

Impact of Corporate Social Responsibility on the Financial Performance of Indian Companies

Rishika Shivkumar Sangolli

Master of Science in Finance

National College of Ireland

Submitted to the National College of Ireland

May 2020

Abstract

CSR is also considered as self-regulation practices which are integrated within the business model of companies and organisations. The main aim behind conducting the present research is to assess the influence of CSR on the financial performance of the different Indian companies. For many businesses CSR can be regarded as the proactive business strategy along with marketing technique for the business in order to attain competitive advantage. In the current investigation sample size is 20 Indian companies listed in the Indian stock exchange. The main sources from where data has been collected involve annual report and CSR/sustainability report of selected companies, CSR website of Indian government, Reuters database and other online websites. CSR spending of the companies from the year 2013-2018 has been considered along with the information of the financial variables such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit.

Regression model has been applied in order to identify the significance between CSR and financial variables.

Reliance industries Ltd is the one of the top performing firm in the area of CSR. It has been found that CSR impacts positively on the financial indicators such as Net Profit, Enterprise Value, EBITDA, and Operating Profit of the selected companies. Considering the correlation analysis between CSR spending and Net profit of the companies it has been found that in case of some companies such as Indian Oil, Tata steel, Infosys ltd and Bharat Petroleum Corporation Ltd correlation is highly positive.

On the other side of this, moderate correlation is present between the average revenue of companies and the CSR spending and it states that CSR spending of the companies is somehow dependent on the revenue of the entities. Considering the variable such as EBITDA, it has been identified through regression that CSR has positive relationship with the EBITDA of the companies.

Declaration

Submission of Thesis and Dissertation

National College of Ireland

Research Students Declaration Form

(Thesis/Author Declaration Form)

Name: Rishika Shivkumar Sangolli

Student Number: x18132219

Degree for which thesis is submitted: Master of Science in Finance

Title of Thesis: Impact of Corporate Social Responsibility on the Financial Performance of Indian Companies.

Date: 05th May, 2020

Material submitted for award

- A. I declare that this work submitted has been composed by myself.
- B. I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged.
- C. I agree to my thesis being deposited in the NCI Library online open access repository NORMA.
- D. I declare that no material contained in the thesis has been used in any other submission for an academic award.

Acknowledgments

I would like to thank my professor, Dr. Paul Hanly for providing me valuable guidance in regards for completion of my dissertation. His eye for detailing and inputs on chapters of my research were very beneficial for me to do justice towards it.

I would also like to thank my professors, my fellow classmates, the library staff at National College of Ireland, who have enhanced my morale during the dissertation. And a big thank you to my family and friends who were a constant support. All this resulting in accomplishing my dissertation in a desired manner.

Table of Contents

Abstract.....	i
Declaration.....	ii
Acknowledgments.....	iii
List of Tables	vii
List of Figures	viii
Chapter 1: Introduction	1
1.1 Background.....	1
1.2 Rationale	3
1.3 Research Problem	5
1.4 Gaps that Research is addressing.....	5
1.5 Aims and Objectives	6
1.6 Structure of the Dissertation	7
Chapter 2: Literature Review.....	8
2.1 Concept of CSR	8
2.2 CSR Motive	10
2.3 Various CSR Practice	12
2.4 Link between CSR and Financial Performance.....	13
2.5 Models and Theories of CSR.....	15
2.6 Proposed Theoretical Framework.....	18
Chapter 3: Research Methodology.....	19
3.1 Introduction.....	19
3.2 Research Onion.....	19
3.3 Research Philosophy.....	20
3.4 Research Design.....	21
3.5 Research Approach	22

3.6 Data Collection	22
3.7 Data Analysis	24
3.8 Sampling	25
3.9 Limitations	29
Chapter 4: Data analysis	30
4.1 Overview	30
4.2 Data Presentation of Selected Companies	31
4.3 Descriptive Statistics of CSR spending	33
4.4 Descriptive Statistics Analysis by Company	35
4.5 Regression.....	36
4.6 Correlation	43
Chapter 5: Discussion	48
Chapter 6: Conclusion and recommendations	55
6.1 Conclusion	55
6.2 Recommendations.....	56
References.....	58
Appendices.....	63
Appendix 1	63
Appendix 2.....	64
Appendix 3.....	68
Appendix 4.....	75

List of Tables

Table 1: Indian firms selected for the investigation.....	27
Table 2: Information of companies for the year 2018	28
Table 3: CSR Spending of 20 selected companies as % of turnover.....	32
Table 4: Corporate Social Responsibility Spending Descriptive statistics	33
Table 5: CSR practice of 20 Indian companies	34
Table 6: Impact of CSR on Net Profit of Companies	36
Table 7: Impact of CSR on Asset Turnover of Companies	37
Table 8: Impact of CSR on Return on Invested Capital	38
Table 9: Impact of CSR on Enterprise Value	39
Table 10: Impact of CSR on Revenue	40
Table 11: Impact of CSR on EBITDA.....	41
Table 12: Impact of CSR on Operating Profit	42
Table 13: Correlation Analysis	43
Table 14: Correlation between CSR spending and Net profit of companies.....	44
Table 15: Types of Company CSR Spending	49

List of Figures

Figure 1: Carroll four-part dimensional framework 16
Figure 2: Research Theoretical Framework..... 18

Chapter 1: Introduction

1.1 Background

Corporate social responsibility (CSR) is the management concept through which business entities focus on integrating environmental and social concerns into the operations of the firm and interaction with the stakeholders. In short, CSR is considered to be one of the most effective approaches through which organizations achieve balance between the environmental, economic and social imperatives (Triple Bottom Line Approach) (Kumar, et al. Aggarwal, 2018). In the era of globalization every company has started to focus a lot on CSR approach as it is the approach that is contributing a lot in the development of the firms. In accordance with Singh and Das (2020) properly implemented CSR concepts into the operations of the firm can surely support in attaining competitive advantage that involves rise in the sales volume and profitability level, better access to markets and capitals, better decision making, increase in the customer loyalty level etc.

Without right corporate social responsibility practice no business can easily survive in the market and this is the reason due to which its relevance is quite high. The main reason behind the same is that CSR practices highlight the efforts applied by the firm in managing environmental, social and economic aspects that are crucial for the business. In the case when these aspects are not considered then unfavourable consequences take place such as decline in sales volume, market share (Menezes, 2019).

After the year 2013, new companies act has been published where it has become necessary for the firms with turnover of more than INR 1000 crores or net worth of more than 500 crores should contribute 2% of their net profits towards the CSR practices (Abilasha and Tyagi 2019). At the same time firms are also required to develop CSR committee and also disclose the different type of CSR activities in the annual report also.

Furthermore, some CSR related challenges are also present that are stakeholder engagement, labour standards, employee and community relations, human rights, good governance etc. These challenges are crucial in the field of CSR and in turn operations of the business are influenced due to this. CSR practices of the firm affects employees, firms and non-profits

(Krishnan, 2012). It can be stated that all the initiatives that are taken in the area of CSR improves the global along with the local community (Das and Bhunia 2016).

Moreover, certain benefits of CSR are present to the businesses and they are valuable for the firm. In accordance with Alikaj, Nguyen and Medina (2017) one of the main advantages is that it enhances the employee loyalty level where it has been found that when staff members are treated fairly and generously in accordance with CSR concept then it brings favourable results for the business. Moreover, companies that focus on this aspect provides positive work environment to the staff, encouraging high professional along with the moral standards etc (Alikaj, Nguyen and Medina, 2017). Another main advantage associated with this concept is that prevention of the financial ramifications as proper compliance with the different laws at present national and international level directly avoids the situation of fine and at the same time legal expenses of the firm are low (Jain, Vyas and Roy, 2017). CSR practice also supports in developing positive reputation of the business in the market (Menezes, 2019). Further, it has been identified that focusing on developing of positive brand image is not an easy task for any organization and this is the main reason due to which companies are focusing on adoption of CSR practices so that they can focus on development of brand image (Alikaj, Nguyen and Medina, 2017).

Furthermore, market trend is changing where online firms are also focusing on CSR and this is done with the proper management of their website. One of the best ways considered by the online firms is to support the environment with the help of website sustainability this represents that companies are lowering down the carbon footprint of the pages by eliminating the screen clutter, removal of the video clips and at the same time improving ease of navigation that is also crucial (Kumar, et al. 2018). Second main practice is supporting the clients to choose charity that are getting portion of the profits. It has been found that target market mainly appreciates like when their input is considered and they feel more satisfied when they get chance to connect with the beneficiary of the charitable campaign (Jain, Vyas and Roy, 2017). Therefore, these are the ways through which online businesses are also contributing a lot in developing their CSR practices that are contributing a lot in the success.

The current investigation focuses on determining the role of CSR on the financial performance of the Indian companies.

Further, the impact of CSR on the financial performance can be analysed by taking into consideration various financial measures of the business such as net profits, return on assets, return on equity etc. All these are the key financial variables. Further, the current investigation analyses whether the investment done by the different companies in the area of CSR has influence on the different financial indicators such as net profit, return on assets and equity etc. In case of every organization managing its financial performance is one of the most significant tasks and in this case, companies are focusing on investing into the CSR practices so that its financial performance can be boosted easily. The research focuses on identifying whether CSR has link with the financial variables or not. Many studies have been carried out in the past to know the relationship between CSR and financial performance. Further, it has been found that some studies show positive relation and other negative (Giannarakis, et al. 2016).

This research is focused upon the large sized companies operating in the Indian market because such entities are more focused upon developing CSR practices in their business operations and disseminate more data with the higher quality disclosure in comparison with the medium and small sized entities. Indian economy is developing at a faster pace and hence government is encouraging businesses to indulge into CSR practices. Therefore, CSR practices of 20 Indian companies have been considered in the present research and their level of investment into CSR has been undertaken from the year 2013 to 2018. Companies from different sectors have been considered in the study so as to verify whether CSR has influence on the companies of different sectors or not. Top Indian companies that are well known in the market and they strongly invest in CSR practices have been considered in the investigation. Companies belonging to chemical, energy, automobile, oil and gas, steel, retail etc have been undertaken and this is representing that research is into different sectors.

Research has been conducted by selecting different well-established Indian brands. Along with this, in the Indian market CSR practice of every firm differs from each other and it depends on every organization like what kind of practice it prefers to adopt so that it can support in the development of the organization.

[1.2 Rationale](#)

The main aim behind conducting the present research is to assess the influence of CSR on the financial performance of the different Indian companies. CSR is all about how firms manage their business processes in order to produce positive influence on the society (Menezes, 2019).

Further, this research explores the different elements of CSR such as legal responsibility, economic, ethic and discretionary and it highlights whether CSR supports in providing more return to the firm. CSR has been defined by the researchers in different ways with the motive to encompass relationship with the different stakeholders and society, socio economic aspects, and the different type of voluntary dimensions (Giannarakis, et al. 2016). In the financial markets the actual role of CSR is considered to be vital and it supports the company to focus on improvement of the financial performance by focusing on the areas such as social, environmental and economic.

The study conducted by Abilasha and Tyagi (2019) focused on examining the impact of CSR on the financial performance of 10 Indian companies and it was carried out through the use of different financial ratios such as profit before tax, return on equity, return on asset (ROA) etc. The results of the study represented that impact of CSR on the financial performance with respect to the financial ratios is positive. The author analysed that with the increase in CSR contribution financial performance of the firms enhances and vice versa. At the same time, New companies Act 2013 is also effective in terms of CSR.

Another study carried out by Menezes (2019) focused on examining the influence of CSR spending on the financial performance of the companies. In this research, data of top ten companies was considered for the 5 years' time period. Further, the key variables were net profit, earnings per share (EPS) and ROA. At the same time, researcher used methods such as OLS regression, random effect and fixed effect. The findings of the research highlighted that Net profit has significant relationship with the spending of CSR and at the same time EPS and ROA has no such influence.

Further, the findings and research questions of the present study will add in knowing the significance of CSR on the variables such as invested capital, enterprise value etc.

For many businesses CSR can be regarded as the proactive business strategy along with marketing technique for the business in order to attain competitive advantage. Certain principles of moving towards the goals of CSR are present that are vital for the businesses and they need to consider them. One of the main principles is concentrating on the CSR efforts where it is necessary for the management to ensure that right efforts are applied such as working for the betterment of the society, safeguarding surroundings etc (Giannarakis, et al. 2016). Moreover, building deep understanding of the benefits is also the key principle where in

accordance with this principle companies are required to find potential for mutual value creation and this is vital in terms of understanding the issues from the perspective of society and business. Lastly finding the right partner is also most important principle where companies have to search for parties that can provide support in developing sustainable practices and carrying out CSR practices in a sound manner. Partners can be suppliers of the business also (Kumar, et al. 2018).

1.3 Research Problem

Since the development of the CSR concept, different opinions have been identified regarding what CSR intends to attain for the organization. Further, considering the view point of Yadav and Singh (2016) it has been identified that it is the main responsibility of the firm is to satisfy the requirement of its stakeholders and at the same time enhancing its profitability level in the long run. Kumar, et al. (2018) argued that organizations must not focus on the CSR practices unless they support company in creating value and assisting in attaining the desired goals also. Mainly one of the crucial factors due to which businesses are actively working on the CSR concept as through this it becomes easy to influence the different stakeholders and in turn different parties can be managed in a positive manner.

