SHS Web of Conferences **234**, 04001 (2026) https://doi.org/10.1051/shsconf/202623404001
ICIEBM 2026

The Relationship between Employee Stock Ownership Plans and Enterprise Performance in the Home Appliance Industry: A Case Study of Midea Group and Gree Electric Appliances

Ruoxi Cao*

School of Management, Sichuan Agricultural University, Chengdu, 625014, China

Abstract. Against the backdrop of deepened mixed-ownership reforms and the pursuit of high-quality development in the home appliance industry, Employee Stock Ownership Plans (ESOPs) have emerged as a critical mechanism for firms to optimize corporate governance and integrate human and material capital. This study conducts a comparative case analysis of Midea and Gree to examine the implementation characteristics, performance effects, and underlying causes of differential outcomes associated with ESOPs in the home appliance sector. The findings reveal that ESOPs exert a significant positive impact on the financial performance of both firms, with their average return on equity (ROE) substantially exceeding industry benchmarks. However, notable disparities exist in innovation and market performance. Midea's composite ESOP model, deeply integrated with corporate strategy, fosters synergistic and sustained performance growth. In contrast, Gree, due to delayed ESOP initiation and a relatively simplistic incentive structure, achieves only short-term financial improvements. The efficacy of ESOP implementation in home appliance enterprises fundamentally depends on the alignment with corporate development stages and strategic objectives, as well as the scientific design of incentive mechanisms. The conclusions offer valuable insights for firms seeking to optimize ESOPs and contribute to the empirical literature on the economic consequences of ESOPs.

1 Introduction

In the context of the continuous deepening of mixed-ownership reform and the continuous advancement of the reform of market-based allocation of factors, the employee stock ownership plan serves as a core tool for realizing the property rights of human capital and building a mechanism of shared benefits and shared risks. It has become an important practical path for enterprises to optimize their governance structure and stimulate internal motivation [1]. This mechanism can deeply align the interests of employees and the company, optimize the equity balance structure, and protect the legitimate rights and interests of employees [2, 3]. It can effectively alleviate the principal-agent problem,

