

A Project Report
On
Does CSR effect Cost of equity?

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**Birla Institute of Technology and Science-Pilani,
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Certificate

This is to certify that the project report entitled “**Does CSR effect Cost of equity**” submitted by Mr. Raghav Raj (ID No.2014A3PS0831H), Ms. Geethika Kalvapalli (ID No.2015A8PS0487H), Anjali Bavisetti(ID No.2014AAPS0247H) in partial fulfillment of the requirements of the course ECON F266, Study Oriented Project Course, embodies the work done by them under my supervision and guidance.

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ABSTRACT

We investigate if Corporate Social Responsibility effects Cost of equity of a firm thereby adding value to it, in India. We use the report done by IIM Udaipur for analysis of CSR and different econometric models to measure Cost of equity. Results show that CSR helps firms to lower the cost of equity financing and hence adds value to them.

Key Words: Corporate Social Responsibility, Cost of Equity

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1. INTRODUCTION

The concept of corporate social responsibility has gained a lot of attention in the past few decades due to increasing awareness of sustainable development among the investors, employees and other stakeholders. It is believed that to stay competitive in a global market and to look out for long term profitability the companies have to form a good relationship between the business and society.

We can gain some insight into the topic by looking at the largest market in the world .i.e. the United States of America. Empirical data shows that companies that have a high CSR rating seem to have a lower cost of capital than those who have a lower CSR rating. The reason that is stated for the above mentioned phenomenon is that of information symmetry. Companies with high CSR performance generally highlight it; the analysts have a higher chance of following companies which voluntarily disclose information. This leads to decrease in information symmetry and that lowers the cost of equity capital (Dhaliwal et al., 2011). When companies don't disclose information or when there is a shortage of information regarding a company coming from the analyst, the investors would naturally demand a higher rate for the capital that they are investing.

It is interesting to study the relationship between corporate social responsibility and cost of equity of firms in India, given that India is the first country to quantify CSR despite its existence. Sustainability .i.e.; how profits are made includes CSR as an important component. In recent times CSR has received increased societal attention in India. Examining the relationship between CSR and cost of equity can help managers comprehend the effect of CSR investments on firms financing costs.

1.1 Purpose of study

The purpose of study is to investigate if CSR performance has effect on firm's value. Value can be measured through cost of capital-the required return necessary to keep an investor interested to make investment. If investors take CSR performance into account in the process of decision making, it would be reflected in the cost of capital of the firm. Thus, CSR could be of help for firms to add value.

1.2 Current Scenario CSR activities

With the dramatic growth in the number of institutes and various other online resources that encourage companies to improve their practices, Corporate Social Responsibility (CSR) has gained importance in the recent years. In 2001, the Commission of the European Communities defined CSR as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis". There is an increase in awareness of sustainability, thus promoting interdependence between business and society. To secure their long-term profits, an increasing number of firms around the world have taken measures to integrate CSR into various aspects of their business.

It is argued that high CSR improves firm's reputation and a low CSR may increase explicit claims on the firm. Firms with high CSR voluntarily disclose information to analysts thus making them follow these companies. This also helps reduce information asymmetry. In general, employees prefer to work for well-reputed firms even though the pay is comparatively less, thus reducing the cost for the firm. People choose to buy products of a well-reputed firm therefore increasing the revenue of that particular firm. Analysts help increase the reputation of the company if even information is provided to them. Therefore investing in CSR can reduce co-financing. It also helps in achieving public support.

Different political and financial climates, lead to different views regarding CSR across the world. Around 60% of the Asian managers believe that CSR is "not very efficient" or "not at all efficient" with regard to firm's financial position. Whereas more than 50% of US and European managers argue that CSR has positive effects on firm's financial position. Firms which work towards maintaining healthy employee and social relations tend to have low cost of equity, whereas the two "sin" industries, Tobacco and Nuclear power, have higher costs of financing.

1.3 What is CSR?

CSR is a widely used concept in corporate world. It has a variety of definitions.

Some of them are listed below.

