

WOMEN ON BOARD OF INDIAN COMPANIES: A TREND ANALYSIS OF BSE 500 INDEX

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Abstract

Corporate governance is becoming an important tool available for shareholders to keep check on directors' activities. Boards are becoming responsible as they walk the tight rope of meeting investors' expectations. Diversity on corporate boards is one such aspect which has become necessary as heterogeneity leads to better decision making. With a compulsory condition imposed by Company Law Amendment, 2013, to include at least one women director, Indian companies now have to accommodate women on board. The present study is an attempt to analyse the trend of presence of women on board in India. Taking an exhaustive sample of BSE 500 Index companies, it has analysed the trend of women directors on Indian companies across different criteria. Firstly, an inter sector comparison of public sector with private sector has been made. Besides, the comparison of women on board across three major economy sectors, i.e. primary, secondary and tertiary sectors has also been undertaken. Going ahead, an inter industry comparison across 29 different industries has revealed the divergence of this trend across Indian corporate sector. Yearly trends of 2013-15 has been analysed to understand the overall tendency of increased presence of women on Indian boards. The data obtained has been analysed for variation using ANOVA (Analysis of Variance) and the results obtained have been mixed.

Keywords: Women on Board, Gender Diversity, BSE 500 Index, Trend Analysis, ANOVA

Introduction

Diversity in any organization always helps as it tends to bring new ideas, better decision making and new approaches to problem solving. With increasing globalization, companies exploring new territories believe in bringing local manpower from the respective territories covered. The motive is to develop a broader organization structure with absorption of people from different backgrounds. This provides depth to organization in terms of critical and wider evaluation of business decisions, making it an effective manpower recruitment strategy. Certainly, this change has to be brought and incorporated at all levels. In fact, in this top to bottom approach to be adopted, firstly, the inclusion of board members from different backgrounds in terms of age, race, colour and gender needs to be done.

The first rationale for bringing diversity in organizations lies in the “Resource Based Advantage” theory of competitive advantage and strategic analysis whereby organizations performance is not industry specific or due to individual competitive advantages. Corporate Governance issues also involve bringing racial, cultural and gender diversity in modern day corporations. Mainly, the supporting argument for this is Agency theory whereby, the shareholders are able to avoid any collusion among the planners (board members) and the implementers (managers). Including more outside & more diverse board helps in solving agency problems. Board independence is believed to ensure better performance as people with different ethnicity, culture and gender ask questions with organizational performance as top priority. Besides, corporate diversity is believed to help corporations as it brings creativity & innovation to the forefront. Heterogeneity at the top is believed to cause effectiveness of corporate leadership. Diversity on board level has become necessary post 2008 crisis and resulting failure of many major corporations and institutions across the globe. The need for transforming homogenous boards with similar thinking and having similar backgrounds to diverse entities has been talked about in corporate world. The big question is how to overcome the challenge and bring people having diverse ethnicity, colour and gender on board.

Women on Board & Glass Ceiling Across the World

Gender diversity at board level implying Women on Board has been talked about for long. With increasing number of women participating in corporate world, their role and their contribution has been appreciated and encouraged. However, the representation of women on board shows little variation across the world. In most of developed markets, including Australia, USA, UK, Spain, France, their participation at board level is less than one half. For year 2016, this representation was just 20.2% in USA, followed by 20.4% in UK. Some European countries have done well in this regard. Norway with 35.5% lead the group followed by Finland having 29.9%, and France with 29.7% are the best performers. Denmark and Netherlands manage to cross the 20% hurdle mark with 21.9% & 21% women directors on their boards. Germany. Portugal has been the worst performer with just 7% of women representation on boards which is even less than 10% thus being placed at bottom of the elite list. This low representation of women on corporate boards is termed as “Glass Ceiling” which has been coined by Wall Street Journal years back.

Women on Board In India

In a survey conducted of BSE-100 companies by Standard Chartered in 2009, it was found that women held 59 directorships among the top 100 companies. Primarily, majority of representation is noticed in companies working as family run businesses followed by government managed enterprises. With India mainly being a patriarchal society, the mindset is influenced by traditional thinking which attributes majority role for women within households. The dual responsibility of managing corporate life along with household chores forbid women from taking senior responsible positions. With a conservative mindset, women are perceived to give first preference to their family work, the challenge of putting women on leadership roles gets aggravated. The silver lining in the cloud is the presence of women on top specifically in Banking & Financial

Services sector. The success of Shikha Sharma & Chanda Kochhar has highlighted the role to be played by women in top echelons of management.

