Research on Equity Governance of Scientific and Technological Innovation Enterprises

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Abstract: With the rapid development of our economy, innovation-driven development has become the new normal, scientific innovation enterprises become the important impetus of national development. Technology and innovation are the core ability of the survival and development of scientific and technological innovation enterprises. In the final analysis, the innovation and research of science and technology depend on capital and human resources. In order to achieve the strategic plan and solve the problems of financing, attracting and retaining talents, scientific and technological innovation enterprises often need to carry out reasonable equity governance. In this paper, Xiaomi Company is selected as the case study object based on the previous scholars' research. Literature research method, case analysis method and comparative analysis method are used to study the status quo of Xiaomi Company's equity governance from the two aspects of dual-class share structure and equity incentive policy. Finally, we should give some suggestions for the equity management of Chinese technology innovation enterprises, considering the current developing situation and its own characteristics.

Keywords: Scientific And Innovative Enterprises; Equity Governance; Dual-class Equity Structure; Equity Incentive

1. Introduction

Nowadays, innovation-driven development has become the new normal, and science and innovation-oriented enterprises are highly valued as an important part of emerging fields such as high-tech industries and strategic emerging industries. Science- and innovation-oriented enterprises have different characteristics compared with traditional enterprises. Science and technology-based enterprises must rely on innovation to establish their business with science and technology. Science and technology research and development activities are the most important and most direct behavioral manifestation of innovation, while financial and human resources are the key and the foundation of science and technology-based enterprises. In the internal governance of science- and innovation-oriented enterprises, equity governance is an important way to solve this problem. Therefore, this paper selects Xiaomi, the first company that successfully went public in Hong Kong by adopting a double-layer equity structure, as a case study object. From the perspective of equity governance, the two aspects of Xiaomi's adoption of a double-layer equity structure and the implementation of an equity incentive policy are studied, and it is summarized that China's science and innovation-oriented enterprises should take into full consideration the current situation of the company's development and its own characteristics to carry out equity governance and put forward certain recommendations so as to provide certain references for the equity governance of China's science and innovation-oriented enterprises.

In their study of the impact of adopting a two-tier equity structure on enterprise development, Shi Xiaojun and Wang Aridran [1], after studying 127 Internet companies, concluded that the establishment of the two-tier equity system has greatly promoted the development of the innovation ability of high-tech enterprises. In the study of the impact of the implementation of equity incentives on the development of enterprises, Liao Zhiyu et al. [2] analyzed Baidu and Sina companies as cases and concluded that the double-layer equity incentives played a positive role in promoting the stability of Baidu's development. Tong Changfeng and

Yang Baoqi [3] concluded that strengthening the equity incentives of core employees is conducive to the improvement of the company's business performance. Yan Li et al. [4] empirically studied the science and technology innovation board enterprises, and concluded that the use of stock options for equity incentives to the company can significantly increase the company's investment in research and development.

To summarize, most of the viewpoints agree that two-layer equity is beneficial to the company to improve innovation and operational efficiency, and in terms of equity incentives, equity incentives for operators, managers, and core employees help to improve the company's innovation efficiency, while some scholars believe that equity incentives have no obvious effect on the improvement of innovation. However, there is relatively little research literature that explores the content of equity governance in the development process of science and innovation-oriented enterprises as the object of research. Second, there are relatively few studies on the impact of combining both equity structure and equity incentives on science-based firms from an equity governance perspective. Therefore, research on the combination of equity structure and equity incentives provides reference value for deepening the applicability of equity governance theory in science and technology-based enterprises as well as for understanding the significance of both equity structure and equity incentives in equity governance from the perspective of equity governance on the development of science and technology-based enterprises.

2. Introduction to Xiaomi and Its Implementation of Equity Governance

2.1 Introduction to Xiaomi Corporation

Founded in March 2010, Xiaomi Technology LLC is a consumer electronics and smart manufacturing company centered on smartphones, smart hardware and IoT platforms. In just seven years of business, Xiaomi's annual revenue exceeded RMB 100 billion. As of 2018, Xiaomi has operations in more than 80 countries and regions around the world, and is successfully listed on the Hong Kong Stock Exchange. As a representative figure of China's Internet and global e-commerce innovation leader of the year, Lei Jun, the founder of Xiaomi, has been awarded a number of domestic and international honors, including China's Economic Person of the Year and Top 10 Financial Leaders, China's Internet Person of the Year, and was selected as Forbes (Asia Edition) 2014 Business Person of the Year.

