Spatial analysis of CSR and societal transformation: A global scenario

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Abstract

The societal transformation is a crucial phenomenon and it depict the strength of the nation and corporate sectors responsibility towards society. Corporates Social Responsibility (CSR) is the mainstream for the societal transformation. The CSR activities probably differs as per the policies and rules of the nation. But, the prime motto of the CSR is fulfil the Economic, Environment and social needs of the nation. Hence, the present study has analyzed the contribution of the top ten countries contribution towards CSR activities for societal transformation. The data were collected from secondary sources analyzed by using Correlation and ANOVA.

Keywords: CSR, societal transformation, corporate sector and contribution

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1. Introduction

In the current scenario Sustainable Development is a prominent factor to generate and retain the sources for our posterity. Corporate Social Responsibility (CSR) creates a biggest renovation in the corporate sector contribution towards society to attain sustainable development. The United Nations General Assembly formulated the 17 SDGs with 169 targets in 2015. Moreover it builds agenda for CSR strategies and these strategies are the key drivers for societal transformation. The CSR activities probably differs as per the policies of the nation. The prime motto of the CSR is fulfil the Economic, Environment and social needs of the nation. CSR connects the industrial sector and stakeholders in a correct way and it insist the industrial sector's responsibility towards society. The contribution towards CSR activities indicates that the country's ability to compete Sustainable competitiveness. Sustainable competitiveness is a metric to identify the environmental, economic and social transformation of the nation.

2. Statement of the problem

In the corporate world, sustainability can be achieved via various dimension. Nevertheless the societal transformation can be done via Corporate Social Responsibility (CSR). It is a major mechanism to explore the corporate sectors level of responsibility and their contribution towards sustainable development. The fundamental pillars of CSR are Economic, Environmental and these factors encapsulated as Economic Social and Governance (ESG). It induces the researchers to analyze the contribution of the countries at global level for societal transformation. The study has posed the following research question.
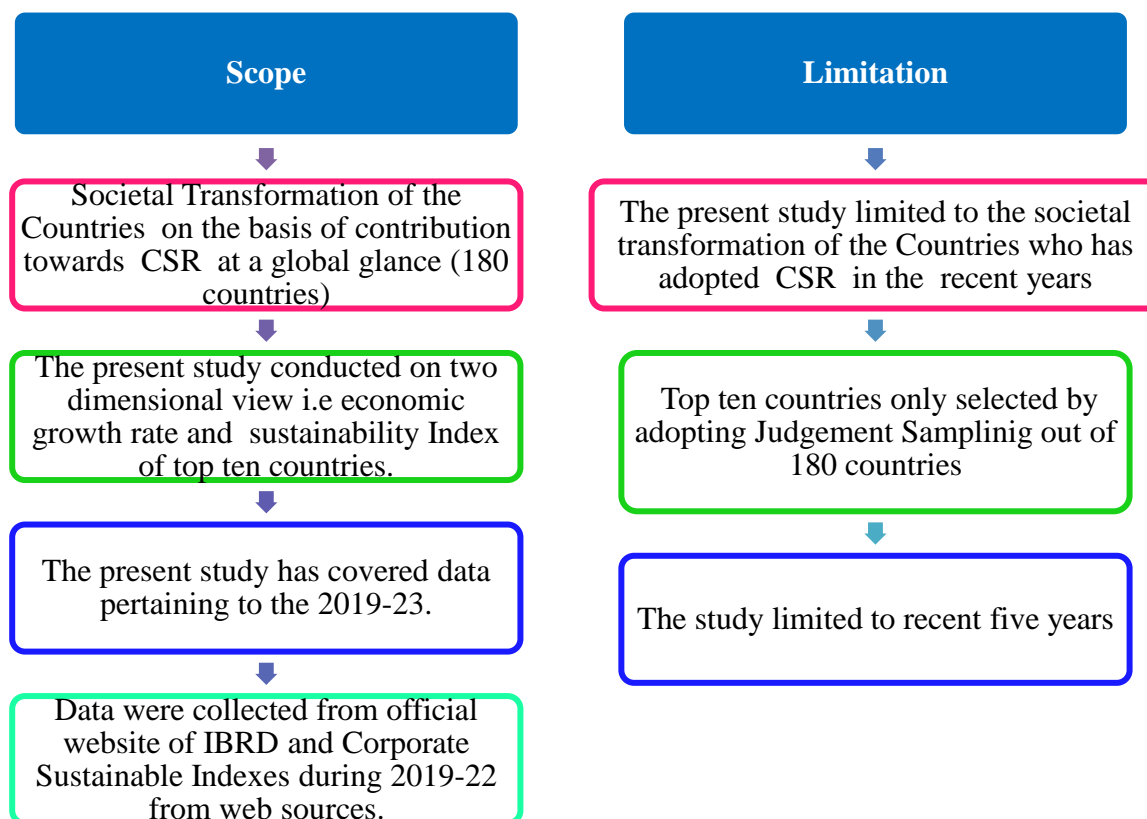
- Is there any association between GDP of top ten economically grown countries and top ten countries on the basis of Sustainability Index?