* Corresponding author: 202402559@stu.sicau.edu.cn

improve the company's operational efficiency and innovation capabilities, and promote continuous improvement in operating performance [3, 4]. However, the pledging of shares by controlling shareholders can exacerbate the separation of control and cash flow rights, leading to market value management and profit misappropriation, significantly weakening the incentive effect of shareholding. High-quality internal control can curb opportunistic behavior and play a positive regulatory role [4]. Furthermore, cancellation-style repurchase and standardized market value management help enhance the effectiveness of employee stock ownership plans [5, 6]. Companies should standardize the use of funds, restrict the pledging of shares by major shareholders, strengthen information disclosure, balance incentive effectiveness and risk control, and safeguard the interests of state-owned capital and minority shareholders [2, 4, 7]. In 2013, the Third Plenary Session of the 18th Central Committee of the Communist Party of China explicitly stated that "mixed-ownership economies are allowed to implement employee shareholding and form a community of interests between capital owners and workers." It provides a clear policy orientation for state-owned enterprises and various market entities to implement employee stock ownership plans [8]. The "Guiding Opinions on the Pilot Implementation of Employee Stock Ownership Plans by Listed Companies" issued by the China Securities Regulatory Commission in 2014 further standardized the framework for the implementation of the system. The Regulatory Guidelines for Listed Companies No. 10 - Market Value Management in 2024 further encourages enterprises to use employee stock ownership plans to stimulate the initiative of employees to enhance the value of the company [9], and a series of policy dividends have driven the continuous implementation of employee stock ownership plans in the capital market. The home appliance industry, a pillar of China's manufacturing sector, has been fully tested by market competition and has entered a critical period of transformation for high-quality development. Enterprises within the industry are increasingly in urgent need of improving governance efficiency and retaining core talents. Employee stock ownership plans bind the interests of employees deeply to the long-term value of the enterprise through the mechanism of sharing residual claims. It can both alleviate principal-agent conflicts and reduce agency costs [1] and strengthen employees' organizational commitment and innovation enthusiasm [8]. It provides an effective path for home appliance enterprises to break through growth bottlenecks and build core competitiveness. Existing empirical research shows that the improvement effect of employee stock ownership plans on corporate performance is particularly significant in mature and high-tech enterprises [9]. The home appliance industry, which is both technology-intensive and human capital-intensive, has typical research value in terms of the implementation effect and mechanism of employee stock ownership plans. Midea Group and Gree Electric Appliances, as benchmark enterprises in the home appliance industry, have formed distinctive models in the practice of employee stock ownership plans. Midea's 2024 employee stock ownership plan involves an amount of 1.286 billion yuan and covers 604 core management and technical personnel, demonstrating its emphasis on core human capital [10]. In the process of mixed-ownership reform, Gree Electric Appliances has optimized its equity structure through an employee stock ownership plan. Its average expense ratio from 2019 to 2023 was controlled at 13.26%, lower than the industry average. In 2023, the return on net assets reached 24.91%, significantly better than the industry average, demonstrating the synergy between incentive mechanisms and corporate performance [8]. The practices of the two companies provide high-quality case samples for studying the relationship between employee stock ownership plans and corporate performance in the home appliance industry. Existing studies have confirmed the positive impact of employee stock ownership plans on the quality of internal control, innovation ability and business performance of enterprises [1, 8]. However, the moderating effects of industry heterogeneity characteristics and the specific implementation models of enterprises still need to be explored in depth. The characteristics of large-scale production in the home appliance industry, the demand for technological iteration, and the intense market competition environment make the design logic and implementation effect of employee stock ownership plans special. Based on this, this paper takes Midea Group and Gree Electric Appliances as cases to systematically explore the implementation characteristics, mechanism of action and impact on enterprise performance of employee stock ownership plans in the home appliance industry, aiming to reveal the practical value of employee stock ownership plans in the sub-sectors of manufacturing. To provide experience for home appliance companies to optimize incentive mechanisms and improve governance efficiency, and to enrich industry-wide research evidence on the economic consequences of employee stock ownership plans in the context of mixed-ownership reform.

2 Overview of employee stock ownership plans of midea group and gree electric appliances

2.1 Overview of midea group Employee Stock Ownership Plans (ESOPs)

Midea Group's implementation of the employee stock ownership plan is mainly based on the industry background of escalating competition in the home appliance industry, enterprise strategic transformation and the competition for industry talents. The core purpose is to bind the core team of the enterprise, deepening the long-term incentive system, optimizing the corporate governance structure, and promoting the implementation of the enterprise strategy. The various types of ESOPs are rolled out in phases between 2014 and 2025, and there are multi-dimensional differences in their core design elements. The stock of the stock option is derived from the issuance of new shares to the incentive recipients, and the funds are borne by the incentive recipients' self-raised funds. The coverage focuses on core management, technical backbones and middle-level personnel of the enterprise, with a lock-up period of 12 months. The assessment criteria include revenue growth rate, net profit growth rate, return on equity (ROE), and individual performance ratings. Restricted shares are derived from a private placement of new shares to the incentive recipients, and the funds are self-raised by the incentive recipients. The coverage is also for core management, technical backbones and middle-level personnel, and the lock-up period is available for 12 months and 24 months. The assessment criteria are the same as stock options, namely revenue growth rate, net profit growth rate, ROE and performance rating. The shares of the partner shareholding plan are sourced from the company's repurchase special account shares, which is different from the previous two types of private placement models. The source of funds is a combination of the company's special incentive fund and employee compensation/self-raised funds. The coverage still includes core management, technical backbones, middle-level personnel, and the lock-up period is 24 months. The assessment indicators are adjusted to net profit attributable to shareholders and individual performance assessment; The source of shares for the A-share holding plan is shares in the repurchase special account, the source of funds is the company's special incentive fund + employee compensation/self-raised funds, the coverage is core management, technical backbone, middle-level personnel, the lock-up period is 24 months, the assessment indicators are further simplified to ROE and individual performance assessment.