A business obligation conduct the affairs of the enterprise to maintain an equitable and workable balance among the claims of the various directly interested groups, a harmonious balance among stockholders, employees, customers, and the public at large (Frederick, 2006).

“[CSR is] the obligations of business to pursue those policies, to make those decisions or to follow those lines of action which are desirable in terms of the objectives and values of our society (Bowen, 1953).”

CSR may be perceived differently by different definitions but the notion is to describe “actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams and Siegel, 2001). CSR acts as a bridge between society and corporate world.

Creation of shared value i.e; mutual benefits for business as well as society is possible when business decisions and social policies follow the same agenda (Porter and Kramer, 2006).

1.4 Value Creation

Various studies have shown that CSR can either increase cost or create value. These two opposing principles have found their basis from several empirical studies. For instance, a meta-analysis performed by Margolis, Elfenbein and Walsh (2007) showed that there is a small positive relation. Some have found mixed results, like Waddock and Graves, 1997; McWilliams and Siegel, 2001; Orlitzky et al., 2003. But the results found from another study, measured by the residual income valuation model, suggest that environmental and social ratings are value relevant and complement financial information.

The first idea pertaining to the impact of CSR on the cost of the company is based on the neoclassical economics argues that this leads to a reduction in the market value as investments in sustainable activities only increases cost (Friedman, 1962). If this is viewed on behalf of shareholders, social responsibility is not in their interests (Friedman, 1970).

The second idea, regarding value creation has a strong argument posed in favour of by Freeman 1984, takes in the interests of all stakeholders in the company. He argues that the firm will get a

competitive advantage and increase in profits by engaging in social activities. This course of action diversifies their investorsto include socially responsible investors (Kapstein, 2001), and also expand their customer base to socially conscious consumers (Hillman and Keim, 2001). CSR also impacts the internal quality of the firm by attracting and retaining efficient employees (Greening and Turban, 2000). Building on the aforementioned arguments and examples, a conclusion can be drawn that future financial performance and CSR are positively correlated, which indicates superior management skills (Waddock and Graves, 1997; Moskowitz, 1972)

1.5 Cost of Capital

The cost of capital is the required rate of return by an investor, given the perceived riskiness of a firm's future cash flows and alternative investments available in the market (Berk and DeMarzo, 2007). It is the rate used to discount future cash flow of a company to find its present value. Higher the cost of capital, lower the present value. Cost of equity is used synonymous to cost of capital.

2. CSR and Cost of Capital

In this section, theoretical arguments supporting our expectations that *ceteris paribus*, cost of equity is lower for firms with high CSR levels. And the arguments involved are-1.the relative size of a firm's investor base and 2. A firm's perceived risk.

1. Relative Size of Firm's Investor Base

Firms with low CSR levels tend to have smaller investor base due to investor preferences and information asymmetry.

Firstly according to the preferences of the investors, the earlier mentioned concepts prior preach investors who are socially conscious do not include low CSR firms in their investment portfolios. For example, based on the equilibrium model, Heinkel et al. (2001) argue theoretically that exclusionary investments of green investors leads polluting firms to be supported only by neutral, and thus fewer investors. As a result, polluting firms have to offer neutral investors, higher expected returns as to compensate them for the lack of risk sharing. Hong and Kacperczyk (2009) study "sin" stocks, i.e., publicly listed firms that operate in the alcohol, tobacco, and gaming industries, and find that norm-constrained institutional investors (e.g., pension plans) include fewer "sin" stocks in their portfolios compared to arbitrageurs (e.g., mutual funds).

Second, with respect to information asymmetry, we argue that firms with information asymmetry have low CSR levels. Agency theory defines information asymmetry as when an agent has more information than a principal, such as between managers and investors (Jensen and Meckling, 1979). Analysts act as intermediaries to transmit private information to public.

The information asymmetry process is associated with two costs for firms and analysts; i) the cost of gathering and processing data and ii) the cost of transmitting information from one party to another (Merton, 1987). Voluntary disclosure of CSR details by the firms lowers the costs for analysts. As a result positive image is easily obtained by the firm in public. Investors generally prefer to invest in firms with good reputation.