3. Objective of the study

To find the solution to the research problem the researchers has framed the following objectives.

- To analyse the relationship between GDP and Sustainability index rank of top ten countries.
- To rank the top ten countries on the basis of sustainability index.

4. Scope and limitation of the study

Scope	Limitation
Societal Transformation of the Countries on the basis of contribution towards CSR at a global glance (180 countries)	The present study limited to the societal transformation of the Countries who has adopted CSR in the recent years
The present study conducted on two dimensional view i.e economic growth rate and sustainability Index of top ten countries.	Top ten countries only selected by adopting Judgement Samplinig out of 180 countries
The present study has covered data pertaining to the 2019-23.	The study limited to recent five years
Data were collected from official website of IBRD and Corporate Sustainable Indexes during 2019-22 from web sources.	

5. Review of literature

The existing studies evaluated the international comparison about CSR and China with West, CSR in India and CSR is a live leverage to attain sustainable development.

Pimentel LV et al (2016) has conducted a study on "International Comparisons of Corporate Social Responsibility" with the aim to understanding how CSR practices are being incorporated and developed in different countries, as they create value for both the companies and the societies. This study was collected and analyzed the data of USA, France, Norway and Italy. This study was based on secondary data analysis and the data were collected from the authenticated sustainability indexes. The study has found that USA are characterized by a more explicit approach to CSR, Europe is better defined with an implicit approach. The high advanced state of CSR policies were framed by Norway followed by in France and Italy, respectively. Hence, study has concluded that the Gini coefficient on social inequalities is strongly inversely correlated with CSR, eventually pointing to a corrective role of CSR. Moreover the unemployment rate seems to be inversely correlated with CSR, possibly signing that in times of crisis, when unemployment is growing, companies take care of other priorities, such as keeping profitable and maintaining jobs.

Dongyong Zhang *et.al* (2019) examined "Corporate Social Responsibility and Sustainable Development in China: Current Status and Future Perspectives". The aim of this research paper highlighted the CSR drivers in China and compares it with CSR in West. The study was based on secondary data analysis. The researchers explored that the drivers of CSR which are based on Market drivers, Social, Government, Globalization, Institutional and Cultural. Trade disputes may cloud waters, but in many markets, consumers are now very discerning and social media is a powerful means of spreading news about companies which exploit workers or cause damage to the environment. Chinese companies will not be immune from this pressure and this will also help the transformation of CSR 1.0 to CSR 2.0 in China. The paper also explores the extent to which CSR can make a contribution to solving the sustainable development challenges faced by China and discusses possible solutions. China's cultural and institutional environment decides that voluntary engagement of CSR, especially when it comes to environmental protection, is difficult. Governmental regulation and relevant environmental law have been the main reasons that Chinese businesses pay attention to their impact on the environment. The series of laws and regulations helped mitigate businesses' irresponsible actions towards the environment. Finally, the paper makes suggestions for future research on CSR in China. The rise of more conscientious domestic and global consumers and investors, the prevalence of social media, and the increasingly competitive global market will reinforce market and globalization drivers as key drivers for China's further engagement in CSR can certainly serve as a positive message and provide the basis for private sector involvement in sustainable development

Parvat. R. Patel examined (2020) examined "Corporate Social Responsibility In India – A Path To Achieve Sustainable Development Goal" with aim to understand the concept of CSR, benefits of CSR to companies and the challenges. Data were collected from secondary sources and this study has to explore the changes in the policy of CSR over the period of time to achieve sustainable development, lack of community participation in CSR activities. Issues of transparency are the major challenges. The researcher has concluded the effective partnership between corporate, NGOs communities and the government will place India's social development on a faster track to achieve sustainable development goal for both firm and nations.

