

## **EMPIRICAL EVIDENCES OF CORPORATE GOVERNANCE AND PERFORMANCE OF AIRLINE SECTOR**

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### **Abstract**

The study attempts to investigate the intricacies of airline industry and its dimensions with corporate governance and its relationship with performance of airline companies. Though a few studies have been undertaken on this but none have been reported in Indian context and especially with any conclusive empirical evidence. The paper attempts to empirically explore the status of corporate governance and performance measures using secondary data collected from various sources and analyzes the perception of airline shareholders collected through primary data analysis with respect to corporate governance attributes in Indian airline industry.

**Key Words:** corporate governance, performance, airline industry

**JEL classification:** G34, G32, L93

### **Introduction**

Corporate governance practices assist the board of directors to oversee the functioning and management of the company on the whole and thereby fulfilling their responsibilities of safeguarding interests of all the stakeholders including shareholders, employees, customers, suppliers, the government and public in general. It is difficult to achieve excellence without good governance in the long run (Sharma, 2014) and companies having good governance are likely to develop into 'brands' and are able to win confidence of stakeholders and investors (Gupta and Sharma, 2014).

The present analysis is based on a survey results which seeks to identify the importance of corporate governance attributes from shareholders' perspectives. For this purpose, a questionnaire survey method was used as an instrument to study the perception of airline shareholders with respect to corporate governance themes selected. The questionnaire included corporate governance variables which were adapted from Adrian et al. (2016) study. The questionnaires were sent to hundreds of airline shareholders but less than one hundred could be gathered. However, with lots of efforts the researcher could finally obtain one hundred (100) responses for the final analysis. In the primary survey of employees, Structural equation modeling (SEM) technique was applied as the researcher had a large sample size of three hundred but here only mere hundred respondents could be obtained in the survey. Therefore, Conjoint approach was thought to be the most appropriate technique for analyzing shareholders'

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survey. Due care was taken to ensure that the samples selected were representative of the entire population.

In the study, the corporate governance of airline companies were measured with the help of board size, board meetings, board composition i.e. proportion of non-executive directors on board, proportion of independent directors on board, audit committee size, audit committee meetings, number of independent directors in audit committee, remuneration committee size, remuneration committee meetings, number of independent directors in remuneration committee, CEO duality, ownership structure i.e. proportion of promoter and institutional ownership. Similarly, the performance of airline companies were measured with the help of Tobin q measure, return on equity (ROE) and return on assets (ROA). The secondary data of the select companies with respect to variables of both corporate governance and performance were collected. The number of passenger airlines in India is very small. Moreover, the availability of the data varied for different companies due to various reasons such as some of the companies are recently listed while few of the companies were listed for many years and few of them are not listed till date. Due to the less sample size, the non-parametric test Kruskal Wallis test is applied. The Kruskal Wallis test being a non-parametric test does not require any assumption; however the results can also not be generalized. The Kruskal Wallis test assumes the following null hypotheses:

**H<sub>01</sub>:** The level of corporate governance of the select airline companies in India is identical on the select corporate governance measures.

**H<sub>02</sub>:** The level of performance of the select airline companies in India is identical on the select performance measures.

### **Methodology**

This paper is based on conjoint analysis, a multivariate technique which is used for measuring psychological judgments of respondents. The aim of this technique is to study the importance of each aspect of a product or service in the subject's overall preference ratings and perception (Dangi & Dewen 2016). The present study tries to give an insight into improving the corporate governance practices of the existing companies on the basis of the feedback obtained from the current airline shareholders. It provided different hypothetical corporate governance designs to the respondents and they were asked to provide the rating of different corporate governance profiles consisting of different combinations of attributes. This technique uncovers the hidden drivers of respondents which they may not be aware of themselves. In the present study, in order to study the shareholder's perception towards different attributes associated with the corporate governance, a different survey was conducted and the responses were analysed with the help of conjoint approach.

The descriptive statistics of all the characteristics is presented in table 1. It includes observations from five passenger airline companies in India during the period of eight years 2009, 2010 2011, 2012, 2013, 2014, 2015 and 2016 ending March 31 are considered.

**Table 1: Descriptive Statistics**

|         | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> | <b>Minimum</b> | <b>Maximum</b> |
|---------|----------|-------------|-----------------------|----------------|----------------|
| BOASIZE | 31       | 6.29        | 2.31                  | 3              | 11             |
| BMEET   | 31       | 6.81        | 2.96                  | 4              | 19             |
| NEXDIR  | 24       | 6.08        | 2.20                  | 2              | 10             |
| INDIR   | 24       | 3.67        | 1.73                  | 0              | 7              |
| ACMEET  | 24       | 3.79        | 1.17                  | 0              | 5              |
| ACID    | 24       | 2.83        | 1.20                  | 0              | 5              |
| RCSIZE  | 24       | 3.17        | 1.23                  | 0              | 5              |
| RCID    | 23       | 2.52        | 1.20                  | 0              | 4              |
| RCMEET  | 24       | 1.00        | 1.02                  | 0              | 4              |
| INOWN   | 23       | 14.65       | 9.64                  | .78            | 38.60          |
| PROWN   | 23       | 57.78       | 21.08                 | 12.85          | 86.15          |
| ROCE    | 31       | 4.19        | 11.81                 | -19.96         | 37.83          |
| Tobin q | 31       | 2.82        | 4.05                  | -2.87          | 19.62          |
| ROA     | 31       | -.30        | 1.14                  | -5.93          | 1.23           |
| Company | 37       | 3.03        | 1.51                  | 1              | 5              |