Along with this, some companies are investing into CSR practices as they are obtaining financial benefits through this. Main motive of every organization is to enhance its financial performance and, in this case, CSR is one of the best practices that supports in enhancing profitability and other financial measures also improves (Yadav and Singh, 2016). Therefore, this informs the research question considered in the research.

Some researchers feel that CSR has no link with financial performance and other may perceive that it improves the net profit and other financial elements. So, this is the debate where authors both agree and disagree with the statement impact of CSR on financial performance. Along with this, the key research problem is to investigate whether CSR influences the financial performance and it affects the various elements that are considered in the research such as return on equity (ROE), ROA etc of the firm.

1.4 Gaps that Research is addressing

Previously the research studies conducted on this topic are based on the variables such as ROA, ROE and Net profit but the other elements of financial performance such as enterprise value,

EBITDA and invested capital are not at all considered. Therefore, the present investigation has considered all these elements and impact of CSR on these measures has been identified in the research. This gap has been addressed as in the past literature these variables have not been considered.

The financial parameters such as invested capital, EBITDA etc are crucial as they represent the efficiency of the companies and it is quite interesting for the researcher to explore whether CSR has influence on these parameters or not.

1.5 Aims and Objectives

Aim: Assessing the influence of CSR on the financial performance of the Indian companies

Objectives

RQ1: To identify the different practices of CSR employed by Indian companies

RQ2: To statistically explore understand the link between CSR and financial performance of the firms

RQ3: To gain insight about the different components of CSR and their link with firm performance

RQ4: To recommend ways through which firms can develop their CSR practices

Research questions

What is the link between CSR and financial performance of the firms?

What is the impact of CSR on the financial variables such as revenue, operating profit, return on invested capital and net profit?

Variables for the Study

Independent Variable – Corporate Social Responsibility

Dependent Variable – Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit

1.6 Structure of the Dissertation

In order to conduct the research in a positive manner proper structure has been framed through which research has been carried out. Following are the key chapters that have been followed in the investigation

Chapter 2: Literature Review: In this chapter secondary sources have been considered for the formation of literature review. Along with this, different themes have been formed such as concept of CSR, link between CSR and financial performance, models of CSR etc. This chapter has supported in understanding about the topic deeply.

Chapter 3: Research methodology: In this chapter research tools and techniques have been selected that are relevant for the study. The key areas that have been covered in this chapter are research design, data collection, data analysis, research limitations etc. By selecting methodological tools researcher has focused a lot on accomplishing the objectives of the study.

Chapter 4: Data analysis: In this chapter data has been analysed for knowing the findings. Mainly statistical tools have been adopted for analysing the information and results have been represented in tabular form.

Chapter 5: Discussion: In this chapter discussion has been carried out where both primary and secondary results have been compared with each other in order to know about the outcomes of the study.

Chapter 6: Conclusion and recommendation: It is the last chapter of the study where findings are concluded and at the same time recommendations have been provided to the companies so that they can develop CSR practices.

Chapter 2: Literature Review

2.1 Concept of CSR

As per the views of Crane, Matten and Spence, (2019) corporate social responsibility (CSR) have emerged as one of the most important aspect linked with the business practices and activities. Moreover, CSR is also considered as self-regulation practices which are integrated within the business model of companies and organisations. Over the past few decades, the interest of companies towards CSR has grown rapidly and there are various reasons behind this growing interest.

The first and foremost reason is the pressure created by government, pressure groups and environmentalist for businesses in terms of taking care of practices and activities. The second reason is linked with the recent evidence based corporate scandals which have opened the eyes of government and has also created high degree of awareness.

According to Grayson and Hodges, (2017) the concept of CSR is very useful and effective because it has resulted in making the organizations accountable for their work, actions and decisions. It can be stated that it is only because of the development of CSR as a concept that companies have now become highly concerned with regards to their action and behaviour. In the present scenario, many organizations have been restricted to take actions and decisions which may have adverse or negative impact on others. The concept of CSR outlines the fact that at the time of carrying out the business operations and activities, there are three major areas upon which companies are required to emphasise on and the areas include economy, society and environment.

On the contrary to this Lins, Servaes and Tamayo, (2017) have argued that the concept of CSR has become very popular and the reason behind growing popularity is that it is encouraging the businesses to give back to the community. Moreover, the selected concept has also encouraged many companies and businesses in the world to take active participation in the philanthropic causes and deliver positive social value.

Companies with strong CSR practices and approaches are the ones which emphasize on ensuring the fact that their operations and activities are not making any kind of adverse impact on societies and environment. The emergence of CSR has resulted in creating several

restrictions for the businesses in terms of carrying out exploitation of local communities and environment.

As per the view of Wang et al. (2016) the reason behind growing popularity and use of CSR practices is the benefits associated with the same. It has been analysed that the benefits are not only associated with corporate and employees but also local communities are benefited because of the same. Nowadays, the people in the market or employees are more interested and inclined towards getting associated and working with companies which is well aware of its responsibilities towards environment and societies. On the other side of this, the concept is providing benefit to the societies as it is encouraging businesses to give back to the local communities and societies under which they operate.

However, Schrempf-Stirling, Palazzo and Phillips, (2016) have argued that accomplishment of CSR is not an easy task and companies are required to make considerable investments in different areas to perform CSR. For example, changes in the practices and ways of operations need to be carried out so the environment is not affected in negative sense. As per the views of Wang and Sarkis, (2017) carrying out the practices linked and associated with CSR is not an easy task and there are various issues or challenges which are faced by businesses during the same.

The first and most common challenge here is associated with the lack of transparency and it can be stated that businesses face several issues because of the same.

In the modern era, high degree of transparency is needed while carrying out the practices of CSR and lack of transparency further creates issues and complications of a business enterprise (Hopkins, 2016). Moreover, the lack of cooperation from stakeholder has also been identified as the issue which is faced frequently by companies while carrying out and conducting the practices linked with CSR. It can be expressed that for the success of CSR and the practices associated with the same, adequate participant from the stakeholders is essential in every context. The internal as well as external stakeholders of a business enterprise are required to emphasize on placing best of their efforts and resources in providing support to the companies so that they can easily carry out CSR practices.

2.2 CSR Motive

As per the view of Hong et al. (2019) the prime motive of carrying out CSR activities is still not clear as companies are carrying out the use of this concept for various reasons. It is still unclear that why organizations and entities are getting involved and engaged in such kind of activities. For example, there are certain business enterprises which emphasize on carrying out the use of CSR activities for the purpose of improving their bottom line instead of enhancing their triple bottom line which is a critical part of CSR.

There are certain businesses in the world which emphasize on carrying out the use of CSR because it helps in development of strong communities and healthy businesses. It has been identified that no entity can sustain and survive in the long run when the local communities where the entity is operating is struggling to a great extent. On the contrary to this, Cronqvist and Yu, (2017) have argued that the real motive behind CSR cannot be identified as businesses do not emphasize maintaining transparency in the money which they have invested in CSR activities. It has also been argued that CSR is not useful and appropriate for companies as companies are mainly owned by shareholders and it is the managers who spend the money on activities such as CSR and this is not right in any case. As per the views of Frynas and Yamahaki, (2016) CSR is important concept because it is providing the businesses and companies with an opportunity to protect the overall stakeholder interest in the best and every possible manner.

The arguments in favour of CSR reflects the fact that it is true that companies are highly concerned about the short term losses which they may encounter because of the CSR but it is more useful for the businesses to emphasize on meeting their social obligations as the obligations are highly important in the long term growth and survival of an entity. However, Petrenko et al. (2016) have argued that the concept of CSR is completely inappropriate for the corporate world as business is an activity which is economic in nature.

Businesses are operating in the market so that they can seeks for the opportunities to become more viable in terms of economy and it is the government which should be focused and responsible for looking after to the local communities and societies. In situations where companies start emphasizing on the CSR activities, different types of obstacles and restrictions are developed for them in context of attaining financial gains and profits in the long-run.

The arguments against CSR also reflect the fact that even companies do not have information about the measure of social responsibility and the overall extent or degree to which an organization should engage within the same. The availability of limited information about the measures and degree of CSR is a big threat for the organizations as it can also result in motivating a business to move in the wrong direction.

According to Demirag, (2018) it is required by businesses and companies to focus on developing strategies and plans with regards to accomplishment of their CSR and there are various reasons behind the same. For example, a reason here could be that many companies and entities in the market have been able to avoid the regulations of government by accomplishing their social responsibilities.

It means that the non-conformance or non-compliance to the social norms may result in creating a situation where a business may attract various legislative restrictions. The government in many nations has the power to influence the activities of a business enterprise and here the regulations and laws play a vital role. In order to protect the entity from different types of legislative restrictions, it is more beneficial for companies to carry out CSR practices. As per the view of Benlemlih and Bitar, (2018) accomplishment of CSR is vital as it is the component which pays a company back in the best and every possible manner. It can be termed as the concept which encourages businesses to go to different areas such as recycling, reuse and disposition and therefore, the result of this is development in the brand image of a business enterprise.

The practices of CSR encourage organizations to save electricity and energy and the results of this is that businesses are able to save the cost of operations in the long-run (Su et al. 2016). The current economic condition in the world is very critical and therefore, it is not allowing companies to make investment in areas such as CSR.

It is required by the organizations to emphasize on saving cost so that better outcomes can be easily generated. The arguments against CSR also reflect the fact that the only thing which a company cares for is generating higher profits in the best and every possible manner. It means that the activities and tasks linked with CSR are carried out by companies only with an objective to focus on areas such as public relations. On the other side of this, Hong, Li and Minor, (2016) have argued that CSR is important for the entities because it drives the choice of consumer in every possible aspect.

It means that CSR has emerged as a concept because the people in the market started encouraging the companies and businesses to understand their role in the growth and development of societies and local communities (Flammer and Luo, 2017). It can be also stated that instead of focusing only on delivering good services and products, it is also required by organisations to emphasize on understanding their social role and accomplishing the same. Thus, it has been analysed that several arguments have been presented against and for CSR and companies are required to become very careful with regards to the same.

2.3 Various CSR Practice

The role of different CSR practices has become very useful and effective as they are providing businesses and companies with an opportunity to promote and enact positive change. As per the views of Dyck et al. (2019) the practices associated with CSR are highly beneficial for companies as they are assisting the brands in clearly differentiate among what is right and what is wrong. Even the consumers have become very interested in buying the services and products of companies which are socially responsible as the consumer feel that they are doing their part in the most profound manner. Encouragement of the social change, creation of trust and increase in the awareness level has been identified as the outcomes associated with the CSR practices carried out by companies.

According to Jamali and Karam, (2018) in the present scenario, there are wide ranges of CSR practices used by businesses in accordance with their objectives, nature of business and goals. Reducing carbon footprints for example has been identified as the most common CSR practice employed by global businesses and the reason behind adoption of this practice is to make sure that the societies and environment are not getting adversely affected because of operations.

According to this CSR practice, integration of 5R's which are refuse, reduce, reuse, rot and recycling is carried out within the operations and business practices of companies. In addition to this, plans and strategies are developed and employed for the purpose of water conservation and switching to the use of clean and sustainable energy.

Cui, Jo and Na, (2018) have explained that improving the labour policies has also been identified as the practice of CSR which is now commonly applied by businesses and companies. Here, the management emphasize on identifying the gaps and issues in the existing labour policy and then it develops actions to eliminate those issues or gaps. The new policies

include best health and safety measures for the employees and employee engagement in various decisions making processes.

On the contrary to this, Albuquerque, Koskinen and Zhang, (2019) have argued that one of the best examples of CSR practices is of Johnson & Johnson as it has been more than three decades since the brand is focusing on reducing its negative impact on the planet. The brand is using the wind power so that it can provide safe and clean water to various societies and communities around the world. Investments in the options linked with renewable energy have also been identified as the CSR practice which has been employed by Johnson & Johnson.

On the other side of this, brand such as Google has carried out an investment of \$1 billion in the area which is renewable energy and the objective here is to become more responsible toward the protection of environment. The community involvement program carried out by XEROX can be also termed as one of the finest examples of CSR practices of global businesses. In this program, the initiatives are used to fund the employees of XEROX in their local communities and create a difference. In the modern era, companies are also making direct and considerable investments in areas such as community development and sustainability as a part of their CSR practices.

[2.4 Link between CSR and Financial Performance](#)

As per the views of Matten and Moon, (2020) the link between financial performance and the practices of CSR is very important for the businesses and companies because the link helps in taking decision with regards to whether the adoption of CSR practices should be carried out or not. Furthermore, the link or relationship between CSR and financial performance is also considered as an important area of interest even for the investors of business. Over the past few years, several studies and researchers have been conducted with an objective to identify and explore the link between CSR and financial performance of a company and several opinions and outcomes have been developed with regards to the same.

For example, it has been identified that the employment of practices linked with CSR results in enhancing the overall effectiveness and competitiveness of a business enterprise and this in turn leads to improvement in the financial performance delivered by an organization (Kang, Germann and Grewal, 2016). Companies and businesses which have been able to perform CSR practices are considered as more competitive and the result of this is increase in the long-term financial gains and performance. On the other side of this, there are certain studies which reflect

the fact that there is a neutral relationship or link between the financial performance of a business and its CSR practices.

