Research on the Influence Path of Executive Characteristics and Social Responsibility

Empirical Data from China

Ruyi Guo
School of Economist and Management
Beijing Jiaotong University
Beijing, China

Abstract—On the surface, The fulfillment of social responsibility is whether a company has actively assumed responsibility for society. But from the perspective of internal decision-making, executives are the most important factor. Corporate executives are a key factor in the decision-making and execution of social responsibility strategies. This paper studies the characteristics of executives and social responsibility, and detailed analysis the reasons why executive characteristics affect social responsibility performance. The research in this paper finds that no matter how to control the research caliber, salary and shareholding ratio can promote the fulfillment of social responsibility.

Keywords—company executive; gender; age; salary; shareholding; CSR; impact path

I. INTRODUCTION

Chinese people always pay attention to people-oriented. In recent years of academic research, scholars have paid more and more attention to the important role of people in the development and operation of the company. The fulfillment of corporate social responsibility (CSR) reflects the contribution of the company to the community, employees, environment and society while pursuing the interests of shareholders. As the makers and implementers of company's strategy, corporate executives are bound to play an important role in the implementation of social responsibility.

In academic research, scholars have different views on the caliber of executives. Some scholars only recognize the chairman, vice chairman, general manager, deputy general manager, chief financial officer, chief engineer, etc. as company executives, such as He Juan (2018) [1]. However, some scholars have identified all directors, supervisors and senior executives as executives, such as Han Fei (2017) [2]. In this paper, two types of executives were studied separately.

The research purposes of this paper include the following aspects. First of all, this paper selects the characteristics that have been widely concerned, and studies their relationship with performance of social responsibility. Secondly, this paper systematically sorts out the influence path of executive characteristics on social responsibility. Finally, this paper studies whether the different calibers of executives affect the conclusion.

The research in this paper is based on my previous research [3]. This article has supplemented and improved the following aspects compared with the previous research. First, in the sample selection, ST companies and financial companies are excluded. Second, this paper conducts a classification study of executives. Third, this paper adds new executive features.

II. THEORETICAL ANALYSIS

A. Gender

By summarizing relevant research, this paper finds that gender has an impact on the fulfillment of social responsibility through four aspects: work style, personality, attitude towards risk and social expectation. The work style is significantly different among people of different genders. Compared with men, women are more euphemistic and more meticulous in their works. This style of work is conducive to persuading other executives to attach importance to social responsibility. The character of female executives is more compassionate, so they will pay more attention to the fulfillment of their responsibilities to employees and the environment. Women are more disgusted with risk and prefer to operate the company within a lower risk tolerance. Failure to fulfill social responsibilities will be concerned by stakeholders. In serious case, relevant departments will impose penalties on company and the media will report negatively. Because women have different social roles than men, the expectations of women in society are more moderate, responsible and caring. In order to meet the expectations of society, female executives will also strive to supervise and promote the fulfillment of social responsibility.

H1: Female executives are conducive to the fulfillment of corporate social responsibility.

B. Age

Age affects members' work experience, work style and risk appetite. In general, older members have more work experience, so older managers are better able to perform their
duties. Older managers are more mature in psychology, work styles of them are more stable, and decisions of them are more rational. Compared with younger members, they can perform their duties more steadily. Older people are averse to risk (Hambrick & Mason, 1984) [4] and have a more conservative attitude towards risk (Bertrand & Schoar, 2003) [5].

H2: The older the executives, the more conducive to the fulfillment of corporate social responsibility.

C. Salary

Nowadays, the law system is getting more and more perfect, which leads to the increasing legal responsibility of managers. A certain level of incentives can encourage executives to perform their duties. Based on the theory of fairness, the higher the salary level, the higher the manager can psychologically think that his contribution, the fairness, the higher the salary level, the higher the manager can psychologically think that his contribution, the responsibility and return are matched.

H3: The higher the salary of executives, the better the performance of corporate social responsibility.

D. Shareholding Ratio

The shareholding situation reflects whether the interests of the executives are consistent with the long-term interests of the company. If the executive holds a certain number of shares, then as a shareholder of the company, the executives will consider the long-term interests of the company, and fulfilling social responsibility is essentially beneficial to the long-term interests of the company. Conversely, if the executive does not hold shares in the company, then the executive is likely to focus on the short-time benefits and use the resources for project investment rather than social responsibility. Therefore, this paper proposes the following assumptions.

H4: The higher the shareholding ratio of executives, the better the performance of corporate social responsibility.

III. RESEARCH DESIGN AND RESULTS

This chapter mainly introduces the empirical data, models and empirical results of this paper.