Under the leadership of the founding team, Xiaomi's mission is to always insist on making good products that "touch people's hearts and are priced well", so that people all over the world can enjoy a better life brought about by technology. The pursuit of products and the relentless pursuit of efficiency have created a Xiaomi that continues to create growth miracles. Currently, Xiaomi is the world's fourth-largest smartphone manufacturer, which is also, so far, in addition to Apple, Samsung, and Huawei, a self-developed cell phone chip technology enterprise. 2023: Xiaomi, ranked 360 in the Fortune 500, is the fifth consecutive year on the list, becoming the fastest growth rate of China's technology companies in the same period.

2.2 Shareholding Structure of Xiaomi

(1) Xiaomi's shareholding structure before the implementation of two-tier shareholding

Xiaomi is an Internet technology company, and from the date of its establishment, it has been insisting on the belief of independent innovation and building the Xiaomi ecosystem; however, this requires a large amount of capital. In order to solve the capital problem, taking into account the characteristics of the company, the cost of capital, and many other factors, Xiaomi initiated several rounds of equity financing before going public, as shown in Table 1.

(2) Shareholding structure of Xiaomi after the implementation of two-tier shareholding

Xiaomi is very careful about its shareholding structure. Xiaomi achieves this two-tier shareholding structure by dividing the company's shares into A and B forms. In particular, the A shares have 10 times the voting rights, and the B shares still retain the original 1 times the voting rights. And Xiaomi Corporation decided to issue A shares only to Lei Jun (4.295 billion shares) and Lin Bin (2.4 billion shares).

As can be seen from Table 2, although the proportion of shares held by founder Lei Jun is only 29.40%, his voting rights are as high as 54.74%, together with co-founder Lin Bin's voting rights of 29.52%, which amount to a total of 84.26%. Such an arrangement serves as a safeguard for the founder's control over Xiaomi, thus favoring the company's long-term development.

Table 1. Changes in Xiaomi's Financing and Shareholders' Shareholding Ratio

Round	Time	Amount Financed (USD)	Lei Jun Equity ratio	Lin Bin Equity ratio	Lei Jun, Lin Bin Equity ratio total
Series A	September 2010	10.25 million	44.09%	19.40%	63.49%
Series B	August 2011	30.85 million	38.91%	16.51%	55.42%
Series C	November 2011	90.1 million	35.31%	14.49%	49.80%
Series D	June 2012	216 million	33.48%	14.21%	47.69%
Series E	August 2013	100 million	32.29%	13.70%	45.99%
Series F	December 2014,	134 million	31.41%	13.32%	44.73%

Source: Xiaomi Prospectus

Table 2. Number of Shares and Percentage of Voting Rights of Each Shareholder of Xiaomi Corporation

Shareholder Name	Class A shares (billions)	Class A shares (billions)	Shareholding ratio (%)	Voting rights (%)
Lei Jun	42.95	22.83	29.40%	54.74%
Lin Bin	24	3.91	12.47%	29.52%
Other Shareholders		130.07	58.13%	15.74%
Total	66.95	156.81	100%	100%

Source: Xiaomi's announcement and prospectus

2.3 Equity Incentives at Xiaomi

Xiaomi was founded in 2010, and the equity incentives were implemented in 2022. The journey can be sorted out in two time periods: pre-IPO and post-IPO.

In the early days of Xiaomi's establishment and early development, Xiaomi carried out a series of equity incentives according to different stages of corporate governance. At the beginning of the venture, Lei Jun attracted a group of ambitious and capable talents through equity. Lin Bin, Li Wanqiang, Zhou Guangping, and other Xiaomi partners before the founding of Xiaomi have been in their respective fields of excellence. Through the allocation of equity to these partners, Lei Jun is gradually growing the future of the giant wheel. On May 5, 2011, Xiaomi released a plan and program for employee equity incentives, which stipulates that persons eligible for the equity incentive plan are free to choose from three methods of equity incentives: stock options, restricted shares, and restricted share units. Incentive recipients include employees, consultants, and members of the board of directors who are approved and authorized by the board of directors and its authorized bodies [5].