Source: SPSS Output

### Results of Kruskal-Wallis Test

The results of Kruskal Wallis test with respect to corporate governance and performance variables are shown in Table 2 and Table 3 respectively:

**Table 2: Results of Kruskal Wallis test with respect to Corporate Governance Variables**

| <b>Corporate Governance Variable</b> | <b>Company</b> | <b>Sample Size</b> | <b>Mean Rank</b> | <b>Chi Square</b> | <b>P value</b> | <b>Remarks</b>                |
|--------------------------------------|----------------|--------------------|------------------|-------------------|----------------|-------------------------------|
| Board Size                           | Jet            | 8                  | 24.44            | 15.344            | 0.004          | Significant difference exists |
|                                      | SpiceJet       | 8                  | 14.88            |                   |                |                               |
|                                      | Kingfisher     | 5                  | 18.50            |                   |                |                               |
|                                      | Air India      | 7                  | 6.71             |                   |                |                               |
|                                      | Indigo         | 3                  | 14.00            |                   |                |                               |
| Total                                |                | 31                 |                  |                   |                |                               |
| Board Meetings                       | Jet            | 8                  | 13.88            | 20.157            | 0.000          | Significant difference exists |
|                                      | SpiceJet       | 8                  | 20.38            |                   |                |                               |
|                                      | Kingfisher     | 5                  | 20.90            |                   |                |                               |
|                                      | Air India      | 7                  | 4.79             |                   |                |                               |
|                                      | Indigo         | 3                  | 28.00            |                   |                |                               |
| Total                                |                | 31                 |                  |                   |                |                               |

|  |            |    |       |        |       |                                 |
|--|------------|----|-------|--------|-------|---------------------------------|
| Non-Executive directors                      | Jet        | 8  | 16.69 | 6.363  | 0.095 | No significant difference found |
|  | SpiceJet   | 8  | 10.44 |        |       |                                 |
|  | Kingfisher | 5  | 13.10 |        |       |                                 |
|  | Indigo     | 3  | 5.83  |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Independent directors                        | Jet        | 8  | 16.94 | 7.672  | 0.053 | No significant difference found |
|  | SpiceJet   | 8  | 10.25 |        |       |                                 |
|  | Kingfisher | 5  | 13.50 |        |       |                                 |
|  | Indigo     | 3  | 5.00  |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Audit Committee Size                         | Jet        | 8  | 17.19 | 7.459  | 0.059 | No significant difference found |
|  | SpiceJet   | 8  | 8.63  |        |       |                                 |
|  | Kingfisher | 5  | 13.00 |        |       |                                 |
|  | Indigo     | 3  | 9.50  |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Audit Committee Meetings                     | Jet        | 8  | 16.06 | 7.945  | 0.047 | Significant difference found    |
|  | SpiceJet   | 8  | 11.19 |        |       |                                 |
|  | Kingfisher | 5  | 6.80  |        |       |                                 |
|  | Indigo     | 3  | 16.00 |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Audit Committee Independent directors        | Jet        | 8  | 18.25 | 9.760  | 0.021 | Significant difference found    |
|  | SpiceJet   | 8  | 10.25 |        |       |                                 |
|  | Kingfisher | 5  | 10.80 |        |       |                                 |
|  | Indigo     | 3  | 6.00  |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Remuneration Committee Size                  | Jet        | 8  | 18.63 | 14.358 | 0.002 | Significant difference found    |
|  | SpiceJet   | 8  | 11.56 |        |       |                                 |
|  | Kingfisher | 5  | 5.40  |        |       |                                 |
|  | Indigo     | 3  | 10.50 |        |       |                                 |
| Total  |            | 24 |       |        |       |                                 |
| Remuneration Committee Independent directors | Jet        | 8  | 18.56 | 15.997 | 0.001 | Significant difference found    |
|  | SpiceJet   | 8  | 11.38 |        |       |                                 |
|  | Kingfisher | 5  | 4.30  |        |       |                                 |
|  | Indigo     | 2  | 7.50  |        |       |                                 |
| Total  |            | 23 |       |        |       |                                 |
| Remuneration Committee Meetings              | Jet        | 8  | 17.25 | 8.756  | 0.033 | Significant difference found    |
|  | SpiceJet   | 8  | 11.31 |        |       |                                 |
|  | Kingfisher | 5  | 6.40  |        |       |                                 |

