

Multiple regression analysis



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Multiple regression analysis was used to measure the relationship between the cost of equity capital and the independent and control variables. It was found that the cost of equity capital is relatively lower when the index of CSR disclosure is higher, reason being immense CSR implementation minimizes the general risk of a company.

It was concluded that CSR disclosure in the company's annual reports reduces the cost of capital by reducing information asymmetry and subsequently reducing company's risk which benefits both the investors and speculators. According to Baimukhamedova and Luchaninova (2017) who examined the relationship between corporate disclosure and cost of equity capital on a sample of 37 largest and most liquid firms listed at Kazakhstan Stock Exchange for period 2008 to 2014, the study used multiple linear regression models.

The findings indicated that firms with higher level of financial transparency are associated with significantly lower cost of equity capital. The results shown that firm on the Kazakhstan market reduce their cost of equity capital by increasing the level of their voluntary corporate disclosure.

Moreover Stanwick (1998) studied the relationship between corporate disclosure and organizational size, financial performance and environmental performance. The objective of the study was to examine the relationship between social performance of the organization and the environmental performance of the organization.

Data was collected from 1987 to 1992 and descriptive design was used. Corporate reputation index was constructed. The findings were that social

performance was indeed impacted by the size of the firm, the financial performance of the firm and amount of pollution emissions released by the firms.

2. 3. 3 Corporate Social Responsibility

Voluntary Disclosure and the Cost of Equity Capital A study by Hossain and Hammami (2009) purported that financial results released are the foundation of an organization's budget and performances. The analysis involves comparing a firm's performance with that of the other firms in the same industry and evaluating trends over time.

Financial analysis involves the use of simple mathematical techniques, an understanding and appreciation of business strategy and future prospects through an examination of financial statements. Financial ratios play a key role in financial management. The extent to which a firm's uses debt financing is what is called financial leverage.

Also Botosan and Plumlee (2002) investigated the relationship between cost of capital and annual reports disclosure, timely disclosure (quarterly or other published reports) and investors relations disclosures, they found a negative association for the annual report disclosure, their research showed that the cost of capital is positively related to timely reporting actions which could be attributed to the fact that timely disclosure increase the volatility of the share price by attracting transient investors who trade aggressively on short term earning , however they did not find association between cost of equity financing and investor relations disclosures.

In evaluating the relationship between information asymmetry and financing methods (debt and equity financing) of firms listed on the Tehran Stock Exchange from year 2003 to 2010, Mahdi, Vahab and Hamin (2015), found that there no significant relationship between information and debt financing though information asymmetry is positively associated with debt financing, however there was a significant positive relationship between information asymmetry and equity financing.

The study was done using secondary dataset of 61 firms were explored where debt and equity financing methods were adopted where data was extracted from financial statements of sample firms and was analyzed in excel and stata. The result of the study showed. In this study used stata and excel.

Another study by Mangena, Jing and Tauringana (2016) investigated whether Intellectual capital and financial disclosure jointly affect the firms cost of capital for 125 UK firms listed on the London Stock Exchange (LSE) representing firms across industries from March 2004 to February 2015, data for measuring disclosure are drawn from annual reports. They used descriptive approach as their study methodology.

The study found that IC disclosure is negatively related to the cost of equity, the relationship between financial disclosure and the cost of equity capital is magnified when combined with the IC disclosures. It was also observed that IC and financial disclosure interacts on the effects of the cost of equity capital, the analysis of this interactions demonstrates that the effect of

financial disclosure on the cost of equity capital is augmented for firm characterized by medium level of IC disclosure.

In their study, Francis, Nanda and Olsson, (2002) investigated the relation among voluntary disclosure, earning quality and cost of capital. The study was done in Chicago, USA on 677 firms' annual reports and 10-K filings in the fiscal year 2001 using self constructed index of coded items.

It was noted that firms with good earning quality have more expansive voluntary disclosure than firms with poor earning quality, on unconditional tests, it was found that more voluntary disclosure is associated with lower cost of capital, however on complementary association between disclosure and earning quality it was noted that the disclosure effect on the cost of capital is substantially reduced or disappear completely.

Additionally, Cerf (1961) investigated the relationship between voluntary disclosure of information and the level of profitability, size of the firm and its shareholders in the US market. The methodology used was descriptive approach which focused on analyzing the association between voluntary disclosure of information and the level of profitability on annual reports of 25 different companies listed on the New York Stock Exchange, he found a positive relationship between voluntary disclosure of information and the level of profitability, size of the firm and its shareholders.

2. 3. 4 Board Size

Information voluntary disclosure and Cost of Equity Capital
In examining the effect of board independence and voluntary disclosure on the cost of equity

capital, Setiany et al. (2007) showed that there is a significant relationship between voluntary disclosure and firm's cost of equity capital.