The two-tier shareholding structure adopted by Xiaomi after its IPO has, to a certain extent, facilitated the implementation of the share incentive scheme. In 2018, the Board of Directors of the Company issued the Post-IPO Share Option Scheme, which, as can be seen from the Xiaomi Prospectus, outlines the main scheme as the granting of share options to any person whom the Board of Directors and its authorized representatives believe has made or will make a contribution to the Group, with the shares originating from the Class B Ordinary Shares. A share-award scheme is also used. The share award scheme combines the interests of motivated employees and the group through the ownership of Class B shares, dividends, and related share appreciation rights, encouraging and retaining talented employees to work together to create value and drive long-term growth and profitability of the business. After its IPO, Xiaomi has continued to provide equity incentives for restricted share units. At the same time, Xiaomi has developed a new 10-year entrepreneurship program and a partnership system to motivate young engineers, which has given a great boost to employee motivation.

3.Impact Analysis of Shareholding Governance in Xiaomi Corporation

3.1 Impact Analysis of Equity Structure

3.1.1 Impact on financial performance

This paper analyzes the impact of the two-tier shareholding structure adopted by Xiaomi on the company's operations from the perspective of financial performance, from the perspective of profitability and solvency, and in terms of the selected data and information, the financial data of 2017–2021 is selected.

(1) Profitability analysis

From Table 3, it can be understood that Xiaomi's profitability indicators have a certain magnitude of change after the listing, showing a fluctuating increase after 2018. In terms of annualized return on net assets, 2018 shows a significant decline, showing a negative number, which is mainly affected by the preferred shares to be issued before the listing. In fact, excluding this effect, Xiaomi's return on net assets after the listing, i.e., 2018–2020, shows a stable upward trend, and the same is true for the total net asset margin. In terms of gross profit margin, profitability is on the rise, with a gradual upward trend after listing. In terms of net profit margin and annualized return on investment, both have increased in 2018–2020. In 2021, in addition to the gross profit margin rising year-on-year, all other profitability indicators declined. It is possible that under the impact of the epidemic, Xiaomi's business situation has been affected to a certain extent, but to maintain the annualized return on net assets at about 15%, the gross profit margin remained up, which is the same as Lei Jun as the core of the management team in the face of the general environment of the epidemic. In the pursuit of long-term interests, the courage to take risks to explore the domestic and international sales markets for profitability and sticking to the company's development strategy are inseparably related.

Comprehensively, Xiaomi has maintained a stable forward development trend after adopting a two-tier shareholding structure for listing, and even in the unpredictable economic environment brought about by the unpredictable epidemic, Lei Jun, who owns the control right, has steadily grasped the direction of Xiaomi's forward movement of this giant wheel and has continuously improved the company's profitability and competitive advantage. This also shows that the two-tier shareholding structure has played a positive role in the improvement of Xiaomi's profitability to a certain extent [6].

Table 3. Changes in Xiaomi's Profitability Indicators

Year	2017	2018	2019	2020	2021
Annualized return on net assets (%)	39.94	-48.45	13.16	19.86	14.82
Net interest rate on total assets (%)	-62.33	11.53	6.11	9.31	7.08
gross margin (%)	13.22	12.69	13.87	14.95	17.75
net interest rate (%)	-38.29	7.71	4.91	8.26	5.87
Annualized Return on Investment (%)	-73.67	14.14	8.05	12.85	9.23

Data source: Oriental Fortune

(2) Solvency analysis

Corporate solvency includes both short-term solvency and long-term solvency, and this paper analyzes the solvency of Xiaomi from these two aspects.

