Chapter-5

Analysis of Data: Corporate Governance, Financial Performance and Social Performance

Corporate governance aims at achieving efficient controls over the business through enhanced disclosures, by bringing fairness and transparency to the system. Implementation of good CG practices leads to the improved financial performance of the company. Good governance protects the interest of all stakeholders. It not only includes ensuring board accountability but also the aspects of CSR.

This chapter analyses the CG scores, FP variables and CSP scores computed from secondary data for the sample companies. Analysis of data has been divided into three sub-sections i.e. analysis of corporate governance scores, financial performance variables and social performance scores.

5.1 Methodology

The sample used for study is NIFTY 100 companies. Secondary data relating to corporate governance has been collected using a score sheet from "annual reports" of NIFTY 100 in 2019. The data for financial performance variables have been collected from PROWESS database for these companies for five years from 2015-2019. The corporate social performance index has been used to compile social performance scores of the sample companies. Data has been analysed using SPSS 22 for understanding the nature of data and its relationship with demographic variables by applying descriptive statistics,

ANOVA, post-hoc test and Chi-square test. The following hypotheses have been tested in this chapter.

H_{01}:There is no significant difference between the demographic characteristics of companies and their corporate governance score categories.

H_{02}: There is no significant difference in the demographic characteristics of companies and their corporate governance scores.

H_{03}: There is no significant difference in demographic characteristics of companies and their Rights and Equitable Treatment of Shareholders scores.

H_{04}: There is no significant difference in demographic characteristics of companies and their practices related to the Role of stakeholders Scores.

H_{05}: There is no significant difference in demographic characteristics of companies and their practices related to disclosures and transparency scores.

H_{06}: There is no significant difference in demographic characteristics of companies and their practices related to responsibilities of the board scores.

H_{07}: There is no significant difference in the demographic characteristics of companies and their financial performance variables.

H_{08}: There is no significant difference in demographic characteristics of companies and their corporate social performance scores.

H_{09}: There is no significant difference in corporate governance practices of companies and their corporate social performance scores.

The demographic characteristics include the company's age, ownership, Private vs PSU status, MNC vs Nationally-located and Industry sectors.

The financial performance variables taken up for the study are Beta-Measure of volatility, closing price, Market Capitalization, Enterprise Value, EPS, PE ratio, Tobin's Q, ROE, Earning before interest and tax, ROCE, ROA, ROS, Dividend Yield, CSR Spend, PB ratio, Total Debt Ratio.

5.2 Results and Discussions

Section is bifurcated into three sub-parts. Sub-section 5.2.1 relates to an analysis of CG scores, sub-section 5.2.2 deals with analysis of FP variables and sub-section 5.2.3 analyses CSP.

5.2.1 Analysis of Corporate Governance

The data relating to CG score has been collected using a score sheet on a scale of 0 to 2 for NIFTY 100 sample companies. The CG score is a composition of four categories of scores related to “rights and equitable treatment of shareholders”, “role of Stakeholders”, “disclosure and transparency” & “responsibilities of the board”.

The analysis of data has been divided into four sub-parts. Sub-part 5.2.1.1 explains descriptive statistics of CG scores of sample 100 companies, sub-part 5.2.1.2 relates to company-wise analysis of CG scores, sub-part 5.2.1.3 analyses demographic characteristics differences in CG practices, and sub-part 5.2.1.4 explains demographic characteristics differences in CG scores using ANOVA.

5.2.1.1 Descriptive Statistics

The score of CG computed here is a combination of scores related to four categories. Various descriptive statistics of each category as well as CG Total Score are shown in table 5.1 below.

Table 5.1-Descriptive Statistics of Corporate Governance Score Categories

	"Category I- Rights and Equitable Treatment of Shareholders Score"	"Category II- Role of Stakeholders Score"	"Category III- Disclosures and Transparency Score"	"Category IV- Responsibilities of the Board Score"	Corporate Governance Total Score (CG)
N	100	100	100	100	100
Minimum	57.9	11.1	58.7	44.7	56.1
Maximum	85.3	100.0	100.0	94.7	91.8
Mean	71.252	77.222	85.879	64.634	74.252
Std. Deviation	5.7749	16.1151	7.8806	11.3388	6.2670

The table above depicts the mean value of CG total score is 74.252,the maximum score is 91.8 and the minimum 56.1. This indicates that the maximum score obtained by any organization is 91.8 and minimum score obtained is 56.1. The average score demonstrates that companies involved follow fair CG practices. The standard deviation value is 6.2670, indicating that data is relatively distributed near the mean value.

The mean score of "Category I - Rights and Equitable Treatment of Shareholders" is 71.252, with a maximum score of 85.3 and a minimum value of 57.9. This shows that score secured by any company in this category is not less than 57.9 and not more than 85.3. The average score indicate that companies have scored reasonably good level in the rights and equitable treatment of shareholders category. The standard deviation is 5.7749, indicating that data is closely distributed near the mean value.

In "Category II -the Role of Stakeholders", the mean value is 77.2, the maximum score is 100 and the minimum 11.1,which indicates that companies have scored maximum in this category. However, there are high variations in the score. Mean value shows that companies have made good efforts in this category. The standard deviation is 16.1151, indicating considerably high variations in data value from the mean value.

Under "Category III -Disclosure and Transparency", the mean value is 85.879, the maximum is 100, and the minimum is 58.7, showing that the company has scored maximum in this category. The average score indicated that companies had made fair and adequate disclosures. The standard deviation is 7.880 which indicates, that the data is distributed in the region of the mean value.

In "Category IV -Responsibilities of the Board", the mean value is 64.634, the maximum score is94.7, and the minimum score is 44.7. This conveys that companies have performed reasonably well under this category. However, the standard deviation shows dispersion from the mean value.

Overall by looking at mean scores, it can be said that companies have scored reasonably well in the total CG (average score is74.252) as well as in its four categories. However, in Category– II, companies have scored the least (minimum = 11.1), and the standard deviation is also the highest in this category (16.1151). In Categories II and III, companies have obtained a maximum score of 100 also.

Table 5.2-Descriptive Statistics of Corporate Governance Score based on Age of the Company

Age of Company Category		Statistic				
		"Category I- Rights and Equitable Treatment of Shareholders Score"	"Category II- Role of Stakeholders Score"	"Category III- Disclosures and Transparency Score"	"Category IV- Responsibilities of the Board Score"	Corporate Governance Total Score (CG)
0-25 Years	Mean	71.074	76.023	80.778	65.594	72.836
	Std. Deviation	4.9065	20.6257	7.9467	10.0603	5.8955
25-50 Years	Mean	70.851	75.000	86.912	66.285	74.715
	Std. Deviation	5.7344	17.7527	7.9386	12.9036	6.8644
50-75 Years	Mean	70.755	79.101	86.994	58.752	72.860
	Std. Deviation	5.6907	7.4338	5.6786	7.2382	4.3157
Above 75 Years	Mean	73.556	83.333	87.733	66.729	76.739
	Std. Deviation	7.0893	12.1325	8.3809	10.5064	6.7630

The descriptive statistics of CG score (CG) based on the company's age are shown in Table 5.2.The company's age is divided into four categories 0- 25 years, 25-50 years, 50-75 years and above 75 years. The CG Total Score of companies above 75 years shows higher mean scores, i.e. 76.739,as compared to companies with ages between25-50 years (74.715), 50-75 years (72.860) and 0-25 years (mean=72.836). This indicates that CG practices of companies above 75 years are slightly better than other age group companies.

The standard deviation of 0-25 years Age Company is 5.8955, 25-50 years is 6.8644, 50-75 years is 4.3157, and above 75 years is 6.7630. This indicates that 25-50 years aged companies have the highest dispersion, and companies with 50-75 years of age have the least dispersion.

For Category I mean score of above 75 years companies is 73.556, which is more than other age group companies mean score, 0-25 years (71.074), for 25-50 years (70.851) 70.7554 for 50-75years. This indicates that above 75 years company follow better practices, in category I. The standard deviation value of 0-25 years age group companies is least (4.9065) followed by 50-75 years (5.6907), 25-50 years (5.7344), and above 75 years standard deviation is 7.0893.

Under category II, the highest average score is for above 75 years companies (83.333), followed by the mean score of 79.101 of 50-75 years, 76.023 of 0-25 years and 75.00 of 25-50 years companies. The standard deviation value of 0-25 years is 20.6257, for 25-50 years is 17.7527, for 50-75 years is 7.4338, and for above 75 years, it is 12.1325, which indicates the least fluctuation in 50-75 years.

The results of category III show that above 75 years of age, companies have the highest mean score of 87.733, 50-75 years (86.994) are second, 25-50 years (86.912) are third, and 0-25 years is the last. The value of standard deviation for 0-25 years is 7.9467 and 25-50 years is 7.9386 is almost the same. Above 75 years, companies have the highest dispersion of 8.309, and 50-75 years have the lowest standard deviation of value 5.6786.

In category IV, above 75 years, companies mean score is 67.105, 0-25 years mean score is 85.594, 25-50 years is 66.285, and 50-75 years is 58.752, indicating that above 75 years companies have better board responsibility practices as compared to other age group companies. Standard deviation values indicate that 25-50 years companies have the highest fluctuation (12.9036) and dispersion, followed by 0-25 years (10.0603), above 75 years has 10.5064 and 50-75 years has 7.2382.

From the above analysis, it can be concluded that above 75 years of age group companies follow better total CG practices and have the highest mean score in all the categories. Thus, it can be inferred that the above 75 years age group of companies have better CG practices than any other age group company. From maximum values, we can conclude that in category I and IV, none of the age group companies has secured 100 scores.

Table 5.3-Descriptives Statistics of Corporate Governance Score Categories based on Demographic Characteristics Classifications

Private vs PSU		Statistic				
		"Category I-Rights and Equitable Treatment of Shareholders Score"	**"Category II-Role of Stakeholders Score"**	**"Category III-Disclosures and Transparency Score"**	**"Category IV-Responsibilities of the Board Score"**	**Corporate Governance Total Score (CG)**
Private	**Mean**	70.994	77.848	84.756	65.152	74.056
	Std. Deviation	6.2780	16.0497	8.2457	11.8499	6.7198
PSU	**Mean**	72.222	74.868	90.100	62.685	74.989
	Std. Deviation	3.1810	16.5383	4.3089	9.1502	4.1936
Nationally-located vs MNC						
Nationally-located	**Mean**	71.637	76.654	86.428	65.260	74.663
	Std. Deviation	5.4743	16.6283	7.6482	11.2408	6.2913
MNC	**Mean**	68.141	81.818	81.433	59.569	70.925
	Std. Deviation	7.3810	10.5675	8.6979	11.3660	5.1815
Promoter-owned vs Institutional vs Widely-held ownership						
Promoter-owned	**Mean**	70.971	75.877	84.508	61.956	72.818
	Std.	5.6036	17.1546	7.9428	9.4157	5.4592

	Deviation					
Institutional	**Mean**	71.018	81.481	89.010	74.561	78.525
	Std. Deviation	6.3960	11.5909	6.0793	13.0178	6.6322
Widely-held	**Mean**	75.517	81.481	93.841	68.772	79.587
	Std. Deviation	5.1962	12.5051	4.2191	12.4623	7.0677

In Table5.3, descriptive statistics of CG scores based on demographic characteristics classifications are given. The above table shows that the overall CG scores mean value of private companies is 74.056, and the mean value of PSU companies is 74.989.This indicates that companies in both privately owned and PSUs follow almost similar CG practices. The standard deviation of private companies is 6.7198 and for PSU is 4.1936, indicating that there are comparatively less variations in PSUs.

Category I values show that the mean score of private companies is 70.994, whereas for PSU rights and equitable treatment of shareholders scoreis 72.22, which shows that PSUs have relatively better practices. The value of standard deviation in private companies is 6.2780, and PSU is 3.1810. This shows that fluctuation in private sector companies is higher.

In category II, the mean score of private companies is 77.848 and PSU is 74.868, which conveys a slight difference in stakeholder practices. The standard deviation of private companies is 16.0497 and for PSU is16.5383.

Under category III, private companies have a mean score of 84.756 indicating that disclosure and transparency scores are not similar in private companies and PSUs have a mean score of 90.100.

According to category IV, the mean score of private companies is 65.152, and for PSU it is 62.685, indicating that private companies have relatively better practices. The standard

deviation of private companies is 11.8499 and for PSUs is 9.1502; showing that fluctuation in private sector companies score is higher.

The above analysis shows that private companies mean CG scores are better than PSU in categories I, II and IV. However, in category III, PSUs have better average scores. Thus, indicating that except in category three .i.e. disclosures and transparency, private companies have better practices.

A comparison of company classification based on nationally-located vs MNC status is shown in Table 5.3. Classification of companies in the Nationally-located category shows that the overall CG mean score is 74.663, whereas, in the MNC category, the CG mean value is 70.925. This reveals that CG practices in nationally-located companies are much better than MNC. The value of standard deviation in nationally-located is 6.2913 and for MNC is 5.1815. This indicates that in Nationally-located companies, the dispersion of data is more than in MNCs.

In category I, the mean score of nationally-located companies is 71.637, which is higher than MNC mean scores (68.141), revealing that nationally-located companies have better practices in category I. The standard deviation value in the case of nationally-located companies is 5.4743, and for MNC, it is 7.3810, showing that in nationally-located companies, data lies closer to the mean value and indicates less dispersion.

In category II, the mean score of nationally-located companies (76.654) is less than the mean score of MNC (81.818), revealing that MNCs have better practices relating to stakeholders' role in CG. The standard deviation of nationally-located companies is 16.6283, and for MNC, it is 10.5675, which shows a high degree of variance in nationally-located companies.

Under category III, nationally-located companies' average score is 86.428, which is higher than MNCs (81.433). This indicates that nationally-located companies follow better disclosure and transparency practices than MNCs. The standard deviation for nationally-located companies is 7.6482, and for MNCs, it is 8.6979.

Under category IV, the mean value of nationally-located companies is 65.260 and for MNC, it is 59.569, indicating that nationally-located companies have better practices than MNC. The standard deviation for both the groups is not much different, with Nationally-located at 11.2408 and MNC at 11.3660.

The above analysis reveals that overall nationally-located companies have better CG practices as compared to MNCs. However, in category II average score of MNCs is higher than nationally-located companies.

Ownership based classification of companies divides all companies into three groups, namely, promoter-owned, institutional-owned and widely-held as shown in Table 5.3. The overall average score of promoter-owned companies is 72.818, for institutional-owned, it is 78.525, and for widely-held, it is 79.587. The maximum score of CG for promoter-owned companies is 82.7, institutional is 90.5 and widely-held 91.8. The standard deviation value shows that widely-held companies (7.0677) have more fluctuations than institutional (6.6322) and promoter-owned companies (5.4592).

Under category I, the average score of widely-held (75.517), is more than institutional-owned companies (71.018) and promoter-owned companies (70.971). This reveals that widely-held companies have better CG practices than promoter-owned and institutional-owned companies under category I. The standard deviation of promoter-owned (5.6036) and widely-held (5.1962) are relatively low than institutional-owned (6.3960) companies.

For category II, the mean score of promoter-owned companies is 75.877. However, both for institutional and widely-held average score is 84.81. The average score of institutional and widely-held companies is higher than promoter-owned, showing that institutional and widely-held have the same practices, but promoter-owned companies have relatively weaker practices. From the standard deviation value, it can be observed that promoter-owned (17.1546) have more dispersion than institutional (11.5909) and widely-held (12.5051).

Under category III, the average score of widely-held (93.841) is more than promoter-owned (84.508) and institutional (89.010). This indicates that widely-held companies follow better disclosure and transparency practices than institutional and promoter-owned companies. The standard deviation value indicates that promoter-owned owned companies (7.9425) have more dispersion than institutional (6.0793) and widely-held (4.2191).

For category IV, the mean score of promoter-owned (61.956), institutional (74.561) and widely-held (68.772) reveals that institutional owned companies have better governance practices compared to promoter-owned and widely-held. The value of standard deviation for a promoter-owned company is 9.4157, institutional-owned is 13.0178, and widely-held is 12.4623.

