

The impact of investment in the integration of industry and education in small and medium-sized enterprises on current profits and losses—Based on analysis of four cases

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Abstract: The integration of industry and education between small and medium-sized enterprises and local universities can, on the one hand, promote the adjustment of local economic structure and promote the rapid development of local economy; On the other hand, it can promote local universities to adjust their professional structure, improve talent cultivation mechanisms, and achieve rapid development of local higher education. However, at present, the willingness of "small and medium-sized enterprises" to invest in the integration of industry and education is low. In order to enhance the enthusiasm of "small and medium-sized enterprises" to participate in the "integration of industry and education", on the one hand, "local governments" will increase their financial support for the "integration of industry and education between small and medium-sized enterprises and local universities" project. On the other hand, local governments lead the comprehensive evaluation and allocation of the effectiveness of "industry education integration" in education, ensuring that "small and medium-sized enterprises" receive reasonable benefits.

1. Question raising

The report of the 20th National Congress of the Communist Party of China clearly states that in order to develop the economy, priority must be given to the development of education, especially higher education. The development of higher education should adhere to the principle of "government coordination, social orientation, local focus, and reliance on enterprises". It is necessary to deepen the integration of industry and education, strengthen cooperation between schools and enterprises, and achieve connotative development of higher education.

The "integration of industry and education" at the national level is relatively mature, and successful cases are basically organized by four parties such as "large and medium-sized enterprises", "well-known universities", "well-known scientific research institutes", and local governments. Most of them rely on national industrial parks or national development zones, and rely on a combination of "finance+finance+land+credit" incentive policies to attract "industry, academia, and research" and other entities to settle in them, Zhongguancun relies on the five "service chains" to build a technology innovation oriented service platform for enterprises, a

research innovation platform and a research achievement transfer platform for higher education institutions and research institutes, and an innovation and entrepreneurship platform and professional construction platform for higher education institutions. Analysis and Experience Reference of the Innovation Mode of Zhongguancun Strong Chain Project: The five service chains refer to the environmental service chain, policy service chain, development service chain, innovation and entrepreneurship service chain, and management service chain. This type of school enterprise cooperation is basically led and organized by the government, belonging to the "deep integration of industry and education".

The integration of industry and education between small and medium-sized enterprises and local universities belongs to the regional integration of industry and education, which is basically advocated by local governments and aims to promote the rapid development of local economy and higher education. Promoting the integration of industry and education between small and medium-sized enterprises and local universities can provide applied talents for the development of local enterprises, promote the adjustment of local economic structure, and promote the rapid development of local economy; On the other hand, it can promote local universities to adjust their professional structure, training plans, and talent training mechanisms in accordance with the needs of local economic structure adjustment, and achieve rapid development of education.

Education has a public good nature. In the implementation process of the integration of industry and education between small and medium-sized enterprises and local universities, local governments play a leading role. The financial capacity of the "government" directly affects the level of financial support. Local governments in economically developed areas have strong financial resources, and the promotion of "industry university cooperation" is relatively strong, while the support in economically underdeveloped areas is relatively small. The 'production side' is also a major constraint, and earnings management policies directly affect the willingness of enterprises to invest. The policy orientation of local governments directly affects the enthusiasm of enterprises to participate in "industry education integration", and also affects the willingness of local universities to "industry education integration". The entry conditions for industry education integrated enterprises in the National Vocational Education Reform Implementation Plan can be roughly divided into two categories: firstly, the enterprise itself can provide relatively complete educational functions and elements. Secondly, the enterprise carries out substantive school enterprise cooperation to promote the formation of a "school enterprise destiny common body". Only through the joint efforts of the "government, industry, and education" three parties can the rapid and healthy development of "industry education integration between small and medium-sized enterprises and local universities" be promoted.

However, in the practical work of promoting the integration of industry and education between small and medium-sized enterprises and local universities, the willingness of both parties to invest is not very strong.

This article mainly analyzes the reasons for the low willingness of small and medium-sized enterprises to invest in "industry education integration", and proposes to improve the "industry education integration" of small and medium-sized enterprises.

2. Analysis of Factors Influencing the Investment in "Industry Education Integration" of Small and Medium sized Enterprises

Small and medium-sized enterprises play an irreplaceable role in promoting employment, driving economic growth, promoting technological innovation, and maintaining social harmony and stability. It can be seen that small and medium-sized enterprises play a very important role in local economic development.