2.2 Overview of gree electric appliances employee stock ownership plan

The employee stock ownership plan of Gree Electric Appliances was launched in three phases in 2021, 2022 and 2024. The fulfillment of the commitment to mixed-ownership reform of state-owned enterprises, coupled with the pressure on the company's performance brought about by intensified competition in the home appliance industry, led the company to hope to achieve the core demand of binding core talents, promoting strategic transformation and improving the long-term incentive mechanism through this plan. There is a certain continuity and development in the core design elements, such as the source of stocks and funds for the three phases of the employee stock ownership plan of Gree Electric Appliances. The specific core design element is that the stock sources for the third phase of the employee stock ownership plan are all repurchased shares from the company's dedicated repurchase account, and the private placement model is not adopted. In terms of funding sources, the funds for the three phases of the plan are all from employees' legal compensation and self-raised funds. There is no participation of the company's special incentive fund. The main body of the funds is the employees themselves. In terms of coverage, the first phase (2021) covers directors (excluding independent directors), supervisors, senior executives and core employees. The coverage of the second phase (2022) has been adjusted, with priority given to middle and lower-level managers, core employees, and technical experts. The third phase (2024) covers directors (excluding independent directors), supervisors, senior executives, middle-level managers, and core employees. The scope is more comprehensive than the previous two phases. The ESOP lock-up period for all three phases is 12 months. The assessment indicators for the first phase are the same as those for the second phase, namely net profit growth, ROE and dividends. For the third phase, the assessment criteria are changed to ROE and individual assessment. Regarding the equity vesting rules, the equity vesting rules for the third phase plan are to be vested in two phases after the lock-up period expires. The differences in ESOP design between Gree and Midea are shown in Table 1.

Table 1. Comparison of ESOP Design Differences between Gree and Midea.

Comparison Dimensions	Midea Group	Gree Electric Appliances
Launch type	Including four types such as stock options and restricted stocks	No specific types
Stock/capital source	Private placement/share repurchase; Employee self-raising/Fund + compensation self-raising	Both are share buybacks; Only employee pay + self-raised funds
Coverage	All are core management, technical backbone, middle management	Dynamic adjustment, with priority given to middle and lower-level positions in Phase II
Lock-up period	12/24 months, longer than normal	Both are 12 months
Assessment indicators	Gradually simplify	

2.3 Comparative analysis of the impact of employee stock ownership plans on corporate performance

2.3.1 Impact on financial performance

During the ESOP core period from 2014 to 2024, the financial performance of Midea and Gree was significantly differentiated. Midea achieved stable ROE, a continuous increase in R&D and a doubling of innovation output through ESOP, with relatively stable revenue and market value growth; Gree's performance fluctuated significantly, with insufficient innovation input and output, and the long-term incentive effect of ESOP was not fully unleashed.

As shown in Figure 1, during the core period of ESOP from 2014 to 2024, the return on net assets of Midea Group and Gree Electric Appliances showed a significant divergence. After reaching a peak of about 37% in 2017, Gree's ROE has shown a fluctuating downward trend overall. Especially in 2020-2022, it dropped from more than 20% to about 18%. In contrast, Midea Group's ROE remained more stable within the range of 22% to 27%.