According to the research carried out by Weber, (2008) the link between social/environmental performance and economic performance follows an inverse U-shaped curve which needs to be well taken care of by the companies and businesses. From the assessment of the curve, it has been identified that sooner or later, the net margin benefits which have been obtained from various environmental efforts will be decrease. Then rationale behind this is that businesses are required to become well aware of the fact that wide or indefinite number of social and environmental activities will not provide the business with an opportunity to increase the overall economic performance. Even the study conducted by Aupperle, Carroll and Hatfield (1985) reflects the fact that there is no positive and significant relationship between financial performance delivered by a firm and accomplishment of the social responsibilities.

On the other side of this, has argued that the impact of CSR on financial performance of a business cannot be witnessed in short run by the long-term impact of the practices may be witnessed to a great extent. For example, the businesses and companies in the market with effective CSR practices are able to create a distinctive brand image among the mind of people in the market and this further results in increasing the volume of sales and profits (Ali, Frynas and Mahmood, 2017). The concept of CSR also encourages companies to focus on areas such as carrying out conservation of paper and focus eliminating the need and use of plastic takeaways. It can be stated that these practices have a slow and gradual but direct impact on the financial performance of a business enterprise.

Companies with effective CSR practices are required to make considerable investments in areas such as developing new and innovative strategies for water conservation, resources utilization and the result of this is that cost of operations increases. However, it can be argued that instead of looking for the short-term increased cost, it is more beneficial for the organizations to emphasize on the long-term financial benefits linked with the same (El Ghouli, Guedhami and Kim, 2017).

It has also been identified that the concept of CSR not only results in improving the social reputation and value of a business but it also plays a crucial role in enhancing the profitability and performance delivered by a business enterprise. The statement can be justified by the fact that the return on assets of a business enterprise is determined by the corporate governance and

the practices of CSR results in carrying out drastic improvements in corporate governance practices of a business enterprise.

Many authors including Rao and Tilt, (2016) have expressed that the adoption of CSR as a concept and its implementation may results in increasing the profits of a business enterprise to a great extent. This can be also termed as one of the reasons because of which the large-scale companies and businesses have started focusing on adoption of these practices. It can be stated that there is a direct link between profits of a firm and its CSR practices and increase in the practices may results in enhancing the profit volume for a business enterprise.

By protecting of the natural environment and local communities, companies are able to enhance their market reputation and this further results in attraction of better personnel's in the firm and higher sales. The long-term financial health of organizations can be improved to a great extent by the application of the concept which is CSR. On the contrary to this, author such as Gond et al. (2017) have argued that there is a negative relationship which exists between CSR and a firm's financial performance. The reason behind this is that in situations when the profit is definite, the overall cost of operations increases when companies emphasize on carrying out the use of CSR practices.

Reduction in the profit margin has been identified as the outcome of such practices as companies are required to make financial investments in areas such as community development and formulation of practices which are environmentally friendly. It has also been evaluated that companies and entities are able to attain higher profit margins in situations when they do not carry out the practices of CSR.

The small and medium sized businesses are less interested in conducting such practices as they are well aware of the fact that such practices will results in increasing operational cost which is a big threat. Hong et al. (2019) has explained that companies should avoid carrying out the CSR practices because of two major reasons. The first and foremost reason here is that such practices can results in reducing the profit margins whereas the second reason is that the practices of CSR may also distract companies from their primary goal.

[2.5 Models and Theories of CSR](#)

The Carroll four-part dimensional framework or model can be taken into consideration for the purpose of developing proper and adequate understanding with regards to the concept of CSR.

The below mentioned figure reflects the four layers CSR pyramid which was developed by Carroll:

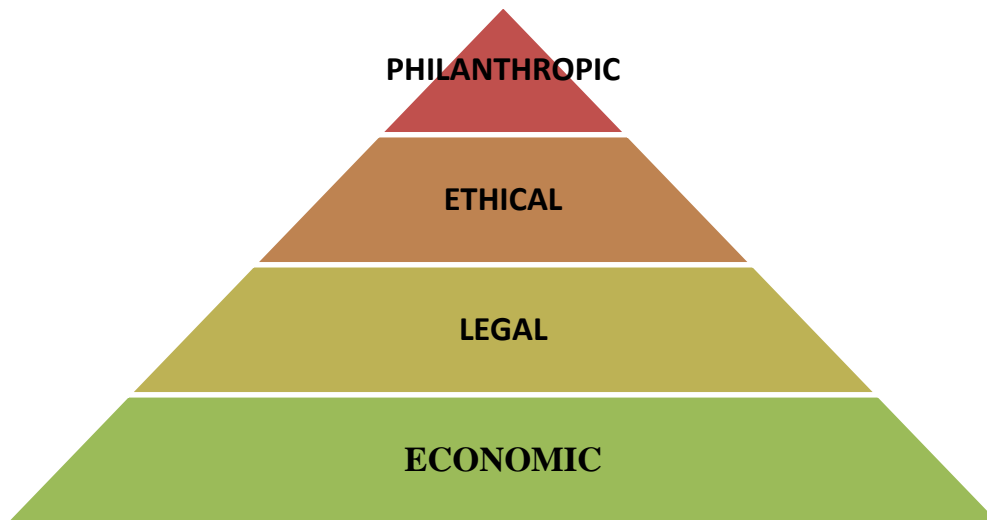


Figure 1: Carroll four-part dimensional framework

(Source: Cronqvist and Yu, 2017)

According to the **Figure 1**, the companies which employ the model of CSR are required to emphasize on four major factors or layers. The first and foremost layer here is linked with economy and it outlines the fact that every business operating in the market has certain economic responsibility towards the societies or communities which have provided the business with an opportunity to carry out task and activities (Cronqvist and Yu, 2017).

According to this responsibility, it is required by the businesses and companies to develop appropriate plans and strategies so that they can easily ensure economic sustainability in the long-run.

The economic responsibility is also considered as important and critical because it encourages a business to become profitable so that the other areas and aspects with regards to CSR can be attained (Demirag, 2018). The second responsibility developed or outlined by the model is associated with legal and it reflects the fact that every business is required to make sure that the laws and regulations are obeyed in the best and every possible manner.

Here, the pyramid reflects the fact that it is the responsibility of every business enterprise to make sure that the laws linked with health and safety, employment, competition etc. are strictly followed while carrying out the operations and business practices. The management is also required to ensure the fact that the business performance is delivered in such a manner that it is consistent with the expectations of the law and government.

Moreover, the legal responsibility of a business is also directed towards meeting the legal obligations of the stakeholders in the communities and societies in the best and every possible manner (Wang and Sarkis, 2017). The third layer of the model emphasizes on outlining the ethical responsibilities of a business enterprise. It means that at the time of carrying out the business practices, it is also required by organisations to make sure that the operations and practices are ethically and morally correct.

Fair treatment with the suppliers and people working in the organisations can be termed as the most critical part of this business responsibility. It is also required by the companies and entities to go beyond the basic and narrow legal requirements so that best possible results can be attained. The last layer of the pyramid consists of philanthropic responsibility which outlines the fact that the companies are required to give back to the local communities and societies in every possible way (Benlemlih and Bitar, 2018).

Here, the discretionary and voluntary activities carried out by a business enterprise are included in this responsibility and it is expected that almost every company operating in the society should accomplish the same. The responsibility can be termed as voluntary in nature and it is only the businesses which decide whether they are required to accomplish this responsibility or not (Hong, Li and Minor, 2016).

Carrying out activities in the form of charitable donations and investing in areas such as community development have been identified as some philanthropic responsibilities of companies operating in the market. The Carroll CSR pyramid is considered as one of the most useful and effective models which can be adopted by the companies to attain the desired and expected outcomes. A critical strength of the model is that it is very easy to understand and at the same time, it focuses on outlining the need and importance of profit for the entities.

2.6 Proposed Theoretical Framework

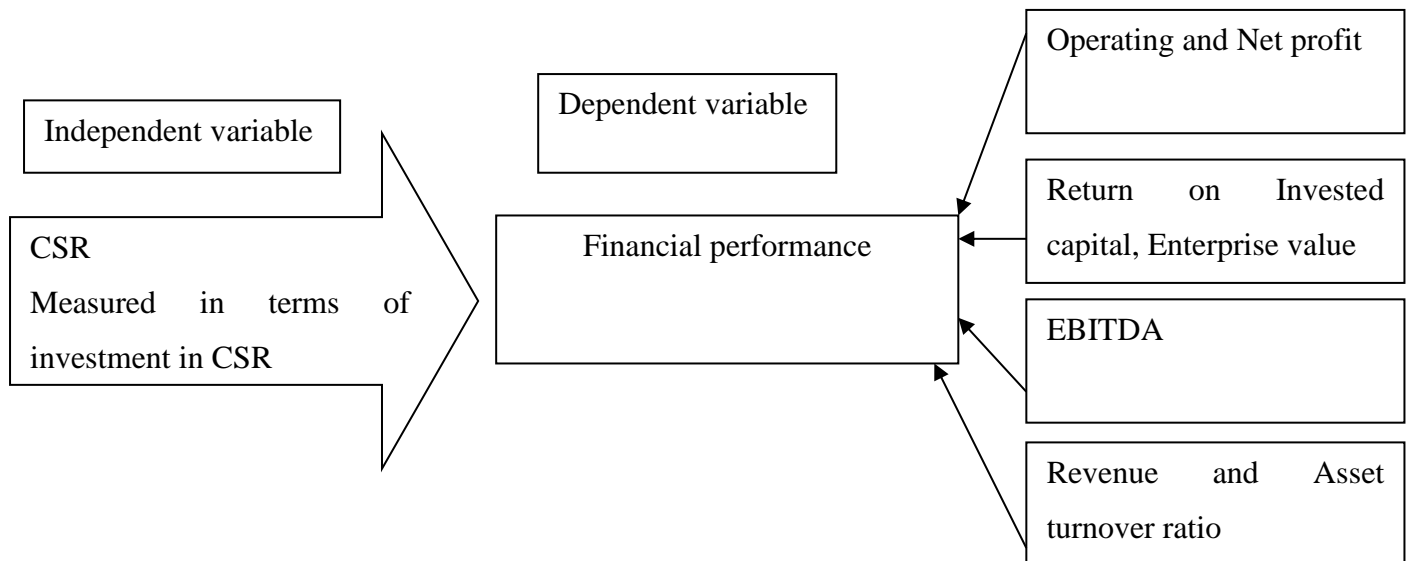


Figure 2: Research Theoretical Framework

(Source: Made by author)

It can be stated that the mentioned above diagram provides information with regards to the **Figure 2** represents information with regards to the proposed theoretical framework used for this research. It can be stated that the investment in CSR activities has been considered as the independent variable whereas the dependent variable here is the financial performance of an organisation.

The study has been focusing on analysing the impact which CSR activities have on different financial areas such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit.

Chapter 3: Research Methodology

3.1 Introduction

The use of research onion was done in this chapter and with the help of research onion; the researcher was able to develop understanding in context of the ways in which methodology in the study needs to be structure. Furthermore, the researcher has also focused on carrying out the selection of suitable methods and techniques to attain the expected outcomes. A strong focus on areas such as reliability and validity of the research has also been provided by researcher to enhance the overall quality of the study. In this chapter, the selection of sources with regards to data collection has been carried out and the researcher has also determined the sample size and technique for the study.

3.2 Research Onion

Research onion is the model which was developed by Thornhill, Saunders and Lewis (Sahay, 2016). The research onion consists of six important layers and sub-sections to enhance proper understanding of useful techniques and tools for conducting the research.

The first layer of the onion is of philosophical stances. The outcomes and even the quality of research is directly influenced and affected by the philosophy which a researcher has chosen. The onion has classified into different categories which are positivism, interpretivism, realism, pragmatism, constructivism and objectivism.

The selection of appropriate and reliable philosophy is done on the basis of the nature and objectives of a research (Fletcher, 2017). In context of the present research which is based on CSR and financial performance of a firm, the use of interpretivism philosophy has been done. The reason behind using the mentioned above philosophy because it has helped the researcher in focusing on the data which was unique and specific

The second layer of onion includes the approaches of research which are inductive and deductive. The research onion reflects the fact that use of deductive approach encourages an investigator to start with the research question and the study emphasize on identifying the answer with regards to the same.

On the other side of this, inductive approach is the one which is used by the researcher with an objective to create a theory or propose a model by conducting the investigation (Wiek and

Lang, 2016). In this research, the use of inductive approach from the research onion layer has been done. The reason behind this is that the use of inductive approach has supported in generating proper and adequate explanations from the information gathered. A more flexible way of data collection and analysis has been attained by use of inductive approach. The onion also reflects the fact that the third layer consists of various strategies which are available and which can be selected by a researcher for the purpose of conducting the research and attaining the desired or expected results.

The use of case study as a research strategy has been done in this investigation. The reason behind using case study is that it has helped in getting detailed insight into the ways in which CSR is making impact on the financial performance of a business.

Mono method has been selected in the current study. Mono method is also termed as one in which a research carries out either the use of qualitative or quantitative technique in completion of an investigation in order gain more specific and valid outcomes. The fifth layer in the onion reflects over the time horizon and it can be expressed that longitudinal time series is the time horizon which has been used in this research.

The reason behind using this horizon is that it has provided the researcher with an opportunity to study the events and different types of behaviour in the long run using the concentrated samples available. The last layer of the onion includes the processes and strategies linked with collection and analysis of the data (Ørngreen and Levinsen, 2017). For the present research, secondary sources have been used to gather the information and analysis of the same has been done using the qualitative technique. The reason here is that the qualitative technique has helped in carrying out content analysis of the data collected from secondary source.