Overall it can be said that widely-held companies have the highest CG total scores as compared to promoter-owned and institutional-owned companies. The category I, category II and category III scores are also better for widely held companies. Under category IV, institutional-owned companies have better scores.

Further, analysis of CG scores for various industry sectors has been presented in table 5.4 below.

Table 5.4-Descriptive Statistics of Corporate Governance Score Categories based on Industry

Industry Classification		Statistic				
		Category I- Rights and Equitable Treatment of Shareholders Score	Category II- Role of Stakeholders Score	Category III- Disclosures and Transparency Score	Category IV- Responsibilities of the Board Score	Corporate Governance Total Score (CG)
HealthCare	**Mean**	70.954	80.952	86.335	63.534	74.342
	Std. Deviation	8.1286	14.6485	8.4861	15.3016	9.6270
Information Technology	**Mean**	73.638	76.852	91.667	71.053	78.592
	Std. Deviation	7.0717	26.1564	6.6533	13.3149	9.1151
Financials	**Mean**	71.404	74.000	83.304	69.986	74.808
	Std. Deviation	5.6750	20.1410	8.8465	12.5512	7.2166
Consumer Staples	**Mean**	67.994	81.667	82.174	65.000	72.717
	Std. Deviation	6.4002	11.1265	7.3757	10.6028	4.8956
Energy	**Mean**	73.698	72.778	92.174	63.786	76.175
	Std. Deviation	4.8962	24.0670	2.7498	8.2393	4.6573
Materials	**Mean**	71.606	80.741	86.964	62.334	74.345
	Std. Deviation	7.0659	9.3592	7.8619	8.2980	5.3776
Consumer Discretionary	**Mean**	70.809	77.778	87.267	61.090	73.528
	Std. Deviation	3.4684	8.7163	6.3727	9.0090	4.0576
Industrials	**Mean**	71.877	79.630	84.870	60.448	73.122
	Std. Deviation	4.6557	11.1111	5.8123	11.7956	4.6798
Utilities and Telecom	**Mean**	68.096	70.833	79.348	55.132	67.856
	Std. Deviation	2.5641	13.8889	9.4759	7.0005	5.7127

Table 5.4 highlights descriptive statistics of CG scores based on industry sector classification. Overall CG average score of the healthcare industry is 74.342, for IT sector it is 78.592, for financial it is 74.808, consumer staples is 72.712, energy 76.175, material

74.345, consumer discretionary is 73.528, industrial 73.122 and utilities, and telecom has 67.856. This shows that the IT sector has a relatively high score than other industries. The healthcare sector, financial, materials have similar kinds of CG practices.

The standard deviation value indicates that consumer discretionary(4.0576) have least dispersion followed by energy (4.6573), industrials(4.6798), consumer staple (4.8956), material (5.3776), utilities and telecom (5.7127), financial (7.2166), information technology (9.1151) and healthcare (9.6270).

Under category, I mean score of energy (73.698) and information technology (73.638) are highest. Health care (70.954), financials (71.404), materials (71.606), consumer discretionary (70.809) and industrial (71.877) have similar average scores, reflecting similar CG practices. The standard deviation value for utilities and telecom is the least, which is 2.5641. However, the health care sector has maximum value for standard deviation, indicating that data is closely distributed to mean value and utilities and telecom sector, but it has maximum dispersion for healthcare.

Category II scores mean value of consumer staples (81.667) is relatively higher as compared to health care (80.952), information technology (76.852), financials (74.000), energy (72.778), materials (80.741), consumer discretionary (77.778), industrials (79.630) and utilities and telecom (70.833) sectors. The standard deviation value indicates that the IT sector has a high dispersion of 26.564 whereas consumer discretionary has the least dispersion in the data 8.7163.

For category III average score of health care is 86.335, IT is 91.667, financials is 83.304, consumer staples is 82.174, energy is 92.174, materials is 80.741, consumer discretionary 77.778, industrials is 84.870 and utilities, and telecom is 70.833. This shows that energy

has a better average score than any other industry, reflecting better CG practices in category III. The energy sector has the least value of standard deviation 2.7498, and the utilities and telecom sector has highest.

From category IV scores, financials mean score is 69.986; IT is 69.737, and the industries with highest average scores. Consumer discretionary has the least value of standard deviation 4.0576 whereas higher standard deviation value is of healthcare industry 15.3016 reflecting highest dispersion.

It can be seen that the IT sector has a relatively high score as compared to other industries. The healthcare sector, financial, materials have similar kind of CG practices. Under category, I mean score of energy (73.698) is the highest. Category II scores are the best for consumer staples (81.667), in category III energy sector is performing the best, and in category, IV financial sector has the highest mean score (69.986). The overall analysis indicates that there are lot of differences in the CG scores and its four category components concerning various demographic variables.

5.2.1.2 Company-wise Analysis

In this sub-section, analysis of CG scores is done for private and PSU companies separately. Out of the total sample of 100 companies of NIFTY 100 Index, 21 companies belong to the PSU category and the remaining 79 companies are private sector companies. The scores of each company have been discussed here under.

Table 5.5 - Corporate Governance Scores of Private Sector Companies

Company Name	Private Ownership				
	"Category I- Rights and Equitable Treatment of Shareholders Score"	"Category II- Role of Stakeholders Score"	"Category III- Disclosures and Transparency Score"	"Category IV- Responsibilities of the Board Score"	Corporate Governance Total Score (CG)
ABB India Ltd.	63.9	83.3	73.9	52.6	65.5
ACC Ltd.	76.5	100.0	73.9	65.8	74.9
Adani Ports and Special Economic Zone Ltd.	70.6	83.3	84.8	76.3	77.8
Aditya Birla Capital Ltd.	63.9	72.2	71.7	55.3	64.5
Ambuja Cements Ltd.	58.3	88.9	67.5	47.4	60.8
Ashok Leyland Ltd.	67.6	83.3	73.9	55.3	67.4
Asian Paints Ltd.	79.4	66.7	84.8	78.9	79.6
Aurobindo Pharma Ltd.	60.5	72.2	78.3	50.0	63.9
Avenue Supermarts Ltd.	72.2	94.4	76.1	78.9	77.6
Axis Bank Ltd.	66.7	94.4	82.6	86.8	80.3
Bajaj Auto Ltd.	76.5	66.7	82.6	60.5	72.5
Bajaj Finance Ltd.	67.6	72.2	80.4	71.1	73.0
Bajaj Finserv Ltd.	79.4	66.7	80.4	60.5	72.8
Bandhan Bank Ltd.	73.5	100.0	78.3	65.8	75.3
Bharti Airtel Ltd.	64.7	72.2	76.1	57.9	66.8
Bharti Infratel Ltd.	67.6	55.6	73.9	57.9	65.4
Biocon Ltd.	73.5	100.0	80.4	68.4	76.7
Bosch Ltd.	72.2	88.9	82.6	50.0	70.3
Britannia Industries Ltd.	73.5	66.7	73.9	55.3	67.5
Cadila Healthcare Ltd.	68.4	77.8	78.3	50.0	66.8
Cipla Ltd.	85.3	100.0	97.8	89.5	91.8
Colgate Palmolive (India) Ltd.	61.8	94.4	78.3	50.0	66.5
Dabur India Ltd.	63.9	88.9	89.1	65.8	74.5
DLF Ltd.	67.6	77.8	89.1	60.5	73.0
Dr. Reddy's Laboratories Ltd.	72.2	83.3	97.8	71.1	80.7
Eicher Motors Ltd.	73.5	83.3	91.3	60.5	75.9
Godrej Consumer Products Ltd.	63.9	88.9	82.6	60.5	71.0
Grasim Industries Ltd.	69.4	83.3	89.1	60.5	74.1

Havells India Ltd.	77.8	88.9	87.0	57.9	75.7
HCL Technologies Ltd.	61.1	27.8	82.6	60.5	64.1
HDFC Bank Ltd.	76.5	94.4	93.5	86.8	86.5
HDFC Standard Life Insurance Company Ltd.	73.5	83.3	80.4	55.3	71.1
Hero MotoCorp Ltd.	63.9	83.3	91.3	55.3	71.5
Hindalco Industries Ltd.	63.2	77.8	82.6	57.9	68.9
Hindustan Unilever Ltd.	57.9	72.2	89.1	65.8	71.1
Hindustan Zinc Ltd.	61.8	66.7	89.1	63.2	70.9
Housing Development Finance Corporation Ltd.	78.9	88.9	84.8	84.2	83.3
I T C Ltd.	77.8	88.9	95.7	71.1	82.2
ICICI Bank Ltd.	66.7	77.8	91.3	86.8	81.2
ICICI Lombard General Insurance Company Ltd.	67.6	94.4	87.0	73.7	77.9
ICICI Prudential Life Insurance Company Ltd.	64.7	88.9	82.6	73.7	75.2
Indiabulls Housing Finance Ltd.	63.2	72.2	87.0	50.0	67.3
IndusInd Bank Ltd.	71.1	61.1	91.3	84.2	80.1
Infosys Ltd.	73.5	100.0	100.0	94.7	90.5
InterGlobe Aviation Ltd.	73.5	55.6	80.4	78.9	75.4
JSW Steel Ltd.	71.1	77.8	91.3	65.8	76.2
Kotak Mahindra Bank Ltd.	81.6	83.3	93.5	92.1	88.5
L&T Finance Holdings Ltd.	69.4	11.1	58.7	55.3	56.1
Larsen & Toubro Ltd.	72.2	94.4	87.0	71.1	78.5
LIC Housing Finance Ltd.	69.4	22.2	60.9	73.3	63.3
Lupin Ltd.	73.5	61.1	87.0	47.4	68.5
Mahindra & Mahindra Ltd.	67.6	83.3	97.8	71.1	79.3
Marico	70.6	66.7	78.3	68.4	71.8
Maruti Suzuki India Ltd.	67.6	66.7	91.3	76.3	77.2
Motherson Sumi Systems Ltd.	69.4	66.7	84.8	50.0	67.9
MRF Ltd.	70.6	83.3	87.0	52.6	71.4
Oracle Financial Services Software Ltd.	73.5	77.8	84.8	57.9	72.6

Pidilite Industries Ltd.	77.8	72.2	89.1	55.3	73.9
Piramal Enterprises Ltd.	76.5	83.3	87.0	55.3	73.9
Procter & Gamble Hygiene & Health Care Ltd.	64.7	83.3	84.8	52.6	69.0
Reliance Industries Ltd.	81.6	94.4	95.7	63.2	81.6
Shree Cement Ltd.	67.6	77.8	87.0	52.6	69.9
Shriram Transport Finance Co. Ltd.	58.3	66.7	82.6	73.7	71.1
Siemens Ltd.	79.4	72.2	95.7	55.3	76.3
Sun Pharmaceutical Industries Ltd.	63.2	72.2	84.8	68.4	72.1
Sun TV Network Ltd.	70.6	77.8	87.0	52.6	70.8
Tata Consultancy Services Ltd.	82.4	72.2	95.7	73.7	82.7
Tata Motors Ltd.	73.7	83.3	93.5	68.4	79.0
Tata Steel Ltd	76.3	77.8	95.7	71.1	80.7
Tech Mahindra Ltd.	73.5	88.9	93.5	73.7	81.1
Titan Company Ltd.	73.5	77.8	91.3	73.7	79.3
UltraTech Cement Ltd.	77.8	94.4	84.8	52.6	74.0
United Spirits Ltd.	73.7	72.2	73.9	81.6	76.0
UPL Ltd.	72.2	77.8	87.0	60.5	73.7
Vedanta Ltd.	83.3	88.9	91.3	65.8	81.0
Vodafone Idea Ltd.	69.4	66.7	73.9	44.7	63.1
Wipro Ltd.	77.8	94.4	93.5	65.8	80.6
Yes Bank Ltd.	76.5	72.2	82.6	73.7	77.1
Zee Entertainment Enterprises Ltd.	75.0	61.1	78.3	68.4	72.6

Table 5.5 shows company-wise CG scores of private sector companies. These scores have been presented for total score (CG) and four components of CG i.e. “Category I - rights and equitable treatment of shareholders”, “Category II - Role of Stakeholders”, “Category III - disclosure and transparency”, and “Category IV responsibilities of the board”. As per CG total score, out of 79 private sector companies, Cipla Ltd. has got the highest CG score 91.8, Infosys Ltd. got second rank 90.5,whereas, Kotak Mahindra Bank Ltd. 88.5, HDFC Bank 86.5, Housing Development Finance Corporation Ltd. 83.3, Tata

Consultancy Services Ltd. 82.7 got 3rd, 4th, 5th and 6th ranks respectively. L&T Finance Holding Ltd. got the last rank.

In the case of category I, Cipla Ltd. (85.3) has got the highest score, Vedanta Ltd. (83.3) got 2nd rank, 3rd rank is of Tata Consultancy Services (82.4), Reliance Industries Ltd. and Kotak Mahindra Bank Ltd. with 81.6 are at the 4th position. Asian paints Ltd., Bajaj finserv Ltd., Siemens Ltd. (79.4) have got 5th rank, and Housing Development Finance Corporation Ltd. (78.9) is at 6th position. Hindustan Unilever, with a 59.9 score, is in the last position.

From category II score analysis, it can be said that ACC Ltd.,Bandhan Bank Ltd.,Biocon Ltd.,Cipla Ltd., Infosys Ltd., scored the highest (100). Avenue Supermarket Ltd, Axis Bank Ltd., Colgate Palmolive Ltd., HDFC Bank Ltd., ICICI Lombard General Insurance Company Ltd., Larsen and Tourbo Ltd., Reliance Industries Ltd., Ultra Tech Cement Ltd. and Wipro Ltd. ranks 2ndwith 94.4 scores. Ambuja Cement Ltd., Bosch Ltd., Dabur India Ltd., Godrej Consumer, Havells India Ltd., Housing Development Finance Corporation Ltd., ITC Ltd., ICICI Prudential Life Insurance Company Ltd., Tech Mahindra Ltd. got 3rdrank by scoring 88.9. With 83.3 ABB Ltd., Adani Ports, Ashok Leyland Ltd., Dr. Reddy Laboratories Ltd., Eicher Motor Ltd., Grasim Industries Ltd., HDFC Standard Life Insurance Company Ltd., Hero Moto Corp Ltd., Kotak Mahindra Bank Ltd., Mahindra and Mahindra Ltd. MRF Ltd., Piramal Enterprises Ltd., Procter and Gamble Hygiene and Health Care Ltd., Tata Motors Ltd., hold 4th rank. Cadila healthcare Ltd., DLF Ltd., Hindalco Industries Ltd., ICICI Bank Ltd., JSW Steel Ltd., Oracle Software Industries Ltd., Shree Cement Ltd., Sun TV Network Ltd., Tata Steel Ltd., Titan Company Ltd., and

UPL Ltd. are at the 5th rank with 77.8 scores. However, L&T Finance Holding Ltd. is in the last position with an 11.1 score.

For category III, Infosys Ltd. with 100 scores is the leader, followed by Cipla Ltd., Dr. Reddy Laboratories Ltd., Mahindra and Mahindra Ltd. with 97.8 scores is at 2nd position. ITC Ltd., Reliance Industries Ltd., Tata Consultancy Services Ltd., Tata Steel Ltd., with a 95.7 score, holds 3rd position. HDFC Bank Ltd., Kotak Mahindra Bank Ltd., Tata Motors Ltd., Tech Mahindra Ltd. and Wipro Ltd. with 93.5 scores are at 4th position. Eicher Motors Ltd.,Hero Moto Corp Ltd., ICICI Bank Ltd., Induslnd Bank Ltd., JSW steel Ltd., MarutiSuzuki India Ltd.,Titan Company Ltd. with 91.3 scores are at 5th position. L&T Finance Ltd. Score (58.7) is the least in category III of corporate governance.

As per category IV score, Infosys Ltd. has the highest score (94.7), Kotak Mahindra Bank Ltd. got 2nd(92.1), Cipla Ltd. got 3rd rank (89.5), HDFC Bank Ltd. and ICICI Bank Ltd. got 4th rank with (86.8) score and Induslnd Bank Ltd. got 5th rank with 84.2 scores. The last position is of Vodafone idea Ltd. with a 44.7 score.