|                         |            |    |       |        |       |                                 |
|-------------------------|------------|----|-------|--------|-------|---------------------------------|
|                         | Indigo     | 3  | 13.17 |        |       |                                 |
| Total                   |            | 24 |       |        |       |                                 |
| Promoter ownership      | Jet        | 8  | 15.25 | 11.331 | 0.010 | Significant difference exists   |
|                         | SpiceJet   | 8  | 7.00  |        |       |                                 |
|                         | Kingfisher | 5  | 10.60 |        |       |                                 |
|                         | Indigo     | 2  | 22.50 |        |       |                                 |
|                         |            | 23 |       |        |       |                                 |
| Institutional ownership | Jet        | 8  | 13.00 | 2.121  | 0.548 | No significant difference found |
|                         | SpiceJet   | 8  | 12.00 |        |       |                                 |
|                         | Kingfisher | 5  | 13.00 |        |       |                                 |
|                         | Indigo     | 2  | 5.50  |        |       |                                 |
| Total                   |            | 23 |       |        |       |                                 |

Source: SPSS Output

The results of Kruskal Wallis test indicate that the probability value of Chi square statistics is found to be less than five percent level of significance for the corporate governance indicators namely board size, board meetings, audit committee meetings, independent directors on audit committee, remuneration committee size, independent directors on remuneration committee, remuneration committee meetings and promoter ownership. However, the probability value of Chi square statistic in case of Institutional ownership, non-executive directors, independent directors and audit committee size were found to be greater than five percent significance level. Thus, with ninety five percent confidence level, it can be concluded that the corporate governance of the select airline companies are different in terms of board size, board meetings, audit committee meetings, independent directors on audit committee, remuneration committee size, independent directors on remuneration committee, remuneration committee meetings and promoter ownership. However the corporate governance in terms of Institutional ownership, non-executive directors, independent directors and audit committee size are found to be same. Furthermore, the mean ranks in the results indicate that in terms of board size, non-executive directors, independent directors, audit committee size, audit committee meetings and independent directors on audit committee, Jet airways was found to be best, followed by Kingfisher and worst in case of Air India whereas in case of board meetings and institutional ownership, Indigo was found to be the best. In case of size and independent directors of remuneration committee, Jet airways was found to be the best followed by Spice jet and worst in case of Kingfisher. In case of audit committee meetings and remuneration committee meetings, Jet was found to be the best followed by Indigo and worst in case of Kingfisher.

Probability value of Chi square statistics as estimated in Kruskal Wallis test is found to be less than five percent level of significance for the first two performance indicators namely Tobin Q and ROE. However the probability value of Chi square statistic in case of ROA is found to be greater than five percent significance level. Thus, with ninety five percent confidence level it can

be concluded that the performance of the select airline companies are different in terms of Tobin q and ROE. However the performance in terms of ROA is found same. The results also indicates that the SpiceJet has for the period of study the best Tobin q among all the available airline companies followed by Indigo. The Tobin q of the company Air India is found to be worst. With respect to ROE the Indigo is having the best performance followed by SpiceJet and the lowest is found in case of Air India.

**Table 3: Results of Kruskal Wallis test with respect to Performance Variables**

| Performance Variable | Company    | Sample Size | Mean Rank | Chi Square | P value | Remarks                         |
|----------------------|------------|-------------|-----------|------------|---------|---------------------------------|
| Tobin q              | Jet        | 8           | 11        | 14.818     | 0.005   | Significant difference exists   |
|                      | SpiceJet   | 8           | 25.38     |            |         |                                 |
|                      | Kingfisher | 5           | 16.80     |            |         |                                 |
|                      | Air India  | 7           | 9.43      |            |         |                                 |
|                      | Indigo     | 3           | 18.33     |            |         |                                 |
| ROE                  | Jet        | 8           | 16.13     | 16.521     | 0.002   | Significant difference exists   |
|                      | SpiceJet   | 8           | 18.00     |            |         |                                 |
|                      | Kingfisher | 5           | 13.00     |            |         |                                 |
|                      | Air India  | 7           | 9.43      |            |         |                                 |
|                      | Indigo     | 3           | 18.33     |            |         |                                 |
| ROA                  | Jet        | 8           | 18.50     | 6.065      | 0.194   | No significant difference found |
|                      | SpiceJet   | 8           | 14.50     |            |         |                                 |
|                      | Kingfisher | 5           | 11.60     |            |         |                                 |
|                      | Air India  | 7           | 13.71     |            |         |                                 |
|                      | Indigo     | 3           | 26.00     |            |         |                                 |

Source: SPSS Output

## Conclusion

This chapter undertook the analysis of secondary data of airlines with respect to corporate governance and performance measures. The secondary data was collected from company websites, annual reports, databases such as CMIE prowess and Capitaline concerning to various aspects related to board size, board composition, board meetings, board committee, role of independent directors and ownership structure. The results of Kruskal-Wallis test related to various aspects have been discussed above. The results reveal that the corporate governance of the select airline companies are different in terms of board size, board meetings, audit committee meetings, independent directors on audit committee, remuneration committee size, independent directors on remuneration committee, remuneration committee meetings and promoter ownership. Table 4 shows the summary of conclusion in the study. The next section presents the analysis of perception of airline shareholders with respect to corporate governance attributes of airlines.

