



A Study of Independent Directors' Gender, Number of Part-Time Jobs and Corporate Performance

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Abstract. As an important institutional arrangement in corporate governance, the independent director system is widely practiced worldwide. The research on the governance of independent directors has been one of the hotspots in the academic world, and scholars have carried out in-depth studies on the independence, reputation, information characteristics, social network, geographic location, and human resource characteristics of independent directors. The findings of this paper show that female independent directors perform their monitoring duties effectively and age has an impact on this monitoring; the number of part-time jobs held by independent directors has an impact on firm performance. Helping company management to better select independent directors with different backgrounds has a better positive effect on the firm.

Keywords: Independent director background, Company performance, Number of part-time jobs, Age

1 Introduction

An independent director is a member of the board of directors hired by the enterprise from outside. Independent directors do not participate in the day-to-day operation and management of the enterprise and do not have a substantive relationship with the enterprise, its senior management team or major shareholders. China introduced the

system of independent directors in 2001, aiming to alleviate the agency problem in the governance of listed companies, monitor the behavior of major shareholders and management teams, and safeguard the rights and interests of small and medium-sized shareholders. According to the Rules for Independent Directors of Listed Companies and other relevant regulations, independent directors are required to participate in the operational decisions of the Board of Directors, express independent opinions on major matters such as connected transactions, appointment and dismissal of senior management, and provide supervision and consulting services for the governance and development of the Company. Since the establishment of the independent director system, independent directors have played a positive role in improving China's corporate governance structure, but in the commercial context of human intertwined, the independence of the domestic independent directors is limited, and it is doubtful whether they can effectively play a supervisory function. The lack of incentives for independent directors to actively fulfill their duties and the greater resistance they face in safeguarding the rights and interests of small and medium-sized shareholders have led to the existence of the independent director system and other problems such as "no independence, no knowledge" and "perfunctory supervision".

Due to information asymmetry, independent directors do not have access to all the important information of the company. In most cases, they only have access to information that controlling shareholders or management are willing to disclose. In the absence of information, it is difficult for independent directors to provide professional advice to effectively improve the company's business performance. Even though most of them are experts in financial or legal fields, they are likely to be transformed into vases that follow the votes of major shareholders, making it difficult for them to play the monitoring role expected by regulators and small and medium-sized shareholders.

Therefore, it is of great significance to analyze in depth the impact of social relations on the independence of independent directors, to explore whether social relations have a negative impact on the supervisory ability of independent directors, and then to look for countermeasures to enhance the supervisory effectiveness of the independent directors' system, in order to improve the governance structure of listed companies, to reduce the agency cost, and to safeguard the interests of small and medium-sized shareholders. This paper analyzes the impact of the number of part-time jobs of independent directors on company performance from the perspective of female independent directors and age. The subsequent arrangement of the paper is

as follows. Part II is the literature review, Part III is the empirical evidence, and Part IV is the conclusion.

2 Literature Review

There are countless studies on the number of independent directors' part-time jobs on corporate performance, for example, Dai Zhimin's (2010) study confirms that the number of independent directors' part-time jobs is significantly and positively correlated with the quality of auditing; [1] Carlos et al.'s (2011) study similarly supports that the higher the proportion of interlocking directors, the better the company's performance. At the same time, studies have found that multiple directorships of independent directors have a negative effect on corporate governance. This view is supported by Kim's (2005) study, which found that Korean firms hire independent directors on the basis of their social reputation rather than their professional expertise, because independent directors with high social reputation tend to work in multiple firms or organizations and have more social resources, which may also explain why some firms hire "stars" who do not have strong managerial skills as independent directors. Liu Tingli and Cao Jinping had proved that the number of part-time jobs of chain independent directors showed a U-shaped relationship with company performance through data analysis, and through the different perspectives of the social resources and busyness hypothesis and the social provision theory, they came up with the conclusion that, for the general independent directors, too many part-time jobs should be avoided as much as possible; however, for the minority of independent directors with a higher reputation, the higher number of part-time jobs is rather a good news. Which is specifically manifested in the average number of part-time companies of independent directors between 1 and 3 companies, with the increase of part-time seats of independent directors, the company performance has a significant downward trend. And when the average number of independent directors' part-time companies is between 3 and 6 companies, with the increase of independent directors' part-time seats, the company's performance increases gradually. [2]

The latest report released by international indexing company MSCI (Ming Sheng) shows that the proportion of female directors in Chinese listed companies will rise to 13.8% in 2021, up from 13% in 2020, and that the proportion of female directors in Chinese listed companies has risen year by year since 2016, with an increase of more than 5 percentage points over the five-year period. And, in terms of the percentage of

companies with women as CEOs and CFOs, China now exceeds the international average. According to the study, the Asia-Pacific region has the lowest proportion of female directors among global companies, at 10.7%, still lagging behind other regions of the world.