Table 5.6- Corporate Governance Scores of PSU Companies

Company Name	PSU Ownership				
	"Category I- Rights and Equitable Treatment of Shareholders Score"	**"Category II- Role of Stakeholders Score"**	**"Category III- Disclosures and Transparency Score"**	**"Category IV- Responsibilities of the Board Score"**	**Corporate Governance Total Score (CG)**
Bank of Baroda	76.5	72.2	82.6	52.6	70.7
Bharat Electronics Ltd.	69.4	77.8	84.1	52.6	69.6
Bharat Heavy Electricals Ltd.	69.4	77.8	84.1	46.7	67.8
Bharat Petroleum Corporation Ltd.	63.9	72.2	89.1	56.7	70.1
Coal India Ltd.	70.6	11.1	87.0	66.7	68.4
Container Corporation of India Ltd.	70.6	83.3	87.0	52.6	71.4
GAIL (India) Ltd.	79.4	77.8	95.7	63.3	79.3

General Insurance Corporation of India	73.5	66.7	91.3	60.5	74.3
Hindustan Petroleum Corporation Ltd.	75.0	61.1	91.3	60.0	74.0
Indian Oil Corporation Ltd.	72.2	72.2	93.5	70.0	77.9
NHPC Ltd.	70.6	88.9	93.5	60.0	76.1
NMDC Ltd.	70.6	83.3	93.5	67.6	77.8
NTPC Ltd.	76.3	77.8	91.3	46.7	72.1
Oil and Natural Gas Corporation Ltd.	72.2	77.8	93.5	76.7	80.5
Oil India Ltd.	73.5	88.9	91.3	70.0	79.3
Petronet LNG Ltd.	72.2	94.4	93.5	64.7	78.6
Power Grid Corporation of India Ltd.	72.2	72.2	89.1	76.7	78.6
SBI Life Insurance Company Ltd.	70.6	77.8	93.5	71.1	78.3
State Bank of India	73.7	83.3	84.8	73.3	77.9
Steel Authority of India Ltd. (SAIL)	70.6	83.3	97.8	70.0	79.9
The New India Assurance Company Ltd.	73.5	72.2	84.8	57.9	72.1

Table 5.6 shows a company-wise analysis of CG scores of Public Sector Units (PSU). For CG total score, out of 21 companies. Oil and Natural Gas Corporation Ltd. has scored the highest, 80.5, followed by SAIL (79.9). GAIL India Ltd., Oil India Ltd. are at 3rd position with a score of 79.3. At 4th position Petronet LNG Ltd., Power Grid Corporation of India Ltd are placed with 78.6 scores. India Oil Corporation Ltd. and State Bank of India are at 5thposition with a score of 77.9. Bharat Heavy Electricals Ltd. (67.8) is in the last position.

Under category I scores, it can be seen that GAIL India Ltd. has got the highest score (79.4), the second rank is of Bank of Baroda (76.5). NTPC Ltd.(76.3)which have the next best score. Hindustan Petroleum Corporation Ltd. (75.0), State Bank of India (73.7) has also scored well. Bharat Petroleum Corporation Ltd. 63.9 is the lowest among all the PSU companies.

For category II, Petronet LNG Ltd.(94.4) has got the highest score. NHPC Ltd., Oil India Ltd.have got the second position (88.9). Container Corporation of India Ltd., NMDC Ltd., State Bank of India and SAIL Ltd. with 83.3 scores is at third rank. At 4th rank, Bharat Electronics Ltd., Bharat heavy electrical Ltd., GAIL India Ltd., NTPC Ltd., ONGC and SBI life insurance company Ltd. are there with 77.8 scores. At 5th rank Bank of Baroda, BPCL, Indian Oil Corporation Ltd. and Power Grid Corporation of India Ltd., The New India Assurance Co Ltd. are there with 72.2 score. However, Coal India has scored the least in category II (11.1).

The highest score in category III is achieved by SAIL Ltd.(97.8), GAIL India Ltd.(95.7) gets the second place, Indian Oil Corporation Ltd., NHPC Ltd., NMDC Ltd., Petronet LNG Ltd., SBI Life Insurance Company Ltd. have got 93.5 score thus, are at the third position. General Insurance Corporation of India, HPCL, NTPC Ltd., Oil India Ltd. with 91.3 are at the four positions, Power Grid Corporation of India Ltd. has also scored good (89.1) and is at 5th position. Bank of Baroda is the lowest among all the PSU's companies with an 82.6 score.

Under category IV score of ONGC is the highest (76.7). Power Grid Corporation of India Ltd. and State Bank of India is at the second position with a 73.3 score. SBI Life Insurance Company Ltd. is in the third position with a 71.1 score. Indian Oil Corporation Ltd., Oil India Ltd. and SAIL Ltd. are at 4th position. The fifth position is of NMDC Ltd. with 67.6 and NTPC Ltd. is last with a 46.7 score.

Overall it can be summarized that for private sector out of 79 private sector companies Cipla Ltd. has got the highest CG score, 91.8, Infosys Ltd. got the second rank, 90.5, Kotak Mahindra Bank Ltd. 88.5. L&T Finance Holding Ltd. which got the last rank.In

case of category I, Cipla Ltd. (85.3) has got the highest score, Vedanta Ltd. (83.3) got 2nd rank, 3rd rank is of Tata Consultancy Services (82.4). From category II score ACC Ltd., Bandhan Bank Ltd., Biocon Ltd.,CiplaLtd., Infosys Ltd., scored the highest score (100). For category III, Infosys Ltd. with a 100 score is the leader, followed by Cipla Ltd., Dr. Reddy Laboratories Ltd., Mahindra and Mahindra Ltd. with 97.8 score are at 2nd position. As per category IV score, Infosys Ltd. has the highest score (94.7), Kotak Mahindra Bank Ltd. got 2nd (92.1), Cipla Ltd. got 3rd rank (89.5).

Under PSUs categories out of 21 PSUs Oil and Natural Gas Corporation Ltd. has scored the highest,(80.5), followed by SAIL Ltd. (79.9). GAIL India Ltd., Oil India Ltd. are at 3rd position with a score of 79.3. Bharat Heavy Electricals Ltd. (67.8) is at the last position. Under category I scores, it can be seen that GAIL India Ltd. has got the highest score (79.4), the second rank is of Bank of Baroda (76.5). NTPC Ltd.(76.3) has the next best score. For category II, Petronet LNG Ltd.(94.4) has got the highest score. NHPC Ltd., Oil India Ltd. have got the second position (88.9). Container Corporation of India Ltd., NMDC Ltd., State Bank of India and SAIL Ltd. with 83.3 score are ranked third. The highest score in category III is achieved by SAIL Ltd.(97.8), GAIL India Ltd.(95.7) gets the second place, Indian Oil Corporation Ltd., NHPC Ltd., NMDC Ltd., Petronet LNG Ltd., SBI Life Insurance Company Ltd. have got 93.5 score thus, are at the third position. Under category IV score of ONGC is the highest (76.7). Power Grid Corporation of India Ltd. and State Bank of India are at the second position with a 73.3 score. SBI Life Insurance Company Ltd. is in third position with a 71.1 score.

Out of private sector companies and PSUs, Cipla Ltd. has got the highest CG score, 91.8, Infosys Ltd. got second rank, 90.5, Kotak Mahindra Bank Ltd., 88.5. The highest score of

PSUs is of Oil and Natural Gas Corporation Ltd. which has scored the highest, 80.5, followed by SAIL Ltd. (79.9). GAIL India Ltd. (79.3), Oil India Ltd. (79.3). Thus we can conclude that private sector companies have better CG scores as compared to PSUs.

5.2.1.3 Demographic Characteristic Differences in CG Practices

In this subsection, the relationship has been analyzed between demographic characteristics and CG practices. The data has been classified based on five demographic characteristics i.e. age of the company, ownership status, private vs PSUs, MNC vs nationally-located companies and industrial sector based classification of companies. The CG total scores have been divided into four categories: leadership, good, fair, and basic, based on the scores they have received.

The results of Table 5.7 shows age-wise differences in CG practices.

Table 5.7- Age-wise Differences in Corporate Governance Practices

		Age of Company Category					
Corporate Governance Practices		**0-25 Years**	**25-50 Years**	**50- 75 Years**	**Above 75 Years**	**Total**	**Chi-square Test**
Leadership	**N**	0	3	0	1	4	11.532 (0.241)
	percent	0.0%	75.0%	0.0%	25.0%	100.0%	
Good	**N**	10	19	6	7	42	
	percent	23.8%	45.2%	14.3%	16.7%	**42.0%**	
Fair	**N**	7	19	15	6	47	
	percent	14.9%	40.4%	31.9%	12.8%	**47.0%**	
Basic	**N**	2	5	0	0	7	
	percent	28.6%	71.4%	0.0%	0.0%	**7.0%**	
Total	**N**	19	46	21	14	100	
	percent	**19.0%**	**46.0%**	**21.0%**	**14.0%**	**100.0%**	

Out of the total 100 sample companies, 46 percent of companies belong to the age group of 25-50 years. 21 percent companies belong to the age group of 50-75 years. 19 percent of the companies age between 0-25years and 14 percent are above 75 years of age. Out of these, 47 percent of the companies have a fair CG score, and 42 percent of companies have a good CG score. The total number of companies under the leadership CG category

is 4 percent, out of which 75 percent belong to 25-50 years of age, and 25 percent belong to above 75 years of age.

The maximum number of companies (47 percent) out of total lies in fair CG practices. 40.4 percent of companies belong to the age group of 25-50 years, and 31.9 percent of companies belong to the age group of 50-75 years.

Good CG practices are found in 42 percent of companies, out of these, 45 percent are from the age group of 25-50 years, and 23.8 percent are between 0-25 years of age. Only 7 percent of the companies which are having basic CG practices out of which 71.4 percent belong to the 25-50 years of age group.

The chi-square test results show a chi-square value of 11.532, with a significance value 0.241 is statistically non-significant at 0.05 percent level of significance. This indicates that there is no significant difference between the age of the company and the CG practices of these companies. Thus, the *null hypothesis* $H_{01a,}$ which shows no significant difference between the age of companies and their CG practices, is accepted. This reveals that there is no difference between the age of the company and its CG practices.

Table 5.8 - Ownership-wise Differences in Corporate Governance Practices

		Promoter-owned vs Institutional vs Widely-held Classification				
Corporate Governance Practices Status		**Promoter-owned**	**Institutional**	**Widely-held**	**Total**	**Chi-square Test**
Leadership	**N**	0	3	1	4	**16.613 (0.011)**
	percent	0.0%	75.0%	25.0%	4.0%	
Good	**N**	30	9	3	42	
	percent	71.4%	21.4%	7.1%	42.0%	
Fair	**N**	39	6	2	47	
	percent	83.0%	12.8%	4.3%	47.0%	
Basic	**N**	7	0	0	7	
	percent	100.0%	0.0%	0.0%	7.0%	
Total	**N**	76	18	6	100	
	percent	76.0%	18.0%	6.0%	100.0%	

Table 5.8 shows the chi-square value is 16.613, indicating significant results that are significant at the 0.01 level of significance, suggesting a significant difference between the CG practices followed by promoter-owned companies, institutional-owned companies, and widely-held companies. This reflects that those companies that are more promoter-owned have better CG practices as compared to other groups. These results are confirmed from the table that 76 percent of companies which are promoter-owned, 18 percent of the companies have institutional ownership, and 6 percent of the companies have widely-held ownership. Out of these,47 percent have fair CG practices, of which 83 percent have promoter ownership, and 12.8 percent have institutional ownership. From the category of good CG practices score, 71.4 percent of companies are promoter-owned, while under the basic CG practices,100 percent of the companies have promoter ownership. Of those companies which have leadership CG practices, 75 percent of these companies have institutional ownership. This indicates that the ownership status of companies does significantly impact the CG practices of the companies, and specifically, the companies with higher promoter ownership have good and fair practices. Thus *null hypothesis* H_{01b}, is rejected as there is a significant difference between the ownership status of companies and their CG practices.

Table 5.9- Private-PSU-wise Differences in Corporate Governance Practices

		Private vs PSU Classification			
Corporate Governance Practices Status		**Private**	**PSU**	**Total Sample**	**Chi-square Test**
Leadership	**N**	4	0	4	3.608 (0.307)
	percent	100.0%	0.0%	4.0%	
Good	**N**	31	11	42	
	percent	73.8%	26.2%	42.0%	
Fair	**N**	37	10	47	
	percent	78.7%	21.3%	47.0%	

Basic	**N**	7	0	7	
	percent	100.0%	0.0%	7.0%	
Total	**N**	79	21	100	
	percent	79.0%	21.0%	100.0%	

Table 5.9 shows the difference in CG practices based on private and PSU status. Out of the total sample of 100 companies, 79 percent of companies are from the private sector, and 21 percent companies belong to PSU. Under fair CG practices, 47 percent of companies are there, out of which 78.7 percent are from the private sector, and 21.3 percent are from the PSU sector. Good CG practices are followed by 42 percent of sample, of which 73.8 percent of companies belong to the private sector and 26.2 percent of companies belong to the PSU sector. The basic CG practices level is followed by 7 percent of companies, and all of them are private companies. Under leadership CG practices, only 4 percent of companies exist, and all belong to the private sector.

The chi-square value is 3.608, which is insignificant at the 0.307 level, indicating no significant relationship between the private sector and PSU classification of CG practices. Thus, the null hypothesis H_{01c} is supported that there is no significant difference between the private and PSU sector with CG practices.

Table 5.10– MNC vs Nationally-Located-wise Differences in Corporate Governance Practices

		MNCs vs Nationally-located Classification			
Corporate Governance Practices Status		**Nationally-located**	**MNC**	**Total**	**Chi-square Test**
Leadership	**N**	4	0	4	1.938 (0.585)
	percent	100.0%	0.0%	4.0%	
Good	**N**	39	3	42	
	percent	92.9%	7.1%	42.0%	
Fair	**N**	40	7	47	
	percent	85.1%	47.0%	47.0%	

Basic	**N**	6	1	7	
	percent	85.7%	14.3%	7.0%	
Total	**N**	89	11	100	
	percent	89.0%	11.0%	100.0%	

The analysis of Table 5.10 shows that out of 100 companies' sample, 89 percent of companies belong to the nationally-located category and 11 percent belong to MNCs. In the fair category of CG score (47 percent of total companies), 85.1 percent are Nationally-located, and 14.9 percent are MNCs. Good CG practices are for 42 percent of companies, wherein nationally-located companies are 92.9 percent, and 7.1 percent are MNCs. With 7 percent of companies in basic practices, 85.7 percent of them are nationally-located, and 14.3 percent are MNCs.

Leadership practices are followed by 4 percent of companies and all are nationally-located. The chi-square value is 1.938, which is insignificant(0.382). S0, the *null hypothesis* H_{01d} is supported. It can be inferred that there is no significant difference between MNC and nationally-located classification with CG practices of companies.

Table 5.11 - Industry-wise Differences in Corporate Governance Practices

Corporate Governance Practices Status		Industry Classification										
		HealthCare	**Information Technology**	**Financials**	**Consumer Staples**	**Energy**	**Materials**	**Consumer Discretionary**	**Industrials**	**Utilities and Telecom**	**Total**	**Chi-square Test value**
Leadership	**N**	1	1	2	0	0	0	0	0	0	4	21.283 (0.622)
	percent	25.0%	25.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4%	
Good	**N**	2	3	11	3	6	6	5	5	1	42	
	percent	4.8%	7.1%	26.2%	7.1%	14.3%	14.3%	11.9%	11.9%	2.4%	42%	
Fair	**N**	3	1	9	7	4	8	9	4	2	47	
	percent	6.4%	2.1%	19.1%	14.9%	8.5%	17.0%	19.1%	8.5%	4.3%	47%	
Basic	**N**	1	1	3	0	0	1	0	0	1	7	
	percent	14.3%	14.3%	42.9%	0.0%	0.0%	14.3%	0.0%	0.0%	14.3%	7%	
Total	**N**	7	6	25	10	10	15	14	9	4	100	
	percent	7.0%	6.0%	25.0%	10.0%	10.0%	15.0%	14.0%	9.0%	4.0%	100.0%	

In Table 5.11, the industrial sector-wise classification of CG practices of companies has been shown. It can be seen that out of 100 companies,25 percent companies are from the financial sector, 15 percent are from the materials sector, 14 percent belong to the consumer discretionary sector, 10 percent of companies are from the consumer staples sector, 10 percent from the energy sector, 9 percent from the industrial sector, 7 percent companies belong to the health care sector, 6 percent belong to the information technology sector, and 4 percent are from utilities and telecom sector. Maximum companies follow fair CG practices (47 percent), with 19.1 percent from the financial sector, and the consumer discretionary sector, 17 percent of companies, are from the materials sector. Good CG is practised by 42 percent of companies, and 26 percent belong to the financial sector. Only 7 percent of companies follow basic CG practices, out of which 42.9 percent are in the financial sector.

