

# Econometric Analysis of How Corporate Social Responsibility has Enabled Social Entrepreneurship and Innovation in India

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**Abstract:** Utilizing robust mathematical and statistical approaches including calculus and regression, this study quantitatively assesses the impact of Corporate Social Responsibility (CSR) on the growth and success of social enterprises. Social entrepreneurs are the forefront of the Indian battle against the cultural, social and environmental issues which plague the nation while also generating employment and uplifting marginalized communities. This paper, through extensive analysis, highlights the role of philanthropic funding avenues through CSR in facilitating social ventures while also considering external cultural, economic, and regulatory incentives for social entrepreneurs. Moreover, the paper's analysis of the diffusion of adoption framework provides social entrepreneurs with a toolkit to target specific CSR programs and better catalyse social-impact and innovation in India. Overall, this research paper explores the intricate interplay between CSR and social entrepreneurship, providing key insights for policymakers, business leaders and social entrepreneurs.

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## I. INTRODUCTION TO CORPORATE SOCIAL RESPONSIBILITY

Corporate Social Responsibility is a concept in business which encourages firms to consider meeting objectives apart from profit and revenue maximization. It ensures that companies take accountability and responsibility for the impact that they have on the environment, society and economy. In today's world, businesses are no longer simply judged by their ability to meet the bottom line of providing high quality goods or services at affordable prices; rather, consumers, investors as well as society at large expect that firms operate increasingly with a conscience.

Corporate Social Responsibility incentivizes firms to create a model of business which encourages a more sustainable future of the world and their own production, thus benefiting both the company itself and the society at large. According to the Harvard Business School, corporate social responsibility (CSR) takes four forms.

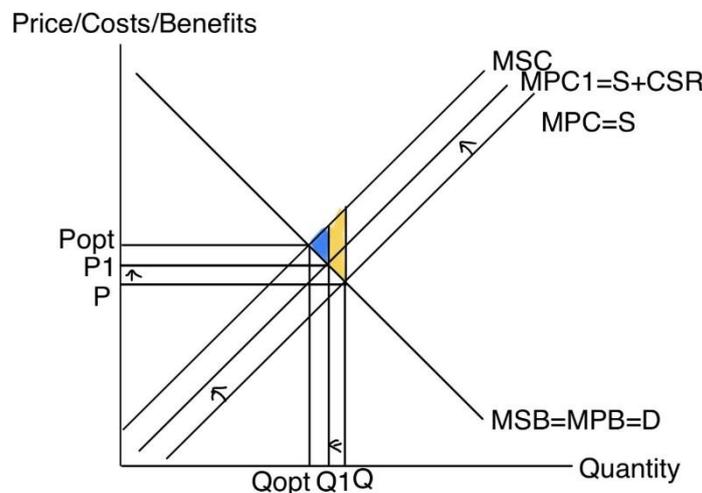
### A) *Environmental Responsibility*

Climate change, resource depletion and global warming serve as ever-growing threats which can pose significant harms to our society. Thus, environmental responsibility is paramount and companies who primarily focus on this component of CSR aim to reduce their negative environmental impact through various incentives. These incentives include: adopting sustainable practices, adopting the use of renewable energy, conserving resources, and using organic raw materials. Primarily, there are three ways that companies aim to uphold their environmental responsibility.



**Figure 1. Techniques To Embrace Environmental Responsibility**

Firstly, by reducing harmful practices, the firm is able to reduce their negative production externalities on society. Secondly, by regulating energy consumption, they are enabling greater economic development as it increases environmental justice in areas of energy scarcity for fossil fuels, nuclear energy and coal. Thirdly, by offsetting negative environmental impacts, they are able to internalize the externality as they bear the external cost upon themselves and hold themselves accountable for it. Below, an externality diagram depicts the company's actions.