Meanwhile, the report of the China Institute of Corporate Governance of Nankai University analyzed that the higher the proportion of female directors, the higher the corresponding governance index of listed companies. According to the study, female directors can more effectively enhance the function of the board of directors, provide different viewpoints and perspectives for board decision-making, and reduce decision-making errors caused by individual subjective preferences. The global economy and labor markets have been devastated by the New Crown epidemic, which has deepened the plight of women in the economy.[3]

As women globally are more concentrated in sectors affected by the epidemic, such as hospitality, retail, food services and tourism, the proportion of informal employment is high, and the rate of job loss and unemployment is higher than that of men. Getting women entrepreneurs and workers who lost their jobs during the epidemic back on track is the main objective of the Global Women's Summit and key to revitalizing the global economy.

It can be seen that the role played by women in the field of corporate governance deserves more and more attention, both at home and abroad. In addition, gender is the most basic characteristic of human beings, and both medical and sociological researches show that there are psychological and behavioral differences between women and men. According to the theory of "high-ranking echelon", the personal characteristics of executives are an important factor influencing the management behavior of enterprises.

On this basis, it is known experimentally that women are more risk-averse. There is evidence from experimental psychology that women are stronger than men when it comes to risk aversion. Psychologists Byrnes et al. designed 16 tasks in an experiment in order to compare the risk-taking tendencies of men and women, and it was found that women showed a higher degree of risk aversion than men in 14 out of 16 tasks [4]. Croson and Gneezy found that the risk preference of women versus men is one of the main differences by summarizing the existing studies on gender differences in economic experiments. Women and men have different emotional responses to risk, women are more nervous and fearful when a negative outcome is expected and

overestimate the probability of a negative outcome occurring, i.e., women are relatively more risk averse[5].

According to the research of Tan Jinsong (2003), the age of independent directors in China is generally between 30 and 60 years old, with doctoral or master's degrees, specializing in economics and management, accounting and law, most of them have senior titles, and their main occupations are university professors, researchers and a small number of entrepreneurs. University professors and economists account for more than 50% of the independent directors, while only 12% of the entrepreneurs are independent directors.

Liu Tingli and Cao Jinping (2011) found through grouping t-tests and other methods that the relationship between independent directors' plurality and corporate performance is U-shaped. When the part time seats are less of three, they have a significant negative correlation. But when the independent director has more than three posts, the corporate performance is improved with the posts' being processed. There are many factors that influence the governance effectiveness of independent directors, and these factors may work together in some mechanism to influence the performance of the role of independent directors, and the same is true for the gender of independent directors; this paper builds on the work of its predecessors and goes further, exploring the linkages between gender, age, and part-time employment, and the possible impacts on firm performance that this linkage presents outwardly.

Literature studies have shown that the number of part-time jobs can affect the independence of independent directors, while gender characteristics can similarly affect the independence of independent directors, and that only by examining the two together can we reduce the serious endogeneity problem in the study and avoid obtaining erroneous conclusions.

Based on the above analysis this paper proposes the following hypotheses:

Hypothesis 1 : The greater the number of part-time jobs for women, the stronger the contribution to company performance than men in the same number of part-time jobs to play a contribution to company performance.

Hypothesis 2: The role played by hypothesis 1 will change with the age of different

3 Model and Empirical Analysis

3.1 Model

$$perform_{i,t} = \alpha + \beta_1 gender_{i,t} + control_{i,t} + \epsilon_{i,t} \quad (1)$$

The explanatory variable of model 1 is the firm's performance level (perform), i.e., return on total assets (ROAt-1) in the previous year.

The gender of the independent director is denoted by Gender. gender is a dummy variable that takes the value of 1 if the independent director of the accounting profession is female and 0 if the independent director of the accounting profession is male. control_{i,t} is a control variable and $\epsilon_{i,t}$ is a disturbance term.

Factors that may have an impact on management compensation are selected as control variables in this paper: firm size, gearing, annual return on assets, book-to-market ratio, are used as control variables in this paper. Whether the general manager is also the chairman of the board of directors, management's shareholding, the proportion of men in the management team, the average age of the management, the size of the board of directors, the independence of the board of directors, the level of director participation, the number of independent directors working part-time, the average remuneration of the sole director, the company's Tobin's Q, the company's financial leverage, the company's share of tangible assets, the size of the company's revenues, the size of the company's assets, the number of employees employed by the company, the size of the company's market cap, the institutional shareholding, nature of ownership, equity concentration, and equity checks and balances. The definitions of the specific variables are detailed in Table 1. In addition, the paper controls for year and industry effects.