**Table 4: Summary of Data Analysis and Results: Hypotheses-wise Table**

| Null Hypothesis   | Tool used           | Result @ 5%                     |
|---|---------------------|---------------------------------|
| <p>The level of corporate governance of the select airline companies in India is same on the select corporate governance measures.</p> <p><b>A.</b> Board size, board meetings, Audit Committee meetings, independent directors on Audit Committee, Remuneration Committee size, independent directors on Remuneration Committee, Remuneration Committee meetings and promoter ownership</p> <p><b>B.</b> Institutional ownership, non-executive directors, independent directors, Audit Committee size</p> | Kruskal-Wallis Test | <p>Rejected</p> <p>Accepted</p> |
| <p>The level of performance of the select airline companies in India is same on the select performance measures.</p> <p><b>A.</b> Tobin q and ROE</p> <p><b>B.</b> ROA</p>  | Kruskal-Wallis Test | <p>Rejected</p> <p>Accepted</p> |

**Source:** Self-compiled by the author

## Evaluation of Corporate Governance in Airline Industry from Shareholders' Perspectives and Evidences

The following section analyses the perspective of shareholders having investments with stocks of listed airline companies in Indian stock market towards the different attributes of corporate governance of their companies. The purpose is to study their perception towards the different attributes of corporate governance and their importance for the better corporate governance in the company. In order to study the shareholder's perception towards different attributes associated with the corporate governance, a different survey was conducted with the help of conjoint approach. The objective of using conjoint approach was to understand the shareholders' perspective towards different attributes of corporate governance practices in listed companies of Indian aviation sector. The software used in the present chapter is SPSS 21.

### Corporate Governance Attributes

The conjoint analysis starts with the following seven corporate governance attributes:

- Board composition
- Board size
- Multiple directorships
- Audit Committee composition
- Audit Committee size

- Remuneration committee composition
- CEO Duality

These above mentioned attributes related to corporate governance in Indian aviation sector selected on the basis of literature review and discussion with industry experts. Once ensured that above mentioned attributes are relevant and important attributes considered by the shareholders while analyzing the company on each attribute various alternative choices were identified. The combination of the corporate governance attributes along with the choices available within each attributes became the conjoint layout. The conjoint layout designed and used in conjoint approach in the study is shown below in table 5.

**Table 5: Conjoint Layout**

| Corporate governance Attributes    | Operational Definition   | Alternative Choices  |
|------------------------------------|--|--|
| Board composition                  | Proportion of non-executive directors who are independent on board | Less than 50% of board are independent directors                 |
|                                    |  | Between 50% and 75% of board are independent directors           |
|                                    |  | More than 75% of board are independent directors                 |
| Board size                         | Number of directors on board                                       | Fewer than five board members                                    |
|                                    |  | Between five and eight board members                             |
|                                    |  | More than eight board members                                    |
| Multiple directorships             | Total number of directorships a director holds                     | Individual board members hold only one directorship              |
|                                    |  | Individual board members hold two or three directorships         |
|                                    |  | Individual board members hold more than three directorships      |
| Audit committee composition        | Proportion of independent directors in audit committee             | Less than 50% of audit committee are independent directors       |
|                                    |  | Between 50% and 75% of audit committee are independent directors |
|                                    |  | More than 75% of audit committee are independent directors       |
| Audit Committee size               | Total number of members and affiliates of audit committee          | Three or fewer audit committee members                           |
|                                    |  | More than three audit committee members                          |
| Remuneration committee composition | Proportion of independent directors in remuneration committee      | Less than 75% independent directors on the RC                    |
|                                    |  | Between 75% and 100% independent directors on RC                 |
|                                    |  | 100% independent directors on the RC                             |



|             |                                   |   |
|-------------|-----------------------------------|---|
| CEO Duality | When CEO is Chairman of the board | CEO and Chair of the board are the same person      |
|             |                                   | CEO and Chair of the board are not the same person. |

Source: Adrian et al. (2016)

### Development of Conjoint Questionnaire

With the help of selected corporate governance attributes and choices, a conjoint questionnaire was developed for the study. This specially designed questionnaire consisted of the different profiles with various choices of the corporate governance attributes. This questionnaire was used in the study for data collection from hundred (100) shareholders having significant investment in listed companies in Indian aviation sector. The shareholders selected for the study were asked to rate the strength of their preference for different hypothetical profiles of airline company with given combination of different choices of corporate governance attributes. The ratings of the profiles were on a scale of 1 to 100, where 1 represents the least preferred profile and 100 represents most preferred profile of corporate governance.