[3.3 Research Philosophy](#)

In simpler terms, the philosophy of research can be defined as the set of principle which reflects the ways in which the entire research will be conducted. It means that the values and belief of the researcher concerning the entire investigation is linked with the concept of research philosophy. The classification of the philosophy is done in two major categories which are interpretivism and positivism.

It can be expressed that according to the concept of positivism philosophy, it is the society which shapes and have a considerable impact on behaviour and perception of individual

whereas interpretivism philosophy outlines that individuals are not affected by the social norms and factors. In studies with positivism philosophy, the use of experience and observation is carried out for the collection and gathering of information (Cuervo-Cazurra et al. 2017).

On the other side of this, reason and logic are the important factors which are used in positivism for the purpose of carrying out the interpretation of data or information collected. According to the concept of positivism philosophy, a person (researcher) and reality are two different things and therefore, they should be perceived as a separate identity. However, the concept of interpretivism philosophy reflects the fact that researcher and reality are interconnected and inseparable.

The present study aims at identifying the impact of CSR on financial performance of a firm and here the use of interpretivism philosophy has been done. The researcher has been able to obtain the opportunity of interpreting the elements associated with the study such as CSR, financial performance, EBITDA etc., and this can be termed as a major reason because of which the use of interpretivism philosophy has been done.

Moreover, the use of this philosophy has also provided the researcher with an opportunity to emphasize on the fact that access to reality can be attained only on the basis of social constructions. The reason behind carrying out the use of interpretivism philosophy is that it has helped in developing understanding about the things which are unique and specific with regards to CSR and its impact on firm's financial performance.

[3.4 Research Design](#)

The primary reason behind carrying out the use of research design is to carry out effective and best possible integration of various elements which are associated with a research. In order to accomplish the present investigation, the use of exploratory design of research has been done (Ulmer, 2017).

It can be expressed that exploratory design is mainly used to address the research problem when only few or no relevant studies are present. The current investigation emphasizes on identifying the overall impact of CSR on the financial performance of a business enterprise and it has been identified that in the past only limited studies in context of the chosen topic have been carried out and this is the primary reason behind the adoption of exploratory design.

In addition to this, the design has also been selected because it has provided the researcher with an opportunity to explore various and critical elements associated with CSR and a firm's financial performance. Here, the use of exploratory design has resulted in encouraging the researcher to explore different types of sources in the form of books, online articles and journals so that detailed knowledge about the ways in which CSR have impact on financial performance can be identified.

[3.5 Research Approach](#)

Deductive and inductive are the most common approaches used while carrying out a research. The use of deductive approach provides the researcher with an opportunity to aim and test the theory which already exists whereas considering inductive approach it totally relies on building new kind of theory from the information that is already present.

For attaining the aim of the research, the use of inductive approach has been done. The reason behind selection and application of this approach is that it has provided the researcher with an opportunity to propose a new theoretical framework in context of variables selected for the investigation. In addition to this, the use of this approach has also been done because it has provided the researcher with an opportunity to carry out a strong focus on exploring and determining new phenomenon.

[3.6 Data Collection](#)

Data collection is the process of obtaining information from the relevant sources in order to find answer to the research problem and evaluating the outcomes obtained. Mainly the data collection methods are segregated into the two main categories that are primary and secondary. Primary information is collected for the first time and the data is not considered in any research done in the past. On the other side of this, secondary information is already published in the sources such as magazines, online portals, journals and newspapers. This data is already published and it is utilized in different studies also. In the secondary information the most crucial part is to ensure that the data present is reliable and authentic so that it can be fruitful for the entire research. The secondary data has been collected and presented in the section of literature review in this research,

In the current investigation Indian companies listed in the stock exchange have been selected. So, only secondary sources of data have been considered in the current investigation. The main

sources from where data has been collected involve annual report and CSR/sustainability report of selected companies, CSR website of Indian government, Reuters database and other online websites. These sources are valuable for the current investigation as they have supported in identifying the CSR spending of the companies from the year 2013-2018 along with the information of the financial variables such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit.

Independent Variable – Corporate Social Responsibility

Dependent Variable – Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit

Net profit: It is also regarded as the bottom line and it is represented in the income statement of the firm. Further, net profit represents the amount left with the firm after all the main expenses are being paid.

Return on invested capital: This variable helps in knowing about the efficiency of the enterprise with the motive to allocate funds under its control to the investments that are fruitful. Further, it directly indicates how well firm is using its money with the motive to generate returns.

Enterprise value: It reflects the total value of the organization. For computation of this variable the market capitalization of the company is considered along with long- and short-term debt and cash that is represented on the balance sheet of the firm.

Asset turnover ratio: This variable is considered to be the efficiency ratio and it reflects the ability of the firm to generate sales from its key assets.

Revenue: It is considered as the amount that is earned by the firm through sale of its products and services.

EBITDA: It represent earnings before interest, taxes, depreciation and amortization and this variable contributes a lot in knowing about the financial performance of the firm. In short, EBITDA is one of the best measures of profitability of the firm.

Operating profit: This variable is an accounting metric that helps in ascertaining the profits that are generated by the firm from its core business functions. In the computation of operating profit tax and interest is excluded.

All these variables have been selected for the investigation as they are key part of the finance. Mainly financial performance of any particular firm can be known by considering these variables. Therefore, within the research data of these variables has been taken with respect to the Indian companies. The time frame of obtaining data of all these variables is 6 years starting from 2013 and ending 2018. All the data has been taken on the annual basis. Along with this, CSR information of all the Indian companies has been taken annually only.

3.7 Data Analysis

Quantitative data analysis involves utilization of statistical methods to collect raw data and transform it into numerical data. Analysis is carried out through hypothesis testing, mean and carrying out descriptive analysis.

In the current investigation data has been analysed through quantitative technique where descriptive analysis has been carried out such as computation of mean, median and other statistical technique. Data of selected companies have been collated in proper format and Microsoft excel has been utilized for analysis purpose.

For six-year (2013-2018) researcher has computed average of CSR spending of total 20 Indian companies. Further, average has been computed for every financial parameter also of six year.

For every company descriptive statistic has been calculated by taking computing of six years financial data and it has been represented in tabular form. Regression model has been applied in order to identify the significance between CSR and financial variables such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit. Further, confidence level in the study has been taken as 95% to ascertain the result.

Correlation technique has been applied in order to know the relation between CSR and financial variables to identify the relation whether it is high, moderate, low or negative. Hence, through this analysis researcher has focused on identifying whether CSR has influence on the financial performance of selected companies or not.

The confidence level in the study has been taken as 95% to ascertain the result. Linear regression model has been selected by researcher in order to test the relationship or significance of CSR on the financial variables selected in the research.

$$FP = \beta_0 + \beta_1 CSR + \varepsilon$$

The above regression equations are further alienated into seven equations with respect to FP. The term FP represents Financial Performance, NP symbolizes Net Profit, AT represents Asset Turnover, EV represents Enterprise Value, ROC denotes Return on Invested Capital, EBITDA represents Earnings before interest tax depreciation, and amortization, REV symbolizes Revenue, and OP denotes Operating Profit. All these variables are treated as dependent variable and CSR is the independent variable and ε represents the error term in the regression equations.

$$NP = \beta_0 + \beta_1 CSR + \varepsilon$$

$$AT = \beta_0 + \beta_1 CSR + \varepsilon$$

$$EV = \beta_0 + \beta_1 CSR + \varepsilon$$

$$ROC = \beta_0 + \beta_1 CSR + \varepsilon$$

$$EBITDA = \beta_0 + \beta_1 CSR + \varepsilon$$

$$REV = \beta_0 + \beta_1 CSR + \varepsilon$$

$$OP = \beta_0 + \beta_1 CSR + \varepsilon$$

[3.8 Sampling](#)

Two type of sampling methods are present that involve probability and non-probability (Kumar, 2019). In the probability sampling every individual in the research has equal chance of being selected but in the non-probability technique chance of being selected is not equal and this is the main difference in between two approaches.

Probability sampling method undertakes techniques such as systematic, simple random, cluster and stratified. In simple random technique every member has equal chance of getting selected. In the non-probability technique, the key approaches are convenience, purposive, snowball and voluntary response. In the convenience approach the researcher selects the respondents who are easily accessible. In voluntary sampling this approach relies on the ease of access. In

purposive sampling technique respondents are selected considering the main purpose of investigation. At last in snowball sampling participants are recruited with the help of other participants.

In the current investigation sample size is 20 Indian companies listed in the Indian stock exchange. Non probability technique has been adopted where convenience sampling technique has been selected. But at the same time some limitations of non-probability sampling are present where one of them is that it is quite difficult or impossible to know whether specific individual is representing the population. At the same time, it is not possible to compute the margin of error and confidence interval also.

Researcher has selected Indian companies on the basis of convenience as the data of selected companies is easily available on the web source. The main reason due to which Indian companies have been selected for the research as the investigator wants to know the CSR spending level of companies and at the same time whether such spending is affecting the financial performance of selected companies or not. Another reason was to know whether Indian companies are focusing on increasing their CSR spending or not on annual basis and this has been known with the help of CSR data.

The target population of the investigation is Indian companies listed in stock exchange. So, considering this researcher has selected top 20 Indian companies whose CSR spending level is high and they are investing adequate amount into CSR. These companies have strong brand image in the Indian market and at the same time they are focusing on sustainability factors also strongly. Hence, this is the reason due to which these companies are the representativeness of the data.

Sample considered is valid also as all the Indian companies selected covers the main area of the research such as CSR. All companies are indulged into the practice of spending into CSR.

The 20 companies selected for the investigation are representative of the data and they have been shown in **Table 1**.

Below is the list of companies that have been selected for the present study:

Table 1: Indian firms selected for the investigation

Ambuja cements Ltd	Tata Power Company Ltd.
Bharat Petroleum Corporation Ltd.	UltraTech Cement Ltd.
GAIL (India) Ltd.	Tata Motors Ltd.
Hindalco Industries Ltd.	ITC Ltd.
Wipro Ltd.	Tata Steel Ltd.
Indian Oil Corporation Ltd.	Infosys Ltd.
Larsen & Toubro Ltd.	ACC Ltd.
Mahindra and Mahindra Ltd.	Bajaj Auto Ltd.
Reliance Industries Ltd.	Godrej Consumer Products Ltd.
Tata Chemicals Ltd.	Titan Company Ltd.

The above companies have been selected for the investigation and the main reason behind considering these companies is that they are investing for the long time in CSR activities and at the same time they are also focused towards spending money for social and noble cause. Every company selected belongs to different sectors and they have good knowledge in the areas where they are working. It can be stated that CSR practices of these companies focus on the aspects such as environmental, economic and social aspects that are crucial in the area of CSR. Further, detailed information regarding companies in terms of their number of employees and annual turnover has been shown in **Table 2**.

Table 2: Information of companies for the year 2018

Company name	Annual turnover (INR. In Crore) (2018)	Number of employees (2018)
Ambuja cements Ltd	26,041	5180
Bharat Petroleum Corporation Ltd.	235,895	12157
GAIL (India) Ltd.	54,496	4529
Hindalco Industries Ltd.	115,183	40,000
Wipro Ltd.	54,487	160,000
Indian Oil Corporation Ltd.	421,492	33,000
Larsen & Toubro Ltd.	119,683	44761
Mahindra and Mahindra Ltd.	92,094	42875
Reliance Industries Ltd.	391,772	194,056
Tata chemicals Ltd	10,270	2763
Tata Power Company Ltd.	26,840	9594
UltraTech Cement Ltd.	30,607	20901
Tata Motors Ltd.	294,619	82797
ITC Ltd.	43,449	26147
Tata Steel Ltd.	123,249	32984
Infosys Ltd.	70,522	204,107
ACC Ltd.	14,802	7400

Bajaj Auto Ltd.	25,156	2863
Godrej Consumer Products Ltd.	9,847	2781
Titan Company Ltd.	16,120	6858

3.9 Limitations

The present study was only based on secondary research and this can be termed as the major limitation associated with the same. Another main limitation is time where researcher has obtained data of 20 Indian companies and collecting and collating data of different companies is time consuming process. So, time is also main limitation.

Main limitation is time period of data where researcher has taken information from the year 2013 to 2018 and this represents time period of 6 years. It is possible that data of 10 years or more than that can be taken in the investigation but researcher has considered only 6 years data and this is also the limitation in the research.

Selection of financial variables is also main limitation where researcher has selected on few variables for the research such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit. Other variables are also present such as inventory turnover, current ratio, quick ratio etc that can be considered. So, this is also another limitation.

Chapter 4: Data analysis

4.1 Overview

To analyze the impact of Corporate Social Responsibility spending on financial performance of companies, financial parameters of 20 Indian companies were selected. Data collected for the year 2013 – 2018, these include CSR spending of companies and financial parameters includes Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit. To analyze the results average CSR spending of 20 companies of six years was calculated and similarly average of selected financial variables all companies for six year was calculated to analyze the results.

In this chapter, the results were presented with the help of three statistical techniques. These techniques were used to analyze the impact of CSR spending on the financial performance of 20 selected companies. First, to represent the CSR spending of 20 companies for the period 2013 – 2018, descriptive statistics is used to analyze the CSR spending of companies, secondly regression model is used to analyze the significance between CSR spending and financial variables such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit. On the basis of regression model, the significance of CSR spending on financial parameters were represented. Thirdly, correlation technique was used to examine that whether the selected financial variables has positive or negative correlation with CSR spending of company in last six years that is from 2013 – 2018.

