may be interpreted as bad news that could influence firm value ((McKinnon & Dalimunthe, 1993; Schipper, 1991).

Size is also an indication by stakeholder theory, as the firm becomes bigger, so the number of stakeholders in the firm concerned will also increase. In order to this increase, the weight of disclosure will be heavier for the firm since it has to supply to the requests of bigger grouping of nation (Amran et al, 2009).

Size is also a reflection of political cost theory because larger firms draw the interest of public and governmental bodies. Disclosure could be an instrument by which to improve public analysis or governmental involvement (Chow & Wong-Boren, 1987; Firth, 1979; Raffournier, 1995).

#### 4. Risk Disclosure Level and Firm size

value; Measuring firm size by number of employees.

A lot of researches have been carried out to highlight the relationship between the voluntary level of disclosures and the size of firms (A. B. Amran & Devi, 2007; Thompson & Zakaria, 2004). In most studies on disclosure, size is a critical factor where it's either used as an invariable factor or a controlled variable (Ahn & Lee, 2004). The researchers who have carried out studies on the areas of risk disclosure and firm characteristics such as firm size include (Abraham & Cox, 2007; A. Amran et al., 2009; Beretta & Bozzolan, 2004; Deumes, 2008; Deumes & Knechel, 2008; Elzahar & Hussainey, 2012; Hassan, 2009; Kajüter, 2006; Konishi & Ali, 2007; Lajili, 2007; Linsley & Shrives, 2006; Mohobbot, 2005; Oliveira et al., 2011; Rajab & Handley-Schachler, 2009). These specific criteria for firm size was used as the orientation for past literature research namely Measuring Firm size by Total sale (TS); Measuring firm size by Total Asset (TA); Measuring firm size by market capitalization; Measuring firm size by total revenue (TR); Measuring firm size by sum of debt book value and equity market

## 4.1 Association Between Firm Size (Measured by TS) and Risk Disclosure Level

Studies have been done to find out the association between firm size as measured by TS and risk disclosure by Lajili (2007), Linsley and Shrives (2006), Mohobbot (2005), Beretta and Bozzolan (2004) and Abraham and Cox (2007), Rajab & Handley-Schachler (2009) and Oliveira et al. (2011).

Lajili (2007) found that there is a positive effect between firm size as measured by TS and the level of risk disclosure for samples used from Canada. Linsley & Shrives (2006) found that there is a positive effect between firm size as measured by TS and the level of risk disclosure for a sample of 79 companies from the UK (The turnover of companies and proxies were measured for size which is the market value but they found no relation between size and the level of risk disclosure). Mohobbot (2005) found that there is a positive effect between firm size as measured by TS and the level of risk disclosure among 90 non-financial Japanese companies.

Beretta and Bozzolan (2004) in a study carried out at the end of 2001, found that there was no effect between firm size as measured by TS and the level of risk disclosure for a sample of non-financial companies from the Italian stock exchange. Abraham and Cox (2007) discovered a positive effect between firm size as measured by TS and the level of risk disclosure for samples of non-financial companies which were ranked according to market value from 1–100. Konishi and Ali (2007) found a positive relation between level of risk disclosure and firm size as measured by TS among Japanese companies. Hassan (2009) found that there was no relation between firm size as measured by TS and the level of risk disclosure for a sample of 41 companies from the UAE. Rajab & Handley-Schachler (2009) also found no relation between firm size as measured by TS and the risk disclosure level for a sample of 52 non-financial companies from the FTSE-100 of England. Oliveira et al. (2011) however, found a positive relation between firm size and the level of risk disclosure for a sample of 81 non-financial Portuguese companies.