### Multiple Regression

Average ratings provided by the selected shareholders was considered as dependent variable and different choices of corporate governance attributes were considered as independent variables and multiple regression model was applied. Multiple regression model is shown below:

$$Ratings_i = \alpha + \beta_{1i}X_{1i} + \beta_{2i}X_{2i} + \beta_{3i}X_{3i} + \beta_{4i}X_{4i} + \beta_{5i}X_{5i}$$

Where, ratings is the dependent variable and the dummies of the choices of the corporate governance attributes are considered as independent variables in the regression model displayed in Table 6.

The results of multiple regression model applied on the ratings and corporate governance attributes choices indicate the estimates of differential cardinal utilities of selected choices considered in regression model. For example, in case of board composition, there are three choices (Less than 50% of board are independent directors, Between 50% and 75% of board are independent directors and More than 75% of board are independent directors). The first choice of board composition is considered as a reference choice. In the regression analysis, it is found that the choice "more than 75 percent of board are independent directors" has the regression coefficient of -2.333. This indicates that the perceived cardinal utility of this choice is 2.333 less than the cardinal utility of the reference choice i.e. "less than 50% of board is independent directors". This also indicates that the first choice is more preferred by the shareholders in airline sector. The f-statistics of the regression model is found to be 3.473 with p value of 0.089, which indicates that the regression model is having reasonable statistical fit. R square of the model is found to be 89.3 percent which indicate that 89.3 percent of the variance in shareholders rating can be explained with the help of regression model.

**Table 6: Results of Regression Model in Conjoint Analysis**

| Dependent Variable              | Independent variables  | Regression coefficients | T Statistics (p value) | F statistics (p value) | R square |
|---------------------------------|--|-------------------------|------------------------|------------------------|----------|
| Average ratings of Shareholders | (Constant)   | 57.917                  | 9.702                  | 3.473<br>(0.089)       | 89.3 %   |
|                                 | Between 50% and 75% of board are independent directors                   | 2.167                   | .513                   |                        |          |
|                                 | More than 75% of board are independent directors                         | -2.333                  | -.553                  |                        |          |
|                                 | Between five and eight board members                                     | 4.333                   | 1.027                  |                        |          |
|                                 | More than eight board members  | 12.500                  | 2.961                  |                        |          |
|                                 | Individual board members hold two or three directorships                 | -11.667                 | -2.764                 |                        |          |
|                                 | Individual board members hold more than three directorships              | -5.500                  | -1.303                 |                        |          |
|                                 | Between 50% and 75% of audit committee are independent directors         | 6.167                   | 1.461                  |                        |          |
|                                 | More than 75% of audit committee are independent directors               | -3.333                  | -.790                  |                        |          |
|                                 | More than three audit committee members                                  | 12.333                  | 3.374                  |                        |          |
|                                 | Between 75% and 100% independent directors on the remuneration committee | -8.167                  | -1.935                 |                        |          |
|                                 | RCC3   | .500                    | .118                   |                        |          |
|                                 | CEOD2  | 5.083                   | 1.391                  |                        |          |

Source: SPSS Output

### Estimation of Cardinal Utilities

Let a, b, c, d and e represents the cardinal utilities of the different choices of the attributes of corporate governance practices considered in the study. The cardinal utilities of all the considered choices of the attributes of corporate governance practices in the conjoint layout can be estimated with the help of following equations:

#### For the attribute “Board Composition”

$$a1+a2+a3=0$$

$$a2- a1=2.167$$

$$a3- a1= -2.33$$

#### For the attribute “Board Size”

$$b1+b2+b3=0$$

$$b2- b1=4.333$$

$$b3- b1=12.5$$

#### For the attribute “Multiple Directorship”

$$c1+c2+c3=0$$

$$c2- c1= -11.667$$

$$c3- c1=-5.5$$

**For the attribute “Audit Committee Composition”**

$$d1+d2+d3=0$$

$$d2- d1= 6.167$$

$$d3 - d1= -3.33$$

**For the attribute “Audit Committee Size”**

$$e1+e2=0$$

$$e2- e1=12.33$$

**For the attribute “Remuneration Committee Composition”**

$$f1+f2+f3=0$$

$$f2-f1= -8.167$$

$$f3-f1= 0.500$$

**For the attribute “CEO Duality”**

$$g1+g2=0$$

$$g2-g1=5.083$$

**Results of Conjoint Analysis**

Table 7 shows the cardinal utilities of the selected choices of corporate governance attributes in the conjoint layout. These cardinal utilities were calculated with the help of above mentioned mathematical equations. The graphical representation of the estimated cardinal utilities of all the choices is shown in figure 1.