**Figure 2. Externality Diagram Depicting Effect Of CSR**

As visible in the diagram above, most companies produce goods and services with significant external costs, most commonly carbon emissions. This leads to a market failure with a negative production externality. Though the socially optimum equilibrium is at  $Q_{opt}$  and  $P_{opt}$  when  $MSB$  (Marginal Social Benefit) is equal to  $MSC$  (Marginal Social Cost), market equilibrium is at price/cost/benefit  $P$  and quantity  $Q$  when  $MPB$  (Marginal Private Benefit) is equal to  $MPC$  (Marginal Private Cost). At market equilibrium,  $MPC$  is greater than  $MSC$  resulting in an overallocation of resources which negatively impacts society making the deadweight loss to society the yellow and blue shaded area. Thus, in order to help society,  $Q$  must move towards  $Q_{opt}$ . By taking upon environmental CSR, companies go out of their way to offset negative carbon emissions, reduce harmful practices or take up a less productive energy-use model which increases their cost of production. This leads to a leftward shift of  $MPC$  to  $MPC_1$  forming a new equilibrium, increasing equilibrium price to  $P_1$  and reducing equilibrium quantity to  $Q_1$ . This reduction in equilibrium addresses the overallocation of resources and makes the market more allocatively efficient. Moreover, it also reduces the deadweight loss to society to just the blue shaded area. This diagram depicts how CSR helps society.

B) *Ethical Responsibility*



**Figure 3. Ethical And Legal Responsibility**

It is the responsibility of a business to conduct themselves with fairness and integrity. Thus, ethical CSR emphasizes the foundation of ethical principles for the company's operations including treating employees well, ensuring fair wages, safe working conditions as well as responsible sourcing patterns. These responsible sourcing patterns ensure that all materials are obtained ethically without contributing to societal harm.

Additionally, ethical CSR extends to avoiding bribery and corruption in the supply chain. This is prevented by a clear and enforced code of conduct. This code of conduct outlines acceptable and unacceptable behaviours by a firm's employees. Normally, the code of conduct also includes anti-bribery policies emphasizing zero tolerance for such policies. Moreover, due diligence by firms including supplier vetting and risk assessments ensure that suppliers comply with legal and ethical standards of the company. Lastly, firms may also use regular monitoring and audits (internal and external) in order to ensure compliance with anti-corruption and anti-bribery policies; external audits provide an unbiased perspective ensuring justice and fairness in the workplace.

C) *Philanthropic Responsibility*

Philanthropic responsibility encompasses another key component of CSR as it involves giving back to the community. This encourages businesses to invest their time, effort, resources and money towards fostering better lives through donations to social causes, employee volunteer programs and even supporting local community initiatives. For example, The International School Bangalore's first ever debate competition TISB DEBATE (largest student-led debate competition in India) raised over 300,000 rupees in revenue from sponsors seeking CSR benefits as all of the event's profits (180,000 rupees) was donated to a cardiology research institute.

Moreover, philanthropic responsibility is one of the most common forms of CSR as firms dedicate a portion of their earnings towards charities and nonprofits that align with their mission. Some firms also decide to create their own trusts in order to better fight for their mission themselves which is also a form of philanthropic CSR. Normally, popular philanthropic CSR programs include matching gifts, corporate volunteerism, volunteer grants as well as sponsorships. These various methods provide funding, manpower and resources to non-profits.

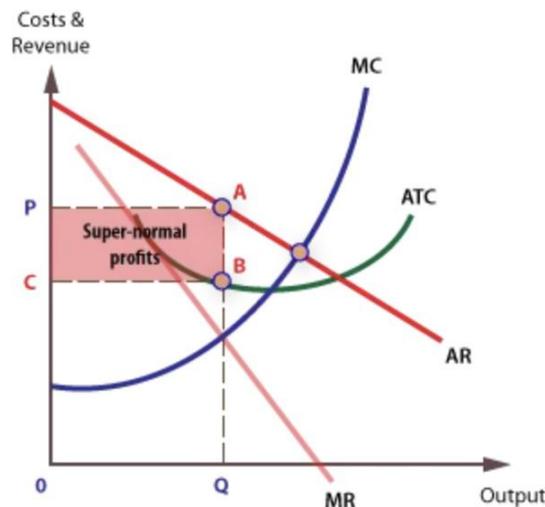
D) *Economic Responsibility*



**Figure 4. Carroll's CSR Pyramid**

Economic responsibility is considered the pillar of CSR as depicted in figure 4. Though profitability is important, it is the responsibility of businesses to contribute to the well-being of the community that they operate in. Therefore, economic CSR prioritises creating a positive economic impact through means including job creation, fair wages, employee benefits and investment in infrastructure. An overlooked part also involves correct and responsible practices of tax and improving human capital through well-designed and well-operated training programs for employees.

Additionally, according to Harvard's Business School, economic responsibility may also be defined as a "firm backing all of its financial decisions in its commitment to do good" and look past simply profit maximization and market share as a firm's objectives. However, profitability of a firm is still a need for CSR as a firm must survive in order to have the funds and power to give back to its community. The condition for a firm to be in supernormal profit (to ensure money for CSR) is given below as average revenue is visibly greater than average cost at the profit maximization condition when marginal revenue (MR) is equal to marginal cost (MC).



