Research on Performance Improvement of Resource and Energy Enterprises Based on the Perspective of Female Executive Compensation Innovation Management

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Abstract. Today, with the rapid development of economy and culture, women have broken through the shackles of "workplace bias" and actively participate in the economic activities of energy-based enterprises. In resource-energy-based enterprises, the effect of female executives on the performance improvement of energy-based enterprises is irreplaceable. Few scholars in resource-energy-based enterprises have focused on the performance improvement of energy-based enterprises by female executives, and there are few studies on the salary and treatment of female executives and the performance of energy-based enterprises. To this end, the thesis takes female executives as the research background, explores the mechanism of female executives' performance on energy-based enterprises, and promotes the performance of female executives on the performance of energy-based enterprises through innovative compensation management methods. The author uses this research to help resource and energy-based enterprises to develop more suitable programs for women's executive management and development, and hopes to benefit the development of energy-based enterprises in the industry.

1. Introduction
In recent years, the quota system for female directors promoted in some European countries shows that the Western government has recognized the important role of female executives and is ensuring the gender diversity of energy-based enterprise executive teams in legal form. For example, Swedish law requires that the proportion of female directors should not be less than 25%. Norway requires that the proportion of female directors in energy-based enterprises should reach 40% or more, otherwise it will face the risk of forced delisting. With the development of economy and culture, more and more women in China have broken through the shackles of traditional concepts and participated in economic activities, which has emerged in the management of energy-based enterprises. Zhu Min, general manager of World Bank (002285), Dong Mingzhu, chairman and president of Gree Electric (000651), Luo Yan, general manager of China National Engineering Corporation (002051), and Wang Zhimin, president of Dashang Group (600694), are typical representatives [1].

For academics, in recent years, domestic and foreign scholars have focused on how women participate in executive teams, how to influence team decision-making and energy-based enterprise development, and the impact of executive team heterogeneity on energy-based corporate performance. The research on female executives is mostly focused on the influence of female executives on energy-
based enterprise performance, R&D investment, financial behavior, and the salary difference between female executives and male executives. The proportion of female executives, the number of female directors, or the presence or absence of female chairman and general manager. The research on the factors affecting the pay gap is based on the power of management, the nature of energy-based enterprises, and the performance of energy-based enterprises. The pay gap is mainly divided into the internal pay gap of energy-based enterprises and the external pay gap of energy-based enterprises.

For the relationship between salary gap and energy-based enterprise performance, academic circles mainly have three viewpoints: tournament theory, behavior theory, and contingency theory. According to the tournament theory, competitive compensation plays a significant role in promoting the performance of energy-based enterprises [2]. The expansion of the salary gap will promote the performance of energy-based enterprises. On the contrary, the behavior theory advocates fairness, and believes that the excessive salary gap leads to an increase in employee unfairness and a decline in employee satisfaction, which has an inhibitory effect on the performance of energy-based enterprises. The contingency theory combines the above two theories, and believes that the pay gap has a positive effect on the performance of energy-based enterprises within a certain range. Exceeding a certain turning point will weaken the performance. For the factors affecting the pay gap, the managerial power theory holds that the greater the power of management, the greater the pay gap. The empirical analysis of the factors affecting the pay gap and the relationship between pay gap and energy-based enterprise performance is helpful to provide new evidence for empirical testing in this field.

2. Thesis research framework
Based on the theoretical results of tournament theory, behavior theory, high-level echelon theory, and the empirical research on the factors affecting the salary gap by domestic and foreign scholars, we can know that there are mainly energy-based enterprise characteristics, equity characteristics, corporate governance structure and executive team characteristics. It has an impact on the internal pay gap of energy-based enterprises. According to the relevant literature research, combined with the relevant research results, the research framework of this paper is based on the influence of equity characteristics, governance structure and energy-based enterprise characteristics on the internal salary gap of energy-based enterprises, combined with the adjustment effect of female executives. The conceptual framework is shown in Figure 1.