In 2002, the SEBI constituted the Narayana Murthy Committee to assess the adequacy of current corporate governance practices and to suggest improvements. Based on the recommendations of this committee, SEBI issued a modified Clause 49 on 29 October 2004 (the 'revised Clause 49') which came into operation on 1 January 2006. However, none of the provisions require compulsory appointment of any women directors on the board. With increasing education facilities and better job opportunities for women in Indian society, women are progressing and applying for top level jobs. The demographic dividend (more than 50% of population below 35 years of age) has changed the thought process leading to more and more women appearing on surface for top level corporate jobs. The representation at board levels have certainly increased and women's contributions in organizational performances are duly acknowledged. 33% quota fixed for women in Indian parliament is a landmark which has strengthen the case for more representation of women at all levels in all spheres of life.

Women on board has become a burning issue since passing of Companies Act, 2013 which has made it mandatory to include women on board. Section 149 of Companies Act, 2013 deals with various issues of recruitment of different categories of investors. This section has made it mandatory for every listed company in India to have at least one women director starting from 1st April, 2015. Besides, a 3-year time frame has been given to public companies not listed but having either a paid-up capital of 100 crores or turnover of 300 crores.

Literature Review

There have been evidences of low ratio of women directors across the globe. Burgess et al., 2002 highlighted this by citing research data already collected by various specialized research agencies across USA, Australia, Canada, Israel, UK & New Zealand, the study has undertaken a simple comparison of the various demographics of women directors across 4 continents. The study has found no significant difference among the women directors of countries on various parameters. Similar results have been obtained by studies conducted in various countries across Europe, UK & state of Texas in USA. (Mateos et al., 2009), (Vinnicombe et al., 2015) and (Pai et al., 2009).

Banerji et al., 2010 conducted a study involves comparing the status of women on board across four major countries of Asia including India. The study found almost similar patterns in hiring of women as employees and directors. Interviewing the top women corporate leaders across these countries, the study talked about the presence of challenges for women to reach the top positions. Acca, 2009 conducted a study on women participation boards of top 100 companies on Karachi stock exchange. The study highlighted the dismal presence of women on board as 69% of companies do not have even a single women director. The study is important as it is undertaken in a neighbouring country of India having number of demographics similar to our country, thus, its findings will find similarities in Indian corporate environment as well.

Talking of developed countries, Matthews, 1997 tracked the positions held by women on boards

over a period of 10 years, i.e. 1987 to 1996. Taking the sample of Fortune 500 companies, the study found significant changes in women presence on boards of these companies. Besides, most of women joining boards in 1996 have been found to professionally better qualified and having more corporate linkages. Boards with higher interactions among board members have been found to be having more women.

Holton, 1995 analysed the trend of women on board in case of UK companies from 1998 to 1993. As per the survey, the number of women on board has become double of the original number, yet, it is still just 4% of total directors. As a positive sign, the women joining boards are younger, more qualified and have a rich profile in terms of background of holding state or central government appointments.

It has been observed worldwide that having women on board follows a trend which is sum total of large number of micro and macro environmental factors. This decision making is based on variety of factors including the size of organisation, nature of industry and kind of operations. Harrigan, 1981 in a study conducted in USA on a sample of 112 firms, made an attempt to estimate the probability of having women directors on US Fortune 500 companies. The study observed that smaller companies have more probability of hiring women director's vis a vis larger companies. The study revealed a disproportionate allocation of women directors across US companies. The results have been validated and supported by similar studies conducted (Reis, 2004) & (Geiger, 2012)). Even outside USA, the study by Singh et al., 2008 found more effective presence and contribution of women across smaller boards. In this study conducted on FTSE 100 companies, a case for inclusion of women on boards was made by comparing human capital contribution by women vis a vis men. The study found women contributing more effectively in boards as they have more practical experience of working on boards of smaller companies. Blum et al., 1994 in their study carried out on 200 work places in US companies cited organizational factors like beliefs and attitudes of employees, human resource policies, social structures prevailing in society and type of industry affect the involvement of women in corporate sector at top levels. The study has found a clear-cut increase in women in service companies as compared to manufacturing companies. Similarly, Bernardi et al. 2006 analysed whether there exists any relationship between companies having women on board and having their names on list of Fortune's "100 Best Companies To Work For". The data revealed a positive correlation between the two variables, signifying the presence of women directors on board to be an important factor affecting the human resource policies of the companies to work for creating better working environment for employees at all the levels. Another study by Hillman et al., 2007 by taking a sample of 1000 US firms over a period of 13 years (1990 to 2003), laid down a strong emphasis on internal factors affecting choice of having increased number of women on board. In another study by Fairfax , 2005, the main reason identified has been the low representation of women on executive level in major corporations. Since, majority of directors are chosen from executives only, this results in low selection of women on board.