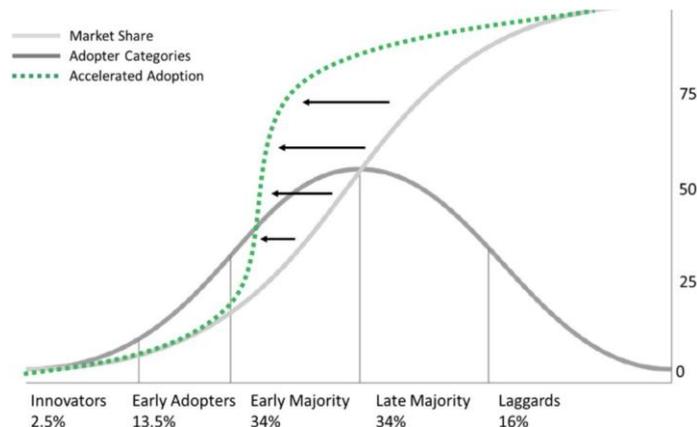
**Figure 5. Supernormal Profit Condition of  $AR > ATC$**

**II. INTRODUCTION TO SOCIAL ENTREPRENEURSHIP**

Traditionally, businesses are driven by profits and often prioritize creating shareholder value even if it is at the expense of the environment or society. However, social entrepreneurship – a paradigm shift in entrepreneurship in the last few decades – has challenged this traditional approach to business, demonstrating how business can be a catalyst for positive change. Through innovative techniques, social entrepreneurs aim to solve pressing global, cultural, environmental and social issues to create social value and impact.

Social enterprises can be characterized by a few key features. Firstly, the presence of a social mission is critical for the enterprise to meet their mission of addressing a social need; this social mission is responsible for driving the company's operations. However, in order to have a social mission, the identification of a specific community problem is necessary. This can include access to clean water in rural communities, inadequate education opportunities or even underdeveloped healthcare systems.

Secondly, innovation and sustainability is central to the mission of a social entrepreneur. Social entrepreneurs often use innovative measures to solve their social problem and find models and methods that are more effective than traditional approaches currently used. Moreover, social enterprises must remain financially stable in order to keep working towards their social mission and continue in their operations and impacts which emphasizes the importance of sustainability of such firms.



**Figure 6. Diffusion of Adoption Framework Representing Speed Of Adoption For Social Entrepreneurs**

The above diagram is able to vividly represent the market of plant-based products. As more companies aim to launch such products successfully, specific segments can be targeted with tailored products through the diffusion of innovation. This valuable tool helps provide a comprehensive profile of early adopters and early majority segments in order to target crowdfunding as well as products towards groups that are most open to adopt this innovative change. Thus, the above diagram represents the framework for 'diffusion of innovation' and the higher adoption rate it provides if social entrepreneurs can implement it.

Additionally, the third feature is an extension of innovation with regards to scalability. By harnessing the efficiency and innovation of a social enterprise's new model, a scalable solution can be created which can reach a wider audience and have a greater impact than a traditional charity model. A fitting example is the sale of water filters where the social entrepreneur gains revenue from the sale of the filters, yet solves a pressing global issue at the same time. Simultaneously, great importance is placed on a social enterprise's ability to measure their impact in order to appropriately work towards reaching their social mission and ensure that they are achieving their goals.

Essentially, the paradigm of social entrepreneurship debunks the way we look at social problems. It represents a shift away from simply throwing money at an issue towards creating sustainable solutions that empower communities and foster long-term change in society. Thus, by blending a social mission with a traditional business approach, social entrepreneurs not only create successful businesses but also create a lasting positive impact on the world. Social entrepreneurs make this impact through three types of social enterprises.

**A) Non-Profit Organizations**

A non-profit organization is one that is completely driven by its social cause and doesn't consider any other business objectives like profit maximization while operating. They reinvest all their surplus revenue back into the organization in order to further their cause. They also have a non-distribution constraint where any profits generated by an NPO can't be redistributed to its owners, investors or directors and must be reinvested towards mission-driven activities. They work to benefit the community at large and are thus provided a tax exempt status not requiring them to pay taxes on any donations or revenue, enabling a fall in the cost of production for NPOs. This helps them reinvest more money into the social mission facilitating a greater impact as seen by the graph below comparing the quantity (impact) of a firm paying taxes (Q) and an NPO with a tax exempt ( $Q_{NPO}$ ). Moreover, as NPO's often provide essential services and products, a tax exemption also enables them to produce at a lower price of  $P_{NPO}$  making their products and services more affordable for low-income consumers who comprise the primary target audience.