A. Sample and Data Sources

This paper takes the listed companies from 2014 to 2016 as samples. The data on corporate social responsibility in this article comes from Hexun website of China. Other data comes from CAMAR. This paper obtains data from Hexun.com and excludes the data that explanatory variables and control variables cannot be obtain, ST companies, and companies which industry code is J. There are a total of 8040 sample data. The software that processes the data is EXCEL and STATA14.

B. Variables and Models

In this paper, I refer to the relevant research and select the following variables as the research variables. There is a difference from the previous paper. This article sets dual as a 0-1 variable. If the manager and the chairman is one people, the variable takes a value of 1, others the variable takes a value of 0. This article takes the logarithm of the assets. (See "Table I")

![Table I. Variable Name](image)

Because the research of Feng and Zhao (2017) [6] did not control the industry and the year, while the research by Wen and Song (2017) [7] controlled the industry and the year. In order to compare whether the industry and the year will have an impact on the research of this paper, the paper is based on the following two models.

\[
CSR = a_0 + a_1 \text{ Executive characteristics} + a_2 \text{ CR} + a_3 \text{ LEV} + a_4 \text{ CD} + a_5 \text{ GRO} + a_6 \text{ TUR} + a_7 \text{ DUAL} + a_8 \text{ SIZE}
\]

\[
CSR = b_0 + b_1 \text{ Executive characteristics} + b_2 \text{ CR} + b_3 \text{ LEV} + b_4 \text{ CD} + b_5 \text{ GRO} + b_6 \text{ TUR} + b_7 \text{ DUAL} + b_8 \text{ SIZE} + b_9 \text{ YEAR} + b_{10} \text{ INDUSTRY}
\]

C. Descriptive Statistics

This article first introduces descriptive statistics for narrow-caliber executives. Narrow-caliber executives include general manager (deputy), manager (deputy), president (deputy), secretary-general, responsible person
This paper identifies narrow-caliber executives through the CSMAR database. Descriptive statistics for the independent variables are shown in "Tab. II". The mean, minimum and maximum values of AGE are 47.224, 33.667 and 59.750. Because the age of executives is not bound by legal norms, different companies hire executives of different ages for their own consideration. The minimum value of SALARY is 0 RMB, indicating that the company's executives do not receive compensation from the company. The maximum value of SALARY is 6949800.000 RMB, which is a higher wage level in China. From the results of descriptive statistics, on average, the proportion of female executives is low. (See "Table II")

| Variable       | Mean   | Min      | Max       | Std. Dev |
|----------------|--------|----------|-----------|----------|
| FEMALE-RATE1   | 0.156  | 0.000    | 1.000     | 0.153    |
| AGE1           | 47.224 | 33.667   | 59.750    | 3.629    |
| SALARY1        | 514274,100 | 0.000 | 6949800,000 | 448620,300 |
| SHAREHOLDING1  | 0.012  | 0.000    | 0.203     | 0.025    |

This article lists the descriptive statistics of wide-caliber executives. Wide-caliber executives include all directors, supervisors, and executives of the company. Descriptive statistics for the relevant independent variables are shown in "Table III". The mean, minimum and maximum values of AGE are 49.080, 35.600 and 61.364. The minimum value of SALARY is 0 RMB, and the maximum value of SALARY is 3347500.000 RMB.

| Variable       | Mean   | Min      | Max       | Std. Dev |
|----------------|--------|----------|-----------|----------|
| FEMALE-RATE2   | 0.181  | 0.000    | 0.643     | 0.107    |
| AGE2           | 49.080 | 35.600   | 61.364    | 3.105    |
| SALARY2        | 283595,600 | 0.000 | 3347500,000 | 234655,300 |
| SHAREHOLDING2  | 0.009  | 0.000    | 0.068     | 0.013    |

The minimum and maximum values of CSR are -19.240 and 90.110, indicating that the degree of fulfillment of social responsibility of listed companies varies greatly. The average CSR is only 23.672 points, indicating that the average performance of listed companies is poor. (See "Table IV")

| Variable | Mean | Min     | Max     | Std. Dev |
|----------|------|---------|---------|----------|
| CSR      | 23.672 | -19.240 | 90.110  | 15.247   |
| CR       | 2.555  | 0.039   | 78.410  | 3.410    |
| LEV      | 0.423  | 0.009   | 4.026   | 0.216    |
| CD       | 0.165  | -6.193  | 6.942   | 0.377    |
| GRO      | 0.296  | -0.828  | 45.460  | 1.257    |
| TUR      | 7.382  | 0.007   | 1087.254| 22.205   |
| DUAL     | 0.274  | 0.000   | 1.000   | 0.446    |
| SIZE     | 22.106 | 15.979  | 28.509  | 1.320    |

D. Correlation Analysis

Due to space reasons, this article does not specifically list the data of correlation statistics. From the results we can know, regardless of the caliber chosen by the executives, AGE and SALARY can significantly promote the fulfillment of social responsibility.