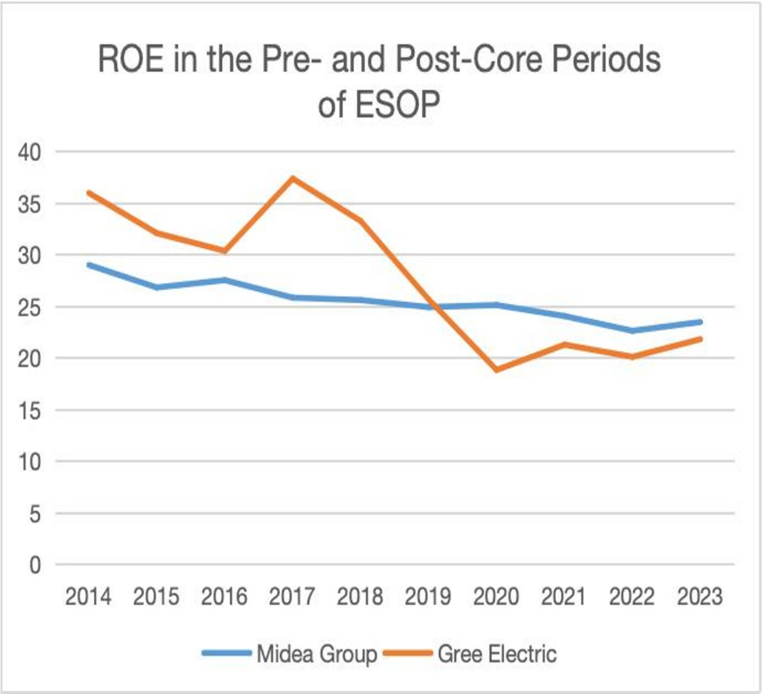

Fig. 1. ESOP Core period ROE (Picture credit: Original).

As shown in Figure 2, during the ESOP core period from 2011 to 2024, both Midea Group and Gree Electric Appliances showed significant fluctuations in revenue growth rates, but Midea had better overall stability and risk resistance. Gree's revenue growth rate dropped to a low of about -30% in 2015, peaked in 2017-2018 and then dropped rapidly, and even showed negative growth in 2020; Midea saw only a slight decline in 2015, a peak of over 50% in 2017, and a more steady recovery after 2022.

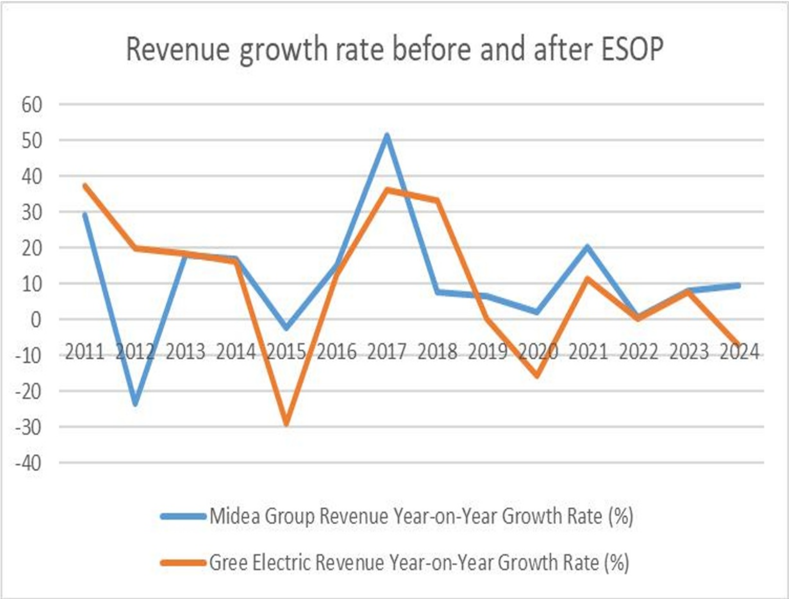

Fig. 2. ESOP Core period revenue growth rate (Picture credit: Original).

2.3.2 Impact on innovation performance

There is a significant divergence in innovation performance between Midea and Gree during the ESOP implementation period from 2014 to 2024. Midea's continued growth in R&D investment has, to some extent, spurred a significant increase in the number of invention patents granted; Gree's fluctuating R&D investment has indirectly led to a shortage of innovation output. The data shows that Midea's ESOP has a more pronounced incentive effect on corporate innovation performance. The specific data table is as follows:

As shown in Figure 3, during the ESOP core implementation period from 2014 to 2020, there was a certain gap between Midea Group and Gree Electric Appliances in terms of R&D investment scale and growth trend. In terms of investment scale, Midea Group's R&D expenditure exceeded 10 billion yuan by 2020, achieving a growth of nearly 140% and maintaining a steady and continuous increase. Although Gree Electric Appliances' research and development expenses rose continuously to a peak of about 7 billion yuan in 2018, they dropped significantly in 2019, and the subsequent recovery was still significantly lower than Midea's level during the same period. Midea Group takes technological innovation investment as the core strategic support and has formed a sustained and stable mechanism for the allocation of R&D resources. The R&D investment of Gree Electric Appliances is vulnerable to short-term operating factors and has failed to match the long-term innovation investment with the ESOP incentive mechanism.