**Table 7: Cardinal Utilities of Corporate Governance Attributes**

| Attributes             | Alternative Choices                                    | Utilities | Range  | Relative Importance |
|------------------------|--|-----------|--------|---------------------|
| Board composition      | Less than 50% of board are independent directors       | 0.055     | 5      | 7.72%               |
|                        | Between 50% and 75% of board are independent directors | 2.222     |        |                     |
|                        | More than 75% of board are independent directors       | -2.778    |        |                     |
| Board size             | Fewer than five board members                          | -5.611    | 12.5   | 19.30%              |
|                        | Between five and eight board members                   | -1.278    |        |                     |
|                        | More than eight board members                          | 6.889     |        |                     |
| Multiple directorships | Individual board members hold only one directorship    | 5.722     | 11.667 | 18.02%              |
|                        | Individual board members hold two or                   | -5.945    |        |                     |

| Attributes                         | Alternative Choices  | Utilities | Range  | Relative Importance |
|------------------------------------|--|-----------|--------|---------------------|
|                                    | three directorships  |           |        |                     |
|                                    | Individual board members hold more than three directorships              | 0.222     |        |                     |
| Audit committee composition        | Less than 50% of audit committee are independent directors               | -0.945    | 9.5    | 14.67%              |
|                                    | Between 50% and 75% of audit committee are independent directors         | 5.222     |        |                     |
|                                    | More than 75% of audit committee are independent directors               | -4.278    |        |                     |
| Audit Committee size               | Three or fewer audit committee members                                   | -6.167    | 12.334 | 19.05%              |
|                                    | More than three audit committee members                                  | 6.167     |        |                     |
| Remuneration committee composition | Less than 75% independent directors on the remuneration committee        | 2.556     | 8.667  | 13.38%              |
|                                    | Between 75% and 100% independent directors on the remuneration committee | -5.611    |        |                     |
|                                    | 100% independent directors on the remuneration committee                 | 3.056     |        |                     |
| CEO Duality                        | CEO and Chair of the board are the same person                           | -2.542    | 5.084  | 7.85%               |
|                                    | CEO and Chair of the board are not the same person.                      | 2.542     |        |                     |

Source: SPSS Output

The results of corporate governance attributes using conjoint approach indicate the following interpretations:

### Board Composition

In case of *board composition*, the choice "*between 50% and 75% of board are independent directors*" has the highest positive cardinal utility of 2.222. This is followed by the next positive utility of the choice '*less than 50% of board are independent directors*' with a value of 0.055. However, in case of the choice '*more than 75% of board are independent directors*', the cardinal utility is found to be the negative with a value of -2.778. Thus, it can be inferred from the results that the shareholders prefer to have 50 to 75 percent independent directors on board. The reason could be that Indian companies are family managed and promoter dominated. So, a reasonable number of independent directors must be on the board to keep in check the decision making process of the company but beyond this limit, the company would become largely dependent on outsiders which might not take care of shareholders' interests. The results are consistent with the findings of

John and Senbet (1998) in which board is more independent if it has more number of non-executive directors. The relative importance of the board composition is found to be 7.72 percent which is not very high.

### **Board Size**

In case of *board size*, the choice '*more than eight board members*' is found to have the highest positive cardinal utility of 6.88. However in case of the choice '*fewer than five board members*' the cardinal utility is found to be most negative (-5.611) followed by the choice '*between five and eight board members*' of -1.278. Thus, it can be inferred from the results that the shareholders prefer to have more than eight members on board. However, the shareholders are dissatisfied if only five to eight members are present on board. The degree of dissatisfaction further increases manifold if there are less than five members on board. The reason could be that larger boards enables the company the opportunity of pool of experienced and knowledgeable specialists to facilitate better decision making and intricate for powerful CEOs to dominate. This observation is consistent with the findings of Haleblian et al. (1993) but inconsistent with the findings of Yermack (1996) and Eisenberg (1998). The relative importance of the board size is found to be 19.3 percent which is the highest among all other attributes of corporate governance.

### **Multiple Directorships**

In case of *multiple directorships*, the choice '*individual board members hold only one directorship*' is found to have the highest positive cardinal utility of 5.722. However, in case of the choice '*individual board members hold two or three directorships*' the cardinal utility is found to be the negative (-5.945). The choice '*individual board members hold more than three directorships*' is found to have the cardinal utility of 0.222. Thus, it can be inferred from the results that the shareholders prefer to have individual board members holding one directorship only. However, the shareholders are dissatisfied if individual board members holding more than three directorships. The degree of dissatisfaction further increases manifold if individual board members hold two or three directorships. The reason perhaps might be that the board members holding more than three directorships are industry experts who are in great demand having significant experience and expertise and who can contribute largely in the decision making of the company. This observation is consistent with the findings of Sarkar and Sarkar (2009). The relative importance of multiple directorships is found to be 14.67 percent.