In conclusion, an increased investor base due to lowered information asymmetry decreases the cost of capital for high CSR performing firms.

2. Firm's Perceived Risk

Prior work suggests that investors view firms that are not socially responsible as having greater risk (Frederick, 1995; King, 1995; Robinson et al., 2008; Starks, 2009). Waddock and Graves (1997) argue that socially irresponsible firms have a greater chance of uncertain future explicit claims. For instance, since such companies do not invest in the safety of their products, this will increase the chance of future cases against the firm on account of sale of faulty goods and in turn the firm's expected future costs. Hong and Kacperczyk (2009) further argue that "sin" firms face higher litigation risks. As an illustration, the case of tobacco companies acts as evidence, the companies faced great litigation risk until they reached a settlement with state governments in 1997. Feldman et al. (1997) find supportive evidence. In particular, they show that firms adopting a more environmentally pro-active posture experience a significant reduction in perceived riskiness to investors.

Based on the above arguments, we hypothesize that *ceteris paribus*, high CSR firms have lower cost of equity than low CSR firms.

3. Modern CSR

Instead of completely sticking to an only-profit policy, a new concept called co-operational capitalism has been brought into light. This new type of capitalism integrates co-operation and values in social context by also simultaneously focusing on profit making. This can be looked at as a switch to profit optimization from profit maximization. There is a shift in responsibility from only shareholders to stakeholders which include employees, consumers and the societies where businesses operate. Unlike the conventional practice of charity and traditional philanthropy, the recent CSR demands the enterprises to engage in mainstream development and show direct concern for the society. Our country demands social progress for sustainable growth. In a country with a wide gap between the higher and the lower societies, a good CSR practice can help in sustainable development.

3.1 Perspectives

CSR can be broadly categorized as three perspectives namely business perspective, eco-social perspective and right-based perspective. CSR is a business approach to see to that risk in any investment is minimized by considering all the stakeholders. CSR is both a value and a strategy that ensures a sustainable business by considering social and environmental impacts. Stakeholders and the communities that are affected by a company have a right to know about the business and the corporation, which is taken into account by CSR. CSR encourages enterprises to maintain a good relationship with the society and know its impact on the society.

4. History and Evolution of Indian CSR

Even though the term CSR has been recently introduced, the concept has now been in use for more than a 100 years. The history and evolution can be classified into four different phases.

4.1 Phase 1(1850 to 1914)

This phase was known for its charity taking into account family values, traditions, culture and religion and also industrialization. During the colonial era, the industrial pioneers like Tata, Birla and Bajaj promoted CSR by setting up educational and charitable foundations. The rich businessman helped the needy during droughts and famine. They also setup temples and other religious institutions to maintain a better social relationship.

4.2 Phase 2(1910-1960)

It was during the Independence movement, Mahatma Gandhi urged the rich businessmen to share their wealth to the poor. He encouraged the concept of trusteeship which in turn promoted social and economic growth. Trusts were setup to involve in social reforms, like education, rural development and women empowerment. He referred the industries as ‘the temples of India’.

4.3Phase 3(1950-1990)

This phase witnessed an emergence of PSUs (Public Sector Undertakings). The licensing and taxes, and the restrictions on private sector has seen malpractices, which finally demanded suitable legislation for corporate governance and social issues. Private sectors actively involved in social and economic development. In 1965, a workshop on CSR was conducted with major emphasis on social responsibility and transparency.

4.4 Phase 4(1980 onwards)

The growing country’s economy has allowed the companies to contribute more towards the social responsibility. It all started as charity which is now a responsibility.

5. Specific features of COMPANIES ACT, 2013

1. The provisions of this act applies to all the companies that fall under any one of the following categories in a financial year:
 - Net worth of INR 500 crores or more
 - Turnover of INR 1000 crores or more
 - Net profit of INR 5 crores or more
2. The average of the previous three financial year’s PAT is considered for calculating the 2%.
3. If any company fails to spend this 2%, the reasons have to be mentioned in the annual board report.
4. CSR policy of any company should make sure that any excess arising out of a CSR activity should not become part of their business profits.
5. All the companies falling under this act should report the details of their CSR initiatives in the director’s report and on the company’s website.