Kumar and Preeti Ruhela (2021) analysed "CSR in India –Issues and Challenges" and recent trend in CSR activities. The study was based on descriptive method and data were collected from secondary sources. The study has found and concluded outlook of CSR is narrow, need to build local capacities consumers Interest; demands for more disclosure are the major issues and challenges towards CSR in India and the companies brand image enhanced, helps to build better relationship between society and companies.

Malini R and Sivagami N (2022) scrutinized "Corporate Social Responsibility Is a Live Leverage to Attain Sustainable Development Goals - A Study with Special Reference to Spinning Mills in Tamil Nadu". The study has the purpose to estimate and evaluate the spinning mills contribution for CSR and SDGs, to explore the CSR is a live leverage to attain SDGs. The present study was based on secondary data during 2016-21 of top ten spinning mills by adopting judgement sampling method and analyzed by using simple percentage analysis and graph. The study has found that selected mills were adopted SDGs 2, 3 4, 10 and 13, all the selected mills contributed towards SDGs 4 (education), Rajapalayam and Bannari Amman mills are the pioneer industries for CSR contribution and selected mills contribution

rural development was good. The study suggested and concluded that the industry should consider the remaining goals instead of largest contribution for education and industries enhance their strategies to attain sustainable development efficiently.

The above studies demonstrated that CSR policies in Norway was the best in the world as per the sustainability index. Implicit approach is much better than explicit approach while conducting CSR activities. It helps to build to better relationship between society and companies. It induces the researchers to study the Spatial Analysis of CSR and Societal Transformation: A Global Scenario

6. Research methodology

6.1 Source

The present study was based on secondary data collected from official web portal of IBRD, authenticated Corporate sustainability Indexes from 2019-23, other web sources and journals.

6.2. Sample Size

GDP of top ten economically grown countries and top ten countries on the basis of Sustainability Index

6.3. Statistical tool

The data analyzed by Mean, SD and CV, Correlation and ANOVA.

7. Analysis and interpretation

The consistency in growth of GDP of GST implementing countries in recent years has been analyzed by using Mean, Standard Deviation (SD), CV (Coefficient of Variation), Correlation and ANOVA (Analysis of Variance). Analysis of CSR and Societal Transformation of the top Ten Countries were given in the following Tables from 1 to 6.

Table 1. Global competitive sustainability index rank of the top ten economic grown countries

S. No.	Countries	2019	2020	2021	2022	2023
1	USA	34	32	30	30	32
2	China	37	39	33	31	30
3	Germany	15	22	10	16	15
4	Japan	25	28	13	10	12
5	India	130	127	135	120	121
6	UK	17	15	17	7	16
7	France	20	18	8	8	18
8	Italy	74	33	32	22	24
9	Brazil	42	54	52	46	65
10	Canada	19	36	37	24	22

Source: GCSI

The above Table demonstrates that the Corporate Sustainability Index of the top ten economic grown countries from 2019-23. The rank of the Italy shows that it kick upstairs via their CSR performances among the top ten countries. The rank of Canada and Japan are in step forward progress. The CSR performance of USA is average and it can be proved from the rank hold by them during the study period. The reaming countries uphold their position in an average level. Nevertheless the rank of the India proves the strength of the CSR policies. As a developing country it is not possible to enhance their societal and economical position constantly.