Descriptive statistical modeling, Regression model, and Correlation technique is used to analyze the impact of CSR spending of selected 20 Indian companies on financial performance.

Variables for the Study

Independent Variable – Corporate Social Responsibility

Dependent Variable – Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit

The confidence level in the study has been taken as 95% to ascertain the result.

Hypothesis

H₀: There is no relationship between Corporate Social responsibility and Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit

H₁: There is positive significant relationship between CSR spending and the Net Profits of companies

H₁: There is positive significant relationship between CSR spending and Asset Turnover of companies

H₁: There is positive significant relationship between CSR spending and Enterprise Value of companies

H₁: There is positive significant relationship between CSR spending and Return on Invested Capital of companies

H₁: There is positive significant relationship between CSR spending and EBITDA of companies

H₁: There is positive significant relationship between CSR spending and Revenue of companies

H₁: There is positive significant relationship between CSR spending and Operating Profit of companies

[4.2 Data Presentation of Selected Companies](#)

Analysis: CSR spending of 20 Indian companies has been analyzed (Refer to Appendix1) for the year 2013-2018. On analyzing this data, it is assessed that in last six years the companies have increased their CSR spending, an average growth rate measured was approximately 18% per annum. These companies belong to different industry verticals such as constructions & materials, oil & gas, chemicals, construction & engineering, metal &, mining, automobiles & auto parts, electric utilities & independent power producers, food, software & IT services, personal & household products services, and textile & apparels.

CSR Spending of 20 selected companies for the year 2013 – 2018

Table 3: CSR Spending of 20 selected companies as % of turnover

Company	CSR Spending as % of Turnover
Ambuja Cements Ltd.	0.31%
Bharat Petroleum Corporation Ltd.	0.03%
GAIL (India) Ltd.	0.13%
Hindalco Industries Ltd.	0.03%
Wipro Ltd.	0.24%
Indian Oil Corporation Ltd.	0.04%
Larsen & Toubro Ltd.	0.09%
Mahindra and Mahindra Ltd.	0.10%
Reliance Industries Ltd.	0.18%
Tata Chemicals Ltd.	0.09%
Tata Power Company Ltd.	0.06%
UltraTech Cement Ltd.	0.21%
Tata Motors Ltd.	0.01%
ITC Ltd.	0.53%
Tata Steel Ltd.	0.16%
Infosys Ltd.	0.31%
ACC Ltd.	0.20%
Bajaj Auto Ltd.	0.59%

Godrej Consumer Products Ltd.	0.15%
Titan Company Ltd.	0.11%

Analysis: In **Table 3** on comparing the CSR Spending as % of Turnover between the firms, it was assessed that Bajaj Auto Ltd., ITC Ltd., Ambuja Cements Ltd., Infosys Ltd., and Wipro Ltd. were the top five companies spending more than 0.24% of their revenue towards CSR spending in last six years. These companies belong to automobiles & auto parts, software & IT services, construction materials, and food industry. Followed by these companies UltraTech Cement Ltd., and ACC Ltd., business firms from construction materials industry also invested more than 0.20% of CSR spending of their turnover.

[4.3 Descriptive Statistics of CSR spending](#)

Table 4: Corporate Social Responsibility Spending Descriptive statistics

Corporate Social Responsibility Spending, 2013 – 2018(INR)	
Mean	108.99
Standard Error	11.41
Median	112.47
Standard Deviation	27.96
Sample Variance	781.72
Kurtosis	0.25
Skewness	-0.53
Range	80.18
Minimum	64.69
Maximum	144.87

Sum	653.97
Count	6

Analysis: Table 4 shows that 20 companies selected for the study, spend an average Rs/INR108.99 Crores towards CSR in the last six years. The average minimum spending of companies in 2013 was INR 64.69 Crores and the maximum average spending was in INR144.87 Crores in 2018. From the last six years, it has seen that these companies were increasing their expenditure on CSR with an average growth rate of 18.2% per annum. These results show that companies are more focused on contributing their money towards society.

Table 5: CSR practice of 20 Indian companies

Name of company	Type of CSR
Infosys ltd	Children and community welfare, Education
ACC Ltd.	Education and community welfare
Mahindra and Mahindra Ltd.	Poverty eradication, education and environment
Ambuja Cements Ltd.	Environment and donation
Bajaj Auto Ltd.	community welfare and education
Bharat Petroleum Corporation Ltd.	Healthcare and community
GAIL (India) Ltd.	Children welfare
Godrej Consumer Products Ltd.	Community welfare
Hindalco Industries Ltd.	Environment and poverty eradication
Wipro Ltd.	Education and community
Indian Oil Corporation Ltd.	Children welfare and environment

Larsen & Toubro Ltd.	Donation and environment
Reliance Industries Ltd.	Poverty eradication, education and environment
Tata Chemicals Ltd.	Education and community
Titan Company Ltd.	Environment
Tata Power Company Ltd.	Education, community welfare and community
UltraTech Cement Ltd.	Girl child and education
Tata Motors Ltd.	Environment
Tata Steel Ltd.	Livelihood and education

Table 5 highlights the CSR practices of the selected Indian companies where the main areas where companies are spending involve education and community, children welfare, livelihood, donation etc.

[4.4 Descriptive Statistics Analysis by Company](#)

Descriptive statistics of CSR spending of each company for the period of 2013 – 2018 has been analyzed (**Refer Appendix 2**). Results show the descriptive analysis of CSR spending of selected 20 companies at an individual level. It shows that Reliance Industries Ltd., ITC Ltd., Tata Steel Ltd., Infosys Ltd., and Indian Oil Corporation are the top five companies that spend more than INR 150 crores for CSR in the last six years. Reliance Industries Ltd. is one of the highest contributors in CSR of the Indian market. The average spending of the company was INR 646.52 Crores followed by the spending of INR 202.91 Crores by ITC Ltd. and Tata Steel Ltd. INR 197.45 Crores in 2013 – 2018. The CSR spending of most of the companies also states that they are spending at least 2% of their net profits towards CSR contribution.

4.5 Regression

1. Impact of CSR on Net Profit of Companies

$$NP = \beta_0 + \beta_1 CSR + \varepsilon$$

Table 6: Impact of CSR on Net Profit of Companies

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	580128016	580128016	53.54	0.00	
Residual	18	195032103	10835117			
Total	19	775160118				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1608.3	937.7	1.71	0.10	-361.7	3578.3
CSR	39.0	5.3	7.31	0.00	27.8	50.2

Dependent Variable: Net Profit, * Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 6** show that selected 20 companies having positive significant relation with average CSR spending and average Net Profit of companies.

The actual coefficient findings of results show there is positive relation between net profit and CSR spending of the companies. Hence, there is positive significant relationship between Corporate Social Responsibility and the Net Profits of companies.

Hence, the null hypothesis is rejected. It resembles that there is a significant relationship between CSR spending and Net Profit between the companies.

2. Impact of CSR on Asset Turnover of Companies

$$AT = \beta_0 + \beta_1 CSR +$$

Table 7: Impact of CSR on Asset Turnover of Companies

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	0	0	0.07	0.79	
Residual	18	4	0			
Total	19	4				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1.0	0.1	7.75	0.00	0.7	1.2
CSR	0.0	0.0	-0.269	0.79	0.0	0.0

Dependent Variable: Asset Turnover

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 7** show that selected companies for the study have negative relation with the spending of CSR and Asset Turnover of companies. The regression model depicts that CSR spending and Asset Turnover of companies does not state goodness fit level. The statistical significance in the above table is greater than 0.05 which indicates that overall regression model is not good fit for the above data.

Hence, the null hypothesis is accepted. It resembles that there is negative significant relationship between CSR spending and Asset Turnover of companies.

3. Impact of CSR on Return on Invested Capital

$$ROC = \beta_0 + \beta_1 CSR + \varepsilon$$

Table 8: Impact of CSR on Return on Invested Capital

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	1	1	0.01	0.92	
Residual	18	1261	70			
Total	19	1261				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	12.5	2.4	5.243	0.0001	7.5	17.5
CSR	0.0	0.0	0.105	0.92	0.0	0.0

Dependent Variable: Return on Invested Capital

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 8** show that selected 20 companies has negative relation between CSR spending and Return on Invested Capital outcome of the companies. The overall result shows that the model does not states the goodness fit.

The statistical significance in the above table shows that *Significance F or P-value is more than 0.05*, which is *0.9 (0.9 > 0.05)* it indicates that, the overall regression model is not fit.

Therefore, the null hypothesis is accepted. It resembles that there is no significant relationship between CSR spending and Return on Invested Capital of companies or negative relationship between these variables.

4. Impact of CSR on Enterprise Value

$$EV = \beta_0 + \beta_1 CSR + \varepsilon$$

Table 9: Impact of CSR on Enterprise Value

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	162658843017	162658843017	64.78	0.00	
Residual	18	45198407224	2511022624			
Total	19	207857250241				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	49752.9	14274.6	3.485	0.003	19763.2	79742.7
CSR	653.1	81.1	8.048	0.00	482.6	823.5

Dependent Variable: Enterprise Value

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 9** show that selected 20 companies spending on CSR and their Enterprise Value of companies suggests that the above regression model significantly predicts the outcome. Therefore, the null hypothesis is rejected. It resembles that there is positive significant relationship between CSR spending and Enterprise Value between the companies.

The overall result shows that CSR spending and Enterprise Value is highly significant. The statistical significance in the above table indicates that Significance is less than 0.05 which indicates that the overall regression model has good fit.

5. Impact of CSR on Revenue

$$REV = \beta_0 + \beta_1 CSR + \varepsilon$$

Table 10: Impact of CSR on Revenue

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	87657526613	87657526613	8.27	0.01	
Residual	18	190753108435	10597394913			
Total	19	278410635048				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	47947.9	29325.0	1.6	0.12	-13661.5	109557.4
CSR	479.4	166.7	2.9	0.01	129.2	829.6

Dependent Variable: Revenue

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 10** show that selected companies having positive significant relation to CSR spending and Revenue of companies. The overall result shows that change in revenue can be explained by the change in CSR spending of companies.

The statistical significance in the above table shows that *Significance F or P-value is less than 0.05*, which is *0.01 (0.01 < 0.05)* which indicates that, overall regression model implies goodness of fit.

Hence, the null hypothesis is rejected. It resembles that there is positive significant relationship between CSR spending and Revenue of companies.

6. Impact of CSR on EBITDA

$$\text{EBITDA} = \beta_0 + \beta_1 \text{CSR} + \varepsilon$$

Table 11: Impact of CSR on EBITDA

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	1304709319	1304709319	21.19	0.002	
Residual	18	1108276928	61570940			
Total	19	2412986246				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	5446.8	2235.2	2.437	0.025	750.7	10142.9
CSR	58.5	12.7	4.603	0.002	31.8	85.2

Dependent Variable: EBITDA

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The results in **Table 11** show that selected companies for the study have positive significance with CSR spending and EBITDA of companies. The overall result shows that CSR spending is explained by a change in EBITDA of companies. The statistical significance in the above table is 0.00 which less than 0.05 ($0.002 < 0.05$) and has goodness fit.

Hence, the null hypothesis is rejected. It resembles that there is a positive relation or significant relationship between CSR spending and EBITDA of companies. The overall results indicate that the above regression model predicts the outcome and suggest the goodness fit.

7. Impact of CSR on Operating Profit

$$OP = \beta_0 + \beta_1 CSR + \varepsilon$$

Table 12: Impact of CSR on Operating Profit

ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	696336336	696336336	30.32	0.0003	
Residual	18	413428621	22968257			
Total	19	1109764957				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	4021.6	1365.2	2.946	0.009	1153.4	6889.8
CSR	42.7	7.8	5.506	0.0003	26.4	59.0

Dependent Variable: Operating Profit

* Significant @ 5% (Computation of Regression statistics has been presented in Appendix 3)

Analysis: The above results in **Table 12** show that the relation between CSR spending and Operating Profit of companies is significant. The statistical Significance value is less than 0.05. Hence, the null hypothesis is rejected. It resembles that there is positive and significant relationship between CSR spending and Operating Profit of companies.

4.6 Correlation

Table 13: Correlation Analysis

	CSR	Asset Turnover	Return on Invested Capital	Net Profit	Enterprise Value	Revenue	EBITDA	Operating Profit
CSR	1							
Asset Turnover	-0.06	1						
Return on Invested Cap	0.02	0.42	1					
Net Profit	0.87	0.08	0.08	1				
Enterprise Value	0.88	-0.10	0.04	0.92	1			
Revenue	0.56	0.37	-0.29	0.73	0.61	1		
EBITDA	0.74	0.10	-0.16	0.90	0.83	0.87	1	
Operating Profit	0.79	0.13	-0.06	0.95	0.89	0.85	0.98	1

Analysis: Table 13 shows the correlation between CSR spending of 20 selected companies with financial performance indicators such as Net Profit, Return on Invested Capital, Enterprise Value, Asset Turnover Ratio, Revenue, EBITDA, and Operating Profit. To analyze the correlation between these variables, financial variables from the years 2013 – 2018 were collected and CSR spending of companies. Mean of each financial variable was calculated for six year along with the mean of CSR spending by companies. On analyzing the significance of the correlation between CSR and financial parameters (**Refer Appendix4**), the results of p-

value of net profit, enterprise value, EBITDA, revenue, and operating profit has less the 0.05 which shows that there is significant relationship between CSR spending and these financial variables. On the other side the p-value of return on invested capital and asset turnover of companies has no significant relationship with CSR spending of the companies.