![Figure 1. Thesis research framework](image-url)
2.1. The regulation of female executives
In general, female executives have both narrow and broad definitions. Narrow female executives include only female CEOs or female CFOs; broad female executives include all women, including directors, supervisors, and senior managers. This article only discusses whether there is a female chairman (deputy chairman) or general manager (deputy general manager) in the energy-based enterprise. The indicator is: when the energy-based enterprise has a female chairman (deputy chairman) or general manager (deputy general manager), the value is 1; when the energy-based company does not have a female chairman (deputy chairman) or general manager (deputy general manager), the value is 0.

From the perspective of equity characteristics, Hypothesis 1: Female executives have a significant regulatory role in the relationship between equity characteristics and internal compensation gaps in energy-based enterprises [3].

From the perspective of governance structure, Hypothesis 2: Female executives have a significant regulatory role in the relationship between governance structure and internal compensation gaps in energy-based enterprises.

From the perspective of energy-based enterprise characteristics, Hypothesis 3: Female executives have a significant regulatory role in the relationship between energy-based enterprise characteristics and internal compensation gaps in energy-based enterprises.

2.2. Research variables

2.2.1. Dependent variable (1) - salary change. Salary is the effort that employees make for the production and operation of energy-based enterprises, and the rewards that energy-based enterprises pay to employees, so as to attract, motivate and compensate employees. In a narrow sense, salaries are mainly in the form of money, such as basic wages, allowances, and various bonuses, or rewards that can be converted into money, such as welfare. In a broad sense, compensation, in addition to the monetary form, also includes various non-monetary forms of remuneration, including on-the-job consumption and benefits not measured in purely monetary terms.

2.2.2. Dependent variable (2) - salary gap. It is generally believed that the internal salary gap of energy-based enterprises is divided into three levels: the salary gap of senior management team, the salary gap of ordinary employees, and the salary gap of all levels of energy-based enterprises. For the definition of senior management, China's existing regulations do not give a completely consistent concept. According to the "Company Law", the company's senior management covers the general manager, deputy general manager, and secretary of the board of directors, financial controller and other personnel as stipulated in the company's articles of association. According to the "related party transactions", the company's senior management covers the chairman, general manager, director, chief financial officer, chief accountant, and deputy general manager in charge of various matters, but does not include supervisors. According to the "Special Provisions of the State Council on the Raising of Shares and Listings of Foreign Companies in Co., Ltd.", the company's senior management covers managers, directors, supervisors, secretary of the board of directors, chief financial officer and other senior management personnel as stipulated in the articles of association. The pay gap study in this paper is based on the pay gap between male executives and female executives [5].
2.2.3. **Independent Variables - Energy Enterprise Performance.** Energy-based business performance, expressed in Roa. According to relevant research by domestic and foreign scholars, the performance of energy-based enterprises is mainly measured by total return on assets (BOA), return on equity (ROE), earnings per share (EPS) and Tobin Q. Foreign scholars generally use the Tobin Q value, and domestic scholars believe that due to the large fluctuations in the domestic stock market, Tobin Q value is not applicable to the study of Chinese energy companies, most scholars use the total return on assets (ROA) to measure energy-based enterprises. Performance. Based on this, this paper selects the total return on assets (ROA) announced by energy companies for the measurement of energy enterprise performance.

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\text{Roa} = \frac{\text{net profit}}{\text{total assets}} \times 100\%
\]

3. **Empirical research**

3.1. **Descriptive statistics**

Before the regression analysis of female high-level related variables, descriptive statistics were firstly carried out. It can be seen from the results that female executives in energy companies have never held shares to hold 60 million shares. The fluctuations are large. The age of female executives ranges from 31 to 81 years, with an average of 48 years and a small residual. The average level of education is concentrated at the level of 3.5, which is the level of undergraduate and graduate students. The average annual salary is about 382,000 yuan, and the data fluctuations are large, which means that the salary incentives of different energy-based enterprises are different. The number of women in the number of senior management teams ranges from 0.021 to 1.000, with an average of around 0.2 and a small residual.

|                     | Lowest | Highest | Mean  | Residual |
|---------------------|--------|---------|-------|----------|
| Female executives   | 0      | 6.154   | 7.85  | 4.290    |
| Average age         | 31.00  | 81.00   | 48.275| 7.01681  |
| Average education   | 1.50   | 5.00    | 3.515 | .65652   |
| Average compensation| 0      | 3490000 | 3.82E5| 498776.850|
| Asset logarithm     | 1.92438| 3.05712 | 2.31661| 2.095738 |
| Assets and liabilities| .5177 | 1.03611 | .557116 | .21420752 |
| Proportion          | .021   | 1.000   | .24810| .186845  |