The study employed regression analysis on secondary data from companies listed in Indonesian Stock Exchange during the period of 2009 to 2012 on a sample of 104 companies in the manufacturing sector. The study concluded that there is no relationship between board independence and cost of equity capital, however the results.

However Khemakhem and Naciri (2015) examined the association between board and audit characteristics and the cost of equity capital in Canadian market. The methodology used descriptive statistics on a sample of 139 firm year observations from proxy circulars, proxy statements and annual reports of Canadian companies that were part of S/P & TSX for the period 2004 to 2006.

The study found that the size of audit committee and non-duality of the chairman of the board are positively related to the cost of equity capital, also the study revealed that the independence and board size do not affect the cost of capital for firms in the sample. Fauzi and Locke (2012) investigated the role of board structure and the effect of ownership structure on firm performance of New Zealand listed firms.

The study employed balanced panel methodology on 79 New Zealand listed firms, it also employed Generalized Linear Model (GLM) to analysis data from annual reports of listed firms for the period of 2007 to 2011. the results of the study show that the board of directors, board committee and managerial ownership have a positive and significant impact on the firm performance.

While Hasan et al. (2009) examined the impact of ownership structure and corporate governance on capital structure using a sample of 58 randomly selected non-financial listed companies from Karachi Stock Exchange for the period 2002 to 2005. Data was analyzed using multivariate regression analysis under fixed model approach.

The results show that board size is significantly related to capital structure. However, non executive directors on board and CEO/Chair duality have no significant relationship with capital structure. Similarly, Jaradat (2015) investigate the effect of board size, board gender, outside director and CEO duality on the capital structure in Jordanian firms.

Observation was done on 129 firms for the period 2009 to 2013. Multiple regression analysis was employed to test the association of secondary data collected from yearly annual reports. The results showed a positive association between board size, board diversity and outside directors and the capital structure, however for CEO duality and capital structure there was no significant relationship.

2. 4 Conceptual framework

This section will deal with operationalization of variables of the study, measures of voluntary disclosure and measure of the cost of equity capital. Independent variables Dependant Variables VariableIn this study the dependent variable is the cost of equity capital while the independent variables also referred as voluntary disclosure are the general corporate and strategic disclosure, forward-looking disclosure, social and board disclosure and financial disclosure (Barako, 2007)

CHAPTER THREE

RESEARCH METHODOLOGY

3. 1 Introduction

This chapter discusses the methods and procedures to employ to conduct the study. This chapter presents details of the research design, population, sampling and sampling procedures data collection methods, data analysis technique data and instruments for data analysis.

3. 2 Research Design

Research design is the framework the research intends to follow.

It describes the nature and pattern the research intends to follow (Makerere University, 2011). Ogula (2005) describe a research design as a plan, structure and strategy of investigation to obtain answers to research questions and control variance. This study will adopt descriptive research design as it describe the characteristic and association voluntary disclosure and cost of equity capital of firms listed at NSE.

Based on the secondary data to be obtained from annual reports and accounts of companies quoted in the NSE and company website. The choice of descriptive is motivated by the fact that it involves gathering data, observing and describing the behavior of the data without influencing it in any way (Bryman, 2001).

This will be appropriate in the study since it will establish the effect of voluntary disclosure on the cost of equity capital.

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3. 3 Target Population

Mugenda and Mugenda (2009) define a population as sum of all the items considered under a study. According to Ngechu (2004) a population is a well defined set of people, services, elements events or households that are being investigated.

The target population for this study will consist of 64 firms listed in NSE (CMA, 2017), however consideration will only be on those which have been continuously trading since 2011 without being suspension or delisting

3. 4 Sample Size and Sampling Procedure

A sample is sub-group of the target population chosen by the researcher to represent other members of the target population (Amin, 2004).

Sampling is the process, technique and procedure of choosing a sub-group from a population to participate in the study. Oso and Onen, 2009) stated that there are two main ways of selecting study sample from the target population, probability and non-probability sampling technique.

The study will apply purposive sampling technique to select companies to be included in the study. Kothari (2004) stated that in purposive sampling technique an element is selected through subjectively defined method where the researcher personal judgments play an important role. An optimum sample is one which fulfils the requirements of efficiency, representativeness, reliability and flexibility.

The study will comprise of a sample of 20 firms from NSE 20 share index selected based on a weighted market performance in the year 2017 (NSE, 2017).

3. 5 Instrumentation and Data Collection

Creswell (2008) argues prior to research, a researcher ought to develop a data collection instruments which is meant to measure, observe data under investigation. The study will use Disclosure Check Index (DCI) as the principal instrument for data collection of voluntary disclosure information. According to Mugenda and Mugenda (2009),