Table 1. List of variable descriptions

Variable Name	Variable Code	Meaning and Description of Variables
Company performance level	ROA	Return on total assets of the company in the previous year
Gender of independent directors	Gender	If the independent director specializing in accounting is female, the value is 1; if the

Variable Name	Variable Code	Meaning and Description of Variables
Average age of management	Age	independent director specializing in accounting is male, the value is 0
Board size	Boardsize	Average age of senior management
Board independence	Independ	Number of Board of Directors
Level of director participation	Meeting	Percentage of independent directors on the board of directors
Number of independent directors working part-time	Parttime	Number of board meetings held per year
Average remuneration of independent directors	Pay	Number of independent directors who are part-time directors in other enterprises
Company's Tobin's Q	TobinQ	Natural logarithm of average remuneration of independent directors
Company's financial leverage level	Leverage	Tobin's Q of the company in the previous year
Tangible Assets Ratio	Tangible	Gearing ratio

3.2 Sample and Data Sources

The data of this paper comes from CSMAR database. This paper selects the panel data of China's A-share listed companies from 2013 to 2020 as the initial research sample, and removes the financial enterprises and ST enterprises in it, obtaining a total of 20001 observations. Sample selection principles: (1) the company has been listed for one year, the purpose is to control the corporate governance and corporate performance will not be affected by the company just listed; (2) Firms that underwent asset reorganization such as change of major shareholders or replacement of main business assets during the sample period are excluded. The reason is that after the reorganization, the shareholding structure and operating performance of these companies have changed significantly; (3) Independent directors have been employed for more than one year and they have not resigned or been fired before $t+3$

years. The purpose is to ensure that the independent directors can really fulfill their duties; (4) Relevant financial data and background information of the independent directors can be found in the public media. A total of 8313 valid observations are obtained by removing the missing values.

3.3 Descriptive Statistics of Main Variables

Table 2 reports the descriptive statistics of the main variables. Firms' ROA, on the other hand, is relatively small, with a mean of only 4.3%; the percentage of firms with female independent directors is higher, at 34.7%. The average age of management is 50 years old. At the level of board characteristics, the average number of board members in A-share listed firms is 10, but the proportion of independent directors among them is only 38%, the average number of board meetings is 10 per year, and the average number of independent directors who are also directors in other firms is 1.3.

Table 2. Descriptive statistics of main variables

Variable	Average Value	Standard Deviation	Minimum Value	Maximum Values
ROA	0.056	0.510	-60.153	2.379
Management shareholding	0.081	0.148	0.000	0.832
Average age of management	49.937	6.699	0.000	81.000
Board size	10.139	2.709	4.000	27.000
Board Independence	0.384	0.075	0.188	0.800
Shareholding checks and balances	0.768	0.632	0.000	4.000

3.4 Analysis of Regression Results

Table 3 reports the regression results. Table 3 shows that female independent directors (gender) are significantly and positively related to firm performance (ROA), supporting the hypothesis of this paper.

Table 3. Regression results

	ROA _{t-1}	ROA _t
gender	1.7*** (9.3)	1.6*** (9.4)
_cons	8.5*** (28)	8.6*** (25)
N	8313	8313
adj. R ²	0.391	0.501

Note: t-values in parentheses, *, ** and *** indicate that the correlation coefficients are significant at the 10%, 5% and 1% levels, respectively.

4 Conclusion

Independent directors of different genders have different impacts on company performance as the number of their part-time jobs varies. The more part-time jobs a woman has, the more pronounced the positive impact on company performance is, and the positive impact is higher than that of a man. However, this difference in impact decreases inversely as age increases.

References

1. Dai Zhimin(2010) (J) Economics & Management, F832.51
2. Liu Tingli, Cao Jinping . An empirical study on the impact of chain independent directors on corporate performance. Finance and Accounting Newsletter. 2014.3.
3. Research Group on Women Directors at the China Institute of Corporate Governance Nankai University, 2022, *Shanghai Securities Journal*, Nankai University's China Institute of Corporate Governance's 2021 Special Report on Women Directors in Chinese Listed Companies, Feb p8
4. Byrnes, J. P., Miller, D.C., Schafer, W. D. Gender Differences in Risk Taking: A Meta-analysis[J]. Psychological Bulletin, 1999, 125(3):367-383.
5. Croson, R., Gneezy, U. Gender Differences in Preferences[J]. Journal of Economic Literature, 2009, 47(2): 448-474.

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