The chi-square value, which is 21.283 with a significance value of 0.622, indicates no statistically significant relationship between industry-wise classification of companies and their CG practices. Therefore, *null hypothesis* H_{01e} supports that there is no difference between industrial sector-wise classification and CG practices followed by companies.

It can be summarized that NIFTY 100 sample companies follow leadership (4 percent), good (42 percent), fair (47 percent) and basic (7 percent) CG practices. Based on its relationship with demographic characteristics wise differences, it has been found that ownership status of companies has a significant impact on CG practices, but age, private vs PSU, MNC vs nationally-located companies and industrial sector based classification does not impact their CG practices. Thus *null hypothesis*$H_{01}$is partially supported.

5.2.1.4 Demographic Characteristics Differences in Corporate Governance Score

Prior to ANOVA, in order to check whether there is equal variance, Levene test, i.e. test for homogeneity of variance, was performed. The test helps to determine if application ANNOVA is fit on the actual data or not.

Table 5.12 – Homogeneity of variance

	"Category I- Rights and Equitable Treatment of Shareholders Score"		**"Category II- Role of Stakeholders Score"**		**"Category III- Disclosures and Transparency Score"**		**"Category IV- Responsibilities of the Board Score"**		**Corporate Governance Total Score (CG)**	
	Levene	**Sig.**	**Levene**	**Sig.**	**Levene**	**Sig.**	**Levene**	**Sig.**	**Levene**	**Sig.**
Age	.192	.902	2.179	.095	.996	.398	2.109	.104	1.670	.179
Private vs PSU	1.256	.163	.433	.512	.779	.810	2.019	.158	2.710	.103
MNC vs. Nationally-located	3.473	.065	.459	.500	.753	.388	.002	.965	.598	.411
Ownership	.760	.470	.390	.678	1.327	.270	1.363	.261	.500	.608
Industry	1.434	.193	1.015	.430	.923	.501	1.522	.160	1.345	.232

Table 5.12 shows that all the values of levene statistics are more than 0.05 level of significance, thus, indicating that variances are not equal. Therefore, ANOVA can be performed.

ANOVA was used after the Levene test to determine the differences in the total score of Corporate Governance (CG) and its four component scores in relation to demographic characteristics **(Ofuani et. al. 2018**). The results are summarized in Table 5.13.

Table 5.13 - ANOVA Test Results for Demographic Characteristics-wise Differences in Corporate Governance Scores

	"Category I- Rights and Equitable Treatment of Shareholders Score"		"Category II- Role of Stakeholders Score"		"Category III- Disclosures and Transparency Score"		"Category IV- Responsibilities of the Board Score"		Corporate Governance Total Score (CG)	
	F	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**	**F**	**Sig.**
Age	.871	.459	1.096	.355	**3.574**	**.017**	**2.525**	**.048**	1.510	.217
Private vs PSU	.748	.389	.565	.454	**8.180**	**.005**	.784	.378	.365	.547
MNC vs. Nationally-located	3.684	.058	1.005	.318	**4.055**	**.047**	2.503	.117	**3.573**	**.049**
Ownership	1.768	.176	1.105	.335	**6.226**	**.003**	**11.396**	**.000**	3.209	0.73
Industry	.929	.497	.537	.826	**2.551**	**.015**	**1.818**	**.044**		

As defined earlier, the CG Total Score (CG) calculated is further divided into four subcategories: "rights and equitable treatment of shareholders score", "Role of stakeholders score", "disclosure and transparency score", and "responsibilities of the board score". These four scores give us a CG Total Score (CG) of each company based on the demographic characteristics.

Age-wise classification of corporate governance total score (CG) the F value is 1.510, which is not significant at the 0.05 level of significance, indicating that the CG total score does not vary for age-wise categorization of companies, so the *null hypothesis* $H_{02a}$is supported.

The *null hypothesis*H_{02b} is also accepted as the F value (3.209) of ownership-wise groups of companies is insignificant with sign level of 0.73. The ANOVA result of classification of companies based on private sector vs PSU shows that the F-value is 0.365 which is not

significant (0.547) at 0.05 level, indicating that there is no difference in CG scores of private firms. Thus, the *null hypothesis* $H_{02c}$is supported.

The CG score is significantly different for multinational companies and companies with nationally-located status as the results of F value is 3.573, and the level of significance is at 0.05, which indicates a significant difference between the CG score of MNCs and nationally-located companies. Thus, the *null hypothesis* $H_{02d}$is not supported, suggesting that CG score varies for MNCs vs nationally-located categorization of companies.

Under category I for rights and equitable treatment of shareholders score, the results of the ANOVA test indicates that age-wise, there is no significant difference in the companies' score related to rights and equitable treatment of shareholders as the F value is insignificant (($H_{03a}$is supported). Similarly, for private vs PSU (H_{03c}), ownership-wise differences (H_{03b}), MNC versus nationally located (H_{03d}) and industrial sector-wise differences (H_{03e}) are insignificant, for rights and equitable treatment of shareholders.

This indicates that age, private vs PSU, MNC versus nationally located, ownership and industrial sector does not affect the company's practices related to the company's disclosure related to Category I (i.e. "rights and equitable treatment of shareholders").

Concerning the Category II ("Role of Stakeholders"), all the ANOVA test results with respect to demographic differences show insignificant results, indicating that null hypothesis $H_{04}$is supported. And there is no significant difference between age-wise, private vs PSU wise, MNC vs nationally-located, ownership-wise and industry-wise

classification of companies for the role of stakeholders scores. Thus, null hypothesis H_{04} is accepted.

Category III of CG score is related to disclosure and transparency scores. The ANOVA test results on disclosure and transparency scores and demographic-wise relationships show highly significant age-wise differences. There is a significant difference between the company's age and the disclosure and transparency scores of companies belonging to different groups. These results can be further verified with the Duncan post hoc test conducted, and the results are shown in Table 5.14, which indicates that the companies which belong to 20-25 years age group, their disclosure and transparency scores are significantly different from other companies. Thus, the null hypothesis H_{05a} is not supported, indicating that the company's age significantly matters for disclosure and transparency scores of companies. With respect to classification for private vs PSU, the disclosure and transparency scores are significantly different with F value of 8.180, which is significant at a 0.05 level of significance. This indicates that the *null hypothesis* H_{05c} is rejected, and there is a significant difference between disclosure and transparency score of private and public companies. With regard to MNC vs nationally-located classification of companies, the F value of 4.055 is highly significant at 0.047 level of significance. Thus, null hypothesis H_{05d} is not supported, and disclosure and transparency scores significantly differ across MNCs vs nationally-located companies.

The hypothesis testing of $H_{05b,}$ with respect to ownership wise differences in companies, shows significantly different results for different categories of ownership and the F value is 6.226 which is significant at the 0.003 level of significance, indicating that the null hypothesis is the null hypothesis H_{05b} is rejected. Table 5.13 shows that the disclosure and

transparency scores of promoter-owned and institutional-owned companies are significantly different. The industry sector-wise classification of disclosure and transparency score indicates that F value of 2.8551, which is highly significant at 0.015 level of significance conveys that the null hypothesis H_{05e} is rejected, and there is a significant difference in the disclosure and transparency scores of industry-wise classification of companies. The Duncan post hoc test results of Table 5.13 with respect to industry-wise classification and disclosure and transparency score category show that utility companies, consumer staples, financials, and IT sector companies show significantly different results compared to the rest of the industrial sectors. So, the null hypothesis H_{05e} is rejected.

Category IV of CG scores, which account for responsibilities of the board, scores the results in table 5.13 to indicate that age-wise ANOVA results are significantly different with an F value of 2.525, which is insignificant at 0.05 level of significance, which suggests that the null hypothesis H_{06a} is accepted. The Duncan post hoc test results for finding out the differences in the age group categories the results in Table 5.14 shows that companies which belong to the age group of 50-75 years and 25-50 years offer significantly different results as compared to the rest of the age groups, so the null hypothesis H_{06a} is rejected.

Table 5.14- Duncan Post Hoc Test for Demographic Characteristics-wise Differences in Corporate Governance Scores

	"Rights and Equitable Treatment of Shareholders Score"	**"Role of Stakeholders Score"**	**"Disclosures and Transparency Score"**	**"Responsibilities of the Board Score"**	**Corporate Governance Total Score**
Age			0-25 years	50-75 years and 25-50 years	
Private vs PSU			Private and PSU		
MNC vs. Nationally-located			MNC vs. Nationally-located		MNC vs. Nationally-located
Ownership			promoter-owned and Institutional	promoter and Institutional	

Regarding private vs PSU and MNC vs. nationally-located companies, the ANOVA results are insignificant, indicating no difference between the responsibility of the board score of private vs PSU companies and MNC vs nationally-located companies. So, the null hypotheses H_{06c} and H_{06d} are accepted. Table 5.13 indicates ownership-wise differences in the responsibility of the board score, and the results of the ANOVA F test are significant with an F value of 11.396, which is significant at 0.005 level of significance, which indicates that the null hypothesis H_{06b} is rejected. There is a significant difference in the ownership-wise distribution of responsibilities of the board, and these results are confirmed by table 5.14, which showcases that promoter-owned and institutional-owned classification of ownership is significantly different from other groups. Industry sector-wise differences in the responsibility of the board score also indicate significant ANOVA result with the F value of 1.818, which is significant at 0.44 level of significance, which suggests that industry sector-wise, there is a significant difference in the responsibilities of the board and the results are confirmed by the Duncan

post hoc test (Table 5.14). It reflects that the responsibility of board score is different for utility companies, consumer staples, financials and IT sector companies as compared to the rest of the industrial sectors. This shows that the null hypothesisH_{06e} is rejected, and there is a significant difference in companies' industry sector-wise classification.

The overall analysis indicates that null hypothesis H_{02} is partially supported as there is a significant difference in the MNC vs nationally-located companies for corporate governance total score (CG). The null hypothesis H_{03} is supported. There is no difference in demographic characteristics of organization and their practices related to the Role of stakeholders scores, and null hypothesis H_{04} is supported. The null hypothesis H_{05} is partially supported as there is a significant difference in the demographic characteristics like age, private vs PSU, MNC vs nationally-located companies and industrial sector based classification of companies and their practices related to disclosures and transparency scores. The null hypothesis $H_{06,}$which indicates that there is no difference in the demographic characteristics and their practices related to responsibilities of the board, is partially rejected as there is a significant difference in the practices related to the responsibility of the board with respect to age, ownership and industry sector.

Overall we can conclude that CG score is impacted by the MNC vs nationally-located status of companies. Age significantly matters with respect to disclosure and transparency scores where it was found that young companies have better disclosures and for the responsibilities of the board old companies have performed better which was from the age category of 50-75 years the disclosure and transparency scores also differ between the private sector companies and PSU. According to the industrial sector classification,

organisations in the utilities, consumer staples, financials, and IT sectors have considerably different disclosure and transparency scores and duties.

The companies which belong to promoter-owned and institutional-owned categories have significantly different disclosures and transparency scores and responsibilities of the Board. Overall, the above analysis shows that MNC vs nationally-located status, industry sector-wise differences, and ownership characteristics affect the CG practices of Indian companies.

5.2.2 Analysis of Financial Performance

This sub-section explains data related to FP variables taken from 2015 to 2019. The detailed analysis has been carried out for financial variables for the financial year 2019, and the rest of the data for a five-year period has been used to compute CAGR for a five-year period. As CG is a strategic and policy-related activity, its impact will be visible on financial performance over five years. So, 5-year CAGR values have also been analysed for the study. Sixteen financial variables data has been analysed.

5.2.2.1 Descriptive Statistics of Financial Performance Variables

For the study, 15 financial performance variables are being considered. Descriptive statistics incorporate mean value, maximum, minimum and standard deviation.

Table 5.15 shows descriptive statistics of financial performance variables of 100 companies for the financial year 2019.

Table 5.15 - Descriptive Statistics of Financial Performance Variables of F.Y. 2019

	Minimum	Maximum	Mean	Std. Deviation
Beta-Measure of volatility	0.00	2.20	.9260	0.4761
Closing Price	18.25	57987.15	1970.1378	6354.4857
Market Capitalization	201102.94	8641224.35	1059560.3633	1383911.5705
Enterprise Value	-364694.38	9542274.35	1153392.3312	1560203.7475
Earning Per share	-17.93	2669.12	72.0407	282.1848
Price to Earning ratio	0.00	503.02	40.9603	65.2940
Price by book ratio	0.00	52.57	6.0800	8.3106
Total Debt ratio	0.0	1617200.0	126858.155	319375.0638
TobinsQ	-0.6570	34.9689	3.3470	5.0503
Return on Equity ratio	-0.2213	0.7881	0.1491	0.1476
Return on Capital Employed	-0.0895	0.8536	0.1651	0.1581
Return on Assets ratio	-0.0556	0.5471	0.0913	0.0908
Return on Sales ratio	-0.4165	0.8998	0.1942	0.1751
Dividend Yield	0.0000	714.4820	58.5516	128.0504
CSR Spend	0.0034	0.1135	0.0238	0.0173

Table 5.15 analyses explain financial performance indicators of these 100 companies. The beta mean value is 0.9260, and the standard deviation value is 0.4761. The closing price mean value is 1970.1378, with a standard deviation of 634.4857. The average score of market capitalization is 1059560.3633, Enterprise value mean is 1153392.3312.

The earnings per share mean score is 72.0407 with a standard deviation of 2.1848. Price to Earnings ratio average score is 40.9603 with standard deviation value of 65.2940, the price to book ratio mean is 6.0800, total debt ratio mean is 126858. Tobin's Q mean score is 3.3470, and the standard deviation is 5.0503.

Return on equity ratio mean is 0.1491 and the standard deviation is 0.1476, return on capital employed mean value is 0.1651, the standard deviation is 0.1581, return on asset ratio average value is 0.0913 and standard deviation as 0.0908, return on sales mean is

0.1942, and the standard deviation is 0.1751. The dividend yield mean is 58.5516, and the standard deviation is 128.0504. CSR spending minimum is 0.0034, whereas the maximum is 0.1135. CSR spend average value is 0.0238, whereas the standard deviation is 0.0173.

5.2.2.2 Demographic-wise Differences in Financial Performance Variables

The analysis of financial variables based on demographic characteristics has been carried out in this sub-section. Demographic characteristics, namely age, private vs PSU, MNC vs nationally-located companies and industrial sector based classification of companies, has been carried out to analyse the financial performance variables.