E. Regression Results

The following results do not take into account the industry and year. It is easy to find that the higher the proportion of female executives, the younger the executives, the higher the salary and the greater the shareholding ratio, the more conducive to the fulfillment of social responsibility. FEMALE-RATE, AGE, SALARY, SHAREHOLDING and CSR are both significant at 1% significance level. (See "Table V")
The following "Table VI" takes into account the industry and year. It was found that SALARY, SHAREHOLDING and CSR were both significantly significant at the 1% significance level.

### TABLE VI. Regression Results of Narrow Caliber 2

| (1) | (2) | (3) | (4) | (5) |
|-----|-----|-----|-----|-----|
| FEMALE-RATE | 0.898 | 0.084 | 0.524 | 0.000 |
| [0.395] | [0.004] | [0.617] | [0.000] |
| AGE | -0.013 | -0.013 | -0.041 | -0.639 |
| [0.775] | [0.94] | [0.94] | [0.00] |
| SALARY | 0.000*** | 0.000*** | 0.000*** | 0.000*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| SHAREHOLDING | 0.000*** | 0.000*** | 0.000*** | 0.000*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| CR | -0.160*** | -0.159*** | -0.152*** | -0.173*** |
| [0.004] | [0.005] | [0.002] | [0.002] |
| LEV | -16.256*** | -16.283*** | -15.348*** | -15.994*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| CD | 4.771*** | 4.771*** | 4.264*** | 4.299*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| GRO | -0.275*** | -0.276*** | -0.279*** | -0.287*** |
| [0.027] | [0.028] | [0.088] | [0.021] |
| TUR | 0.004 | 0.004 | 0.004 | 0.004 |
| [0.556] | [0.548] | [0.56] | [0.56] |
| DUAL | 0.447 | 0.460 | 0.191 | -0.185 |
| [0.212] | [0.198] | [0.587] | [0.64] |
| SIZE | 4.325*** | 4.325*** | 3.267*** | 3.368*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| INTERCEPT | -7.167*** | -7.333*** | -7.160*** | -7.157*** |
| [0.000] | [0.000] | [0.000] | [0.000] |
| YEAR | YES | YES | YES | YES |
| INDUS | YES | YES | YES | YES |
| R-squared | 0.169 | 0.169 | 0.201 | 0.171 | 0.202 |
| Obs | 8040 | 8040 | 8040 | 8040 | 8040 |

*a, ***, ***means significant at the 10%, 5%, 1% level.
Under the premise of not controlling the year and industry, the results of wide-caliber executives are basically the same as those of narrow-caliber executives. (See "Table VII")

### Table VII. Regression Results of Wild Caliber1

|          | (1)        | (2)        | (3)        | (4)        | (5)        |
|----------|------------|------------|------------|------------|------------|
| FEMALE-RATE2 | 7.339***  | 0.000***   | 5.379***   |
| AGE2      | -0.101*   | 0.039      | 0.486      |
| SALARY2   | 0.000***  | 0.000***   |
| SHAREHOLDING2 | 78.321*** | 53.290***  |
| CR        | -0.120**  | -0.112**   | -0.133**   |
| LEV       | -15.334***| -14.222*** | -14.580*** |
| CD        | 4.808***  | 4.432***   | 4.865***   |
| GRO       | -0.155    | -0.092     | -0.169     |
| TUR       | -0.012    | -0.009     | -0.021*    |
| DUAL      | 0.532     | 0.267      | 0.222      |
| SIZE      | 4.366***  | 3.115***   | 4.439***   |
| INTERCEPT | -68.194***| -69.357**  | -51.335**  |
| R-squared | 0.130     | 0.168      | 0.131      |
| Obs       | 8040      | 8040       | 8040       |

Under the premise of controlling the year and industry, the characteristics of wide-caliber executives are basically the same as those of narrow-caliber executives. (See "Table VIII")