The literature review clearly shows a plethora of analysis being carried out on presence of women

on boards outside India, however, there is lack of sufficient evidence and data regarding women participation on boards of Indian companies which the present study plans to achieve.

Research Methodology

Objective of The Study

1. To measure the trends of presence of women on boards in Indian corporate sector across various sectors and industries.

Sampling

A sample of 500 companies forming the index of BSE500 companies which cover almost all the major industries in Indian economy. With a maximum market capitalisation of 5,02,850 crores, it is an index in which the top 10 stocks constitute almost 36% of total market capitalisation. There are total 29 industries as classified under BSE Industry classification which are represented by BSE 500 index, the breakup of these stocks is as follows: -

TABLE 1 : Industry Wise & Sector Wise Break Up of BSE 500 Index (As on 31-03-2015)

S. No.	Industry	Sector Classification	No. of Companies	S. No.	Industry	Sector Classification	No. of Companies
1	Agriculture & Related	Primary	22	16	Electronics	Secondary	6
2	Auto Parts & Equipment	Secondary	16	17	Entertainment	Tertiary	11
3	Automobile	Secondary	15	18	Financial Services	Tertiary	43
4	Banking & Insurance	Tertiary	37	19	FMCG	Tertiary	25
5	Industrial Products	Secondary	21	20	Realty	Tertiary	20
6	Information Technology	Tertiary	26	21	Telecom Services	Tertiary	8
7	Metals & Non-Metals	Primary	15	22	Logistics	Tertiary	12
8	Retail	Tertiary	7	23	Healthcare & Education	Tertiary	4
9	Cement	Secondary	16	24	Hospitality & Travel	Tertiary	9
10	Construction	Secondary	20	25	Household	Tertiary	21
11	Diversified	Secondary	5	26	Industrial Machinery	Secondary	10
12	Oil & Gas	Secondary	19	27	Textiles	Secondary	13
13	Paper & Publishing	Secondary	8	28	Trading		10

14	Pharmaceuticals	Secondary	37	29	Electrical Equipment	Secondary	20
15	Power	Secondary	22				

Testing Hypothesis

1. Whether there is significant difference in presence of women across public sector vis a vis private sector
2. Whether there is significant difference in presence of women on board across primary, secondary and tertiary sectors
3. Whether there is significant difference in presence of women on board across various industries
4. Whether there is significant difference in presence of women on board in Indian corporate sector over the last 3 years

Measures

To measure the presence of women on board, No. of women appointed/nominated/selected on board has been used. This number ranges from minimum 0 to a maximum of 4 women present on board at the scheduled cut off timeline. The timeline for this purpose has been uniformly taken as the end of financial year for each respective year. Any women director present on board as member/chairman of board of directors has been included, whereas, any woman director joining the board midway and leaving the company before the end of financial year has been excluded.

Test For Analysis

Analysis of Variance (ANOVA) has been applied across the data collected for three years (2013-15) to measure the level of difference.

RESULTS

Trend Across Public Sector Units (PSUs) Vis A Vis Private Sector Organisations

Table 2: Women Directors in Public Sector Units vs. Private Sector Organisations (BSE 500 Index as on 31-03-2015)

No. Of Women Directors	Public Sector Units	%Age	Private Sector Organisations	%Age
0	19	31.67%	14	3.19%
1	33	55.00%	374	85.19%
2	8	13.33%	37	8.43%
3	0	0.00%	7	1.59%
4	0	0.00%	1	0.23%
Total Companies	60	100%	439	100%

Total Women Directors	68		473	
Average	1.10		0.817	
Std Dev	0.21		0.42	
F Calculated Value	19.07			