6. CSR activities in India

The most common areas covered by the companies in India include education, health, environment, livelihood and rural development, out of which education was the most common. Approximately 88% of the companies have provided support to better infrastructure facilities in the education domain. Whereas nearly 74% of the companies have offered services and conducted awareness camps in the health care sector. CSR activities in the environment domain include initiatives such as tree plantation, efforts to conserve water and drives to promote afforestation. Many companies support skill development and income generation activities. Companies also work towards rural development by providing infrastructure facilities and conducting awareness camps.

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7. Methodology and Data Sample

To understand the relationship between CSR activities and Cost of capital we make use of the data from 2 specific databases namely Bloomberg database and the Prowess database. The data for CSR expenditure has been collected from the Prowess database. The data sample includes the companies that have been listed under the National Stock Exchange of India. From the initial list of 1963 companies we use the following criteria for selecting our sample. Firstly the companies should have incurred CSR expenditure in the financial years FY 14-15, FY 15-16, FY 16-17. Secondly they should have incurred a CSR expenditure of INR 20 million and above. 127 companies pass the criteria and is our sample set.

A proxy CSR index has been constructed to compare firms which are comparable by value, size, leverage. The expenditure spent on CSR activities divided by the prescribed CSR Expenditure according to the Companies Act 2013 is taken as the proxy. A regression choosing the Cost of capital as the dependent variable and the CSR index as the independent variable is done and the results are observed. Similarly a regression choosing Cost of Capital as the dependent variable and the CSR index as the independent variable has been conducted.

The Cost of equity and the Weighted average cost of capital data has been taken from the Bloomberg database. There are specific reasons for doing so. One of the main reasons is that Bloomberg is one of the largest databases used in the finance industry and hence will give accurate representation of what the analysts feel. Bloomberg is updated frequently hence contributing to the accuracy of the data.

8. Results

Table: Cost of Equity vs CSR Expenditure Ratio

SUMMARY OUTPUT			Cost of Equity vs CSR					
<i>Regression Statistics</i>								
Multiple R	0.087256403							
R Square	0.00761368							
Adjusted R Square	-0.00032541							
Standard Error	7.909722774							
Observations	127							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	59.99933	59.99933	0.9590116	0.329327566			
Residual	125	7820.464	62.56371					
Total	126	7880.464						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	11.9101649	1.682015	7.080892	9.152E-11	8.581249003	15.239081	8.581249	15.23908
CSR Index	1.931186347	1.972024	0.979291	0.3293276	-1.971694371	5.8340671	-1.9716944	5.834067

Table: Weighted Average Cost of Capital vs CSR Expenditure Ratio

SUMMARY OUTPUT			WACC vs CSR					
<i>Regression Statistics</i>								
Multiple R	0.214384							
R Square	0.045961							
Adjusted R Square	0.038328							
Standard Error	1.38449							
Observations	127							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	11.54274	11.54274	6.021838	0.015507			
Residual	125	239.6017	1.916813					
Total	126	251.1444						
	<i>Coefficient</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	10.80957	0.294414	36.71555	8.23E-69	10.22689	11.39225	10.22689	11.39225
CSR Index	0.847043	0.345176	2.453943	0.015507	0.163896	1.53019	0.163896	1.53019

9. Conclusion

Contrary to the results expected from the literature review we have obtained results favouring the notion that CSR has little to know effect on the cost of capital and equity . Even if it does have an effect it empirical data from this study shows that Firms which spend less on CSR activites have lower cost of capital than those who have higher CSR expenditure

The Reasons for the above could be :

- 1) In India the concept of CSR is still in a very nascent stage and hence we are not able to quantify it correctly
- 2) The Companies Act of 2013 is not being followed by a majority of the companies. We can explicitly state this because in our study of 1962 companies we have observed a number of companies which has a positive value of PAT and yet have not had the presecrbed expenditure in CSR attvities.
- 3) The laws in India seem to flexible which has prompted companies to circumvent the issue of CSR expenditure.

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