①Short-term solvency analysis

Usually, the larger the current ratio of a company, the stronger the company's short-term solvency, and the indicator is better when it is about 2. The larger the quick ratio of a company, the stronger the company's short-term solvency, and the indicator is better when it is about 1. As seen in Figure 1, Xiaomi's current ratio increased from 1.3 to 1.71 after its IPO in 2018, and in the three years after its IPO, its current ratio stayed at about 1.5 with little change, maintaining a steady upward trend. In terms of quick ratio, Xiaomi maintains a more stable ratio of around 1 both before and after listing, with small fluctuations within the normal range.

This shows that Xiaomi's current and quick ratios have fluctuated steadily within a reasonable range after the listing of the two-tier equity structure, and Xiaomi's short-term solvency is strong and steadily increasing. This has a positive effect on promoting Xiaomi's sustainable business development and adhering to the company's development strategy.

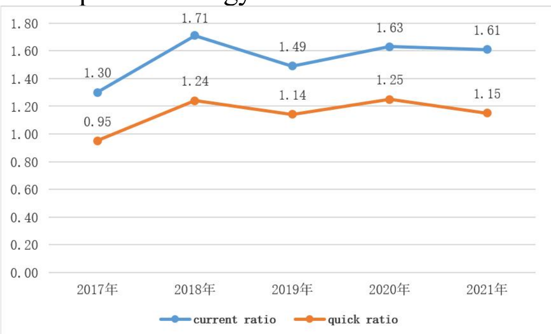

Figure 1. Xiaomi's Current Ratio and Quick Ratio, 2017 to 2021

Data source: Oriental Wealth Choice data

②Long-term solvency analysis

In this paper, gearing ratio and equity ratio are used to measure the long-term solvency of enterprises in the analysis. As shown in Figure 2, in terms of gearing ratio, Xiaomi's gearing ratio reached 2.42 in 2017 because of multiple preferred stock financings before its listing in 2018, and as the fair value of preferred stock increases, so does the liability, but if the factors brought by preferred stock are excluded, the gearing ratio in 2017 should be 0.62, which is in a reasonable range. After Xiaomi adopted a two-tier shareholding structure to go public in 2018, its gearing ratio dropped to 0.51. In the three years since the listing, its gearing ratio has remained stable, with small fluctuations within the range of 0.5–0.6, which shows that Xiaomi's source of funds channels have been expanded more, its operating performance has been slowly improving, and its long-term solvency capacity has been steadily improving. In terms of the equity ratio, before the listing of multiple rounds of preferred stock financing, the total shareholders' equity was negative, thus showing a negative number. After the listing, its equity ratio is 1.04, and in the three years after the listing, it stays within the range of 1–1.3, which shows that the equity ratio of Xiaomi has been in the appropriate range after the listing and that the long-term debt-servicing ability is good and stable.

Figure 2. Xiaomi's Gearing and Equity Ratios, 2017 to 2021

Data source: Oriental Wealth Choice data

A comprehensive analysis of the above can conclude that Xiaomi, after adopting a two-tier shareholding structure to go public, under the leadership of the founding team with Lei Jun as the core, adheres to the scientific business strategy to improve the company's operating income while at the same time optimizing the company's capital structure, enhancing the company's solvency, and increasing the value of the company.

3.1.2 Impact on innovation capacity

(1) Strengthening the foundation of innovation

In terms of the foundation of innovation strategy, because the control of the company is in the founder's team with Lei Jun and others, and the founder's team assumes the role of operator in the process of enterprise operation, so in the process of operating the enterprise, it will pay more attention to the long-term development of Xiaomi than the investing shareholders [7], focusing on the cultivation of the company's core competitiveness-innovation ability, so in the formulation of the company's development strategy, it will pay more attention to the innovation strategy and insist on the implementation of the innovation strategy, which strengthens the foundation of the strategic orientation to improve the company's innovation ability [8].