### **Audit Committee Composition**

In case of *audit committee composition*, the choice '*between 50% and 75% of audit committee are independent directors*' has the highest positive cardinal utility of 5.222. However in case of the choice '*more than 75% of audit committee are independent directors*' the cardinal utility is found to be most negative (-4.278) followed by the choice '*less than 50% of audit committee are independent directors*' of -0.945. Thus, it can be inferred from the results that the shareholders prefer to have 50 to 75% independent directors on audit committee. However, the shareholders

are dissatisfied if less than 50% independent directors are present on audit committee. To our surprise, the degree of dissatisfaction further increases manifold if there are more than 75% independent directors on audit committee. The reason perhaps could be that the committee must consist of non-executive directors to ensure independence of audit committee. There are fewer occurrences of corporate fraud when companies have independent audit committee (Uzun et al., 2004). However, shareholders do not want to have more than 75% independent members on audit committee as they might not want to have more than 75% outsiders in audit matters. The relative importance of audit committee composition is found to be 18.02 percent.

### **Audit Committee Size**

In case of *audit committee size*, the choice '*more than three audit committee members*' is found to have the positive cardinal utility of 6.167 while the cardinal utility is found to be negative (-6.167) in case of the choice '*three or fewer audit committee members*'. Thus, it can be inferred from the results that the shareholders prefer to have more than three members on audit committee. On the other hand, the shareholders are dissatisfied if three or fewer members are in audit committee. The audit committee must consist of at least three members so as to ensure audit independence. This observation is inconsistent with the findings of Narwal and Jindal (2015). The relative importance of audit committee composition is found to be 19.05 percent.

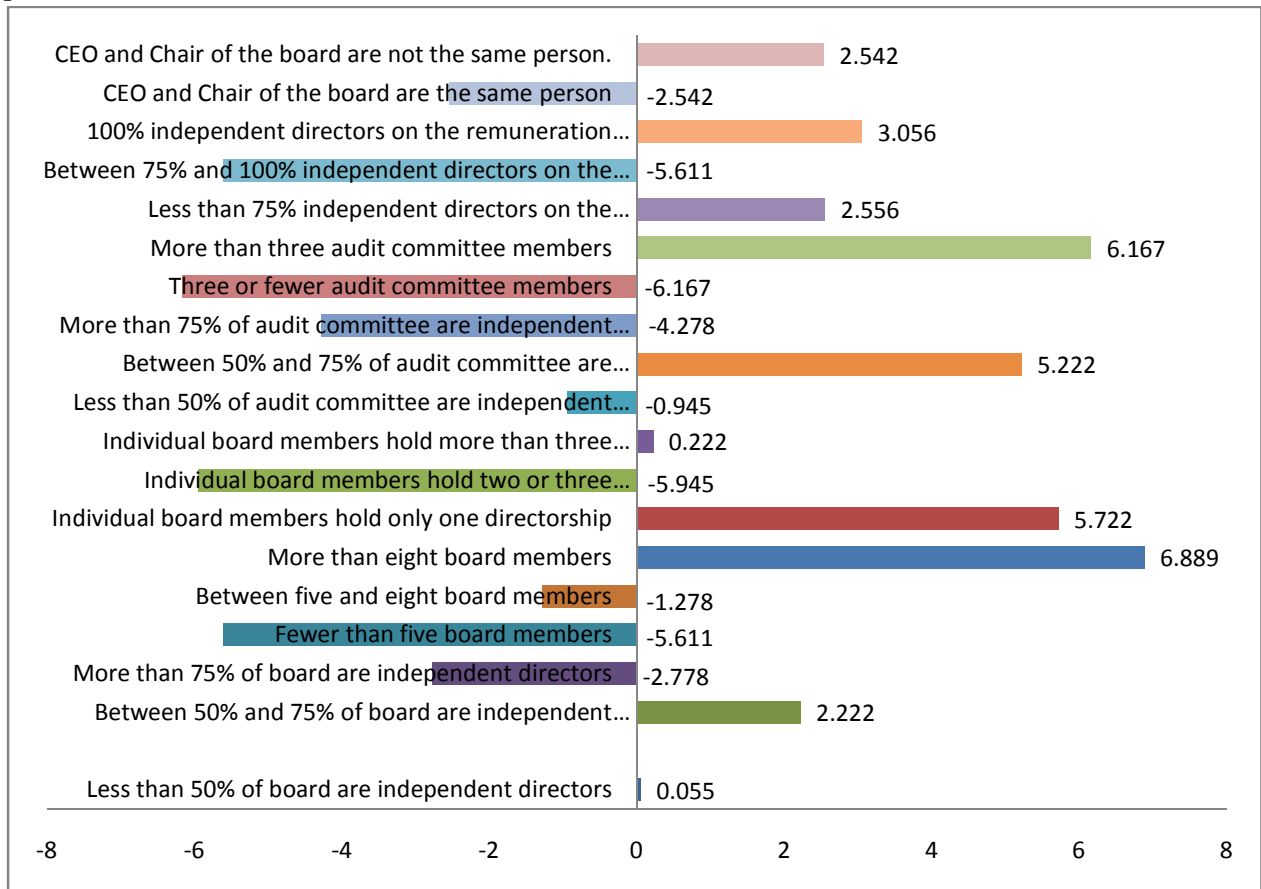
### **Remuneration Committee Composition**

In case of *remuneration committee size*, the choice '*100% independent directors on the remuneration committee*' is found to have the highest positive cardinal utility of 3.056. This is followed by the next positive utility of the choice '*less than 70% independent directors on remuneration committee*' with a value of 2.556. However, in case of the choice '*between 75% and 100% independent directors on remuneration committee*', the cardinal utility is found to be the negative with a value of -5.611. Thus, it can be inferred from the results that the shareholders prefer to have In case of the choice '*less than 75% independent directors on remuneration committee*', the cardinal utility is found to be negative (-6.167). Thus, it can be inferred from the results that the shareholders prefer to have 100% independent directors on remuneration committee.