Table 5.16- Age-wise Descriptive Statistics of Financial Performance Variables of F.Y. 2019

		Statistic			
		Age of Company Category			
		0-25 Years	25-50 Years	50- 75 Years	Above 75 Years
Beta-Measure of volatility	**Mean**	.9336	.8993	1.2465	.7945
	Std. Deviation	.52227	.30235	.42632	.33324
Closing Price	**Mean**	1487.8743	1494.0383	4825.7390	1170.0545
	Std. Deviation	1949.0350	2978.2382	13294.0565	839.0159
Market Capitalization	**Mean**	664835.7929	1472559.4890	519529.2880	1412629.2255
	Std. Deviation	262885.3263	1893940.6307	337044.2805	1233277.9311
Enterprise Value	**Mean**	788213.8786	1731281.5081	481274.1480	1311694.5800
	Std. Deviation	355620.3145	2088055.8626	486484.0094	1195636.5821
Earning Per share	**Mean**	30.4757	67.1069	180.0215	33.7755
	Std. Deviation	43.14702	132.98007	597.61881	19.25259
Price to Earning ratio	**Mean**	62.8800	34.9083	61.1775	37.5573
	Std. Deviation	89.29390	33.05509	110.71253	21.19991
Price by book ratio	**Mean**	8.9121	5.4636	5.2870	12.1391
	Std. Deviation	9.1801	4.2567	9.5585	15.3866

Total Debt ratio	**Mean**	36517.4071	152212.3476	127714.8200	45686.8000
	Std. Deviation	80028.3510	407268.3482	212705.1671	91286.5508
Tobin'sQ	**Mean**	5.3367	2.9374	2.3765	5.6672
	Std. Deviation	9.0816	2.6673	4.7916	6.1945
Return on Equity ratio	**Mean**	0.1256	0.1552	0.1433	0.2646
	Std. Deviation	0.1024	0.1413	0.1138	0.2102
Earning before interest and tax	**Mean**	25320.621	79938.052	45708.760	70716.082
	Std. Deviation	19160.1799	115254.8318	58393.8395	59739.9146
Return on Capital Employed	**Mean**	0.1180	0.1754	0.1642	0.2880
	Std. Deviation	0.0970	0.1558	0.1381	0.2129
Return on Assets ratio	**Mean**	0.0787	0.1074	0.0710	0.1397
	Std. Deviation	0.0651	0.1067	0.0641	0.0768
Return on Sales ratio	**Mean**	0.2649	0.2254	0.1578	0.1909
	Std. Deviation	0.2285	0.1615	0.1412	0.0817
Dividend Yield ratio	**Mean**	20.5164	63.7995	109.4843	30.6520
	Std. Deviation	34.5677	130.1096	188.3009	60.7136
CSR Spend	**Mean**	0.0181	0.0216	0.0300	0.0278
	Std. Deviation	0.0057	0.0146	0.0249	0.0179

Table 5.16 shows age-wise descriptive of financial performance variable for the financial year 2019. The age of companies is categorized into four groups, i.e. 0-25 years, 25-50 years, 50-75 years and above 75 years. Beta, which is considered a measure of volatility, has a mean score of 0.9336 for 0-25 years, 25-50 years is 0.8993, for 50-75 years, mean of beta is 1.2465 and for above 75 years, mean is 0.7945. This shows that companies under the age group of 50-75 years have the highest mean value, reflecting that this age group has a high risk and has a high return. Closing Price mean value of companies under age group0-25 years is 1487.8743, 25-50 years is 1494.0383, 50-75 years is 4825.7390 and above 75 years is 1170.0545. Companies under 0-25 years, 25-50 years category have

almost the same mean score, but 50-75 years companies show the highest mean value. Looking at market capitalization values, companies with 25-50 years have the highest mean followed by above 75 years (1412629.2255), 0-25 years (664835.7929) and 50-75 years (519529.2880). Market capitalization reflects a company's total wealth. Hence, it can be seen that companies above 75 years have more wealth than other age group companies. The mean score of enterprise value for 0-25 years is 788213.8786, 25-50 years is 1731281.50814, 50-75 years is 1274.1480, and for above 75 years is 1311694.5800. Since the enterprise value reflects the cost of purchasing a company and the highest enterprise value average is 25-50 years. Earnings per share ratio mean score for 0-25 years is 30.4757, 67.1069 for 25-50 years, 180.02154 for 50-75 years and 33.77554 for above 75 year companies. Earning per share reflects how profitable a company is based on per-share price. From the table, it can be seen that 50 -75 years of companies have the highest EPS mean. Price to earnings ratio 0-25 years average score is 62.8800 and for 25-50 years is 34.9083 and for 50 -75 years is 61.1775 and for above 75 years is 37.5573. Price to earnings ratio shows that investors want to invest more in companies that have a high price to earnings ratio as it leads to higher future growth or future return. The price to book value ratio of above 75 years (12.1391) is higher than 0-25 years (8.9121), 25 -50 years (5.4636) and 50-75 years (5.2870). Since the price to book ratio of above 75 years is the highest, these age group companies are confident about their growth aspects. However, a too high price to book ratio can reflect that the company is overvalued. Total debt ratio average score is lowest and 0-25 years of companies and 25-50 years. Whereas 50-75 years of companies total debt ratio mean value is 127714.8200 and for above 7-5 years are 45686.8000. The total debt ratio depicts that total debt is more than total assets. Therefore,

25-50 years of companies are at risk as their borrowing capacity reduces with a high total debt ratio, leading to financial inflexibility.

Tobin's Q mean value for 0-25 years is 5.3367, for 25-50 years is 2.9374, 50 -75 years is 2.3765, and for above 75 years of companies, it is 5.6672. High Tobin's Q ratio reflects that the company's market value is greater than the value of company recorded assets. For the return on equity ratio, the mean score of 0-25 years of companies is 0.1256, 25-50 years is 0.1552, for 50-75 years is 0.1433, and for above 75 years it is 0.2646. Since the return on equities average value of above 75 years of company is highest, these companies efficiently utilise equity capital to generate profit. For earning before interest in tax (EBIT) highest mean value is of the companies with the age of 25-50 years (79938.052) followed by above 75 years (70716.082), 50-75 years (45708.760) and lastly 0- 25 years of age companies (25320.621) are reflecting that companies under age group 25-50 years have the more earning ability that generates high revenues than other age groups. The return on capital employed has the highest mean score above 75 years of companies (0.2880), 25-50 years of companies are second with 0.1754 scores, 50-75 years of companies next 0.1642 and 0-25 years of companies are last with 0.1180. Companies under the age group above 75 years have generated the highest return for their investors. Return on assets ratios means score for 0-25 years is 0.0787, for 25-50 years is 0.1074, for 50-75 years is 0.0710, and for above 75 years is 0.1397. Since the average score of above 75 years of companies is the highest, these companies generate the highest returns by utilizing their assets. Looking at return on sales ratios, 0-25 years of companies have the highest average score followed by 25-50 years of companies (0.2254), above 75 years (0.1909) and 50-75 years at last (0.1578). High return on sales ratios reflects that the

company is efficiently converting its sales into profit. Therefore, 0-25 years of companies are leading in this category. Similarly, if we look at the dividend yield ratio, the average score of 50-75 years of companies is relatively high than 25-50 years (3.7995), above 75 years (30.6520) and 0-25 years (0.5164). It reflects that 50-75years age group companies are distributing dividends to their shareholders. For CSR spending, the mean value of 0-25 years of companies is 0.0181, 25 to 50 years is 0.0216, 50-75 years of companies is 0.0300 and about 75 years is 0.0278. As per the Companies Act, companies must spend 2 percent of their average profit for the preceding three years. Companies under 50-75 years of age spend relatively higher than other age group companies.

Table 5.17 - Private vs PSU-wise Descriptive Statistics of Financial Performance Variables of F.Y. 2019

		Statistic	
		Private vs PSU ownership	
		Private	PSU
Beta-Measure of volatility	**Mean**	.9397	1.1233
	Std. Deviation	.41770	.28632
Closing Price	**Mean**	2638.3050	200.4847
	Std. Deviation	7393.8998	128.4449
	Minimum	91.3000	24.7000
	Maximum	57987.1500	525.3000
Market Capitalization	**Mean**	1189978.8779	760415.1780
	Std. Deviation	1567724.3513	586464.5570
Enterprise Value	**Mean**	1304841.8724	923621.7447
	Std. Deviation	1728233.4957	840635.5217
Earning Per share	**Mean**	96.6117	17.4047
	Std. Deviation	329.81773	10.89942
Price to Earning ratio	**Mean**	52.8814	11.7127
	Std. Deviation	73.04031	6.33227
Price by book ratio	**Mean**	7.7625	2.3073
	Std. Deviation	9.1917	2.2466
Total Debt ratio	**Mean**	70360.1347	326338.9200
	Std. Deviation	226158.8605	505846.2268

TobinsQ	**Mean**	4.0242	1.2142
	Std. Deviation	5.5345	1.8575
Return on Equity ratio	**Mean**	0.1562	0.1870
	Std. Deviation	0.1404	0.1637
Earning before interest and tax	**Mean**	55008.217	96223.160
	Std. Deviation	85648.8962	102276.6205
Return on Capital Employed	**Mean**	0.1805	0.1651
	Std. Deviation	0.1619	0.1351
Return on Assets ratio	**Mean**	0.0983	0.0994
	Std. Deviation	0.0817	0.1277
Return on Sales ratio	**Mean**	0.2075	0.2330
	Std. Deviation	0.1462	0.2357
Dividend Yield ratio	**Mean**	29.6930	223.7184
	Std. Deviation	73.9572	214.5587
CSR Spend	**Mean**	0.0222	0.0312
	Std. Deviation	0.0131	0.0300

Table 5.17 depicts private and PSU wise descriptive analysis of financial performance variables for the year 2019. The average beta score of PSU (1.1233) is greater than the mean score of private sector (0.9397) companies. The standard deviation of PSU is 0.28632 is less than the standard deviation of private companies is 0.41770. Similarly, the average score of the closing price for private companies (2638.3050) is greater than PSU (200.4847). The standard deviation of private companies is 7393.8998, and for PSU, it is 128.4449. Market capitalization mean score for private sector companies (1189978.8779) is more than PSU (760415.1780) and for enterprise value mean score of the private sector is 1304841.8724 PSUs, it is 923621.7447. The difference between market value and enterprise value is majorly due to cash and debt.

From earning per share, it can be seen that in private sector companies, mean score are 96.6117, and for PSU, it is 17.4047.It indicates that per-share profit is good in private

sector companies. The standard deviation for private sector companies is more (329.81773) than PSU sector companies (10.89942). For price to earnings ratio, the average score of PSU (11.7127) is less than private sector companies (52.8814), indicating that for every rupee invested in private sector companies, shareholders will get more earnings. Similarly, the price by book ratio, mean score of private companies (7.7625) is more than the mean score of PSU (2.3073). It indicates that shareholders will own a greater book value of assets for every rupee invested in private companies. The total debt ratio for private companies is 70360.1347, and for PSU, it is 326338.9200, indicating that PSU's debt is more than private sector companies. Tobin's Q mean score for private sector companies (4.0242) is more significant than PSU (1.2142), implying that in private sector companies, stock prices are higher than the replacement cost of assets compared to PSU.

The mean score of equity ratio for PSU is 0.1870, and private sector companies 0.1562. It depicts that in PSUs, companies can generate more profits for shareholders equity investments. The earnings before interest in tax mean are 55008.217, and for PSU, it is 96223.160. This indicates that PSUs have relatively higher earnings than private companies from their core businesses, i.e. before interest tax is more. Return on capital employed for private companies (0.1805) and PSU (0.1651) indicates that companies generate relatively high returns from capital employed in the private sector.

Return on assets ratio, mean score of private sector companies (0.0983) is relatively less than PSU's (0.0994). However, there is a slight difference in their mean score, but PSUs generate more profits than private companies. The mean score of returns on sales ratio for PSU is 0.330 and for private is 0.2075. This reveals that PSUs generate more profit from sales than private companies. For the dividend yield ratio, the mean score of private

companies (29.6930) is less than PSU mean score (223.7184), indicating that PSUs are giving more price to their shareholders as a dividend for their stocks. CSR spend average score for private sector companies is 0.0222 and for PSU is 0.0312, this shows that PSUs are spending more than private companies on CSR activities. This analysis reveals that private companies have higher profitability measures than PSUs, but CSR spending of PSUs is more than private companies.

Table 5.18– MNC vs. Nationally-located-wise Descriptive Statistics of Financial Performance Variables of F.Y. 2019

		Statistic	
		MNCs vs Nationally- located categories	
		Nationally-located	MNC
Beta-Measure of volatility	**Mean**	.9817	.9000
	Std. Deviation	.40920	.36488
Closing Price	**Mean**	1921.3320	4267.6364
	Std. Deviation	6916.9383	5606.7428
Market Capitalization	**Mean**	1157763.9996	826785.7191
	Std. Deviation	1501240.4738	1073540.0298
Enterprise Value	**Mean**	1303895.8207	791532.6009
	Std. Deviation	1672662.7573	1067800.3579
Earning Per share	**Mean**	79.2350	108.6591
	Std. Deviation	317.00375	160.54062
Price to Earning ratio	**Mean**	44.5182	54.5245
	Std. Deviation	72.16013	29.80701
Price by book ratio	**Mean**	5.6217	15.1145
	Std. Deviation	5.8964	17.2196
Total Debt ratio	**Mean**	130675.2263	2699.6636
	Std. Deviation	323919.0600	7703.0580
TobinsQ	**Mean**	3.1386	6.3110
	Std. Deviation	4.7677	7.2082
Return on Equity ratio	**Mean**	0.1438	0.2841
	Std. Deviation	0.1209	0.2236
Earning before interest and tax	**Mean**	66964.724	28601.818
	Std. Deviation	94023.2878	33467.5318
Return on Capital Employed	**Mean**	0.1594	0.3049
	Std. Deviation	0.1311	0.2504

Return on Assets ratio	**Mean**	0.0925	0.1398
	Std. Deviation	0.0875	0.1028
Return on Sales ratio	**Mean**	0.2172	0.1754
	Std. Deviation	0.1678	0.1323
Dividend Yield ratio	**Mean**	71.4881	5.5065
	Std. Deviation	139.4091	8.4814
CSR Spend	**Mean**	0.0239	0.0225
	Std. Deviation	0.0184	0.0066

Table 5.18 shows MNC vs nationally-located classification based descriptive statistics of financial performance variables for the year 2019. The mean beta score of nationally-located (.9817) is higher than MNCs (.9000). The closing price, mean score of nationally-located 1921.330 is less than MNC mean score (4267.6364). In the case of market capitalization, nationally-located companies average score is 1157763.9996, and for MNCs, it is 826785.7191, which shows that nationally-located companies have more market capitalization value than MNC. Considering enterprise values mean score of nationally-located (1303895.8207) and MNC (791532.6009), it can be seen that the average score of nationally-located is more than MNC's. Earnings per share mean for nationally-located (79.2350) and MNC (108.6591) shows that MNC's are making more money than nationally-located for each share. For the price to earnings ratio, nationally-located companies mean is 44.5182, and for MNC, it is 54.5245. This indicates that investors are willing to pay more for MNCs shares than for nationally-located companies share. The price by book ratio mean score for nationally-located is 5.6217, and for MNC, it is 15.1145. The total debt ratio of nationally-located companies, mean score is 130675.2263 and MNC it is 2699.6636, indicating that debt is more in nationally-located companies. For Tobin's Q mean for nationally-located companies is 3.1386, and for MNC, it is 6.3110. This depicts that MNCs are relatively worth more than the cost of their assets. For return on equity ratio, the nationally-located companies average score is 0.1438, and

for MNC's it is 0.2841. This concludes that the return on equity ratio of MNCs is more than the nationally-located company. The mean score of earnings before interest in tax of nationally-located companies' (66964.724) is more than MNC's mean (28601.88818). This indicates that nationally-located companies have more EBIT than MNC's. Return on capital employed average for nationally-located companies (0.1594) is less than MNC's (0.3049), indicating that MNC's generate more profit from its capital employed than nationally-located companies. Return on assets ratio mean values of nationally-located companies (0.0925) is lesser than MNCs (0.1398), it can be concluded that MNCs are utilizing their assets more efficiently to generate profit than nationally-located companies. In return on sales ratio, nationally-located companies mean (0.2172) is more than MNC's (0.1754), showing that nationally-located companies can convert their revenues into profit more efficiently than MNC. The dividend yield ratio mean for nationally-located companies (71.4881) is relatively higher than the mean score of nationally-located companies (5.5065). This shows that nationally-located companies are paying more to their shareholders per share price as dividends. Considering CSR spent mean for nationally-located companies 0.0239 and MNC's 0.025, there is not much difference in average score.