Secondly, in terms of the foundation of the innovation culture, most of the founders have rich technical experience, all deeply appreciate the importance of innovation ability, and all have the spirit of constantly challenging themselves and being brave to innovate. Therefore, under the double-layer shareholding structure, it helps to ensure the long-term and stable control of the company by the founding team, which will help the founding team integrate their innovative entrepreneurial spirit into the corporate philosophy and corporate culture so that more Xiaomi people are actively involved in all aspects of the enterprise's innovation and provide the company with a constant stream of innovative vitality [9]

(2) Increased investment in innovation

In the R & D expenses, according to the millet 2017–2021 annual report data, derived from the millet company's R & D expenditures, operating income 2017-2021 R & D expenses as a percentage of R & D expenses and R & D expenditures as a percentage of the change as shown in Table 4. In the table of changes in the ratio of R&D investment, it can be seen that Xiaomi's total R&D expenses in 2017–2021 increased rapidly from 3.151 billion yuan, along with the increase in operating income, to 13.167 billion yuan invested in 2021, exceeding 10 billion. The proportion of R&D expenses is also steadily increasing until it reaches 4% in 2021, which is on a steady upward trend.

Table 4. Changes in Xiaomi's R&D Investment Share 2017-2021

particular year	2017	2018	2019	2020	2021
Total R&D expenses (billions of dollars)	31.51	57.77	74.93	92.56	131.67
Operating income (billions of dollars)	1146.25	1749.15	2058.39	2458.66	3283.09
R&D expenses/operating income (%)	2.75	3.30	3.64	3.76	4.01

Source: Based on Xiaomi's annual reports.

The setup of the dual-layer shareholding structure enables Lei Jun to better utilize his leadership skills, giving Xiaomi's founding team more confidence in planning for long-term development, focusing on increasing the long-term value of the company, executing long-term management strategies, allowing Xiaomi to adhere to its long-term innovation strategy, insisting on the cultivation of innovative talents, carrying forward the spirit and culture of innovation, and vigorously promoting Xiaomi's continuous acquisition of new achievements in the field of science and technology innovation. This plays a great positive role in improving the company's R&D and innovation capabilities.

3.2 Impact Analysis of Equity Incentives

3.2.1 Impact on financial performance

Xiaomi's implementation of the ultimate goal of equity incentives is to maximize the value of the enterprise. In the analysis of the implementation of equity incentives in the process of their impact on financial performance, this paper analyzes the impact of the company's ability to develop the growth rate of operating income and gross profit growth rate, the two indicators to be analyzed.

Table 5. Xiaomi's Operating Income Growth and Gross Margin Growth, 2017-2021

Year	2017	2018	2019	2020	2021
Year-on-year growth rate of operating income (%)	67.50	52.60	17.68	19.45	33.53
Gross profit growth rate (%)	109.04	46.44	28.67	28.71	58.53

Data source: Oriental Wealth Choice data

As can be seen from Table 5, Xiaomi's operating income maintained an upward trend in 2017–2021, but in terms of the year-on-year growth rate of operating income, there were fluctuations of decline and then rise in the middle of 2017–2021, and there is a possibility that the global cell phone market is constantly under pressure to fall in 2019, and the competition in the stock market is extremely fierce. And Xiaomi continues to promote the development of high IoT gross margin businesses with active transformation in the middle, so the operating income growth rate slowed down. In terms of gross profit year-on-year growth rate, it has decreased after the listing, which is related to the core of Xiaomi's corporate transformation to establish the IoT business strategy, but in the latter two years, the gross profit year-on-year growth rate is increasing, especially in 2021, where the gross profit year-on-year growth rate is 58.53% and the gross profit is increasing in a more substantial way.

Overall, Xiaomi has been practicing equity incentives to achieve long-term incentives. The process allows management, technical staff, and employees to better utilize their talents, adhere to the growth strategy, and, in the face of fierce competition, like a startup, keep fighting and increase the value of the company.

3.2.2 Impact on innovation capacity

In terms of innovation strategy, according to the principal-agent theory, Xiaomi's founding team as operators and managers of both goals and interests are not the same, and scientific and reasonable equity incentives are conducive to effective incentives for the management of efforts to maximize shareholder value, and the founder of the team's core objectives converge, pay more attention to the long-term development of the company, and are more willing to increase the investment in research and development and innovation, adhere to the strategy of innovation, and move towards the creation of first-class high-tech enterprise goals [10].