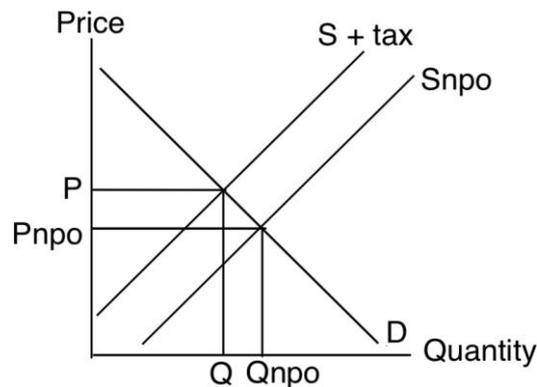


Figure 7. Tax Exempt Impact On NPOs

An example of an NPO is Grameen Bank which specializes in microfinance and provides small loans to the impoverished as well as farmers without requiring confirmation of collateral for those loans, enabling them to start businesses and improve their livelihood. Their primary target audience comprises of the underprivileged in order to help them attain financial stability in Bangladesh. Moreover, they also cater specifically to women – an under-represented group of beggars – as 98% of borrowers are women with nearly 66% of them being able to elevate their living conditions.

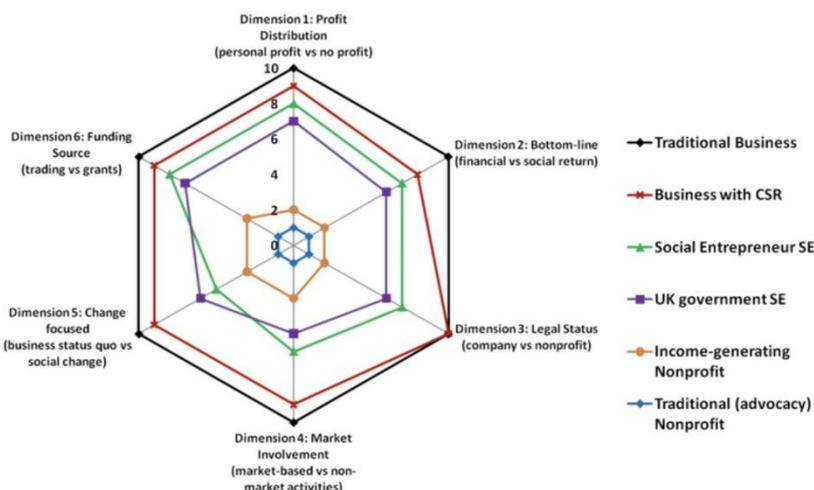
B) *Hybrid Organizations*

Hybrid organizations blend elements of an NPO and for-profit enterprise by leveraging their commercial strategies in order to achieve their social objectives. This enables them to be self-sustaining by operating with a business model that generates income while still focusing on a social mission. These include public initiatives of firms in order to gain public support towards their cause, increase their consumer base and consumer loyalty. For instance, Warby Parker partners with an NPO in order to distribute a pair of eyeglasses for every pair of eyewear they sell. This is one of the most commonly seen forms of social entrepreneurship. Although, it brings into question the very definition of a social enterprise as this may also be viewed as a form of philanthropic CSR. Overall, this is the reason why the distinction between the two is often tough to make and is considered a ‘hybrid organization’.

C) *For-Profit Social Enterprises*

For-profit social enterprises often operate with a traditional business approach however dedicate themselves to a social mission, often reinvesting great parts of their profits into meeting their social objectives. Such a firm has both profit maximization and the social mission as its primary business objectives. This happens through research and development, surveying or product reviews. Such firms operate on high dynamic efficiency in order to ensure that none of their resources which can be utilized towards meeting their social objectives are wasted.

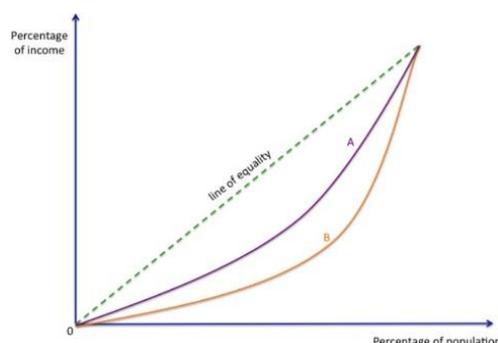
An example of this is TOMS shoes who operate a “one on one” model. Through this model, they donate a pair of shoes to an underprivileged child for every shoe bought from their enterprise, enabling them to still make profits while dedicating themselves to a social mission. The below diagram represents how closely these different business models compare to a traditional business approach in which we see that though a business with CSR works closest to a traditional business, a social entrepreneur is the next best for meeting all dimensions of profit distribution, bottom-line of financial or social return, legal status, market involvement, focus on change and funding.