Table 5.19- Ownership-wise Descriptive Statistics of Financial Performance Variables of F.Y. 2019

		Statistic		
		Promoter-owned vs Institutional vs Widely-held ownership		
		Promoter-owned	Institutional	Widely-held
Beta-Measure of volatility	**Mean**	.9488	1.0400	1.0140
	Std. Deviation	.41120	.39219	.37421
Closing Price	**Mean**	1771.0400	973.1956	12420.2300
	Std. Deviation	3536.3481	643.0785	25492.9428
Market	**Mean**	990278.6275	1750734.2094	438731.7900

Capitalization	**Std. Deviation**	1414948.1085	1624180.3528	135529.8989
Enterprise Value	**Mean**	1049685.1150	2115754.3983	507902.8900
	Std. Deviation	1509525.7880	1897859.1693	205472.0655
Earning Per share	**Mean**	54.8145	46.6367	573.9040
	Std. Deviation	125.70815	47.10560	1171.54235
Price to Earning ratio	**Mean**	50.4447	36.2217	20.5400
	Std. Deviation	76.06435	41.31344	12.60522
Price by book ratio	**Mean**	7.9891	3.9294	2.2960
	Std. Deviation	9.7942	1.7267	1.0555
Total Debt ratio	**Mean**	140673.1484	19955.5111	119746.5600
	Std. Deviation	349250.7407	52403.7847	150983.2450
TobinsQ	**Mean**	4.2387	1.6384	1.4380
	Std. Deviation	5.8584	1.4568	1.0513
Return on Equity ratio	**Mean**	0.1834	0.0906	0.1364
	Std. Deviation	0.1541	0.0959	0.0468
Earning before interest and tax	**Mean**	56380.711	82327.233	62736.660
	Std. Deviation	93716.9476	80090.7798	64310.7488
Return on Capital Employed	**Mean**	0.1975	0.1163	0.1473
	Std. Deviation	0.1666	0.1259	0.0295
Return on Assets ratio	**Mean**	0.1102	0.0639	0.0734
	Std. Deviation	0.0965	0.0686	0.0168
	Minimum	-0.0201	0.0035	0.0575
	Maximum	0.5471	0.1852	0.0996
Return on Sales ratio	**Mean**	0.2232	0.1917	0.1399
	Std. Deviation	0.1789	0.1146	0.0761
Dividend Yield ratio	**Mean**	75.0420	33.8782	16.2340
	Std. Deviation	149.0977	60.5951	21.0521
CSR Spend	**Mean**	0.0236	0.0212	0.0354
	Std. Deviation	0.0173	0.0142	0.0262

Table 5.19 shows ownership-wise differences in descriptive statistics of financial performance variables for the financial year 2019. As stated earlier, ownership has been categorized into three i.e. promoter-owned, institutional-owned and widely-held. The average beta score for promoter-owned (0.9488) is less than institutional (1.0400) and widely-held (1.0140). The closing price mean score for widely-held (12420.2300) is

higher than promoter-owned (1771.0400) and institutional-owned (973.1956) companies. Market capitalization average score is highest for institutional-owned (1750734.2094), promoter-owned (990278.6275), and lowest for widely-held (438731.7900) companies. Enterprise value mean of promoter-owned companies is 1049685.1150, for institutional is 2115754.3983 and for widely-held is 507902.8900. Earnings per share mean score is highest for widely-held (57.9040) than promoter-owned (54.8145) and institutional-owned (46.6367) companies. Price to earnings ratios, promoter-owned (50.4447), institutional (36.2217) and widely-held (20.5400) shows that promoter-owned companies offer a better return and thus, investors will be willing to pay more for promoter-owned companies shares than institutional and widely-held. Price by book ratio mean score for promoter-owned (7.9891) is higher than institutional (3.9294) and widely-held (2.2960). Total debt ratio mean for promoter-owned (140673.1484), institutional (19955.5111) and widely-held (119746.5600) indicates that institutional owned companies have less debt whereas promoter-owned owned companies have the highest debt. From Tobin's Q mean for promoter-owned companies (4.2387), institutional (1.6384) and widely-held (1.4380) it can be concluded that promoter-owned owned companies have the highest Tobin's Q, indicating that promoter-owned owned companies market value is greater than the value of recorded assets. From a return on equity ratio mean value for promoter-owned companies (0.1834), institutional-owned (0.0906) and widely-held (0.1364) companies it can be understood that promoter-owned owned companies are utilizing their equity capital to generate profit more effectively. Earnings before interest in tax mean for institutional (82327.233) is higher than widely-held (62736.660) and promoter-owned owned (56380.711), shows that institutional owned companies generate high revenues before

interest and tax. Looking at return on capital employed, promoter-owned owned companies' score (0.1974) is higher than widely-held (0.1473) and institution-owned (0.1163), indicating that promoter-owned owned companies generate higher returns for their shareholders than widely-held and institutional owned companies. Return on assets ratio average score of promoter-owned companies (0.1102), institutional (0.0639) and widely-held (0.0734) companies, it can be inferred that promoter-owned companies are more efficient in generating a return from their assets than institutional and widely-held. Return on sales ratio mean for promoter-owned (0.2232), institutional-owned (0.1917) and widely-held (0.1399). This shows that promoter-owned companies are generating relatively high returns from their sales. The dividend yield ratio mean for promoter-owned is 75.0420, institutional is 33.8782, and widely-held is 16.2340. This concludes that promoter-owned companies give more dividends to their shareholders when compared to institutional and widely-held. CSR spend mean for promoter-owned is 0.0236, for institutional owned 0.0212 and four widely-held it is 0.0354. This shows that widely-held companies are investing more in CSR activities than promoter-owned companies and institutional owned companies.

Table 5.20- Industry-wise Descriptive Statistics of Financial Performance Variables of F.Y. 2019

		Statistic								
		Industry Classification								
		Health Care	Information Technology	Financials	Consumer Staples	Energy	Materials	Consumer Discretionary	Industrials	Utilities and Telecom
Beta- Measure of volatility	**Mean**	.6650	.3717	1.0881	.5450	1.0370	1.2479	.9938	1.3556	.8233
	Std. Deviation	.12112	.08208	.39815	.23491	.19414	.38702	.18697	.31504	.31723
Closing Price	**Mean**	914.2200	1284.6217	1497.2225	2064.7700	333.7170	2123.8236	7257.8362	789.1556	214.6500
	Std. Deviation	934.9252	1191.4842	1712.5517	3198.3789	365.6033	4874.6055	16008.4971	546.5600	164.5448
Market Capitalization	**Mean**	400604.79	2469550.840	1550740.475	1196528.133	1763594.261	678648.3079	657130.5038	583068.3444	719771.1867
	Std. Deviation	55552.7320	2665647.8093	1591830.5666	1317437.1351	2485487.2804	332261.4509	471584.6176	539212.0386	555132.8154
Enterprise Value	**Mean**	394493.11	2342613.790	2251551.618	1171823.583	1972537.181	681518.6079	543670.8192	523238.0667	864580.7533
	Std. Deviation	87803.5776	2516122.0476	1853108.8500	1270852.0198	2769638.2700	381827.5114	544703.9840	428634.3065	697366.8312
Earning Per share	**Mean**	27.7067	59.8450	41.1863	27.6250	26.1480	47.7521	362.1415	12.2300	2.8833
	Std. Deviation	24.61114	42.51039	34.65944	35.11188	13.24408	84.41811	733.62381	14.04657	11.69518
Price to Earning ratio	**Mean**	43.2983	21.5017	55.2681	64.6980	12.5900	51.8121	64.5400	37.8922	10.5867
	Std. Deviation	33.99278	3.37150	84.25356	20.29257	5.43506	49.63070	132.84341	37.26582	10.55514
Price by book ratio	**Mean**	3.6600	6.0550	5.8244	22.4110	2.6500	4.7671	5.5554	5.1856	1.9300
	Std. Deviation	1.1060	3.0605	8.1767	14.2160	2.6492	5.2037	4.0195	3.3749	1.4575

Total Debt ratio	**Mean**	15467.433	9365.8333	104333.5063	3964.0100	482397.7200	121365.4500	9422.7462	47683.4000	342765.9667
	Std. Deviation	20029.4766	20604.6151	365460.0345	8001.1865	605243.2201	160411.9211	11735.1655	84852.9919	438916.2570
TobinsQ	**Mean**	2.3322	4.1778	3.1320	10.7871	1.4126	2.5075	3.0531	2.0184	1.2748
	Std. Deviation	0.6096	1.9953	8.5223	6.0467	2.2282	2.9707	2.1066	1.8083	1.3142
Return on Equity ratio	**Mean**	0.1146	0.2635	0.0289	0.3654	0.2084	0.1303	0.1849	0.1228	0.0828
	Std. Deviation	0.0367	0.0822	0.0475	0.1869	0.1952	0.0815	0.0763	0.0617	0.0984
Earning before interest and tax	**Mean**	18081.867	146410.867	63459.488	37000.120	166874.340	47067.364	36157.092	24497.233	4475.267
	Std. Deviation	6881.8651	141227.4212	76546.0888	56702.8534	155247.8229	48843.7221	27095.6211	24929.1818	49429.2757
Return on Capital Employed	**Mean**	0.1332	0.3446	0.0323	0.3774	0.1784	0.1353	0.2458	0.1327	0.0815
	Std. Deviation	0.0315	0.1261	0.0248	0.2151	0.1498	0.1006	0.1083	0.0825	0.1289
Return on Assets ratio	**Mean**	0.0822	0.2062	0.0222	0.1944	0.1142	0.0760	0.1251	0.0584	0.0620
	Std. Deviation	0.0149	0.0747	0.0246	0.0767	0.1542	0.0520	0.0610	0.0345	0.0818
Return on Sales ratio	**Mean**	0.1884	0.3092	0.2754	0.1946	0.1998	0.1868	0.1906	0.1529	0.2097
	Std. Deviation	0.0360	0.1256	0.1791	0.0972	0.2654	0.1506	0.1391	0.1466	0.2686
Dividend Yield ratio	**Mean**	3.8768	50.2391	23.5902	31.2457	241.6015	80.0243	14.3137	19.1985	194.6181
	Std. Deviation	3.3637	67.7399	55.5143	64.4306	246.8128	147.1436	25.4015	29.4066	186.0497
CSR Spend	**Mean**	0.0235	0.0191	0.0185	0.0205	0.0290	0.0347	0.0193	0.0276	0.0112
	Std. Deviation	0.0118	0.0019	0.0073	0.0010	0.0222	0.0241	0.0049	0.0325	0.0068

Table 5.20 presents industry-wise descriptive statistics of financial performance variables for the financial year 2019. The industry has been classified under nine heads: healthcare, information technology, financials, consumer staples, energy, materials, consumer discretionary, industrials and utilities, and telecoms. This table presents descriptive statistics of 15 financial performance variables for above mentioned nine industries.

Beta, which is considered as a measure of volatility, under this, the highest mean score is of industrials (1.3556), followed by materials (1.2479), financials (1.0881), energy (1.0370), consumer discretionary (0.9938), utilities and telecom (0.8233), health care (0.6650), consumer staples (0.5450) and information technology (0.3717) is last. This indicates that the industrials sector is riskier than other industries, and the information technology industry has the least risk. For the closing price, the mean value of healthcare is 914.220, information technology is 1284.6217, financials is 1497.2225, consumer staples is 2064.7700, energy is 333.7170, materials is 2123.8236, consumer discretionary is 7257.8362, industrials are 789.1556 and utilities and telecom is 214.6500. This shows that the highest mean score is of consumer discretionary, and the least is of utilities and telecom. The highest standard deviation is consumer discretionary (16008.4971), whereas the least value of standard deviation is utilities and telecom (164.5448). The information technology average score w.r.t. market cap, (that defines the size of the entity), is the highest (246950.8400), and the least is of industrials (583068.3444). Enterprise value mean score for healthcare is 394493.113 for information technology it is 2342613.7900, financials it is 2251551.6188, consumer staples are 1171823.5830, energy is 1972537.1810, materials is 681518.6073, consumer discretionary is 543670.8192, industrial is 523238.0667 and utilities in telecom is 864580.7533. This depicts that the

highest mean score is of information technology, and the healthcare industry has the least mean score. For earning per share, consumer discretionary have the highest mean score (362.1415), and the least is of utilities and telecom (2.8833). Whereas the highest standard deviation value showing maximum dispersion is consumer discretionary (733.62381), and the least is of utilities and telecom (11.69518). Price to earnings ratio average scores shows highest average score is of consumer staples (64.6980), followed by consumer discretionary (64.5400,) financials (55.2681), materials (51.8121), healthcare (43.2983), industrials (37.8922), information technology (21.5017), energy (12.5900) and at last utilities and telecom (10.5867). Standard deviation values of price to earnings ratio is least for information technology (3.37150) and highest of consumer discretionary (132.84341), showing highest dispersion. Price by book ratio mean score of health care is 3.6600, information technology is 6.0550, financial is 5.8244, consumers staples is 22.4110, energy is 2.6500, materials is 4.7671, consumer discretionary is 5.5554, industrials are 5.1856 and utilities and telecom is 1.9300. This shows that the highest mean score is of consumer staples. The total debt ratio highest mean score is of energy (482397.7200), second is of utilities and telecom (342765.9667), third is of materials (121365.4500), financials (104333.5063), industrials (47683.4000), health care (15 467.4333), information technology (9365.8333), consumer discretionary (9422.7462) and at last consumer staples (3964.0100). Tobin's Q highest average score is of consumer staples (10.7871), second is information technology (414.1778), financials (3.1320), consumer discretionary (3.0531), materials (2.5075), health care (2.3322), industrials (2.0184), energy (1.4126) and at last utilities and telecom (1.2784). The highest standard deviation is of financials (8.5223) and the least dispersion standard deviation in the healthcare

industry (0.6096). From a return on equity ratio, it can be seen that the highest mean score is of consumer staples (0.3654) and the least mean score is of utilities and telecom (0.0828). Earnings before interest in tax average scores tell that the highest mean score is of energy (166874.340), second is (146410.867) of information technology, third is of financials (63459.488), fourth (47067.364) is of materials, the fifth position is of consumer staples (37000.120), consumer discretionary (36147.092), industrials (24497.233), health care (18081.867) and least score is of utilities and telecom (4475.267). Return on capital employed average score of healthcare industry is 0.1 332, for information technology it is 0.3446, financials 0.0323, consumer staples 0.3774, energy 0.1784, materials 0.1353, health care 0.1322, industrials 0.1327, utilities and telecom 0.0815 and financials 0.0323. Return on assets ratio mean score of healthcare is 0.0822, information technology is 0.2062, financials is 0.0222, consumer staples is 0.1944, energy is 0.1142, materials is 0.0760, consumer discretionary is 0.1251, industrials is 0.0584 and utilities and telecom is 0.0620. This indicates that the highest mean score for return of asset ratio is of information technology, and the least average score is of industrials. The return on sales ratio mean value for health care is 0.1884, for information technology is 0.30924,for financials is 0.2754, for consumer staples is 0.19464, for energy is 0.1998, for materials is 0.1868, for consumer discretionary, it is 0.19064, for industrial it is 0.1529, and for utilities and telecom, it is 0.2097. This shows that the highest average score is of information technology and the least score is of industrials. Dividend yield ratio highest mean score is of the energy sector (241.6015), the second position is of utilities and telecom (194.6181), third is materials (80.0243), fourth is information technology (50.2391), followed by consumer staples (31.2457), financials

(23.5902), industrials (19.1985), consumer discretionary (14.3137)and last healthcare (3.8768). Looking at CSR average scores, healthcare average score is 0.0235, information technology is 0.0191, financials is 0.0185, consumer staples is 0.0205, for energy, it is 0.0290, for materials 0.0347, consumer discretionary is 0.0193, and utilities and telecom is 0.0112. The highest score is for materials, 0.0347, and the lowest score is for utilities and telecom. The standard deviation highest standard deviation is in the industry energy 0.0222, and the least deviation is in consumer staples 0.0010.