### Table VIII. Regression Results of Wild Caliber2

|          | (1)        | (2)        | (3)        | (4)        | (5)        |
|----------|------------|------------|------------|------------|------------|
| FEMALE-RATE2 | 2.406     | 0.052      | 1.975      |
| AGE2      | 0.052      | 0.125**    |
| SALARY2   | 0.000***   | 0.000***   |
| SHAREHOLDING2 | 74.360*** | 60.635***  |
| CR        | -0.162***  | -0.159***  | -0.179***  |
| LEV       | -16.254*** | -15.034*** | -15.638*** |
| CD        | 4.766***   | 4.338***   | 4.766***   |
| GRO       | -0.277**   | -0.210*    | -0.302**   |
| TUR       | 0.004      | 0.003      | 0.004      |
| DUAL      | 0.421      | 0.504      | 0.777      |
| SIZE      | 4.348***   | 3.240***   | 4.462***   |
| INTERCEPT | -72.929*** | -51.124*** | -75.588*** |
| YEAR      | YES        | YES        | YES        |
| INDUSTRY  | YES        | YES        | YES        |
| R-squared | 0.170      | 0.198      | 0.172      |
| Obs       | 8040       | 8040       | 8040       |

* * * means significant at the 10%, 5%, 1% level.
Finally, this paper summarizes the regression results of the control variables. In the above four tables, CR has a significant negative correlation with CSR, indicating that the higher the fluidity, the more the company tends to invest resources in projects that are not conducive to social responsibility. LEV has a significant negative correlation with CSR, indicating that the greater the pressure on debt repayment, the more the company wants to use resources for projects with high returns rather than relying on social responsibility. The CD is significantly positively correlated with CSR, indicating that at a certain net liabilities, the more cash generated by operating activities, the more resources the companies have, the more it will promote the company's social responsibility. SIZE is significantly positively correlated with CSR, indicating that the larger the company, the more attention it will pay on the fulfillment of social responsibility.

F. Robustness Test
In the multiple regression test of this paper, the independent variables are relative indicators. In this paper, the number of female executives (FEMALE-NUM) and the number of executives holding the stocks (STOCK) are tested for robustness. Due to space reasons, this paper does not specifically list the regression results. By comparison, the regression results of FEMALE-NUM are consistent with the results of FEMALE-RATE. The regression results of STOCK are consistent with the results of SHAREHOLDING. In this paper, the logarithm of the salary (LNSALARY) is tested for robustness, and the regression results are also consistent with the results of SALARY.

In this paper, the continuous variables involved in multiple regressions were subjected to 1% and 99% tailing treatment, and the regression results were consistent except for AGE. In addition, the results of this paper were tested by random effects. The regression results were consistent except for AGE2, indicating that the results of this paper are basically robust.

G. Further Research
According to definition on Hexun.com of CSR, this paper studies the relationship between executive characteristics and shareholder responsibility (CSROW), employee responsibility (CSREM), supplier customer responsibility (CSRUS), environmental responsibility (CSREN) and social responsibility (CSSRO). We found that regardless of whether the executives choose narrow or wide caliber, whether or not they control the industry and the year, executive gender promotes the fulfillment of CSSRO, and executive compensation contributes to all types of social responsibility. Due to space reasons, the specific regression results are not listed in this paper.

This paper divides the enterprises by the nature of the enterprise (STATE) in CSMAR, and studies the difference between state-owned enterprises and non-state-owned enterprises. The study found that the caliber of executives does not affect the regression results, and the regression results between characteristics of executives and STATE are different.

IV. Conclusion
This paper carefully summarizes the path of characteristic of executives influence on social responsibility and conducts empirical tests. The research in this paper finds that no matter how to control the research caliber, salary and shareholding ratio can promote the fulfillment of social responsibility.

REFERENCES
[1] He Juan. The Influence of Executive Team Characteristics on Corporate Social Responsibility [J]. Modern Economic Information, 2018(24):130.
[2] Han Fei. Executive Characteristics, Internal Control and Corporate Social Responsibility — Data from Listed Companies in 2009-2015 [J]. Accounting Newsletter, 2017(10):12-15.
[3] Ruyi Guo. The Relationship between Characteristics of Executives and Corporate Social Responsibility. [M] 4th International Symposium - Management, Innovation and Development, 1996-781
[4] Hambrick D C, Mason P A. Upper Echelons: The Organization as a Reflection of Its Top Managers [J]. Academy of Management Review, 1984, 9(2):193-206.
[5] Bertrand M, Schoar A. Managing With Style: the Effect of Managers on FIRM Policies [J]. Quarterly Journal of Economics, 2003, 118(4):1169-1208.
[6] Feng Lili, Zhao Simin. Property Rights, Gender of Executives and Fulfillment of Corporate Social Responsibility [J]. Journal of Hebei University of Geosciences, 2017, 40(06): 79-83.
[7] Wen Wen, Song Jianbo. Executive overseas background and corporate social responsibility [J]. Management Science, 2017, 30(02): 119-131.