Therefore, the results of the correlation of CSR spending with the selected financial performance indicators show that there is a highly positive correlation between Net Profit, Enterprise Value, EBITDA, and Operating Profit of the selected companies. It indicates that CSR spending of companies is positively affecting these financial variables of these companies and these financial variables are moving in relation to CSR spending. When CSR contribution was increased in 2013 – 2018, there is a positive impact on Net Profit, Enterprise Value, EBITDA, and Operating Profit or vice versa.

On the other side, the average of CSR spending and average revenue of companies shows that there is a moderate correlation between these variables, and an increase in CSR spending of companies is also dependent on the revenue of companies. Correlation between the average of CSR spending and return on invested capital is very low and Asset Turnover is negatively correlated. There is a negative relationship between these variables better performance of these variables does not lead to an impact on CSR spending of these companies or vice versa.

Correlation – CSR Spending and Net Profit of Companies

Table 14: Correlation between CSR spending and Net profit of companies

Correlation		CSR	Net Profit
ACC Ltd.	CSR	1	
	Net Profit	-0.50	1
Ambuja Cements Ltd.	CSR	1	
	Net Profit	0.50	1
Bajaj Auto Ltd.	CSR	1	

	Net Profit	-0.31	1
Bharat Petroleum Corporation Ltd.	CSR	1	
	Net Profit	0.89	1
GAIL (India) Ltd.	CSR	1	
	Net Profit	-0.14	1
Godrej Consumer Products Ltd.	CSR	1	
	Net Profit	0.70	1
Hindalco Industries Ltd.	CSR	1	
	Net Profit	-0.46	1
Wipro Ltd.	CSR	1	
	Net Profit	0.69	1
Indian Oil Corporation Ltd.	CSR	1	
	Net Profit	0.93	1
Larsen & Toubro Ltd.	CSR	1	
	Net Profit	0.22	1
Mahindra and Mahindra Ltd.	CSR	1	
	Net Profit	0.16	1
Reliance Industries Ltd.	CSR	1	
	Net Profit	0.47	1
Tata Chemicals Ltd.	CSR	1	
	Net Profit	0.26	1

Titan Company Ltd.	CSR	1	
	Net Profit	0.47	1
Tata Power Company Ltd.	CSR	1	
	Net Profit	-0.003	1
UltraTech Cement Ltd.	CSR	1	
	Net Profit	-0.05	1
Tata Motors Ltd.	CSR	1	
	Net Profit	-0.74	1
Tata Steel Ltd.	CSR	1	
	Net Profit	0.94	1
Infosys Ltd.	CSR	1	
	Net Profit	0.92	1

Analysis: Table 14 represents the correlation between CSR spending and Net Profit of selected 20 companies for the period 2013 – 2018. On analyzing the correlation between these variables, it was analyzed that the CSR spending of some companies is highly correlated with the increased net profit of their businesses. Tata Steel Ltd., Indian Oil Corporation Ltd., Infosys Ltd., and Bharat Petroleum Corporation Ltd. has a high positive correlation with CSR spending. An increase in their net profits of business has also led to an increase in CSR spending in the last six years. In addition, Wipro Ltd., Reliance Industries Ltd., Godrej Consumer Products Ltd. and Ambuja Cements Ltd. also increase their CSR spending in accordance with an increase in net profit but up to some extent. On the other side, there are also some other companies that have a negative correlation with their CSR spending and Net profit of their businesses. This represents that though there is an increase in the net profit of these companies there may be no increase in CSR spending or vice versa. Some of these companies are ACC Ltd., Tata Motors Ltd., Bajaj Auto Ltd., and Hindalco Industries Ltd. The

negative correlation between CSR spending and Net Profit of these companies was also observed due to fluctuations in CSR spending or net profit of the companies. CSR spending companies also states that most of the companies are spending at least 2% of their net profits towards CSR contribution in India.

On further analyzing the spending of CSR spending of companies, it is assessed that most of the companies are spending in the area of education, community welfare and children welfare are the three major areas in which most of the companies have incurred CSR spending. These includes ACC Ltd., Wipro Ltd., Reliance Industries Ltd., Ambuja Cements Ltd., and others. In addition, limited number of companies such as Tata Motors Ltd., Hindalco Industries Ltd., Mahindra and Mahindra Ltd. and others have spent in the areas of poverty eradication, environment and healthcare.

Chapter 5: Discussion

From the analysis carried out it has been found that all the Indian companies selected are contributing a lot in on CSR spending and at the same time average growth rate is 18.2%.

Furthermore, considering the CSR spending of NSE companies of India it has been found that level of spending has increased 18 percent in 2018/19 in comparison with the year on year growth of around 12% in the previous fiscal year (Kiran, 2020). This is indicating the kind of efforts that have been applied by every company in order to balance the different elements of CSR whether it may be economical, social and environmental.

At the same time CSR data of the 20 different companies is representing that Reliance industries Ltd is the one of the top performing firm in the area of CSR. From the year 2013 to 2018 the selected firm has focused a lot on investing into the CSR practices. Every year growth in the investment level of CSR has been witnessed with respect to Reliance industries. The second main company whose CSR investment has increased is Indian Oil Corporation (IOCL). It has been witnessed that this company is also investing a lot in the practices of CSR especially in the year 2018.

This analysis has supported in knowing that these Indian companies mainly prefers to invest into the area of CSR. Further, on yearly basis spending on this area takes place so that they can contributes towards the society, economy and the environment. The selected Indian companies have framed right CSR policies and such policies are supporting them to conduct CSR practices in a fair manner. Company like Reliance industries has managed to meet the expectations of society through high investment in CSR.

The list of companies that are low in terms of investment in the area of CSR are Tata chemicals, Godrej consumer products Ltd, Titan company ltd etc. Investment or the spending level of these firms in the area of CSR is not up to the mark.

So, this is having a kind of negative implication on the businesses. Low investment in CSR is representing that these firms are unable to allocate proper funds in CSR. Further, this can hamper the brand image of these companies in the long run. It is suggested to the companies such as Titan company, Godrej industries, Tata chemicals etc. to allocate more funds into the CSR practices. Companies are required to focus more on CSR as through this they can obtain different benefits such as improved shareholder value, high stock price, positive consumer

perception, customer loyalty etc. In accordance with the viewpoint of Verma (2011) it has been found that the main disadvantage of not investing in CSR is dissatisfied stakeholder and it hampers the brand image of the organization also. The main reason due to which these companies are low in CSR investment as they may not be earning adequate profits or they are focusing more on retained earning rather than investment into CSR.

Applicability of descriptive statistics has shown that 20 companies have invested on an average INR 108.99 Crores towards the CSR in the last six years where average minimum spending was INR 64.69 Crores in the year 2013 and maximum spending was INR 144.87 Crores in the year 2018. Moreover, CSR spending level of these firms have also increased.

From the descriptive analysis of the CSR spending of 20 Indian companies it has been identified that the top companies that are highly spending in CSR are Tata steel, Infosys, Indian Oil corporation and Reliance Industries Ltd. These companies are strongly focusing on CSR and at the same time Reliance Industries Ltd was one of the top companies in terms of CSR investment. This information has been identified from the annual reports of these companies and at the same time CSR spending of the selected Indian companies have been compared through which it has been identified that Reliance industries is on the top in terms of CSR spending followed by other firms such as Tata Steel, Infosys etc.

Mainly these companies are strongly focusing on CSR investment for better stakeholder management such as customers, suppliers, investors, government etc. In short, pressure from different parties such as customers or any other encourages company to invest into CSR (Jamali and Karam, 2018). Along with this, there is no such other effective measure present to satisfy society, environment and overall economy also. Therefore, companies have to strongly focus a lot on CSR spending and if they fail to do so then stakeholder management becomes difficult task.

Table 15: Types of Company CSR Spending

Name of company	Type of CSR spending
Infosys ltd	Children and community welfare, Education
ACC Ltd.	Education and community welfare

Mahindra and Mahindra Ltd.	Poverty eradication, education and environment
Ambuja Cements Ltd.	Environment and donation
Bajaj Auto Ltd.	community welfare and education
Bharat Petroleum Corporation Ltd.	Healthcare and community
GAIL (India) Ltd.	Children welfare
Godrej Consumer Products Ltd.	Community welfare
Hindalco Industries Ltd.	Environment and poverty eradication
Wipro Ltd.	Education and community
Indian Oil Corporation Ltd.	Children welfare and environment
Larsen & Toubro Ltd.	Donation and environment
Reliance Industries Ltd.	Poverty eradication, education and environment
Tata Chemicals Ltd.	Education and community
Titan Company Ltd.	Environment
Tata Power Company Ltd.	Education, community welfare and community
UltraTech Cement Ltd.	Girl child and education
Tata Motors Ltd.	Environment
Tata Steel Ltd.	Livelihood and education

In order to know the influence of CSR on the different financial parameter's regression technique has been applied. Considering the impact of CSR on the net profit of the companies

it has been found that there is significant relationship between the two components and in this case null hypothesis can be easily rejected. This analysis is representing that CSR spending of the companies affects their net profits.

Along with this, CSR has also influence on the asset turnover of the companies. There is also negative relationship in between these two variables considered for the investigation.

Considering the impact of CSR on return on invested capital it can be stated that there is no such significant relationship between the two variables. This information is representing that CSR investment has no such impact on the actual return that is obtained by the firm on the invested capital. Hence, null hypothesis can be accepted in this case.

Further, there is significant relationship between CSR and enterprise value. This analysis is indicating that when company increases its amount of CSR investment then this enhances the total value of the company. The relationship between the two variables is highly significant. Considering the case of Reliance Industries Ltd where the company is heavily investing into CSR and in this case its enterprise value is increasing. This information is also stating that if any organization wants to improve its enterprise value then in such case the best practice that can be considered is associated with investing into CSR.

CSR has positive significant relationship between revenue of the selected companies. From the regression analysis it has been identified that CSR spending of the companies affects the revenue of the firms.

Considering the variable such as EBITDA it has been identified through regression that CSR has positive relationship with the EBITDA of the companies. Change in the CSR spending of the firms affects the EBITDA of the firms. Moreover, there is no relationship between CSR spending level and operating profit of the companies.

Considering the research conducted by Bafna (2017) it highlights the results that CSR practice has link with net profits of the company and at the same time this element shows slight correlation but no significant influence with the Return on Assets and Earnings per share of the company. This research has clearly highlighted that CSR relationship varies in case of every variable and it is not necessary that CSR has positive influence on every variable that represents the financial performance of the firm.

Correlation analysis has also been carried out for determining the impact of CSR on the financial performance of the selected Indian companies. Mainly correlation is considered as the measure of the strength of linear relationship between the two variables that are quantitative in nature. From the correlation analysis it has been found in the research that there is significant relationship between the variables such as CSR and others such as EBITDA, Net profit, Enterprise value and operating profit of the 20 companies that have been selected for the investigation. This analysis is clearly indicating that CSR investment of the companies selected for the research has positive correlation with the variables identified. Mainly the positive correlation represents that all the variables are moving in the same direction like in the case when CSR spending of all the companies is increasing then it is leading to rise in the level of EBITDA, Net profit, Enterprise value and operating profit and vice versa.

On the other side of this, moderate correlation is present between the average revenue of companies and the CSR spending and it is stating that CSR spending of the companies is somehow dependent on the revenue of the entities. At the same time, considering the correlation between Return on invested capital, Asset turnover and CSR spending it is negative and it is representing that these variables are not at all moving in the same direction. In the case when companies will focus on enhancing their CSR spending then it will not at all affect these variables and there is no such link.

Considering the correlation analysis between CSR spending and Net profit of the companies it has been found that in case of some companies such as Indian Oil, Tata steel, Infosys Ltd and Bharat Petroleum Corporation Ltd correlation is highly positive. With the increase in the net profit of these companies their CSR spending has also enhanced at a faster pace. In accordance with the view point of Singh and Das (2020) it has been identified that when companies earn higher profits then it becomes quite easy for them to invest into the activity such as CSR that has positive influence on their brand image. On the other hand, when adequate amount of net profit is not earned by the firms then it creates obstacle in terms of investing into the different areas such as CSR etc.

Along with this, companies such as Wipro Ltd., Reliance Industries Ltd., Godrej Consumer Products Ltd. and Ambuja Cements Ltd have also increased their CSR spending with the increase in the net profits of the business. Along with this it can be stated that in case of some firm's negative correlation is present between net profit and CSR spending. This is applicable in the case of companies such as ACC Ltd., Tata Motors Ltd., Bajaj Auto Ltd., and Hindalco

Industries Ltd. Further, this negative correlation has been identified due to fluctuation in the CSR spending of the companies or the net profits of the firms.

Further, the analysis can be supported with the help of another secondary research. The research conducted by Menezes (2019) reflected that CSR has no such as relation with the EPS, return on assets of the selected firms. Further, the research reflected that CSR spending has significant relation with the net profits of the firm. So, same finding has been obtained in the case of current investigation where net profits and CSR spending has shown significant relationship but it is also applicable in the case of some selected companies only.