3.2. **Adjustment effect analysis**

In the model, first put the male executives of the dependent variable - the female executive pay gap (Megap, in turn put the control variables, independent variables, regulatory variables and standardized interactions between the independent variables and the regulatory variables to eliminate collinearity, Verify the specific effects of the regulatory variables. From the model results, we can see that the F value is 29.735, and R2 is increased from 0.183 to 0.195 under the adjustment effect, indicating that the
female executive is the female chairman (deputy chairman) or general manager (deputy general manager). The presence or absence of a manager does play a regulatory role.

![Regression Line for Males' Salaries](image)

**Figure 3.** Male executives - regression analysis of female executive compensation

3.3. **Relationship between female executive compensation and energy-based enterprise performance**

Hypothesis 4 is that female executives have a significant role in regulating the performance of energy-based companies and the internal pay gaps of energy-based companies. Energy-based corporate performance and female executives (interactive terms "energy-based corporate performance* female executives") and female executives There is a positive correlation between the salary gap with male executives, but the relationship is not significant. The gap between the size of energy-based enterprises and the female executives "energy-type enterprise scale* female executives" is at a significant level of 1%. Correlation, the correlation coefficient is -0.099, and the results are consistent with the assumptions.

4. **Pay innovation to give play to the role of female executives in improving the performance of energy-based enterprises**

4.1. **Energy companies can consider increasing incentives by adding female executives to share shares**

In the statistics, it is found that female executives currently hold fewer shares. From the data point of view, energy companies mostly adopt salary incentives. Through effective and reasonable shareholding methods, the enthusiasm of female senior managers can be stimulated, and the relationship between salary and energy enterprise performance can be fully utilized, so that executives can achieve the goal of unifying the value of personal value and energy-based enterprises. Contribution to the development of energy-based enterprises. Energy companies should also focus on the incentives for executives to hold shares, increase the number of executives holding shares, and more effectively achieve diversification of incentives, making incentives more enriched and improved, and energy-based enterprise management is more effective. Therefore, China's energy enterprises should further standardize and expand the incentive system, adopt a more comprehensive incentive method, increase the situation of women executives holding shares, stimulate their enthusiasm for work, and promote the performance development of energy-based enterprises.

4.2. **Moderately increase the proportion of female executives in the recruitment of talents**

The conclusions presented in this paper can be applied to the employment of talents in energy-based enterprises and employee incentives. When setting up an energy company executive team, gender can be considered as a consideration, and women executives should be appropriately placed in the senior management team to play a role in the senior management team. At the same time, it should also consider the factors of the work experience of female executives. It is recommended to choose female executives with more long-term management experience.
4.3. Encourage women to participate in the executive team

The empirical results show that the energy company executives specifically refer to the chairman (deputy chairman) or general manager (deputy general manager) gender differences. With the development of social progress and the theory of female leadership, more and more energy-based enterprises and government departments have begun to attach importance to women's abilities and are willing to provide more career opportunities and development space for women. However, as far as the findings of this study are concerned, there are not many phenomena among women at the top of functional source companies. Energy-based enterprises should give women more career opportunities and encourage women to enter the top of energy-based enterprises, so that women's professional ability and advantages can be fully utilized.

5. Conclusion

There are many literatures on the relationship between female executives' performance and energy-based corporate performance, but most scholars only study the correlation between the two, but there is no correlation between different background characteristics and energy-based enterprise performance. The adaptation interval was studied, and the relevant critical points were not studied. The research was not deep enough. Therefore, in the future, the research can further explore the optimal term of the executives. How many female executives in the senior management team will maximize the performance of energy-based enterprises? Energy-based enterprises are at different stages of development. There will be different HR demand plans. The above research results may not be applicable in different stages of development of energy-based enterprises. Later research can use the life cycle of energy-based enterprises as an entry point to explore the impact of the background characteristics of female executives on the performance of energy-based enterprises at different stages of development of energy-based enterprises.

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