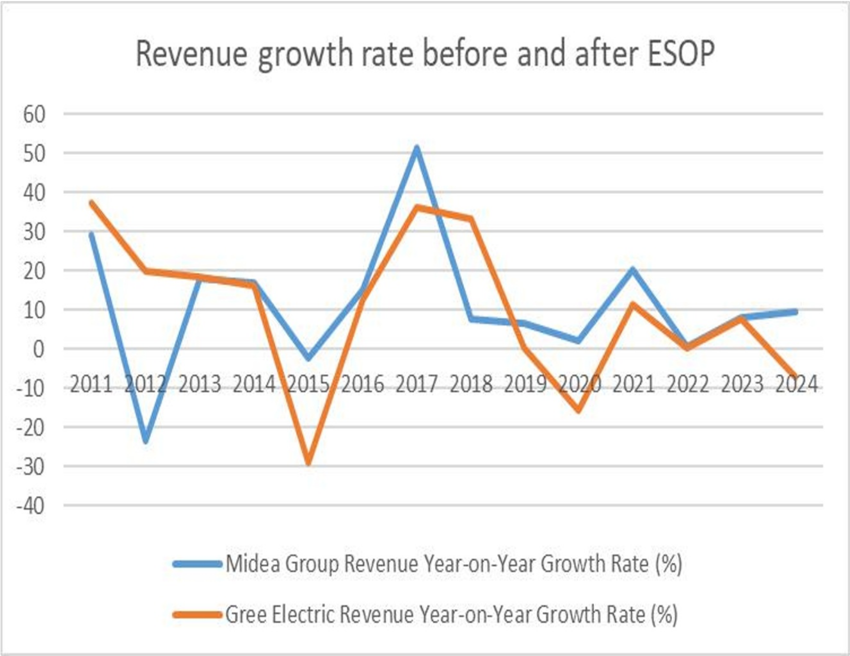

Fig. 3. ESOP Core period research and development expenses (Picture credit: Original).

2.3.3 Impact on market performance

From 2014 to 2024, Midea Group's market value grew steadily after implementing the employee stock ownership plan, and its risk resistance capacity was outstanding. The market value of Gree Electric Appliances fluctuated sharply, and the incentive effect was limited. As shown in Figure 4, Midea's ESOP has a more significant positive boosting effect on market performance.

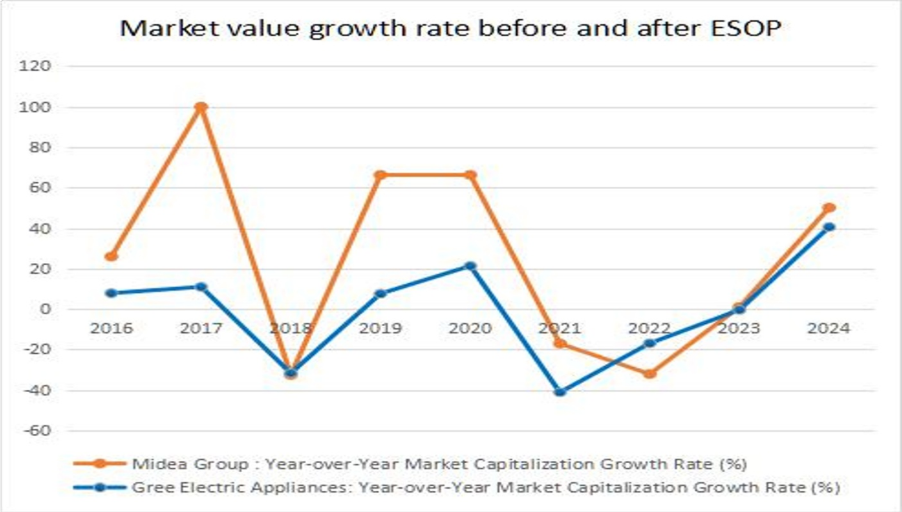

Fig. 4. ESOP Core Period market value growth rate (Picture credit: Original).

