Suggestions on Perfecting the Equity and Dividend Incentive Policies of State-owned Science and Technology Enterprises

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Abstract. The implementation of state-owned technology-based enterprise equity and dividend incentive policies is of great significance to improving the enthusiasm of state-owned enterprises' scientific and technological personnel, reducing the loss of core employees, accelerating the transformation of scientific and technological achievements, and improving the economic benefits of enterprises. However, in the implementation process of the policy, there are realistic problems and obstacles: the first is the scope of implementation of the policy; the second is the unreasonable setting of policy implementation constraints; the third is the inherent thinking and habits of the enterprise; the fourth is the actual operation has concerns and difficulties. Based on the analysis and research, this paper puts forward some suggestions: the first is to reduce the constraints of policy implementation and further enhance the autonomy of enterprises; the second is to expand the scope of policy implementation and appropriately increase incentives; the third is to enhance policy operability by increasing policy advocacy and communication.

1. Introduction

Since the issuance of the “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” in March 2016, the state-owned technology-based enterprise equity and dividend incentive policies have been promoted nationwide and have been implemented for about three years. During this period, the relevant departments have successively issued the “Notice on Doing a Good Job in the Equity and Dividend Incentives of Central Science and Technology Enterprises” and “Guidelines for the Implementation of Dividend Incentives by Science and Technology Enterprises in Central Enterprises”, the “Notice on Expanding the Scope of Implementation of the Interim Measures for the Equity and Dividend Incentives of State-owned Sci-Tech Enterprises”, which provide technology-based companies effective policy guidance for equity and dividend incentives. Through research and analysis, this paper finds out the main problems in the implementation of state-owned technology-based enterprises’ equity and dividend incentive policies, and proposes relevant suggestions for policy optimization.

2. Analysis of problems in policy implementation

Through the symposium and interview research, the research team of this paper has investigated the management personnel involved in equity and dividend incentive work among 8 central enterprises, and investigated the experts in the long-term research on state-owned technology-based equity and dividend incentive policies of 3 research institutions. And then on this basis, analyze the status quo of the implementation of the policy and the main problems. In general, the pilot units of state-owned science and technology enterprises are mainly focused on dividends, and most of them are job
dividends, while the equity incentives are mainly based on equity sales. The pilot units are mainly small and medium-sized enterprises of the second and third grades of the group that have been established for more than three years. Among them, the enterprises that implement equity incentives are mainly third- and fourth-tier enterprises, and the establishment time is shorter. Among the incentive targets, the number of core scientific research personnel accounts for more than 90%, which fully reflects the incentive orientation to the backbone scientific and technological personnel. Judging from the effect of policy implementation, the pilot units have mobilized the enthusiasm of scientific researchers through equity and dividend incentives, reduced the loss of core employees, accelerated the transformation of scientific and technological achievements, and improved the economic benefits of enterprises. At the same time, however, there are some problems and practical obstacles in the implementation of existing policies. In summary, there are four main aspects.

2.1. The scope of policy implementation is still narrow
The formulation and implementation of the “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” is to promote the Zhongguancun equity and dividend incentive pilot policy to state-owned technology-based enterprises. However, the technology-based enterprises in Zhongguancun are growing rapidly, their business distribution is relatively focused, and the nature of subordinate institutions is relatively simple. Most state-owned enterprises, especially large-scale central enterprises, are distributed in traditional industries. The business of the group is large, and there are significant differences in the nature and function positioning of subsidiaries. Although in October 2018, the “Notice on Expanding the Scope of Implementation of the Interim Measures for the Equity and Dividend Incentives of State-owned Sci-tech Enterprises” further expanded the scope of implementation of equity and dividend incentives for state-owned technology-based enterprises, but the problem of narrowing is still presence.