Testing the hypothesis that number of women directors vary significantly across PSUs, Table 2 shows a distinguishably different compliance of the requirement of one women director across private sector as compared to public sector units. There are 19 PSUs in top 500 companies who have not even a single women director as on 31st March, 2015. It is a substantial number as it constitutes 32% of total 60 public sector companies as forming the sample. Whereas, there are only 14 private sector companies who are defaulters, which is percentage wise, approximately 3% of total 439 private sector companies. Comparing the two types of enterprises on having more than one women director on their board, the percentage is 13% in favour of public enterprises vis a vis 10% in case of private sector units. There is only one companies out of total sample, i.e Apollo Hospitals which has a record number of 4 women directors on the board. Although from the first surface analysis, it seems to reflect positively in favour of private enterprises, however, ANOVA was applied to test the hypothesis of any significant difference of presence of women directors across two types of ownership. The results indicate an unequal distribution of women directors across these two types of enterprises with a F value of 19.07 which is higher than tabulated value of 3.86 thereby rejecting the null hypothesis of no significant difference in women on board in PSUs vis a vis private enterprise.

Trend Across Primary, Secondary & Tertiary Sectors of Economy

The following table shows the classification of various industries constituting BSE 500 Index into 3 respective groups, namely, primary, secondary and tertiary sectors.

TABLE 3: Women Directors in Primary, Secondary and Tertiary Sectors (BSE 500 Index as on 31-03-2015)

No. of Women Directors	Primary Sector	%Age	Secondary Sector	%Age	Tertiary Sector	%Age
0	6	10.53%	10	3.92%	17	9.09%
1	44	77.19%	216	84.71%	148	79.14%
2	7	12.28%	25	9.80%	18	9.63%
3	0	0.00%	4	1.57%	3	1.60%
4	0	0.00%	0	0.00%	1	0.53%

Total Companies	57		255		187	
Total Women Directors	58		278		197	
Average	1.01		1.09		1.05	
Std Dev	0.23		0.19		0.29	
F Calculated Value	0.657					

The level of participation of women is also hypothesised to differ significantly across the three sectors of economy, namely, primary, secondary and tertiary sectors. The breakup of companies as present in BSE 500 index across three different sectors shows the clear domination of manufacturing companies. They comprise almost 51% followed by tertiary/service sector contributing 38% and primary sector contributing almost 12% of total index companies. There is a clear skewness across all three groups with more than 77% of companies across three sectors have only one women director on board. The performance of secondary sector seems better than the other two as only 4% of companies are unable to fulfil the basic requirements of having at least one-woman director. Statistically, the null hypothesis of equal variance of women on board across three groups stands accepted as calculated F value of 0.657 is lesser than tabulated value of 3.0138. Thus, any significant difference of unequal representation of women across three different sectors is ruled out. The mean and standard deviation calculations as visible from Table 5 clearly indicate a similar trend with insignificant difference among these values across three groups.

Trend Across Different Industries

Table 5 gives a bird eye view of the level of women directors across the three economy sectors, the holistic picture of compliance of SEBI requirement could be understood better only by analysing this trend across all 29 industry sectors. Banking & Insurance lead the race of defaulters with maximum number of 7 banks have no women director. Closely following is Entertainment, Financial Services, Oil & Gas with 3 to 4 companies having zero women director.

TABLE 4: Women Directors Across Different Industries

Industry Classification	No. of Women Directors					Total Companies
	0	1	2	3	4	
Agriculture & Related	1	18	3	0	0	22
Auto Parts & Equipment	1	13	2	0	0	16
Automobile	1	13	1	0	0	15
Banking & Insurance	7	23	6	1	0	37
Cement	1	13	1	1	0	16

Construction	1	18	0	1	0	20
Diversified	0	4	1	0	0	5
Electrical Equipment	1	15	4	0	0	20
Electronics	0	6	0	0	0	6
Entertainment	4	7	0	0	0	11
Financial Services	3	37	3	0	0	43
FMCG	0	23	2	0	0	25
Healthcare & Education	0	2	1	0	1	4
Hospitality & Travel	1	6	2	0	0	9
Household	0	18	3	0	0	21
Industrial Machinery	0	10	0	0	0	10
Industrial Products	0	18	3	0	0	21
Information Technology	0	23	3	0	0	26
Logistics	1	11	0	0	0	12
Metals & Non- Metals	1	12	3	0	0	16
Oil & Gas	4	14	1	0	0	19
Paper & Publishing	1	6	0	1	0	8
Pharmaceuticals	0	31	6	0	0	37
Power	4	17	1	0	0	22
Realty	0	18	1	1	0	20
Retail	0	7	0	0	0	7
Telecom Services	0	6	1	1	0	8
Textiles	0	11	1	1	0	13
Trading	1	8	1	0	0	10
Total Companies	33	408	50	7	1	499
F Calculated Value	1.629					