### **CEO Duality**

In case of *CEO duality*, the choice '*CEO and Chair of the board are not the same person*' is found to have the positive cardinal utility of 2.542 while the cardinal utility is found to be negative (-2.542) in case of the choice '*CEO and Chair of the board are the same person*'. Thus, it can be inferred from the results that the shareholders prefer to have separate roles of CEO and Chairman. Agency theory says that when the Chairman assumes the role of CEO, the function of the board to minimize agency cost could weaken drastically and therefore, performance of the company goes down. This observation is inconsistent with the findings of Jensen and Meckling

(1976) and Fama and Jensen (1983). The relative importance of CEO duality is found to be 7.85 percent.

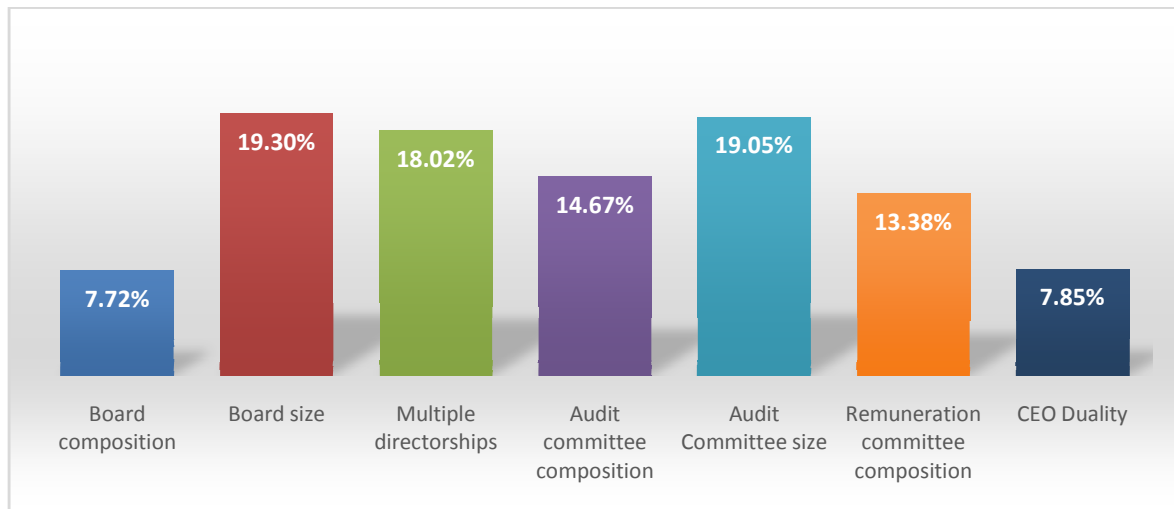


Source: MS Excel Output

**Figure 1: Estimated Cardinal Utilities of All Choices**

The graphical representation in figure 6.1 shows that the highest utility perceived by shareholders is in case of more than eight board members (6.889). This is followed by more than three audit committee members (6.167), individual board members hold only one directorship (5.722) and 50% to 75% members in audit committee must be independent. The lowest utility factors from shareholders perspectives are found to be in case of three or fewer audit committee members(-6.167) followed by individual board members holding two or three directorships (-5.945) and fewer than five board members (-5.611) and between 75% and 100% independent directors (-5.611) on remuneration committee.

The relative importance of all the attributes of corporate governance in airline sector is shown in figure 2. It shows that the most important attributes of corporate governance in the opinion of shareholders are board size (19.3%) followed by audit committee (19.05%) and multiple directorships (18.02 %). The least significant attributes of corporate governance are board composition (7.72 %) and CEO duality (7.85 %)



Source: MS Excel Output

**Figure 2: Relative Importance of Corporate Governance Attributes**

### Conclusion

This chapter undertook the analysis of hundred (100) shareholders who have invested in airlines. The analysis was based on the perception of airline shareholders collected through a conjoint questionnaire concerning to various aspects of corporate governance such as board size, board composition, multiple directorships, audit committee size & composition, remuneration committee composition and CEO duality. The results of Conjoint approach related to various aspects have been discussed above. The results of Conjoint approach reveal that the most important attributes of corporate governance in the opinion of shareholders are board size (19.3%) followed by audit committee (19.05%) and multiple directorships (18.02%). The least significant attributes of corporate governance are board composition (7.72%) and CEO duality (7.85%).

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