## 4.2 Association Between Firm Size (Measured by TA) and Risk Disclosure Level

There are some studies that investigated the element of size and risk disclosure level of companies. Linsley and Shrives (2006) found that there was no coefficient relation between firm size as measured by TA and the level of risk disclosure for a sample of 79 companies from the UK. Kajüter (2006) found a positive effect between firm size as measured by TA and the level of risk disclosure for samples from Germany. Mohobbot (2005) discovered a positive effect between firm size as measured by TA and the level of risk disclosure among 90 non-financial Japanese companies. Elzahar & Hussainey (2012) found the positive relation between firm size and risk disclosure in UK Interim reports sample of 72 UK companies.

## 4.3 Association Between Firm Size (Measured by Market Capitalization) and Risk Disclosure Level

There is a study which measured the size of companies based on market capitalization; Kajüter (2006) in this study found that there was a positive relation between firm size as measured by market capitalization and the level of risk disclosure for samples from Germany. While this study found a positive relation between level of risk disclosure and firm's size as measured by TA but there was no relation between risk disclosure level and firm's size when measured based on total revenues.

#### 4.4 Association Between Firm Size (Measured by TR) and Risk Disclosure Level

There are several studies which measured the size of companies based on total revenue; Amran et al. (2009) conducted such a study and found that there was a positive effect between firm size as measured by total revenue and the level of risk disclosure for a sample of 100 companies from Malaysia. Kajüter (2006) found that there was no relation between firm size as measured by total revenue and the level of risk disclosure for samples from Germany, while Kajüter (2006) found a positive relation between the level of risk disclosure and firm size as measured by TA and market capitalization. Konishi and Ali discovered a positive relation between the level of risk disclosure and firm size as measured by TR among Japanese companies.

# 4.5 Association Between Firm Size (Measured by Sum of Debt Book Value and Equity Market Value) and Risk Disclosure Level

The Study by Deumes & Knechel (2008) measured the size of companies based on the sum of debt book value and equity market value in order to find out the association between levels of risk disclosure and firm size. They found that there was a positive effect between firm size as measured by the sum of debt book value and equity market value and the level of risk disclosure for samples from the Netherlands.

#### 4.6 Association Between Firm Size (Measured by Number of Employees) and Risk Disclosure Level

Oliveira et al. (2011) measured the size of the company based on the number of employees. They found a positive relationship between firm size and the level of risk disclosure among Portuguese companies in 2005.

#### 5. Discussion

In reviewing previous studies on the level of risk disclosure among companies (mandatory or voluntary) and firm characteristic (firms Size), it was realized that there were no studies which mentioned a negative relationship between firm size and level of risk disclosure. Firm size is one of the most important factors which impact the level of risk disclosure and the way the firm size is measured is the most essential part for the analysis. In a study by Linsley and Shirves (2006), it was found that two ways of measuring firm's size and finding the association with the level of risk disclosure gave dissimilar results. Another study by Kajüter (2006) also did not find any similar results for the various ways he measured the firm size for samples from Germany. Similar results were obtained between two methods of measurement of firm's size by Mohobbot (2005) for samples from Japan not unlike the results obtained from a study by Linsley and Shirves (2006) which was carried out in England. The methods for measuring firm size include the measurement of total sales (turnover, TS); total Assets; market capitalization; total revenue; sum of debt book value and equity market value and number of employees. The results and the demographic of the study will be affected by the concept of firm size and there is no certainty that the results for every country will be the same. However, the most studies that found a positive relationship between firm size and the level of risk disclosure and firm size can influence the risk disclosure level.

#### 6. Conclusion

In this study, previous literatures have been reviewed base on Firm size as an important determinates on risk disclosure level. This reviews help to researchers to contribute their research to find the methods of measuring firm size association between firm size and level of risk disclosure. By this study we can contribute that the firm size affects the level of risk disclosure positively or no significant, in addition, there is no study that found the negative relationship between firm size and risk disclosure. This study also highlights the importance of choosing the method of measuring the firm size. The limitation of this study is base on the limit number of study on the risk disclosure especially when the firm size narrated to measurement methods. Future research suggested that increase number of studies to improve literatures on risk disclosure by more countries.

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