Table 2. Consistency of the top ten economic grown countries from 2019-23

S. No.	Countries	Mean	SD	CV
1	USA	23633.8	2286.4	9.67
2	China	16473.1	1631.9	9.90
3	Germany	4068.85	1609.93	3.95
4	Japan	4766.66	363.409	7.62
5	India	3158.57	381.738	12.08
6	UK	3019.22	218.36	7.23
7	France	2831.11	151.093	5.33
8	Italy	2043.9	99.5133	4.86
9	Brazil	1767.02	176.543	9.99
10	Canada	1851.59	186.951	10.09

Source: IBRD

The Table 2 reveals that the consistent growth of the top ten countries from 2019-23. Among the top ten countries Germany economic growth consistent is excellent when compared with other countries. The consistency in GDP of Italy, France and UK are outstanding. The remaining counties values of the CV proved that their economic growth is reasonable. India CV is in least position but their GDP value is decreased only during the pandemic period

To explore the top ten countries capability towards societal transformation via Corporate Social Responsibility the researchers compare the rank and GDP of the top ten countries and exhibits it in below Table.

Table 3. GDP and corporate sustainability index rank of the top ten countries

S. No	Countries	2019 GDP	2019 R	2020 GDP	2020 R	2021 GDP	2021 R	2022 GDP	2022 R	2023 GDP	2023 R
1	USA	21381	34	21060.5	32	23315.1	30	25462.7	30	26949.6	32
2	China	14279.9	37	14687.6	39	17734	33	17963	31	17700.9	30
3	Germany	3888.7	15	3886.5	22	4262.7	10	4075.4	16	4,230.8	15
4	Japan	5118	25	5048.7	28	5005.5	13	4231.1	10	4429.8	12
5	India	2831.5	130	2667.6	127	3176.2	135	3385.1	120	3732.2	121
6	UK	2857.1	17	2704.6	15	3131.3	17	3071	7	3332.0	16
7	France	2729.1	20	2635.9	18	2957.4	8	2784	8	3049	18
8	Italy	2011.5	74	1895.6	33	2115.7	32	2010.4	22	2186.	24
9	Brazil	1916.9	42	1873.29	54	1476.0	52	1648.7	46	1920	65
10	Canada	1725.3	19	1743.73	36	1647.6	37	2001.4	24	2139.8	22

Table 3 illuminates that the Gross Domestic Product (GDP) and Global Sustainability Competitive Index Rank of the top ten economic grown countries from 2019 to 2023. Among the top ten countries GDP is increased constantly excluding Japan. Nevertheless Japan's rank in sustainability index increased step forward constantly. The GDP of the India, UK France and Italy are augmented during the study period simultaneously their rank in sustainability index also step forward constantly. The rank of the USA in sustainability index is acceptable when compared with their GDP.

Hence, the Table values proved that the rank of the top ten countries in sustainability index obviously rely on their economic position. It induces the researcher to identify the

relationship between GDP and sustainability index of the top ten countries statistically ANOVA test is used.

Ho₁: There is no significant relationship between top ten countries' GDP and sustainability index

Table 4. The variability in GDP and corporate sustainability index rankings of top ten countries.

		Sum of Squares	df	Mean Square	F	Sig.
GDP	Between Groups	2511802761.6	9	279089195.7	267.6	<0.001**
	Within Groups	41704926.8	40	1042623.1		
	Total	2553507688.5	49			
Rank of Sustainability Index	Between Groups	51147.6	9	5683.0	71.5	<0.001**
	Within Groups	3175.2	40	79.3		
	Total	54322.8	49			

** 1% level of significance

The above Table illustrates that the result of Analysis of Variance (ANOVA) of the tpo ten economic grown countries. The substantial F-values (267.680 for GDP and 71.593 for Sustainability Index) with p-values below 0.001. The Table values clearly indicates that the variations shown in GDP and sustainability rankings among the countries are not likely due to random chance. These results emphasize the importance of group differences in understanding the disparities in economic and sustainability performance among the studied nations.

7.1. Correlation between GDP corporate sustainability index rank of the top ten countries

To identify the correlation between the top ten countries rank in GDP and Sustainability index the Karl Pearson correlation test is used.