**Figure 8. Comparison Of Various Social Enterprises With A Traditional Business Approach**

Additionally, the overall benefits of social entrepreneurship include:

1. A direct ability to create a lasting social impact by providing issues to key local or global issues.
2. Stimulation of economic growth through generation of employment. Moreover, often times social enterprises seek to employ migrant workers or laborers from under represented communities to help them further their social impact. This is also able to facilitate economic development within the country and lower income inequality as visible by the inward shift of the Lorenz curve below from B to A, reducing the Gini coefficient.



**Figure 9. Lorenz Curve Depicting Impact of Social Entrepreneurship**

3. Driving innovation and efficiency into markets with transferable applications. For instance, an innovative solution to increase efficiency of water filtration in rural areas by a social enterprise may have applications in sewage water treatment, hydroelectric energy and more. This enables greater efficiency amongst various markets, exceeding simply the market entered by the social entrepreneur.
4. Empowerment of communities by providing them with the belief of bettering their living conditions. By increasing representation of marginalized communities, they have a greater say in societal decisions and are considered as a key stakeholder for government decisions. This increased visibility enables the maintenance of a more sustainable and increased quality of life.

### **III. FACTORS INCENTIVIZING SOCIAL ENTREPRENEURSHIP IN INDIA**

India serves as fertile ground for social entrepreneurship due to a few key factors that drive and support such ventures. Due to a confluence of social challenges, a growing ecosystem and patronized start-up culture – especially in urban cities such as Mumbai and Bangalore, – the educated population are incentivized to adopt social entrepreneurship.

Nevertheless, social needs and challenges play a prominent role amongst these factors. Firstly, India has a large and diverse population with many unmet needs in areas including healthcare, education, sanitation and clean water.

Thus, this large, underserved population provides ample opportunities for social enterprises to develop innovative solutions to address critical issues. Secondly, the rising visibility of such problems through growing awareness campaigns fueled by the media and social media fosters a sense of social responsibility. This is an incredibly motivating source for individuals to seek solutions for such issues through entrepreneurial ventures. “Kamlesh, 20, is currently the CEO of a food bank in Bangalore which has reached over 7000 homeless people. He emphasizes on the role played by media on his incentive to start his company. Kamlesh comes from a privileged background and he explained how even though he had nearly completed his engineering degree in a local Bangalore college, he dropped out to start his social venture to help thousands of people get daily access to good food and clean water. He realized this issue through increased social media coverage on starvation and thirst in rural Bangalore and felt empathetic towards those communities.”

Simultaneously, supportive ecosystems including government incentives, funding avenues, the rise of incubators and accelerators as well as CSR programs further incentivize social entrepreneurship in India. The recognition of social entrepreneurship by the Indian government has led it to launch initiatives like Startup India and Stand-up India which provide funding, incubation facilities as well as a streamlined regulatory process for social enterprises.

Additionally, the growing pool of investors dedicated to supporting social impact ventures has effectively created a plethora of funding avenues. These funding avenues include angel investors, impact investment funds and philanthropic organisations dedicated to channeling resources towards promising social enterprises.

Furthermore, a growing young population in India is brimming with ideas and the desire to see change. This demographic is incredibly valuable to the social enterprise market as they can be a key driver of innovative solutions through their unique perspectives. Coupled with technological advancements that provide social entrepreneurs with tools to reach wider audiences, create more scalable solutions and efficiently manage their ventures, the growing youth entering the social enterprise market is an appreciating asset.

Lastly, the presence of various legislation facilitating and encouraging social entrepreneurship in India helps the social entrepreneurship scene. Firstly, relaxed regulations that the Indian government has introduced under Section 8 of the Companies Act, 2013 offers a simpler framework for social enterprises compared to traditional non-profits.