Besides, Agriculture, Auto Parts, Automobile, Cement, Construction, Electrical Equipment, Logistics, Metals, Paper & Trading sectors all have at least one company failing to meet minimum requirement. However, Banking & Insurance also leads along with Pharmaceuticals in having maximum number of companies (6) with two women directors on board. It can thus be implied that the distribution of companies in various sectors vary widely in terms of having women directors. Testing this using ANOVA, the calculated value of F as 1.629 being greater than tabulated value of 1.500 rejecting the null hypothesis of no significant difference among various industry sectors in terms of women directors on board.

Overall Trends of Women Directors on Boards

It is very important to analyse the trends in women presence on boards of Indian companies. The above analysis was based on data for just one year, i.e the end of financial year 2014-15. It reveals the number of women across Indian boards exactly a day before SEBI deadline starts on 1st April, 2015. The transition years of 2013, 2014 and 2015 has to be analysed to get a clear picture of actual presence of women across Indian boards. With 2015 taken as base year, the same set of

companies that constitute BSE 500 index were analysed in terms of women on board across two back years, i.e. 2013 & 2014. All the changes carried out in BSE 500 index over a period of 3 years were incorporated in order to appear at the constitution of BSE 500 index as on 31-03-2014 and 31-03-2013. The sample size was marginally reduced to 497 and 498 across 2013 & 2014 years respectively due to data inadequacy. Trends have been analysed and data clearly reveals an immense change.

**TABLE 5: Women Directors on Boards of BSE 500 Index Companies
(2013 to 2015)**

NO. OF WD ON BAORD	2013	% change over last year	2014	% change over last year	2015	CAGR (2013-15)
0	314	-16%	263	-87%	33	-89%
1	142	30%	184	122%	408	187%
2	32	38%	44	14%	50	56%
3	8	25%	6	17%	7	-13%
4	1	0%	1	0%	1	0%
Total Women Directors	234		294		533	
Total Companies	497	--	498	--	499	--
Chi Square Calculated Value	120.989					

Looking at Table 5, number of companies with zero women directors have reduced substantially from 314 to just 33 from 2013 to 2015 which symbolises a net reduction by 89% in companies with such characteristic feature. This fall has been immensely compensated by 187% rise in companies with just one women director over the same time horizon. Similarly, 56% CAGR has been reported in number of companies with 2 women directors over two years of transition. This shows a clear adherence to SEBI requirements as undertaken by majority of companies so as to avoid the penalty to be imposed if they fail to meet the requirement of having at least one women director on board. ANOVA test undertaken gives a calculated F value of 120.989 which is much higher than tabulated F value of 3.0001 thereby rejecting the null hypothesis so formulated. Hence, there is a significance change observed in the number of women directors on board of Indian companies from BSE 500 Index from 2013 to 2015.

Conclusion

The representation of women on top 500 companies listed on BSE is relatively low as compared to international standards, (20% average). There are very few women directors on boards of

Indian companies. For year 2015, the ratio is 89% men directors to only 11% women directors. However, the trend seems positive as total number of women directors on BSE 500 companies has increased from 234 in 2013 to 294 in 2014 and has jumped to 533 in 2015. The credit for this remarkable growth can be attributed to passing of 2013 company law amendment which has made it compulsory for listed companies to have at least one women director. The results are similar to what Seierstad and Opsahl, 2011 revealed in their study of Norway where 40% women on board made compulsory led to expected increase in women on board. Trends of women on board for PSU vs. Private sector, Primary vs. Secondary vs. Tertiary Sector and Across 29 industries represented on BSE 500 Index has given mixed results. However, it can be safely concluded that there exists a significant difference in presence of women on board across various sectors and across industries. In future, substantial efforts are required to overcome the glass ceiling to promote more participation of women across these deficient sectors.

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