Ho: There is no association between GDP of Top Ten Countries Corporate Sustainability Index

Table 5. Correlation between GDP and corporate sustainability index rank of top ten countries

		2019	**2020**	**2021**	**2022**	**2023**
2019	Pearson Correlation	1	.925[**]	.783[**]	.825[**]	.981[**]
	Sig. (2-tailed)		<0.001	0.007	0.003	<0.001
	N	10	10	10	10	10
2020	Pearson Correlation	.925[**]	1	.870[**]	.881[**]	.899[**]
	Sig. (2-tailed)	<0.001		0.001	0.001	<0.001
	N	10	10	10	10	10
2021	Pearson Correlation	.783[**]	.870[**]	1	.921[**]	.785[**]
	Sig. (2-tailed)	0.007	0.001		<0.001	0.007
	N	10	10	10	10	10
2022	Pearson Correlation	.825[**]	.881[**]	.921[**]	1	.803[**]
	Sig. (2-tailed)	0.003	0.001	<0.001		0.005
	N	10	10	10	10	10
2023	Pearson Correlation	.981[**]	.899[**]	.785[**]	.803[**]	1
	Sig. (2-tailed)	<0.001	<0.001	0.007	0.005	
	N	10	10	10	10	10
**. Correlation is significant at the 0.01 level (2-tailed).						

The above Table exhibits that an association in between the GDP of the top ten countries and Corporate Sustainability Index from 2019- 23. Each cell in the matrix represents the correlation between the variables for the corresponding years. The Table values proved that there is strong correlation between GDP and CSI of the top ten countries with correlation coefficients ranging from 0.783 to 0.981.

7.2. Top ten countries in global competitive sustainability index

The countries corporate sustainability indexes help to identify their position among other countries the below Table exhibits the countries who are in top ten rank to find out the foremost countries in social performances.

Table 6. Top ten countries in global competitive sustainability index

S. No.	Countries	2019	2020	2021	2022	2023
1	Sweden	1	1	1	1	1
2	Finland	2	4	2	2	2
3	Switzerland	5	5	3	3	4
4	Denmark	4	2	4	4	6
5	Norway	6	9	5	5	5
6	Iceland	3	3	6	6	3
7	Ireland	14	13	13	7	13
8	France	20	18	8	8	18
9	Austria	11	14	11	9	8
10	Germany	15	22	16	10	15

Source: GCSI

Table 6 shows that the top ten Corporate Sustainability Index rankings from 2019 to 2023. Among the top ten countries Sweden retained their position at topmost level during the study period. Except Ireland, France, Austria and Germany maintained their position within in the top ten rank. It proved that top 6 countries CSR performance are excellent.

8. Findings

The economic growth of the top ten countries are outstanding.

The sustainability rank of Italy, UK,India, Japan and China are step forward.

Sweden and Finland retained theri position in sustainability competitive index throughout the study period. Their CSR policies are ideal agenda for other countries

nevertheless the CSR programme of Norway mostly impressed the othe countries as per their curren scenarion towards socitae transformation

India performance towards sustainable is phenomenal. however the countries effort towards ecomonic position lead the society as well as the nation to attain sustainable developemtent. The current ecomomic growth rate proved this (2023 it reached 4th place)

9. Suggestions

The countries should sustain their economic position to compete the sustainability competitiveness.

The rank of Brazil is acceptable but the country should enhanced their CSR policies

USA contribution towards sociatel transformation via CSR are need to be enhanced. They have the much potetial to offer social acitiviess

10. Conclusion

The present study has conducted Spatial Analysis of CSR and Societal Transformation: A Global Scenario by using GDP and Rank in Corporate Sustainability Index (CSI) rankings of the top ten countries underscores the complex relationship between economic performance and sustainability. The result of the study proved that a strong positive correlation observed in some instances suggests a potential synergy between economic prosperity and sustainable practices. However, needful consideration must be given to country-specific contexts, sectoral contributions, and long-term planning to ensure a holistic and effective approach. Collaborative international efforts and meticulous monitoring mechanisms will be instrumental in steering policies and business strategies toward a future where economic development and sustainability coalesce for lasting global benefit. Social transformation can be achieved when the CSR policies is strong. These strategies are the pillar to attain sustainable development.

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