Secondly, the Companies Act also mandates all companies to spend a certain portion of their revenue on CSR, which creates funding opportunities for social enterprises that can partner with corporations to achieve social goals. The intricacies of the relationship between CSR and social entrepreneurship will be explored in section (IV). Thirdly, social enterprises that are registered under Section 80(G) of the Income Tax Act enjoy tax exemptions on donations received. This serves two purposes: it enables social enterprises to operate more productively enabling them to broaden their impact and also incentivizes individuals and companies to financially support social ventures as they see a greater tangible output from their investment because none of it is lost as tax.

#### **IV. ECONOMETRIC AND QUALITATIVE ANALYSIS OF HOW CSR DRIVES SOCIAL-IMPACT**

##### **INNOVATION IN INDIA**

Post the passing of the Companies Act in 2013 by the Indian parliament to reshape how companies must operate, all Indian companies were mandated to pay 2% of their profits towards CSR. This opened up new avenues for funding for social enterprises as we saw more partnerships between companies and social enterprises to reach joint social objectives. Post the passing of this act and due to the factors previously analysed for incentivizing CSR, the total funding in India grew from 2014 up to 2023 according to the Indian CSR division from 6338 Cr to 27593 Cr which consequently led to an increase in the number of Indian Social Enterprises as well from merely 258 to 2000000 according to the Bertelsmann Stiftung Journal. This econometric analysis using secondary data, regression analysis and the ANOVA test will determine the strength of this relationship and test the statistical significance of the correlations found.

##### **A) Hypothesis**

This study will consider the following 2 hypotheses in order to determine whether CSR funding increases correlate to an increased number of social enterprises. This will enable firms to pave a path forward in better allocating their CSR funding.

H<sub>0</sub> Null Hypothesis: There is no correlation between the amount of CSR funding and the number of Indian social enterprises.

H<sub>1</sub> Alternate Hypothesis: There is a positive correlation between the amount of CSR funding and the number of

Indian social enterprises.

*B) Independent Variable: Amount of CSR Funding available in India*

This value is a representation of the total CSR fund of the country in INR Cr portraying all the possible funding opportunities for social enterprises. This value primarily includes philanthropic CSR and doesn't take internal R&D into consideration – as it comes under a firms' own cost of production to improve product quality rather than a funding source available to social enterprises – to provide a more accurate understanding of funding pathways for social entrepreneurs. This statistic is calculated by the CSR division of the Indian government by calculating 2% of the total profits for all formal enterprises in the country.

*C) Dependent Variable: Number of Social Enterprises*

This value is a representation of all the registered social enterprises in India actively working towards solving a social mission. The difference in each value is a representation of the number of social enterprise start-ups per year. Although, the funding is distributed amongst already existing social enterprises and start-ups, thus both will be taken into consideration for this study.

*D) Raw data and Analysis*

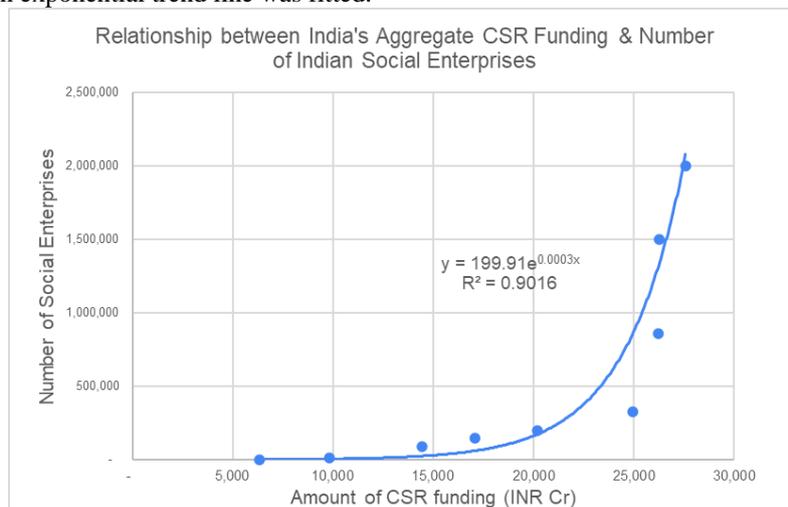
This data was obtained from the official government reports from [csr.india](http://csr.india) where each year's total CSR fund is reported. It compares the relationship between the independent and dependent variable across a 9 year time period from 2014 till 2023. This data will now be analysed using statistical models of regression and ANOVA as well as mathematical approaches involving calculus.