As shown in Figure 4, the market value growth rates of Midea Group and Gree Electric Appliances both showed significant fluctuations during the ESOP core period from 2015 to 2024, but Midea had stronger resilience and stability. Both hit rock bottom in 2018 and rebounded sharply in 2019 due to external shocks such as the pandemic. Compared with Midea's steady performance, Gree fell back again in 2020. Midea was the first to recover and continue to grow in 2022, while Gree rebounded in tandem with the ups and downs. Overall, Midea's market value growth under ESOP incentives has been more stable than that of Gree.

3 Single-sample t-test

As shown in Table 2, Midea's financial performance after implementing ESOP was significantly higher than the industry average, effectively verifying the incentive effect. Gree's financial performance was significantly higher than the industry average after implementing ESOP, and the incentive effect was equally significant.

Table 2. One-sample t-test.

Enterprises	Cycle	Industry benchmark ROE	Sample ROE mean	t value	p value	Significance level
Midea Group	2019-2022	17%	22.64%	10.04	0.002	$P < 0.01$
Gree Electric Appliances	2021-2024	17%	23.96%	12.87	0.001	$P < 0.01$

In summary, ESOP has a significant incentive effect on the financial performance of home appliance enterprises - Midea's average ROE from 2019 to 2022 was 22.64%, and Gree's average ROE from 2021 to 2024 was 23.96%, both far exceeding the industry benchmark of 17%, with p-values of the single sample t-test < 0.01, and the incentive effect is statistically significant.

In terms of performance, Midea's research and development expenses and patent authorizations continued to increase during the ESOP period, and its market value steadily rose over the long term; Gree's R&D expense ratio remained high, but patent growth was moderate. Revenue and market value only improved temporarily, lacking long-term and stable performance. The core differences between the two confirm the key impact of ESOP design, strategic synergy and the timing of implementation on incentives.

4 Analysis of the reasons for the differences in the effectiveness of employee stock ownership plans

The core reason for the certain differences in the ESOP effects between Midea and Gree lies in the differences in implementation timing, strategic coordination, incentive mechanisms and other aspects.

In terms of the timing of implementation, Midea launched multiple rounds of ESOP in 2014 during the industry's boom period and coordinated it with strategic transformation for diversified and coordinated development; Gree only launched ESOP in 2021, missing the window of rapid growth, and incentives became a relatively passive choice during the industry's downturn; At the strategic synergy level, Midea's ESOP was deeply tied to its diversification and globalization strategy and linked incentives to R&D investment and patent output. R&d expenses continued to grow from 2014 to 2020, forming a virtuous cycle of innovation-driven growth. Gree's business is highly dependent on its main air conditioning business. ESOP has not promoted industrial reform and diversified global development. The effect of promoting research and development is not obvious. Patent growth is flat and the ability to resist cycles is weak. In terms of incentives, Midea's ESOP uses a combination of tools to bind long-term value and is a multi-level incentive system covering management, technical backbones, etc. While Gree's ESOP is biased towards management, it is not closely linked to innovation indicators, and the effect of stimulating the enthusiasm of all employees is not obvious.

In summary, Midea's ESOP achieved a triple resonance of timing, strategy, and mechanism, while Gree's lag and singleness led to the difference in innovation and market value performance between the two.