In terms of attracting talent, Xiaomi's equity incentives for technical personnel have been increasing, and Xiaomi granted option incentives to thousands of core engineering and technical talents on the eve of its listing. In 2019, Xiaomi set up a group technology committee and launched the highest internal technology award of Xiaomi, the "Million Dollar Technology Award". All of these show that millet is technology-based, and it also greatly inspires the innovation vitality of research and development personnel, the courage to innovate, and attracts a number of excellent technical personnel to join the research and development team of millet, which provides a guarantee of human resources to improve the core competitiveness of millet's innovation ability and also inspires the innovation potential of research and development personnel, fostering a culture of innovation.

4. Shareholding Governance of Xiaomi for Science-Based Enterprises

4.1 Insights from the Adoption of a Two-Tier Shareholding Structure

4.1.1 Rationalization of shareholding structure

After several rounds of financing, combined with the fact that the company will carry out a new round of strategy that requires a large amount of financial support as well as the external competitive industry situation, Xiaomi finally chose to list on the Hong Kong Stock Exchange, which has just been opened up to allow the use of a two-tier shareholding structure for listing, taking into account the financing needs of all parties as well as the control of the founders' team. After Xiaomi adopted the equity structure, it solved the problem of financing and maintaining the control of the founders. It has been proven that Xiaomi made a scientific decision after considering various aspects. Therefore, science- and innovation-oriented enterprises can better combine with their own situation and development stage, rationally design the equity structure, and lay a good equity foundation for the company's long-term development.

4.1.2 Leveraging the equity structure

Xiaomi gives full play to the positive functions of the two-tier equity governance structure, where the founders and their management team are able to exercise control of the company through the exercise of super-voting rights [11]. Thus, the impact of external investors disrupting its well-established business strategy is avoided to the greatest extent possible. In terms of corporate governance, the founder's team is able to control the board of directors to ensure the coherence of corporate management ideas and the farsightedness of corporate strategies. While utilizing the leadership talents of the founders' team with Lei Jun at the core, leaders such as Lei Jun also focus on strengthening their own leadership and pay close attention to their personal social image. Xiaomi has fully utilized the advantages of human resources in its two-tier shareholding structure.

4.1.3 Leveraging the governance effects of equity checks and balances

Xiaomi did play a leadership role for the founders in the pre-equity governance model with a two-tier shareholding structure. At the same time, there is also the problem that the development of the company is too dependent on the founder's team. At this time, equity incentives can let more leadership and technical talents and the founder team work together for the development of the company. This can be organically combined with the two-tier equity governance model, which, on the one hand, can ensure that the founder team can better play its outstanding leadership; on the other hand, it can also attract more talents and the founder team to struggle together for the long-term development of the company to inject a constant flow of power and vitality [12].

4.2 Insights from the Implementation of Equity Incentive Policies

4.2.1 Raising equity incentives to a strategic level

For science-based enterprises, improving the company's level of innovation is an important and unchanging topic, and equity incentives are an important way to promote the company's ability to release the potential of innovation from various aspects and stimulate the vitality of innovation. Therefore, according to their own specific situation, science- and innovation-oriented enterprises can elevate equity incentives to a strategic level and formulate and implement incentive mechanisms in accordance with their own needs.

In terms of time, Xiaomi has been implementing the equity incentive system since the date of its founding, which is very forward-looking compared to most companies, and there are plans to develop even better equity incentives in the future. Many managers believe that the company's equity incentive program can only be implemented in the company's growth period, but this is not the case. At Xiaomi, the equity incentive program applies to the company's start-up, growth, stability, and other phases of the various stages of the equity incentive program. Such as millet company at the beginning of the next decade, the layout of the new talent strategy Has implemented the "young engineers incentive plan" and "new decade entrepreneurs program," which are for the future of millet to seize the heights of the new decade of technological innovation and do a good job of talent preparation.

4.2.2 "People-oriented" equity incentive policy

In running a business, people are the company's most core resources. How to attract and retain talent and give full play to the people's maximum mobility is the need to solve the problems of each company. Xiaomi has developed a scientific and reasonable equity incentive plan program to implement the core of equity incentives: people-oriented. In the early stages of Xiaomi's development, a unique compensation model was customized for core employees, allowing employees to have the right to choose and respecting employees' willingness to hold shares. After the listing, the development of a wider range of incentives compared to the pre-listing incentive targets of the equity incentive model occurs, and many times employees do not need to pay consideration for the share incentive. And millet, whether it is a pre-listing share option or after the listing of the equity awards, the exercise conditions are more relaxed; millet are not on the employees to meet performance requirements. Xiaomi's equity incentive plan takes all-round consideration of the level of demand for talent, increases the sense of participation in the development of talent for the company, and increases the company's sense of identity to meet their self-fulfillment and respect for their high-level needs.