Another research carried out by Abilasha and Tyagi (2019) has represented that companies such as ITC and ACC companies is having positive influence of CSR on the profit before tax. Along with this, in the case of companies such as Mahindra & Mahindra, Ultratech cement etc., it has been identified that CSR has positive influence on the financial variable return on capital employed. This research has also clearly stated that on an average every company selected for the investigation has invested 2% towards CSR activities. In this investigation the research focused on identifying the relation between CSR and financial indicators such as ROA, ROE, ROC and PBT. The result indicates that investment in the area of CSR improves the financial performance and vice versa.

In every type of research results are representing that CSR impact on the financial variables such as ROA, ROE, Return on invested capital varies on the basis of companies for instance, in some companies impact of CSR on net profit, operating profit may be positive but for other companies it may be negative also. So, it depends on the company also.

Hence, these are the key results that have been identified through the applicability of the quantitative technique in the research. The results are stating that CSR has positive influence on some selected financial variables and on the other side no impact has been witnessed on the certain variables.

The main limitation of the present research is that only information of 20 listed Indian companies has been considered in the research such as their CSR spending and data linked with financial performance. Second main limitation is that research is only secondary and no such primary investigation has been carried out such as questionnaire analysis through which direct response can be obtained from the respondents and this can lead to acquiring more authentic data. In near future research can be carried out in some others. Research can be conducted by

considering the other variables also such as inventory turnover ratio, firm size, stock price etc. Further, it is possible to carry out investigation on the topic impact of CSR on the stock performance of the companies as in this area very few studies are present. At the same time, research can be conducted on determining influence of CSR on customer satisfaction, employee management and other stakeholders of the business etc. So, these are the suggestions for the future research.

Chapter 6: Conclusion and recommendations

6.1 Conclusion

The study supported a lot on knowing the influence of CSR on the financial performance of the Indian companies. Further, it has been found that CSR impacts positively on the financial indicators such as Net Profit, Enterprise Value, EBITDA, and Operating Profit of the selected companies. On the other hand, average revenue of the companies has low correlation with the CSR spending of the firms. Furthermore, considering net profit as one of the variables it can be stated that Tata Steel Ltd., Indian Oil Corporation Ltd., Infosys Ltd., and Bharat Petroleum Corporation Ltd CSR spending has positive relation with this variable and in case of ACC Ltd., Tata Motors Ltd., Bajaj Auto Ltd., and Hindalco Industries this correlation is negative.

Return on invested capital and CSR spending has also no significant relationship.

The different financial variables considered in the research have both positive and negative influence with CSR and this can be mainly concluded from the current study.

It can be concluded that among all the selected companies Reliance Industries Limited is one that focuses a lot on CSR spending and amount of investment is very high in the area of CSR in comparison with other Indian companies selected. Additionally, when any particular company is able to earn higher net profits by carrying out its operations then in such case it becomes easy to invest high amount or allocate more funds into the CSR practices.

Further, the results also demonstrate that all the selected companies are meeting at least 2% which is mainly demonstrated in the New Companies Act 2013. Further, when companies invest a lot in the CSR practices then it has positive influence on their brand image also and they are able to sustain in the market easily for the longer time period. No doubt, in the case of companies that operate on smaller basis for them it is one of the most difficult tasks to invest into CSR.

Research has also demonstrated that expenditure on CSR for the selected companies has increased with the average growth rate of 18.2% on yearly basis and it is also representing as positive sign in regarding with the CSR investment of the entities. In short, every company is playing crucial role for carrying out operations in favor of society, managing economy and at the same time protecting environment also that is also most vital.

No doubts in near future companies are required to take more measures for boosting their CSR performance in the market. Along with this, it depends on every organization like what measures management may like to take for promoting or undertaking its CSR practices that are crucial. The findings represent that in the Indian market for every company whether it may be operating in any sector CSR activity is still regarded as the main dimension through which companies can easily grow in the market and it can support in the actual growth also.

6.2 Recommendations

- It is the moral responsibility of Securities and Exchange Board of India to take strict actions in order to boost the CSR disclosure practices
- For development of the CSR practices it is recommended to the selected companies to involve all the levels of the organization such as top, middle and lower. Through this suggestion it will be possible for the firm to obtain more views of its employees and they will contribute a lot in building right CSR practices that are crucial
- Another main recommendation is to focus on the customer engagement. The main reason behind the same is that customers prefer to purchase products of the companies who are more inclined towards the sustainability factors such as managing social values and taking initiatives for the environmental protection also. By considering these aspects the selected companies can attract more customers through its CSR practices and in turn it can lead to the growth of the business also.
- Understanding the financial implications is also the main suggestion to the companies. At the time when management plans CSR strategy then in such case it is necessary to track several metrics such as stock price, monetary outlay, return on investment etc. By considering implications on all these areas it will be more fruitful for the firm to design or develop its CSR practices in a proper manner.
- Localizing the business efforts is also the main suggestion for the companies. Even if the firms are operating at global level but it is necessary to understand well in advance like how the activities of the firm can have effect on the local community. By focusing on this aspect, it will be possible for the companies to contribute more towards the favor of the society and in turn it will provide long term advantage such as increase in profitability, market share, etc. that are crucial for the businesses.
- Aligning CSR with the business goals and considering it as a part of corporate strategy is also the main suggestions. Companies can focus on keeping CSR practice on the top

of priority and through this they can serve best to the community and at the same time environmental aspects can be easily managed through this.

References

1. Abilasha, and Tyagi, M, (2019). Impact of CSR on Financial Performance of Top 10 Performing CSR Companies in India. *IOSR Journal of Economics and Finance*, 10(2), PP 49-55
2. Albuquerque, R., Koskinen, Y. and Zhang, C., (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science*, 65(10), pp.4451-4469.
3. Ali, W., Frynas, J.G. and Mahmood, Z., (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management*, 24(4), pp.273-294.
4. Alikaj, A., Nguyen, C.N. and Medina, E., (2017). Differentiating the impact of CSR strengths and concerns on firm performance. *Journal of Management Development*.
5. Aupperle, K.E., Carroll, A.B. and Hatfield, J.D., (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of management Journal*, 28(2), pp.446-463.
6. Bafna, A, (2017). A Study on the Impact of CSR on Financial Performance of Companies in India. *International Journal of Engineering Technology Science and Research*. 4(12). http://ijetsr.com/images/short_pdf/1512892686_325-331-ietech842_word_etsr.pdf
7. Benlemlih, M. and Bitar, M., (2018). Corporate social responsibility and investment efficiency. *Journal of Business Ethics*, 148(3), pp.647-671.
8. Bresler, L. and Stake, R.E., (2017). Qualitative research methodology in music education. In *Critical Essays in Music Education* (pp. 113-128). Routledge.
9. Crane, A., Matten, D. and Spence, L. eds., (2019). *Corporate social responsibility: Readings and cases in a global context*. Routledge.
10. Cronqvist, H. and Yu, F., (2017). Shaped by their daughters: Executives, female socialization, and corporate social responsibility. *Journal of Financial Economics*, 126(3), pp.543-562.
11. Cuervo-Cazurra, A., Mudambi, R., Pedersen, T. and Piscitello, L., (2017). Research methodology in global strategy research. *Global Strategy Journal*, 7(3), pp.233-240.
12. Cui, J., Jo, H. and Na, H., (2018). Does corporate social responsibility affect information asymmetry?. *Journal of Business Ethics*, 148(3), pp.549-572.

13. Das, L. and Bhunia, A., (2016). The Impact of CSR on Firms' Financial Performance— A Literature Review. *American Journal of Business, Economics and Management*, 4(4), p.66.
14. Demirag, I. ed., (2018). *Corporate social responsibility, accountability and governance: Global perspectives*. Routledge.
15. Dyck, A., Lins, K.V., Roth, L. and Wagner, H.F., (2019). Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics*, 131(3), pp.693-714.
16. El Ghoul, S., Guedhami, O. and Kim, Y., (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies*, 48(3), pp.360-385.
17. Flammer, C. and Luo, J., (2017). Corporate social responsibility as an employee governance tool: Evidence from a quasi-experiment. *Strategic Management Journal*, 38(2), pp.163-183.
18. Fletcher, A.J., (2017). Applying critical realism in qualitative research: methodology meets method. *International journal of social research methodology*, 20(2), pp.181-194.
19. Frynas, J.G. and Yamahaki, C., (2016). Corporate social responsibility: Review and roadmap of theoretical perspectives. *Business Ethics: A European Review*, 25(3), pp.258-285.
20. Giannarakis, G., Konteos, G., Zafeiriou, E. and Partalidou, X., (2016). The impact of corporate social responsibility on financial performance. *Investment management and financial innovations*, (13, Iss. 3 (contin. 1)), pp.171-182.
21. Goldberg, S.B., Tucker, R.P., Greene, P.A., Simpson, T.L., Kearney, D.J. and Davidson, R.J., (2017). Is mindfulness research methodology improving over time? A systematic review. *PloS one*, 12(10).
22. Gond, J.P., El Akremi, A., Swaen, V. and Babu, N., (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior*, 38(2), pp.225-246.
23. Grayson, D. and Hodges, A., (2017). *Corporate social opportunity!: Seven steps to make corporate social responsibility work for your business*. Routledge.
24. Hong, B., Li, Z. and Minor, D., (2016). Corporate governance and executive compensation for corporate social responsibility. *Journal of Business Ethics*, 136(1), pp.199-213.

25. Hong, H.G., Kubik, J.D., Liskovich, I. and Scheinkman, J., (2019). Crime, punishment and the value of corporate social responsibility. *Available at SSRN 2492202*.
26. Hopkins, M., (2016). *The planetary bargain: corporate social responsibility comes of age*. Springer.
27. Jain, P., Vyas, V. and Roy, A., (2017). Exploring the mediating role of intellectual capital and competitive advantage on the relation between CSR and financial performance in SMEs. *Social Responsibility Journal*.
28. Jamali, D. and Karam, C., (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, 20(1), pp.32-61.
29. Kang, C., Germann, F. and Grewal, R., (2016). Washing away your sins? Corporate social responsibility, corporate social irresponsibility, and firm performance. *Journal of Marketing*, 80(2), pp.59-79.
30. Kiran, N, (2020). *CSR spends improve to 18% in FY19; yet far below all-time high*. [Online]. Accessed through <<https://www.businessstoday.in/current/corporate/csr-spends-improve-to-18-in-fy19-yet-far-below-all-time-high/story/394582.html>>. [Accessed on 2nd May 2020].
31. Krishnan, N, (2012). *IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON THE FINANCIAL AND NON FINANCIAL PERFORMANCE OF SELECT BSE LISTED COMPANIES*. [Online]. Accessed through <<http://www.dypatil.edu/schools/management/wp-content/uploads/2015/11/Impact-of-Corporate-Social-Responsibility-on-the-financial-and-non-financial-performance-of-select-BSE-listed-companies-NALINI-KRISHNAN.pdf>>. [Accessed on 16th April 2020].
32. Kumar, A., Sinha, A., Arora, A. and Aggarwal, A., (2018). Impact of CSR activities on the financial performance of firms. *MUDRA: Journal of Finance and Accounting*, 5(1), pp.75-89.
33. Kumar, R., (2019). *Research methodology: A step-by-step guide for beginners*. Sage Publications Limited.
34. Lins, K.V., Servaes, H. and Tamayo, A., (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance*, 72(4), pp.1785-1824.

35. Matten, D. and Moon, J., (2020). Reflections on the 2018 Decade Award: The Meaning and Dynamics of Corporate Social Responsibility. *Academy of Management Review*, 45(1), pp.7-28.
36. Menezes, G., (2019). Impact of CSR Spending on firm's financial performance.
37. Mohajan, H.K., (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), pp.23-48.
38. Ørngreen, R. and Levinsen, K., (2017). Workshops as a Research Methodology. *Electronic Journal of E-learning*, 15(1), pp.70-81.
39. Petrenko, O.V., Aime, F., Ridge, J. and Hill, A., (2016). Corporate social responsibility or CEO narcissism? CSR motivations and organizational performance. *Strategic Management Journal*, 37(2), pp.262-279.
40. Rao, K. and Tilt, C., (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), pp.327-347.
41. Schrempf-Stirling, J., Palazzo, G. and Phillips, R.A., (2016). Historic corporate social responsibility. *Academy of Management Review*, 41(4), pp.700-719.
42. Singh, P.K. and Das, B., (2020). Relationship between CSR and firms' Financial Performance: Empirical Evidence from Indian Banks. *Studies in Indian Place Names*, 40(60), pp.3483-3490.
43. Su, W., Peng, M.W., Tan, W. and Cheung, Y.L., (2016). The signaling effect of corporate social responsibility in emerging economies. *Journal of business Ethics*, 134(3), pp.479-491.
44. Ulmer, J.B., (2017). Posthumanism as research methodology: Inquiry in the Anthropocene. *International Journal of Qualitative Studies in Education*, 30(9), pp.832-848.
45. Verma, S., (2011). Why Indian Companies Indulge in CSR? *Journal of Management & Public Policy*. 2 (2). <http://jmpp.in/wp-content/uploads/2016/01/Shweta-Verma.pdf>
46. Wang, H., Tong, L., Takeuchi, R. and George, G., (2016). Corporate social responsibility: An overview and new research directions: Thematic issue on corporate social responsibility.
47. Wang, Z. and Sarkis, J., (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*, 162, pp.1607-1616.