2.1.1. State-owned technology-based enterprises in the new business field are difficult to implement equity and dividend incentives in the initial stage
At present, most of the central enterprises are in the stage of transformation and upgrading, and they are generally accelerating the deployment of strategic emerging businesses. However, state-owned technology-based enterprises in the new business sector are unlikely to be profitable in the first three to five years of their establishment, and they often need to continue to invest. The “Guidelines for the Implementation of Dividend Incentives for Science and Technology Enterprises in Central Enterprises” stipulates that “encourage qualified enterprises to give priority to job dividend incentives” and “stable implementation of equity incentives, enterprises should gradually promote on the basis of accumulating pilot experience”. At the same time, the “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” stipulates that “the accumulated net asset value of the after-tax profit in the past three years should account for more than 10% of the total net assets of the company in the beginning of the past three years, and the undistributed profit at the beginning of the year was positive.” In light of the requirements of these documents, state-owned technology-based enterprises in new business areas are often in a position to not reach the dividends of their positions, and it is difficult to approve the implementation of equity incentives. As a result, they do not enjoy equity and dividend incentive policies in the early stages of development.

2.1.2. Research units affiliated to state-owned listed companies and research units affiliated to state-owned non-listed companies are difficult to implement equity and dividend incentives
The “Interim Measures for the Equity and Dividend Incentives of State-owned Sci-Tech Enterprises” limited state-owned technology-based enterprises to state-owned and state-controlled unlisted technology enterprises with corporate legal personality. For state-controlled listed companies, in principle, equity incentives can be implemented in accordance with the “Measures for the Administration of Equity Incentives of Listed Companies”. However, considering the risk of loss of state-owned assets, it is more difficult to implement equity incentives. At the same time, state-
controlled listed companies tend to attach importance to the incentives of production and operation, and have less attention to the incentives of scientific research, which makes the research units under the state-controlled listed companies often lack medium- and long-term incentives. According to the relevant provisions of the policy, the scientific research units of state-owned subordinate branches cannot be included in the implementation scope of state-owned technology-based equity and dividend incentives. How to solve the medium- and long-term incentive problems of scientific and technical personnel in these units has become a practical problem.

2.2. Policy implementation constraints are set to be improved

In the process of formulation, policy documents have set corresponding constraints for the careful consideration of controlling the quality of selected companies and improving the implementation of policies. Among them, some of the constraints are tight and tight, some do not meet the functional positioning of scientific research units, some have "one size fits all" characteristics, and do not consider the differences in policy implementation objects, making it difficult for enterprises to flexibly and effectively carry out equity and dividend incentive work, policy implementation The incentive effect is limited.

2.2.1. The requirement for the growth of business performance is not consistent with the functional positioning of scientific research units

The “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” stipulates that the position dividends “in principle, the annual net profit growth rate should be higher than the average growth rate of the company's implementation of job dividends in the past three years”. However, the research institutes mainly carry out scientific and technological research and development work. It should not focus on profitability, but provide support for the Group's technological progress and independent innovation. From the international experience, IBM, GE, Siemens, Cisco and other companies generally position the Group Research Center or the Central Research Institute as a cost unit. For example, IBM's assessment of its research institutes is mainly technical breakthroughs, patents and research cooperation, but not to assess the profitability, the research institute is not required to engage in management and create benefits. The implementation of the Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises will strengthen the scientific performance of scientific research units and have to pursue more business operations or increase the amount of scientific research contracts. As a result, it is difficult for scientific and technical personnel to concentrate on scientific and technological research and development. In particular, it will reduce the motivation for conducting basic forward-looking research, and it is more inclined to carry out short-term application technology development with quick results to achieve efficiency and ensure continuous dividend incentives.

2.2.2. The “one way to the main” rule limits the choice of multiple ways to combine incentives

The “Notice on Doing a Good Job in Equity and Dividend Incentives for Central Science and Technology Enterprises” stipulates that “in the initial stage of equity and dividend incentives, the same enterprise should be based on one principle in principle.” Although the document says “in principle”, the pilot unit can only choose one incentive method in practice. However, there are different types of scientific research personnel, and their work nature and outcome characteristics are different, and different incentives are needed. For example, for scientific and technical personnel engaged in basic forward-looking research, the results of application transformation are often longer, and it is not suitable for project dividends; scientific and technical personnel engaged in application technology and product development should encourage the use of project dividend incentives; the backbone personnel engaged in scientific research management are suitable for post dividend incentives. According to the provisions of the existing documents, combined incentives that cannot be combined in various ways can not be implemented in the same unit. Different types of scientific and technical personnel cannot implement differentiated incentives, and their incentive effects will be limited.
2.2.3. The limits on incentive quotas and proportions are difficult to meet the incentive needs of core employees