Table 5.21- ANOVA Results of Demographic Characteristics wise Differences in Financial Performance Variables

	2019									
	Age		Private vs PSU		MNC vs. nationally-located		Ownership		Industry Sector	
	F	Sign	F	Sign	F	Sign	F	Sign	F	Sign
Beta-Measure of volatility	6.220	**.001**	1.890	.172	.037	.849	.037	.849	6.255	**.000**
Closing Price	1.574	.201	2.048	.156	1.626	.205	1.626	.205	1.277	.265
Market Capitalization	2.335	**.049**	1.173	.281	.347	.557	.347	.557	1.946	**.042**
Enterprise Value	3.369	**.022**	.904	.344	.663	.418	.663	.418	1.942	**.043**
Earning Per share	1.200	.314	1.235	.269	.206	.651	.206	.651	1.959	**.041**
Price to Earning ratio	.820	.486	6.735	**.011**	.531	.468	.531	.468	.820	.587
TobinsQ	1.532	.212	4.841	**.030**	4.450	**.038**	4.450	**.038**	4.119	**.000**
Return on Equity	1.688	.175	.100	.753	11.607	**.001**	11.607	**.001**	10.334	**.000**
Earnings before interest and tax	1.240	.300	1.975	.163	1.203	.276	1.203	.276	4.943	**.000**
Return on Capital Employed	1.895	.136	.566	.454	10.771	**.001**	10.771	**.001**	10.946	**.000**
Return on Assets ratio	1.263	.292	.149	.701	3.658	**.039**	3.658	**.049**	8.133	**.000**
Return on Sales	1.134	.340	.010	.920	.142	.707	.142	.707	.885	.533
Dividend Yield	1.684	.176	28.854	**.000**	2.165	.145	2.165	.145	4.715	**.000**
CSR Spend	1.820	.150	3.461	**.046**	.069	.793	.069	.793	1.537	.158
Price to Book Ratio	1.255	.294	7.570	.007	16.962	**.000**	16.962	**.000**	9.228	**.000**
Total Debt Ratio	1.099	.354	6.717	**.011**	1.901	.171	1.901	.171	4.033	**.000**

Table 5.21 shows ANOVA results of demographic characteristics wise differences in financial performance variables. However, Levene test for homogeneity of variance was performed before ANOVA and all values were found to be insignificant.

For ANOVA Sixteen financial performance variables have been considered in the test. The demographic wise profile includes the age of the company, private vs PSU, nationally-located vs MNC status, promoter-owned, institutional-owned and widely-held ownership and industrial sector.

For age-wise classification of beta, F value (6.220) is significant at 0.05 level of significance, indicating that null hypothesis is not supported and there is a significant difference between beta scores of companies belonging to various age groups. For market capitalization and age, the F value is 2.335, which is significant at a 0.05 level of significance, thus the null hypothesis is rejected, and there is a significant difference between the market capitalisation of companies of different age groups. As per F value for enterprise value, 3.369, which is significant at a 5 percent level of significance, indicating that enterprise value significantly differs age-wise. Thus *null hypothesis* $H_{07a}$is partially supported for beta, enterprise value and market capitalization. The results suggest that out of four age group categories, category 50-75 years is significantly different from the rest of the age groups. For enterprise value, companies which belong to the age group of 25-50 years are significantly different from the rest of the groups. Based on the age-wise classification, other financial variables do not show a significant difference in their characteristics.

For Nationally-located vs MNC ownership, ANOVA results suggest that nationally-located and MNC wise there is a significant difference in five variables. F values of Tobin's Q (4.450), Return on equity (11.607), return on capital employed (10.771), return on asset ratio (3.658) and price by book ratio(16.962) are significantly different for different companies. Thus *null hypothesis*H_{07b} is partially supported. For classification

related to nationally-located companies and MNCs, the results of ANOVA were found to be statistically significantly different for Tobin's Q, return on equity, return on capital employed, return on assets ratio, and price to book ratio.

Considering private vs PSU classification, F value is significantly different for the price to earnings ratio (F=6.735), Tobin's Q (F=4.841), dividend yield (F=28.854) and CSR spending (F=3.461). So, *null hypothesis*$H_{07c}$is partially supported. ANOVA results were found to be significantly different for the price to earnings ratio, Tobin's Q, dividend yield, CSR spending, and total debt ratio between the private companies and PSUs. This indicated that private sector vs PSUs classification has an impact on the financial performance of companies.

ANOVA results for ownership-wise classification of financial performance variables indicate that Tobin's Q (F=4.450), return on equity (F=11.607), return on capital employed (F=10.771), return on assets (F=3.658) and price to book ratio (F=16.962) are significantly different for classification of companies based on ownership. Thus null hypothesisH_{07d} is partially supported.

For the industry sector, beta F value is 6.255, which is significant at a 0.05 level of significance, indicating that the null hypothesis is rejected and there is a significant difference between the beta and industrial sectors. Similarly, the closing price F value is 1.277, showing that it is not significant at the 0.05 level of significance, thus accepting the null hypothesis that there is no relationship between the closing price and the industry sector. For market capitalization, the F value is 1.946, which is significant at a 0.05 level of significance. Considering enterprise value and ANOVA test, results show F value 1.942 as significant at 0.05 level of significance, at null hypothesis is rejected and there

is a significant difference between enterprise value and industry score. For earnings per share, F value is 1.959 which is significant at a 0.05 level of significance indicates that the null hypothesis is rejected and concludes a significant difference between earnings per share and industry sector score. The price to earnings ratio and ANOVA results show no significant difference between the price to earnings ratio and industry sector score as F value is .820 which is not significant at the 0.05 level. Thus, the hypothesis is accepted that there is no relationship between price to earnings ratio and the industry sector. ANOVA results for Tobin's Q shows that the F value is 4.119, which is significant at 0.05 Similarly, the return on equity F value is 10.334, which is significant at 0.05 level. Earnings before interest in tax F value is 4.943, return on capital employed F value is 10.946, return on assets F value is 8.133, dividend yield F value is 4.715, price to book ratio F value 9.228, the total debt ratio of value 4.033, shows that these F values are significant at 0.05 level of significance. Thus *null hypothesis*$H_{07e}$is partially supported.

Table 5.22- Duncan Post Hoc Test Results of Demographic characteristics wise Differences in Financial Performance Variables

	2019				
	Age	**Private vs PSU**	**MNC vs nationally-located**	**Ownership**	**Industry Sector**
Beta-Measure of volatility	50-75 years				IT, financial, utility, consumer discretionary, materials, industrial
Closing Price					
Market Capitalization					
Enterprise Value 2019	25-50 years				
Earnings Per share					
Price to Earnings ratio		Private vs PSU			
TobinsQ		Private vs	nationally-	Institutional	Consumer Staples

		PSU	located vs MNC		
Return on Equity			nationally-located vs MNC	Widely-held	Ulitiy, Financial, Industrial, Consumer staples, IT Energy
Earnings before interest and tax					Energy and Utility
Return on Capital Employed			nationally-located vs MNC	Institutional	Consumer staples, financial, energy
Return on Assets ratio			nationally-located vs MNC	Widely-held	Financials, Energy, IT, consumer staples.
Return on Sales					
Dividend Yield		Private vs PSU			Energy, Healthcare and Utilities
CSR Spend		Private vs PSU			
Price to Book Ratio					Energy and Utilities
Total Debt Ratio					Consumer Staples

Table 5.22 shows the Duncan post-hoc test results for demographic characteristics differences in financial performance variables. Regarding the promoter-owned, institutional-owned and widely-held ownership category, return on equity is significantly different for widely-held companies. Return on capital employed is significantly different for institutional-owned companies as compared to the rest of the two groups. Return on assets is statistically significantly different for companies with widely-held ownership from the rest of the two groups.

For different industry sectors, beta is statistically significantly different for Information technology, financial companies, utility and telecom companies, consumer discretionary, materials, and industrial sector companies. Tobin's Q is found to be significantly different for consumer staples. Return on equity is statistically significantly different with an F value of 10.334, which is statistically significantly different at the 0.05 percent level of significance for utility and telecom, financials, industrial sector, consumer staples, the

information technology sector, and energy sectors. Interest before interest tax was found to be statistically significantly different for the energy and utility sector. Return on capital employed is significantly different for consumer staples financial sector to sector companies. A return on assets is statistically significantly different for the financial sector and the sector and consumer staple sector. The dividend yield for companies was found to be statistically different for energy, healthcare and utility and telecom companies. Return on assets is statistically significantly different for the financial sector, IT sector, and consumer staple sector. The dividend yield for companies was found to be different for Energy, healthcare and utility and telecom sectors. The price to book ratio is different for the energy and utility and telecom sectors. The total debt ratio was found to be statistically significantly different for the consumer staple sector. This implies that the *null hypothesis*(H_{07e}) that there is no difference between the industrial sector-wise classification of financial performance variables is, rejected. And for most of the variables, the companies which belong to different industrial sectors usually will have different levels of financial performance. This indicates that the industrial sector can be an important variable, which can influence the performance of companies.

Overall it can be concluded that null hypothesisH_{07}that there is no difference in the demographic characteristics and their FP variables is partially supported.

5.2.2.3 Descriptive Statistics of Five Year CAGR Values of Financial Performance Variables

In this sub-section, financial performance variables data were taken for five years (2015-2019) have been used to calculate CAGR, which will normalize any abnormal values in the financial performance of companies.

Table 5.23- Descriptive Statistics of 5-year CAGR Values of Financial Performance

	Minimum	Maximum	Mean	Std. Deviation
Beta-Measure of volatility	-0.1194	0.1967	0.0189	0.0536
Closing Price	-0.3032	0.4908	0.0632	0.1192
Market Capitalization	-0.1969	0.5337	0.0723	0.1180
Enterprise Value	-1.5453	0.6322	0.0571	0.2104
Earnings Per share	-3.3173	0.6182	-0.1933	0.6394
Price to Earnings ratio	-1.0000	0.5129	-0.0487	0.2730
Price by book ratio	-0.2738	0.3218	-0.0258	0.1008
Total Debt ratio	-1.0000	0.8709	-0.0847	0.4628
TobinsQ	-1.5358	0.5705	-0.0261	0.1965
Return on Equity ratio	-2.1151	0.9836	-0.1678	0.4866
EBIT	-2.3246	3.2020	-0.0341	0.6340
Return on Capital Employed	-1.9680	0.6426	-0.1465	0.4800
Return on Assets ratio	-2.0319	0.9926	-0.1330	0.4810
Return on Sales ratio	-2.2495	0.2741	-0.1251	0.4865
Dividend Yield	-1.0000	0.4731	-0.0473	0.3072
CSR Spend	-0.1031	1.1746	0.1104	0.2010

Table 5.23 depicts descriptive statistics of 5-year compound annual growth rate (CAGR) values of financial performance variables of 100 companies. The beta mean value is 0.0189, and the standard deviation value is 0.0536. The closing price mean value is 0.0632. The average score value for market capitalization is 0.0723, enterprise value mean score is 0.0571. The earnings per share mean are -0.1933, whereas the standard deviation is 0.6394. Price to earnings ratios average score is -0.0487, and standard deviation value is 0.2730, price to book ratio mean is -00258. The total debt ratio mean is -0.847. Tobin's Q mean score is -0.0261, Return on equity ratio mean is -0.1678, EBIT average is -0.0341, return on capital employed mean value is -0.1465, the standard deviation is 0.4800, return on asset ratio average value is -0.1330, return on sales mean is -0.1251, dividend yield

mean is -0.0473, and the standard deviation is 0.3072 and CSR spend average value is 0.1104 whereas standard deviation is 0.2010.

It can be concluded that only beta, closing price, market capitalization, enterprise value, and CSR spend average scores were positive.

5.2.3 Analysis of Social Performance

This sub-section relates to the social performance variable computed using a scoresheet for calculating corporate social responsibility performance of sample 100 NIFTY companies. The total CSP score computed has been named as the social performance variable.

The social performance or corporate social responsibility is an essential indicator of sustainable and prosperous practices followed by companies. It has a close relationship with the FP of companies as it impacts the future profits, perception and brand value of the company. Good social performance is generally linked with companies with good CG practices that fulfil the norms, believe in equality, transparency, full disclosure, and protect the rights of stakeholders. Thus, these three variables, namely CG practices, financial performance and social performance, are closely knit.

The CSP has been analysed for its characteristics and its relationship with demographic factors and CG practices of companies.

5.2.3.1 Descriptive Statistics

The descriptive statistics of the social performance variable has been reported in Table 5.24.

Table 5.24- Descriptive Statistics of Corporate Social Performance Score

		Mean	Std. Deviation	Minimum	Maximum
Age	**0-25 Years**	20.7368	2.66338	17.00	25.00
	25-50 Years	21.0217	2.82441	14.00	29.00
	50- 75 Years	22.4286	1.88604	19.00	26.00
	Above 75 Years	21.8571	2.56776	14.00	24.00
Private vs PSU ownership	**Private**	21.2785	2.54668	14.00	26.00
	PSU	21.7619	2.94796	14.00	29.00
MNCs vs Nationally-located ownership	**Nationally-located**	21.2360	2.71788	14.00	29.00
	MNC	22.5455	1.29334	20.00	24.00
Promoter-owned vs Institutional vs Widely-held ownership	**Promoter-owned**	21.6316	2.62725	14.00	29.00
	Institutional	20.2778	2.67462	15.00	24.00
	Widely-held	21.5000	1.87083	19.00	24.00
Industry Classification	**HealthCare**	21.0000	2.23607	17.00	23.00
	Information Technology	21.3333	2.42212	17.00	23.00
	Financials	19.7200	2.90861	14.00	24.00
	Consumer Staples	22.0000	2.10819	17.00	24.00
	Energy	21.9000	1.52388	19.00	24.00
	Materials	23.7333	1.75119	21.00	29.00
	Consumer Discretionary	21.0000	3.03822	14.00	26.00
	Industrials	22.2222	1.30171	20.00	24.00
	Utilities and Telecom	20.2500	1.89297	19.00	23.00
Corporate Governance practices	**Leadership**	20.2500	2.06155	18.00	22.00
	Good	21.3333	2.67478	15.00	29.00
	Fair	21.6383	2.54887	14.00	26.00
	Basic	20.5714	3.30944	17.00	24.00

Table 5.24 presents descriptive statistics of the corporate social performance score. To understand the nature of CSR score, the classification has been done into various demographic groups like age, private vs PSU categories, MNC vs nationally-located, ownership wise, industry sector-wise and CG practices.

For the age group, 0-25 years means score is 20.7368, 25-50 years is 21.017, 50-75 years is 22.486 and for above 75 years average score is21.8571.This shows that the average score of 50-75 years is relatively higher than other age groups. This implies that 50–75-years companies contribute more towards CSR activities than other age groups. Standard deviation is maximum among 25-50 years (2.82441) and the least standard deviation is for 50-75 years (1.88604). PSU vs private sector status scores shows that average scores of PSUs (21.7619) is higher as compared to private sector companies (21.2785). The standard deviation for private is 2.94796 and for PSU it is 2.54668. With respect to MNC and nationally-located status, it was found that MNC average score (22.5455) is relatively higher than the nationally-located status (21.2360).In the case of ownership-wise differences highest average score is of promoter-owned (21.6316) companies followed by widely-held (21.500) and institutional-owned is at last 20.2778. The standard deviation of promoter-owned is 2.62725, institutional-owned is 2.67462 and widely-held is 1.87083. Under the CG practices category, fair category practices have the highest mean score (21.6383), second highest mean score is of good category practice (21.333) followed by basic (20.5714) and leadership (20.2500) at last. Leadership category scores have the least dispersion 2.06155 whereas basic category practices have a higher standard deviation value 3.30944.

As per industry sector classification, the highest average score is of materials 23.7333, followed by industrials 22.2222, consumer staples 22.0000, energy 21.9000, information technology 21.3333, consumer discretionary 21.0000 and utilities and telecom 20.2500. The highest standard deviation value is of consumer discriminatory 3.03822 and least standard deviation value is of industrials 1.30171.

It can be summarized that companies within 50–75-years age group contribute more towards CSR activities than other age groups. PSUs have better social performance scores as compared to private sector companies. MNCs have better CSR scores as compared to nationally-located status. Promoter-owned companies contribute more in social performance. Industrial-sector wise classification shows that CSR scores are highest for the materials sector, industrials sector, and consumer staples sector. As per the relationship of CG practices with social performance scores, it is found that companies with fair CG practices and good CG practices have better social performance than other groups.

5.2.3.2 Demographic Characteristics wise Differences in Social Performance Variable

The demographic characteristics wise differences of CSP score have been analysed on the basis of age, MNC vs. nationally-located status, ownership, private vs. PSU, industrial sector and CG total score.