48. Weber, M., (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, 26(4), pp.247-261.
49. Wiek, A. and Lang, D.J., (2016). Transformational sustainability research methodology. In *Sustainability science* (pp. 31-41). Springer, Dordrecht.
50. Yadav, R. and Singh, F.B., (2016). Impact of corporate social responsibility on financial performance of Indian commercial banks—An analysis. *Imperial Journal of Interdisciplinary Research*, 2(12), pp.1113-1122.

Appendices

Appendix 1

Corporate Social Responsibility contribution of key 20 performing CSR Indian Companies (Rs/INR in Crores), CSR Spending from 2013 – 2018.

Company	2013	2014	2015	2016	2017	2018
Ambuja Cements Ltd.	39.8	52.6	41.0	59.4	58.8	53.5
Bharat Petroleum Corporation Ltd.	17.9	34.4	33.9	95.6	91.0	166.0
GAIL (India) Ltd.	64.7	62.6	17.2	104.8	75.8	91.7
Hindalco Industries Ltd.	29.8	32.3	32.4	34.2	28.4	31.1
Wipro Ltd.	14.1	16.0	132.7	159.8	186.3	186.0
Indian Oil Corporation Ltd.	79.0	81.9	113.8	156.7	214.0	331.1
Larsen & Toubro Ltd.	73.2	76.9	76.5	119.9	100.8	100.9
Mahindra and Mahindra Ltd.	33.5	121.1	83.2	85.0	83.3	82.0
Reliance Industries Ltd.	351.0	711.7	760.6	651.6	659.2	745.0
Tata Chemicals Ltd.	9.0	12.8	10.2	14.0	15.0	14.3
Tata Power Company Ltd.	7.9	15.3	31.1	28.3	22.8	15.2
UltraTech Cement Ltd.	43.4	48.6	44.5	50.9	54.2	60.7
Tata Motors Ltd.	19.2	4.5	18.6	20.6	25.9	21.4
ITC Ltd.	82.3	106.6	214.1	247.5	276.0	291.0
Tata Steel Ltd.	171.0	213.0	171.5	204.0	193.6	231.6
Infosys Ltd.	10.0	9.0	239.5	202.3	289.4	312.6

ACC Ltd.	22.8	27.5	31.2	22.3	21.8	20.5
Bajaj Auto Ltd.	219.1	226.7	42.9	86.7	95.0	100.5
Godrej Consumer Products Ltd.	3.1	4.5	16.1	14.6	16.5	18.9
Titan Company Ltd.	3.0	4.0	12.3	17.4	20.0	23.4

Appendix 2

Descriptive Statistics Analysis by Company

CSR Spending, 2013 – 2018					
	<i>Ambuja Cements Ltd.</i>	<i>Bharat Petroleum Corporation Ltd.</i>	<i>GAIL (India) Ltd.</i>	<i>Hindalco Industries Ltd.</i>	<i>Wipro Ltd.</i>
Mean	50.83	73.13	69.45	31.35	115.82
Standard Error	3.49	22.76	12.37	0.84	32.87
Median	53.02	62.68	70.23	31.68	146.25
Standard Deviation	8.54	55.75	30.29	2.06	80.52
Sample Variance	72.90	3108.23	917.67	4.25	6483.35
Kurtosis	-1.84	0.18	1.47	-0.47	-1.94
Skewness	-0.55	0.92	-0.95	-0.22	-0.72
Range	19.55	148.14	87.67	5.79	172.17
Minimum	39.82	17.88	17.15	28.36	14.13
Maximum	59.37	166.02	104.82	34.15	186.30

Sum	304.99	438.78	416.67	188.07	694.93
Count	6	6	6	6	6

CSR Spending, 2013 – 2018					
	<i>Indian Oil Corporation Ltd.</i>	<i>Larsen & Toubro Ltd.</i>	<i>Mahindra and Mahindra Ltd.</i>	<i>Reliance Industries Ltd.</i>	<i>Tata Chemicals Ltd.</i>
Mean	162.73	91.37	81.35	646.52	12.54
Standard Error	39.56	7.65	11.39	61.78	0.99
Median	135.24	88.84	83.27	685.46	13.37
Standard Deviation	96.89	18.73	27.90	151.32	2.41
Sample Variance	9387.71	350.70	778.33	22897.11	5.83
Kurtosis	0.96	-1.24	2.69	4.31	-1.40
Skewness	1.21	0.58	-0.64	-2.00	-0.71
Range	252.08	46.72	87.62	409.58	5.99
Minimum	78.97	73.17	33.52	351.00	9.01
Maximum	331.05	119.89	121.14	760.58	15.00
Sum	976.39	548.19	488.12	3879.14	75.22
Count	6	6	6	6	6

CSR Spending, 2013 – 2018					
	<i>Tata Power Company Ltd.</i>	<i>UltraTech Cement Ltd.</i>	<i>Tata Motors Ltd.</i>	<i>ITC Ltd.</i>	<i>Tata Steel Ltd.</i>
Mean	20.10	50.37	18.38	202.91	197.45
Standard Error	3.62	2.63	2.97	36.06	9.73
Median	19.03	49.75	19.89	230.78	198.81
Standard Deviation	8.86	6.45	7.28	88.33	23.84
Sample Variance	78.47	41.62	52.94	7802.44	568.42
Kurtosis	-1.39	-0.10	3.86	-1.77	-1.12
Skewness	-0.06	0.68	-1.72	-0.65	0.17
Range	23.25	17.31	21.44	208.64	60.62
Minimum	7.88	43.40	4.50	82.34	171.00
Maximum	31.13	60.71	25.94	290.98	231.62
Sum	120.59	302.21	110.28	1217.47	1184.69
Count	6	6	6	6	6

CSR Spending, 2013 – 2018

	<i>Infosys Ltd.</i>	<i>ACC Ltd.</i>	<i>Bajaj Auto Ltd.</i>	<i>Godrej Consumer Products Ltd.</i>	<i>Titan Company Ltd.</i>
Mean	177.15	24.32	128.49	12.27	13.37
Standard Error	55.29	1.68	31.00	2.75	3.46
Median	220.92	22.52	97.75	15.33	14.87
Standard Deviation	135.42	4.11	75.94	6.73	8.47
Sample Variance	18338.87	16.89	5767.06	45.27	71.75
Kurtosis	-1.90	0.07	-1.64	-1.72	-1.92
Skewness	-0.64	1.15	0.64	-0.80	-0.27
Range	303.60	10.71	183.79	15.81	20.44
Minimum	9.00	20.45	42.91	3.07	3.00
Maximum	312.60	31.16	226.70	18.88	23.44
Sum	1062.88	145.91	770.95	73.63	80.22
Count	6	6	6	6	6

Appendix 3

Regression Analysis

Net Profit						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.87					
R Square	0.75					
Adjusted R Square	0.73					
Standard Error	3291.7					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	580128016	580128016	53.54	0.000001	
Residual	18	195032103	10835117			
Total	19	775160118				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1608.3	937.7	1.715	0.103	-361.7	3578.3
CSR	39.0	5.3	7.317	0.000	27.8	50.2

Asset Turnover						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.06					
R Square	0.00					
Adjusted R Square	-0.05					
Standard Error	0.4					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	0	0	0.07	0.79	
Residual	18	4	0			
Total	19	4				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1.0	0.1	7.75	0.0000004	0.7	1.2
CSR	0.0	0.0	-0.269	0.79	0.0	0.0

Return On Invested Capital						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.02					
R Square	0.00					
Adjusted R Square	-0.05					
Standard Error	8.4					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	1	1	0.01	0.92	
Residual	18	1261	70			
Total	19	1261				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	12.5	2.4	5.243	0.0001	7.5	17.5
CSR	0.0	0.0	0.105	0.92	0.0	0.0

Enterprise Value						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.88					
R Square	0.78					
Adjusted R Square	0.77					
Standard Error	50110.1					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	162658843017	162658843017	64.78	0.00	
Residual	18	45198407224	2511022624			
Total	19	207857250241				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	49752.9	14274.6	3.485	0.003	19763.2	79742.7
CSR	653.1	81.1	8.048	0.00	482.6	823.5

Revenue						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.56					
R Square	0.31					
Adjusted R Square	0.28					
Standard Error	102943.6					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	87657526613	87657526613	8.27	0.01	
Residual	18	190753108435	10597394913			
Total	19	278410635048				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	47947.9	29325.0	1.6	0.12	-13661.5	109557.4
CSR	479.4	166.7	2.9	0.01	129.2	829.6

EBITDA						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.74					
R Square	0.54					
Adjusted R Square	0.52					
Standard Error	7846.7					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	1304709319	1304709319	21.19	0.000	
Residual	18	1108276928	61570940			
Total	19	2412986246				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	5446.8	2235.2	2.437	0.025	750.7	10142.9
CSR	58.5	12.7	4.603	0.000	31.8	85.2

Operating Profit						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.79					
R Square	0.63					
Adjusted R Square	0.61					
Standard Error	4792.5					
Observations	20					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	1	696336336	696336336	30.32	0.000	
Residual	18	413428621	22968257			
Total	19	1109764957				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	4021.6	1365.2	2.946	0.009	1153.4	6889.8
CSR	42.7	7.8	5.506	0.000	26.4	59.0

Appendix 4

Significance of Correlation between CSR and Financial Parameters

	Asset Turnover	Return on Invested Capital	Net Profit	Enterprise Value	Revenue	EBITDA	Operating Profit
Coefficient (r)	-0.92	-0.66	0.91	0.97	0.15	0.88	0.84
N:	6	6	6	6	6	6	6
T Statistic	-4.9	-1.8	4.3	7.5	0.3	3.7	3.1
DF	4	4	4	4	4	4	4
p value	0.003	0.090	0.005	0.0004	0.354	0.010	0.017

Mean is Calculated for Each Figure for the period 2013 - 2018, Figures are in Rs Crores/INR Crores

Company	CSR	Asset Turnover	Return on Invested Capital(%)	Net Profit
Ambuja Cements Ltd.	50.8	0.6	8.8	1,654.1
Bharat Petroleum Corporation Ltd.	73.1	2.6	11.4	6,409.8
GAIL (India) Ltd.	69.4	0.9	8.8	3,727.1
Hindalco Industries Ltd.	31.3	0.7	5.6	2,147.4
Wipro Ltd.	115.8	0.8	17.2	8,006.3

Indian Oil Corporation Ltd.	162.7	1.7	8.8	11,815.1
Larsen & Toubro Ltd.	91.4	0.5	5.6	5,701.6
Mahindra and Mahindra Ltd.	81.4	0.8	9.4	4,704.5
Reliance Industries Ltd.	646.5	0.8	7.8	27,141.3
Tata Chemicals Ltd.	12.5	0.6	7.1	701.8
Tata Power Company Ltd.	20.1	0.4	3.2	859.6
UltraTech Cement Ltd.	50.4	0.6	9.2	2,403.4
Tata Motors Ltd.	18.4	1.1	11.1	11,071.0
ITC Ltd.	202.9	0.9	28.0	9,659.2
Tata Steel Ltd.	197.4	0.8	4.1	1,959.3
Infosys Ltd.	177.1	0.9	23.9	12,711.8
ACC Ltd.	24.3	0.9	11.7	991.3
Bajaj Auto Ltd.	128.5	1.3	30.6	3,656.6
Godrej Consumer Products Ltd.	12.3	0.9	15.2	1,069.0
Titan Company Ltd.	13.4	1.9	25.4	791.7

Mean is Calculated for Each Figure for the period 2013 - 2018, Figures are in Rs Crores/INR Crores

Company	Enterprise Value	Revenue	EBITDA	Operating Profit
Ambuja Cements Ltd.	36,891.8	16,381.8	2,705.2	1,793.4

Bharat Petroleum Corporation Ltd.	85,282.8	229,031.5	14,538.8	11,983.9
GAIL (India) Ltd.	62,243.3	54,800.3	6,708.8	5,199.5
Hindalco Industries Ltd.	81,371.0	97,715.8	9,806.7	5,977.9
Wipro Ltd.	115,599.0	48,096.4	10,012.8	8,510.8
Indian Oil Corporation Ltd.	177,757.1	420,424.5	24,940.0	18,714.1
Larsen & Toubro Ltd.	207,957.5	96,921.0	11,365.2	9,373.2
Mahindra and Mahindra Ltd.	110,641.4	77,641.8	10,567.4	7,860.8
Reliance Industries Ltd.	458,681.3	362,852.8	44,293.7	30,736.3
Tata Chemicals Ltd.	19,348.6	13,881.3	2,194.8	1,684.0
Tata Power Company Ltd.	64,835.5	31,052.5	6,590.9	4,403.2
UltraTech Cement Ltd.	89,636.2	24,051.7	4,918.5	3,605.8
Tata Motors Ltd.	154,239.4	253,690.4	33,787.9	19,081.6
ITC Ltd.	272,206.1	38,532.8	14,174.8	13,121.6
Tata Steel Ltd.	110,679.4	126,668.8	15,160.3	9,363.3
Infosys Ltd.	198,575.1	57,541.8	15,894.8	14,462.0
ACC Ltd.	24,318.3	12,278.6	1,699.3	1,087.4
Bajaj Auto Ltd.	62,195.1	21,876.5	4,358.7	4,102.7
Godrej Consumer Products Ltd.	46,778.5	8,298.3	1,539.1	1,431.1
Titan Company Ltd.	39,399.4	12,270.1	1,175.2	1,083.0