4.2.3 Adoption of dynamic equity incentives in multiple ways

Xiaomi Group's pre-listing equity incentives were based on share options and restricted share units, supplemented by employee funds and flexibly deployed remuneration. With the introduction of a variety of incentive plans, Xiaomi's equity incentives also follow the "sustainable" principle. Each employee was granted shares with the growth of time on the job; with changes in performance and job promotion, the price also changed accordingly. At the same time, Xiaomi's equity incentive program also fully reflects that equity incentives should be in line with dynamic, regular, sustainable development principles to form a complete and operable equity incentive mechanism. In the early stages of the company, the price of obtaining equity is relatively low and can even be said to be gratuitous. However, with the continuous development of the company, the price of the shares should be gradually increased for the employees who join later or the shares obtained at a later stage, so as to reflect fairness to the early entrants. They have to take more risks, so the early company may have less incentive to pay them [13].

5. Conclusion

Xiaomi, as a science and innovation-oriented enterprise, has paid attention to equity governance at different stages of development, fully understood the impact of equity structure and equity incentive policy on the company, and continuously moved forward in the direction of positive effects, thus continuously improving the core competitiveness of the enterprise. It is hoped that the research in this paper can provide a certain degree of reference for the practice of equity governance in technology-based enterprises.

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References

[1] Shi Xiaojun, Wang Ariran The impact of unique corporate governance mechanisms on firm innovation: global evidence from a two-tier shareholding system of Internet firms. Economic Research, 2017, 52 (01): 149–164.

[2] Liao Zhiyu, Zhu Keyue Research on the Impact of Dual-Level Equity Structure on Corporate Performance—Taking Baidu Company as an Example. China Management Informatization, 2019, 22 (05): 6–10.

[3] Tong Changfeng, Yang Baoqi Can strengthening core employee equity incentives enhance firm performance?. Economic Jingwei,2019, 36 (01): 118-125.

[4] Yan Li, Wang Shan, and Liu Xun Equity incentives, R&D investment, and corporate innovation—based on the empirical data of science and innovation board enterprises. Journal of Hubei University of Economics, 2021, 19 (04): 85–94.

[5] Tong Lingzhi. Research on the equity incentive program of Xiaomi group companies after listing. Northeast University of Finance and Economics, 2021.

[6] Lin Yi-han. Study on the motivation and economic consequences of the adoption of double-layer equity structures in science-based enterprises. Beijing Foreign Studies University, 2022.

[7] Liang Xiaoyu, Research on the Impact of Dual Equity on the Innovation Performance of Science and Technology-Based Enterprises. Anhui University of Finance and Economics, 2022.

[8] Liu Yibo. Motivation and effect analysis of dual equity structure in science and technology-based enterprises. Henan University of Finance and Economics, 2021.

[9] Yu Xinmeng, Research on the Impact of Equity Incentives on the Performance of Innovative Science and Technology Enterprises. Jiangxi Normal University, 2021.

[10] Ying Liu, The Application of Dual Equity Structure in the Corporate Governance of Science and Innovation-Oriented Enterprises. Investment and Entrepreneurship, 2021, 32 (13): 147–149.

[11] Luo Tianming, Research on the Application of Dual Shareholding Structure in Science and Innovation-Oriented Enterprises: Taking Xiaomi as an Example. Journal of Tianjin Business Vocational College, 2021, 9 (01): 31–37.

[12] Bai Yuhong, Wang Fuying Discussion on the Governance of the Dual Equity Structure Cooperative Economy and Technology, 2022 (15): 130–131.

[13] Ren Jiachen. Research on equity incentive programs and their implementation effects underthe dual equity structure of Xiaomi Group. Qingdao University of Science and Technology, 2021.