The “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” stipulates that individual incentives for equity awards must be purchased at a ratio of not less than 1:1, and the total amount of equity awards received does not exceed 3 million yuan. For small and micro enterprises, because the total amount of equity is small, “the incentive shares obtained by a single incentive object must not exceed 3% of the total share capital of the enterprise”, resulting in too small incentives and the incentive effect is difficult to reflect. The incentive targets for equity awards are “limited to important technical personnel who have worked continuously for more than three years in the company”, resulting in the introduction of high-level key position technicians from outside and the inability to enjoy equity rewards. Incentives for job dividends, “the total amount of annual dividends for enterprises is not higher than 15% of the profits after tax in the current year”. From the actual effect of enterprises that have already carried out job dividends, the average incentive amount is usually about 30,000 yuan/person, which is difficult to achieve the goal of retaining core technical talent.

2.3. Inherent thinking and habits

In the process of formulating group equity and dividend incentive schemes, enterprises are susceptible to the inherent thinking and habits of human resource management in the past. For the convenience of management and easy operation, new requirements and conditions are added on the basis of policy documents. For example, locking the effective execution period and different employees of different identities, etc., reduce the flexibility and rationality of the implementation of relevant policies in the enterprise.

2.3.1. The post dividend plan is implemented for a three-year validity period, and the group strictly manages the list of selected employees

The “Interim Measures for the Equity and Dividend Incentives of State-owned Science and Technology Enterprises” stipulates that the effective period of the post dividend incentive scheme shall not exceed 3 years in principle. This means that the company can choose to implement the validity period of one year, two years or three years according to the actual situation, and does not require the group to strictly manage the list of employees whose subordinate units are selected for the incentive plan. However, in actual operation, the central enterprise group is easy to handle. They implement a job dividend incentive plan based on a three-year validity period, and strictly manage the list of selected employees, that is, employees can enjoy three consecutive years if they are selected, but those who are not selected need to wait for three years to have an opportunity. This kind of operation will have a poor incentive effect, and even counterproductive, because those who are not given incentives will obviously reduce their enthusiasm, and may be able to leave in less than three years. The ideal plan should be the list of the group's regardless of the incentives, allowing the subordinate units to flexibly adjust the list once a year for the three-year validity period.

2.3.2. It is difficult for employees of different identities to participate in equity and dividend incentives without discrimination

In the existing policy documents, it is stipulated that “the incentive object is an important technical personnel and management personnel who sign labor contracts with the enterprise”, and that the dividend-paying object requires “should be continuously working in the position for more than one year”. There are no excessive restrictions. However, some enterprises have differences in employee identities, and employees with identity establishment and market-based employment often use different compensation systems. In the case of equity and dividend incentives, it is also easy to treat differently. It is often not included in the scope of incentives for market-based workers, that is, they are not treated equally.
3. Related policy recommendations

3.1. Reduce policy implementation constraints and further enhance corporate autonomy

3.1.1. The revision of the limit on the performance growth of job dividends is subject to the “one enterprise, one policy” standard set by the central enterprise headquarters

The headquarters of the Central Enterprise Group has clear functional positioning and development goals for its subordinate units, and has a differentiated performance appraisal system, which can effectively determine the target requirements that should be achieved after the implementation of the job dividend incentives. For example, the research enterprises of the subordinates may not have the requirements for business performance, while the production enterprises will take the business performance as the main goal, and it will be more scientific to determine the assessment criteria by the group headquarters. It is not recommended to make a uniform line in the policy document.