| Fiscal Year | Amount of CSR Funding (INR Cr) | Number of Indian Social Enterprises |
|-------------|--------------------------------|-------------------------------------|
| 2014-15     | 6338                           | 258                                 |
| 2015-16     | 9822                           | 13000                               |
| 2016-17     | 14438                          | 90000                               |
| 2017-18     | 17099                          | 150000                              |

|         |       |         |
|---------|-------|---------|
| 2018-19 | 20218 | 200000  |
| 2019-20 | 24966 | 330000  |
| 2020-21 | 26211 | 860000  |
| 2021-22 | 26279 | 1500000 |
| 2022-23 | 27593 | 2000000 |

**Table 1. Relationship Between CSR Funding And Number Of Social Enterprises**

As visible in the table, there is an evident increase in both variables across the time period due to the conducive environment for social entrepreneurship and glorification of CSR for companies. However, the trend of how the number of social enterprises behaves over time must still be found. Therefore, the scatter plot below was graphed and an exponential trend line was fitted.



**Figure 10. Relationship between India’s Aggregate CSR Funding & Number of Indian Social Enterprises**

The equation of the graph line is  $y = 199.91e^{0.0003x}$  which represents the natural exponential relationship between the two variables. Firstly, through differentiation on the equation below, the equation for the gradient of the trendline was obtained as seen below.

$$(1) y = 199.91e^{0.0003x}$$

$$(2) \frac{dy}{dx} = 0.059973e^{0.0003x}$$

The domain of x is such that  $\{x \in \mathbb{Z}_+\}$ , thus we can see that in  $\frac{dy}{dx}$ , for any value of x, equation (2) will always be positive, demonstrating a positive relationship between the two variables.

In order to further test how well the independent variable explains variations in the dependent variable, an  $R^2$  test was conducted on the trendline. The  $R^2$  value is a statistical test which provides a value ranging from 0 to 1 with 1 indicating the model’s perfect fit to the data. The following formula was used to conduct the  $R^2$  test.

$$R^2 = \frac{\text{Unexplained Variation}}{\text{Total Variation}}$$

This provided a value of 0.9016 for our line of best fit. In a regression model, this indicates a strong positive correlation between the independent (amount of CSR funding) and dependent variable (number of social enterprises). In the case of this value, 90.16% of variation in the dependent variable can be explained by the independent variable in the model which accounts for 9.84% of external factors affecting the number of social enterprises in India which is understood in section (III). Values above 0.7 are considered to be statistically significant and demonstrative of a high level of correlation. However, due to the  $R^2$  test having its limitations, a One-Way ANOVA test will also be performed on the data in order to ensure the level of the correlation econometrically. This is because ANOVA compares group means while regression models relationships and allows prediction.

The ANOVA test proves an assumed cause and effect relationship by determining if there were any statistically significant differences between the means of different sets of trials. This test was conducted on excel through the data analysis tab to give us the below results in Figure 10. Here, the two hypotheses are as follows:

$H_0$  Null Hypothesis: Presence of statistically significant difference between number of social enterprise means  
 $H_1$  Alternate Hypothesis: Absence of statistically significant difference between number of social enterprise means.

| Anova: Single Factor |               |         |               |              |               |             |
|----------------------|---------------|---------|---------------|--------------|---------------|-------------|
| SUMMARY              |               |         |               |              |               |             |
| Groups               | Count         | Sum     | Average       | Variance     |               |             |
| Column 1             | 9             | 172964  | 19218.22222   | 60557209.44  |               |             |
| Column 2             | 9             | 5143258 | 571473.1111   | 528754427007 |               |             |
| ANOVA                |               |         |               |              |               |             |
| Source of Variation  | SS            | df      | MS            | F            | P-value       | F crit      |
| Between Groups       | 1372434580358 | 1       | 1372434580358 | 5.190603978  | 0.03678020586 | 4.493998418 |
| Within Groups        | 4230519873732 | 16      | 264407492108  |              |               |             |
| Total                | 5602954454090 | 17      |               |              |               |             |

**Figure 11. Single Factor ANOVA Test Results**

There are primarily three observations that can be made from this ANOVA test.

1. The F value of 5.19 is greater than the F crit value of 4.49
2. The F value of 5.19 is not near 1
3. The P-value is 0.03678 which is lower than the maximum p-value for statistical significance of 0.05

Therefore, the null hypothesis  $H_0$  can be rejected and the alternate hypothesis  $H_1$  can be accepted proving that there is a positive (as seen by the positive gradient previously found from the graph) correlation between the amount of Indian CSR funding and number of Indian social enterprises.