5 Conclusion

The Employee Stock Ownership Plan (ESOP) exerts a significant positive incentive effect on the performance of home appliance enterprises. This finding aligns with conclusions drawn from relevant empirical studies, indicating that employee ownership significantly enhances the efficiency of working capital management in enterprises, with equity structure serving as a partial mediating mechanism in this process, thereby becoming a crucial channel through which ESOP empowers operational performance.Specifically within the home appliance sector, the Return on Equity (ROE) of both Midea Group and Gree Electric Appliances exceeds the industry benchmark of 17%. However, the incentive effects manifest distinct disparities. According to relevant statistical data, as of September 29, 2025, the total implementation capital of ESOPs in the home appliance industry reached 21.65 billion yuan, ranking second among various industries. Among these, Midea Group, as a representative of the sector, has invested 13.31 billion yuan in its ESOP. The plan establishes performance appraisal metrics requiring the weighted average return on net assets not to fall below 18% during 2025–2027 and not below 17.5% in 2028. Moreover, the achievement of these targets is closely tied to the allocation of stock options. Since its initial public offering, Midea has maintained a weighted average return on net assets consistently above 20%. By leveraging cyclical industry prosperity and implementing phased, composite incentive schemes deeply integrated with diversified and innovation-driven strategies, the company has successfully achieved synergistic growth across financial, innovative, and market performance dimensions. In contrast, Gree's delayed ESOP launch, monolithic incentive mechanisms, and weak strategic integration have resulted in merely incremental financial improvements, coupled with inadequacies in innovation and market capitalization stability. Integrating ESOP implementation practices among A-share listed companies in 2025 with empirical research findings, it becomes evident that ESOP effectiveness is fundamentally contingent upon its alignment with corporate strategy and developmental stage.

Recommendations: At the enterprise level, companies should strategically time their ESOP implementation in accordance with their own developmental trajectory. Building upon research-based proposals for optimizing ESOP frameworks, firms should refine key elements—including stock sources, lock-up periods, and appraisal indicators—based on job values and individual contributions. This involves designing differentiated ownership entitlements and dynamically adjusting stockholding schemes. Priority ownership mechanisms may be introduced for core business departments, such as working capital management. Furthermore, enterprises should select ESOP models commensurate with their growth stage, drawing insights from practices adopted by A-share listed companies such as BYD and Midea Group, where ESOP performance metrics are deeply integrated with critical operational indicators like revenue growth and return on equity. Regulatory bodies should encourage innovation in hybrid incentive models by reinforcing disclosure requirements and fostering meticulous, standardized development of ESOP structures among listed companies. Industry associations could establish ESOP communication platforms to disseminate exemplary ESOP implementation cases, both within the home appliance sector—as exemplified by Midea Group—and across industries, thereby providing actionable references and directional guidance for enterprises planning subsequent ESOP initiatives.

References

1. Q. Li, Employee Stock Ownership and Corporate Working Capital Management Efficiency — A Test of the Mediating Effect Based on Ownership Structure. China Circulation Economy **2025**, 145-148 (2025).
2. H.L. Zhang, Z.R. Jiang, L.J. Yang, Employee Stock Ownership Plans and Corporate Performance: A Perspective Based on Corporate Life Cycle. Accounting and Economics Research **39**, 97-114 (2025).
3. S.S. Chen, X.R. Zhang, P.L. Li, Research on the Impaired Wealth Effect of Employee Stock Ownership Plans. Journal of Systems & Management (Online first, 2026).
4. D.Y. Gu, H.X. Li, Z.F. Wu, Practice of Employee Stock Ownership Plan in High-tech Enterprises from the Perspective of Mixed Ownership Reform——A Case Study of Gree Electric Appliances. Economic Research Guide **2025**, 102-107 (2025).
5. L. Sun, T. Liu, Corporate Governance Effects of Employee Stock Ownership Plans Under the Background of Mixed-Ownership Reform —— From the Perspective of Internal Control Quality. Finance and Accounting **2025**, 62-71 (2025).
6. Y.G. Fan, Research on the Interest Synergy Mechanism Between State-owned Controlling Shareholders and Employee Stockholding Entities. Business Management **2026**, 121-124 (2026).
7. X.Z. Ren, N.X. Wu, "Incentivization" or "Tunneling"? Zero-Cost Employee Stock Ownership Plans and Minority Shareholder Interest Protection. Business Management (Online first 2026).
8. P.P. McHugh, J. Cutcher-Gershenfeld, D.L. Bridge, Examining structure and process in ESOP firms. Personnel Review **34**, 277-293 (2005)
9. O.K. Akinsola, Risk Mitigation Strategies in ESOP Transactions. Available at SSRN 5126565 (2025). http://dx.doi.org/10.2139/ssrn.5126565
10. M.J. Kaswan, Property, ownership and employee ownership: employee control in ESOPs. Journal of Participation and Employee Ownership **5**, 14-31 (2022).