3.1.2. Allows companies to choose a variety of ways to combine incentives

Break the vague stipulations of the existing document “mainly in one way”. Allow enterprises to implement differentiated incentives according to the characteristics of different incentive objects, such as basic research, applied research, technology development, and transformation of results, and other innovative chain research workers, as well as researchers and scientific research managers. But the same person can only choose one incentive method. At the same time, it allows enterprises to dynamically adjust and optimize the combination incentives at different stages of development.

3.2. Further expand the scope of policy implementation and appropriately increase incentives

3.2.1. Expand the scope of policy implementation

Changing the current policy orientation of steadily promoting equity incentives and priority job dividend incentives, explicitly supporting central enterprises to carry out equity incentives in strategic emerging business areas, encouraging the adoption of equity options and equity sales, and increasing the number of incremental business units or new incentives for small and micro enterprises will stimulate the innovation and vitality of the emerging businesses of central enterprises, and promote the transformation of business enterprises and optimize the structure of the central enterprises. At the same time, it is also necessary to allow qualified research units of listed companies to be included in the policy area.

3.2.2. Moderately increase incentives

It is recommended to appropriately increase the upper limit of the total amount of equity awards obtained by a single incentive object, appropriately increase the upper limit of the proportion of incentive shares acquired by a single incentive object to the total share capital of the enterprise, and appropriately increase the upper limit of the annual total dividend incentives of the enterprise to the proportion of the after-tax profit of the current year, and cancel the incentive object of the equity award requires the limitation of the working years of the enterprise.

3.3. Increase policy advocacy and communication, and enhance policy operability

3.3.1. Increase policy advocacy

The "Problem Answers on the Interim Measures for the Equity and Dividend Incentives of State-owned Technology Enterprises” was formulated, and several rounds of corporate training and presentations were carried out. However, there are still many confusions in the specific practice of enterprises. The problems related to the applicable conditions of enterprises, the requirements of incentive targets, the conditions for implementing incentives, and the management of incentive programs are still not well understood, and systematic solutions are needed. Therefore, it is
recommended to further increase policy propaganda, in-depth interpretation of policies, and help enterprises solve problems such as misunderstanding or in-depth understanding of policies.

3.3.2. Increase research and exchange of experience
For enterprises that are implementing equity and dividend incentives, through investigation and research, we will sort out the practical problems encountered in practical operations, and strengthen theoretical and methodological research to further strengthen the guidance of policies on practical operations. For the existing pilot enterprises, timely strengthen the experience summary, compile and interpret the typical successful cases, and share successful practical experience through convening enterprise exchange seminars and strengthening training.

4. Conclusion
Establish a sound equity and dividend incentive system as soon as possible, and form a salary distribution mechanism with equal emphasis on incentives and constraints. A reasonable salary distribution mechanism must not only reflect the value and contribution of employee labor, but also unify responsibility. Due to the special nature of scientific research work, some of the results have a long conversion cycle, and it is difficult to judge its value through short-term work results. It is necessary to closely link employee compensation with its contribution through appropriate medium- and long-term incentives, and to make the compensation more fully reflect the value of researchers, but also have a certain binding effect.

Acknowledgments
This paper is funded by the project “Research on Key Technologies of Incentive Mechanism Optimization of Corporate Science and Technology Innovation”.

References
[1] Wang, B. (2018) Research on the Incentive Ways of Modern State-owned Science and Technology Enterprises. Market Modernization, 3: 102.
[2] Bao, X., Zhao, L. (2018) Discussion on the Incentive Mechanism of Scientific and Technological Personnel in Coal Research Institutes. Coal Economy Research, 38(04): 52-57.
[3] Li, N., Shi, J. (2018) The Status Quo and Countermeasures of Incentive Mechanism for Scientific and Technological Achievements Transformation Management Service Personnel. Technology Venture Monthly, 31(03):14-15.
[4] Wu, L. (2018) Exploring the Incentive Methods and Principles of R&D Personnel in High-tech Enterprises. Modern Commerce, 6:74-75.
[5] Luo, W., Wang, L. (2018) Research on Incentive Mechanism of Scientific Research Personnel in State-owned Scientific Research Institutions. Financial Science, 2:50-59+73.