Table 5.25- ANOVA results of Demographic Wise Differences in Social Performance Score

	F	Sig.
Age	1.991	.120
MNC vs. Nationally-located	2.467	.119
Ownership	1.976	.144
Industrial Sector	3.856	**.001**
Corporate Governance total Score	.616	.606
PSU vs. Private	.559	.456

Table 5.25 presents ANOVA results for the demographic wise difference in CSP score. The table shows that for age-wise distribution of companies and their CSP score, F value 1.991 is insignificant at 0.05 level of significance. This indicates that the *null hypothesis*

$H_{08a}$is accepted, and there is no significant difference between the company's corporate social performance score and age.

Ownership-wise differences in CSR score also show insignificant ANOVA results thus, the *null hypothesis* $H_{08b}$is supported. ANOVA test result for private vs PSU shows that F value is 0.559 is not significant at 0.05 level of significance. This indicates no significant relationship between corporate social performance score and PSU versus private sector companies. Thus, accepting the *null hypothesis* (H_{08c}) is supported. For MNC vs. nationally-located status *null hypothesis* (H_{08d})is accepted that there is no significant difference between corporate social performance score and MNC vs nationally-located classification of companies as ANOVA result shows that F value (2.467) is not significant at 0.05 level of significance. For industrial sector-wise classification of CSR score, F value (3.856) is significant at 0.05 level of significance, which shows that *null hypothesis* (H_{08e}) is rejected and there is a significant difference between corporate social performance score and industrial sector-wise classification of companies. Similarly, for CSR spending and CG score, ANOVA results show an insignificant value(0.616)which is not significant at 0.05 level of significance. Thus, the *null hypothesis* (H_{09}) is supported, and it is found that CG practices do not influence social performance scores.

Table 5.26- Duncan Post Hoc Test Result of Social Performance Score

Industry Classification	N	Subset for alpha = 0.05	
		1	2
Financials	25	19.7200	
Utilities and Telecom	4	20.2500	
HealthCare	7	21.0000	
Consumer Discretionary	14	21.0000	
Information Technology	6	21.3333	21.3333
Energy	10	21.9000	21.9000

Consumer Staples	10	22.0000	22.0000
Industrials	9	22.2222	22.2222
Materials	15		23.7333
Sig.		.064	.063
Means for groups in homogeneous subsets are displayed.			
a. Uses Harmonic Mean Sample Size = 8.582.			
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.			

The results of Duncan post hoc test for industrial sector-wise classification of social performance variable is shown in Table 5.26. The results show that the Industry sectors are found to be statistically significantly different with F value of 3.856, which is statistically significantly different at 0.05 percent level of significance.

This shows that the null hypothesis is rejected and there is a significant difference in the industry sector wise classification of companies and CSP score. Two homogeneous subsets are formed as per post hoc results, according to subset 1 mean values; results reveal that there is a statistically significant difference between financial, utilities and telecom, health care, consumer discretionary and materials.

It can be concluded that the null hypothesis *(H_{08})* is partially supported for the industrial sector-wise classification of companies and their CSR initiatives. The null hypothesis *(H_{09})* is supported, and it is found that CG practices do not influence corporate social performance scores.

5.3 Conclusion

The analysis of CG scores reveals that companies have scored reasonably well in the total CG practices (average score is 74.252) and in its four categories. However, in Category – II, companies have scored the least (minimum = 11.1), and the standard deviation is also

highest in this category (16.1151). In Categories II and III, companies have obtained a maximum score of 100. Age-wise analysis of companies shows that above 75 years age group companies have better CG practices as their mean score is the highest mean score in all the categories. Thus, it can be inferred that the above 75 years age group of companies have better CG practices than any other age group company. From maximum values, we can conclude that in category I and IV, none of the age group companies have secured 100 scores; however, in category II except 50-75 years companies, all other age group companies have obtained 100 scores. For category III only 0-25 years companies have got 100score in CG practices. Private companies mean CG scores are better than PSU in categories I, II and IV. However, in category III, PSUs have better average scores. Thus, indicating that except in category three i.e. disclosure and transparency, private companies have better practices. Nationally-located companies have better CG practices as compared to MNCs. However, in category II average score of MNCs is higher than nationally-located companies. Ownership wise, it was found that widely-held companies have the highest CG total scores compared to promoter-owned and institutional-owned companies. The category I, category II and category III scores are also better for widely held companies. Under category IV, institutional-owned companies have better scores. The industrial sector-wise classification shows that the IT sector has a relatively high score than other industries. The healthcare sector, financial, materials have similar kind of CG practices. Under category I mean score of energy (73.698) is highest, category II scores are best for consumer staples (81.667), in category III, the energy sector is performing the best, and in category IV financial sector has the highest mean score (69.986). The overall

analysis concludes that there are many differences in the Corporate Governance (CG) scores and its four category components for various demographic variables.

Table 5.27- Summary of Results of Hypotheses

	Hypothesis Statement	**Accepted/ Rejected**
H_{01}: *There is no significant difference between the demographic characteristics of companies and their corporate governance practices.*		partially supported
	H_{01a}: *There is no significant difference between the age of companies and their corporate governance practices.*	supported
	H_{01b}: *There is no significant difference between the ownership status of companies and their corporate governance practices.*	not supported
	H_{01c}: *There is no significant difference between private and PSU companies and their corporate governance practices.*	supported
	H_{01d}: *There is no significant difference between MNC and nationally-located companies and their corporate governance practices.*	supported
	H_{01e}: *There is no significant difference between the industry-wise classification of companies and their corporate governance practices.*	supported
H_{02}: *There is no significant difference in the demographic characteristics of companies and their corporate governance scores.*		partially supported
	H_{02a}: *There is no significant difference between the age of companies and their corporate governance scores.*	supported
	H_{02b}: *There is no significant difference between the ownership status of companies and their corporate governance scores.*	supported
	H_{02c}: *There is no significant difference between private and PSU companies and their corporate governance scores.*	supported
	H_{02d}: *There is no significant difference between MNC and nationally-located companies and their corporate governance scores.*	not supported
	H_{02e}: *There is no significant difference between the industry-wise classification of companies and their corporate governance scores.*	supported
H_{03}: *There is no significant difference in demographic characteristics of companies and their Rights and Equitable Treatment of Shareholders scores.*		supported
	H_{03a}: *There is no significant difference in the age of companies and their Rights and Equitable Treatment of Shareholders scores.*	supported
	H_{03b}: *There is no significant difference in ownership status of companies and their Rights and Equitable Treatment of Shareholders scores.*	supported
	H_{03c}: *There is no significant difference in private and PSU companies and their Rights and Equitable Treatment of Shareholders scores.*	supported
	H_{03d}: *There is no significant difference in MNC and nationally-located companies and their Rights and Equitable Treatment of Shareholders scores.*	supported
	H_{03e}: *There is no significant difference in industry-wise classification of companies and their Rights and Equitable Treatment of Shareholders scores.*	supported
H_{04}: *There is no significant difference in demographic characteristics of companies and their practices related to the Role of stakeholders scores.*		supported

	H_{04a}: There is no significant difference in the age of companies and their practices related to the Role of stakeholders scores.	supported
	H_{04b}: There is no significant difference in ownership status of companies and their practices related to the Role of stakeholders scores.	supported
	H_{04c}: There is no significant difference in private and PSU companies and their practices related to the Role of stakeholders scores.	supported
	H_{04d}: There is no significant difference in MNC and nationally-located companies and their practices related to the Role of stakeholders scores.	supported
	H_{04e}: There is no significant difference in the industry-wise classification of companies and their practices related to the Role of stakeholders scores.	supported
H_{05}: There is no significant difference in demographic characteristics of companies and their practices related to disclosures and transparency scores.		not supported
	H_{05a}: There is no significant difference in the age of companies and their practices related to disclosures and transparency scores.	not supported
	H_{05b}: There is no significant difference in ownership status of companies and their practices related to disclosures and transparency scores.	not supported
	H_{05c}: There is no significant difference in private and PSU companies and their practices related to disclosures and transparency scores.	not supported
	H_{05d}: There is no significant difference in MNC and nationally-located companies and their practices related to disclosures and transparency scores.	not supported
	H_{05e}: There is no significant difference in industry-wise classification of companies and their practices related to disclosures and transparency scores.	not supported
H_{06}: There is no significant difference in demographic characteristics of companies and their practices related to responsibilities of the board scores.		partially supported
	H_{06a}: There is no significant difference in the age of companies and their practices related to responsibilities of the board scores.	not supported
	H_{06b}: There is no significant difference in ownership status of companies and their practices related to responsibilities of the board scores.	not supported
	H_{06c}: There is no significant difference in private and PSU companies and their practices related to the responsibilities of the board scores.	supported
	H_{06d}: There is no significant difference in MNC and nationally-located companies and their practices related to responsibilities of the board scores.	supported
	H_{06e}: There is no significant difference in industry-wise classification of companies and their practices related to responsibilities of the board scores.	not supported
H_{07}: There is no significant difference in the demographic characteristics of companies and their financial performance variables.		partially supported
	H_{07a}: There is no significant difference in the age of companies and their financial performance variables.	**partially supported** for Beta and Enterprise Value
	H_{07b}: There is no significant difference in the ownership status of companies and their financial performance variables.	**partially supported** for Tobin's Q, Return on Equity, Return on Capital Employed and Return on Assets ratio

	H_{07c}: There is no significant difference in private and PSU companies and their financial performance variables.	**partially supported** for Price to Earning ratio, Tobin's Q, Dividend Yield and CSR Spend
	H_{07d}: There is no significant difference in MNC and nationally-located companies and their financial performance variables.	**partially supported** for Tobin's Q, Return on Equity, Return on Capital Employed and Return on Assets ratio
	H_{07e}: There is no significant difference in the industry-wise classification of companies and their financial performance variables.	**partially supported** for Beta, Tobin's Q, Return on Equity, Earning before interest and tax, Return on Capital Employed, Return on Assets ratio, Dividend Yield, Price to Book Ratio and Total Debt Ratio
H_{08}: There is no significant difference in demographic characteristics of companies and their corporate social performance scores.		partially supported
	H_{08a}: There is no significant difference in the age of companies and their corporate social performance scores.	supported
	H_{08b}: There is no significant difference in ownership status of companies and their corporate social performance scores.	supported
	H_{08c}: There is no significant difference in private and PSU companies and their corporate social performance scores.	supported
	H_{08d}: There is no significant difference in MNC and nationally-located companies and their corporate social performance scores.	supported
	H_{08e}: There is no significant difference in the industry-wise classification of companies and their corporate social performance scores.	not supported
H_{09}: There is no significant difference in corporate governance practices of companies and their corporate social performance scores.		supported

Out of private sector companies and PSUs, Cipla Ltd. has got the highest corporate governance score, 91.8, Infosys Ltd. got second rank 90.5, Kotak Mahindra Bank Ltd. 88.5, which are private sector companies. The highest score of PSUs is of Oil and Natural Gas Corporation Ltd. has scored the highest, 80.5, followed by SAIL Ltd. (79.9). GAIL India Ltd. (79.3), Oil India Ltd. (79.3). Thus we can conclude that private sector companies have better CG scores as compared to PSUs.

The analysis reveals that NIFTY 100 sample companies follow leadership (4 percent), good (42 percent), fair (47 percent) and basic (7 percent) CG practices. Based on its

relationship with demographic characteristics wise differences, it has been found that ownership status of companies has a significant impact on CG practices, but age, private vs PSU, MNC vs nationally-located companies and industrial sector based classification does not impact their CG practices. Thus null hypothesis H_{01} is partially supported. The summary of the results of the hypothesis tested is given in Table 5.26. The overall analysis indicates that null hypothesisH_{02} is partially supported as there is a significant difference in the MNC vs nationally-located companies for CG total score (CG). The null hypothesis H_{03} is partially supported as MNC vs nationally-located companies and their right and equitable treatment of shareholders score significantly differ. There is no difference in demographic characteristics and their practices related to the Role of stakeholders scores, and null hypothesis H_{04} is supported. The null hypothesis H_{05} is partially supported as there is a significant difference in the demographic characteristics like age, private vs PSU, MNC vs nationally-located companies and industrial sector based classification of companies and their practices related to disclosures and transparency scores. The null hypothesis $H_{06,}$ which indicates that there is no significant difference in the demographic characteristics of companies and their practices related to responsibilities of the board, is partially rejected as there is a significant difference in the practices related to the responsibility of the board with respect to age, ownership and industry sector. Overall we can conclude that CG score is impacted by the MNC vs nationally-located status of companies. Age significantly matters with respect to disclosure and transparency scores where it was found that young companies have better disclosures and with respect to the responsibilities of the board old companies have performed better which was from the age category of 50-75 years the disclosure and transparency scores also differ between the

private sector companies and PSU. Industrial sector wise classification has indicated that companies that belong to utility, consumer staples, financials, and IT sector significantly differ regarding disclosure and transparency scores and board responsibilities. The companies which belong to promoter-owned and institutional-owned categories have significantly different disclosures and transparency scores and responsibilities of the board. Overall, the above analysis shows that MNC vs. nationally-located status, industry sector-wise differences, and ownership characteristics do affect the CG practices of Indian companies.

Analysis of financial performance variables of these 100 companies shows Beta mean value is 0.9260 and the standard deviation value is 0.4761. The closing price mean value is 1970.1378, with a standard deviation of 634.4857. The average score of market capitalization is 1059560.3633, Enterprise value mean is 1153392.3312. The earnings per share mean score is 72.0407 with a standard deviation of 2.1848. Price to Earnings ratio average score is 40.9603 with a standard deviation value of 65.2940, the price to book ratio mean is 6.0800, total debt ratio mean is 126858. Tobin's Q mean score is 3.3470 and the standard deviation is 5.0503. Return on equity ratio mean is 0.1491 and the standard deviation is 0.1476, return on capital employed mean value is 0.1651, the standard deviation is 0.1581, return on asset ratio average value is 0.0913 and standard deviation as 0.0908, return on sales mean is 0.1942, and the standard deviation is 0.1751. The dividend yield mean is 58.5516, and the standard deviation is 128.0504. CSR spending minimum is 0.0034, whereas the maximum is 0.1135. CSR spend average value is 0.0238, whereas the standard deviation is 0.0173. Therefore, *null hypothesis* H_{07} is partially supported, and there is no significant difference in the demographic characteristics of companies and their

FP variables. The financial performance variables which are significantly different for various demographic characteristics include Beta, Tobin's Q, Return on Equity, Earning before interest and tax, return on Capital Employed, Return on Assets ratio, Dividend Yield, Price to Book Ratio and Total Debt Ratio. Descriptive statistics of 5-year compound annual growth rate (CAGR) values of financial performance variables of 100 companies. The beta mean value is 0.0189, and the standard deviation value is 0.0536. Closing price mean value is 0.0632. The average score value for market capitalization is 0.0723, enterprise value mean score is 0.0571. Earnings per share mean is -0.1933, whereas the standard deviation is 0.6394. Price to earnings ratios average score is -0.0487 and standard deviation value is 0.2730, price to book ratio mean is -00258. The total debt ratio mean is -0.847. Tobin's Q mean score is -0.0261, Return on equity ratio mean is -0.1678, EBIT average is -0.0341, return on capital employed mean value is -0.1465, the standard deviation is 0.4800, return on asset ratio average value is -0.1330, return on sales mean is -0.1251, dividend yield mean is -0.0473 and standard deviation is 0.3072 and CSR spend average value is 0.1104 whereas standard deviation is 0.2010.It can be concluded that only beta, closing price, market capitalization, enterprise value, and CSR spend average scores were positive.

Analysis of CSP reveals that companies within 50–75-years age group contribute more towards CSR activities than other age groups. PSUs have better CSP scores as compared to private sector companies. MNCs have better CSR scores as compared to nationally-located status. Promoter-owned companies contribute more to social performance. Industrial-sector wise classification shows that CSR scores are highest for the materials sector, industrials sector, and consumer staples sector. As per the relationship of CG

practices with social performance scores, companies with fair CG practices and good CG practices have better social performance than other groups. The null hypothesis *(H_{08})* is partially supported for the industrial sector-wise classification of companies and its CSR initiatives. The null hypothesis *(H_{09})* is supported, and it is found that corporate governance practices do not influence social performance score.