*E) Graph trends and qualitative analysis*

As seen from the graph, the number of social enterprises are increasing at an increasing rate with an increase in CSR. While the primary trend is flatter from 2014-2017, the first significant and visible rise is seen between 2017 and 2019 where the number of social enterprises rises to 200,000 with 20,218 Cr INR in CSR funding. Below are the qualitative reasons for which this trend can be proven true.

Firstly, CSR funding through grants, donations and impact funding along with strategic partnerships and joint ventures enable social enterprises to increase their scale of impact, gain support for their innovative solutions, and pool resources and expertise to meet societal needs. Secondly, business mentorships, training workshops as well as supply chain integration and product distribution further support social enterprises’ ability to scale their products including through R&D collaboration and the increased public awareness and visibility that the social enterprise would receive. Lastly, there are also specific CSR programs focused on enabling social entrepreneurship including Microsoft’s Tech for Social Impact, Unilever’s Sustainable Living Plan and Goldman Sachs’ 10,000 women initiative.

However, there is a much larger increase post 2019 up to 2023 with 2,000,000 social enterprises; the rise in CSR is very marginal to just 27,593 Cr INR in 2023. This can be explained by the inertia carried by the impacts that the already high CSR already has on social enterprises as well as the conducive environment it creates to motivate social entrepreneurs to take risks to start their firms. Along with the other factors previously explored in section (III), we can see that even a small increase in CSR at such a high amount makes the number of social enterprises very elastic.

**V. CONCLUSION**

This research paper has meticulously explored the profound impact of Corporate Social Responsibility (CSR) on the growth and success of social entrepreneurship and innovation in India. Through a comprehensive econometric analysis and qualitative insights, it has been established that CSR initiatives, particularly those mandated by the Companies Act of 2013, have significantly fostered the proliferation of social enterprises across the country.

Our econometric analysis revealed a strong positive correlation between the amount of CSR funding and the number of social enterprises, as evidenced by an  $R^2$  value of 0.9016. This indicates that 90.16% of the variation in the number of social enterprises can be explained by CSR funding, underscoring the crucial role of corporate philanthropy in driving social innovation. The ANOVA test further validated these findings, with an

F value of 5.19 and a P-value of 0.03678, both confirming the statistical significance of the correlation.

The data from the Indian CSR department and Bertelsmann Stiftung Journal spanning from 2014 to 2023 illustrates a remarkable increase in both CSR funding and the number of social enterprises. CSR funding grew from INR 6,338 crore in 2014-15 to INR 27,593 crore in 2022-23, marking a 335% increase. Correspondingly, the number of social enterprises surged from 258 in 2014-15 to 2,000,000 in 2022-23, demonstrating an exponential rise. This growth trajectory highlights how CSR has created a conducive environment for social entrepreneurship, enabling enterprises to scale their operations and amplify their impact.

Several qualitative factors previously explored in the study have also contributed to this growth. India's large underserved population, estimated at over 200 million people lacking access to essential services, provides a vast market for social enterprises. The rising awareness of social issues through media and social media has fostered a heightened sense of social responsibility, particularly among the youth. Technological advancements have further empowered social entrepreneurs by enabling scalable solutions and efficient management of operations.

CSR initiatives have provided vital funding avenues, including grants, donations, and strategic partnerships. Notable CSR programs like Microsoft's Tech for Social Impact and Unilever's Sustainable Living Plan have exemplified how targeted investments can significantly enhance the capacity and reach of social enterprises. These programs not only offer financial support but also provide mentorship, training, and increased visibility, thereby amplifying the impact of social ventures.

The benefits of social entrepreneurship driven by CSR are multifaceted. Social enterprises have directly addressed critical societal challenges, contributing to improved healthcare, education, and sanitation. They have created employment opportunities, particularly for marginalized communities, thereby reducing income inequality, as evidenced by the inward shift of the Lorenz curve, indicating a more equitable distribution of income.

In conclusion, CSR has emerged as a crucial driver of social entrepreneurship and innovation in India. The mandated CSR spending, as per Section 135 of the Companies Act, 2013, has mobilized substantial financial resources towards social causes, fostering a culture of corporate responsibility. As social entrepreneurship continues to gain momentum, corporations, policymakers, and social entrepreneurs must sustain their commitment to innovation and social impact. The path towards a sustainable and inclusive future for India hinges on the continued synergy between CSR and social entrepreneurship, ensuring that businesses contribute meaningfully to societal well-being while achieving their economic objectives. The journey ahead requires persistent efforts to maintain and enhance this synergy, paving the way for a more equitable and prosperous society.

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