Local higher education institutions and small and medium-sized enterprises cooperate in running schools. For the "production side", training leading talents in small and medium-sized enterprises and improving the quality of small and medium-sized enterprise management talents can help improve the level of small and medium-sized enterprise management; For the "school", it can promote its rapid adjustment of professional direction and the cultivation mechanism of applied talents, significantly improve the quality of applied talent cultivation, and promote the healthy development of local higher education. It can be seen that small and medium-sized enterprises are a key element of "regional integration of industry and education"^[1].

2.1 Policy orientation is the primary factor affecting the investment in "industry education integration" of small and medium-sized enterprises

On November 4, 2019, relevant national departments jointly issued a document and clearly stipulated that enterprises listed as supporting units for industry education integration projects can enjoy education surcharge and local education surcharge credit policies in accordance with the law. At the same time, provide convenient support for the construction and cultivation of enterprises in project approval, purchase services, financial support, land use policies, and other aspects. In addition, you can also enjoy a combination of "finance+finance+land+credit" incentives and enjoy relevant tax policies.

2.2 The demand for surplus adjustment is an important factor affecting the investment of "industry education integration" in small and medium-sized enterprises

In February 2022, the Announcement of the State Administration of Taxation and the Ministry of Finance on Continuing the Implementation of Delaying the Payment of Partial Taxes and Fees by Small and Medium sized Enterprises in the Manufacturing Industry pointed out that relying on adjusting the earnings management policies of small and medium-sized enterprises to stimulate the enthusiasm of "industry" parties to participate in the "integration of industry and education".

2.3 Comprehensive benefit distribution is a direct factor affecting the investment in "industry education integration" of small and medium-sized enterprises

According to relevant literature review, there is a lack of information on the evaluation of the benefits of industry education integration. There is neither a mature third-party fair evaluation nor a reasonable mechanism for distributing benefits, which affects the investment of the "industry side".

3. Analysis of the impact of investment in "integration of industry and education" on the current profit and loss of small and medium-sized enterprises

3.1. The impact of tax incentives on the current profits and losses of small and medium-sized enterprises is relatively small.

The combined incentive policy has promoted the rapid development of "regional integration of industry and education". For example, Changzhou Industrial Vocational and Technical College and West the Taihu Lake Science and Technology Industrial Park in Jiangsu Province jointly built West the Taihu Lake Modern Service Industry College. With the support of the government, the school has carried out comprehensive cooperation with enterprises in the industrial park, such as establishing a cross-border e-commerce base, building a "Internet plus" business training platform, etc. Through government leadership, school enterprise cooperation, integration of industry and

education, and diversified participation, enterprises can accurately participate in the whole process of talent training, so that enterprises can better play their role.

At present, China has introduced a series of preferential policies for high-tech enterprises, such as collecting corporate income tax at a rate of 15% for recognized high-tech enterprises; Starting from January 1, 2018, enterprises with the qualifications of high-tech enterprises or technology-based small and medium-sized enterprises in that year shall extend the period for carrying forward losses.

The enterprises listed in the "National Catalogue of Industry Education Integrated Enterprises" are all large enterprises, while the proportion of small and medium-sized enterprises among the enterprises listed in the "Approved List of Industry Education Collaborative Education Project Guidelines by the Ministry of Education" is extremely low, less than 6%.

Overall, the "income tax preferential policies" enjoyed by small and medium-sized enterprises are not sufficient to affect the "current cash flow", and the impact of the "change in loss carryover period" on the "taxable income" of small and medium-sized enterprises is also minimal.

3.2. The impact of fiscal subsidy policies on the current profits of small and medium-sized enterprises is not significant

Zibo Vocational College collaborated with Lunan Pharmaceutical Group to establish the "Lunan Pharmaceutical College". Lunan Pharmaceutical Group provides educational facilities such as office desks and chairs, computer networks, and management software, and assigns management personnel to guide internship practices. The classroom is moved to the enterprise, creating school enterprise order classes and modern apprenticeship classes, breaking the barriers between schools and enterprises.

On the one hand, "Lunan Pharmaceutical College" has trained urgently needed applied talents for Lunan Pharmaceutical Group, reduced the cost of human resource training, increased the operating income of the enterprise, and significantly improved the operating efficiency of the enterprise; On the other hand, relying on the "State Administration of Taxation and Ministry of Finance Document No. 2, 2022" to adjust the earnings management policies for small and medium-sized enterprises, the cash flow outflow was significantly reduced, and the business performance of the enterprise was significantly improved.

However, the local government's financial subsidies for the "industry education integration project" are linked to the registered capital and operating income of enterprises, Small and medium-sized enterprises do not really receive a lot of subsidy income^[2].

3.3. Differential land prices have not saved the land acquisition costs of small and medium-sized enterprises

In the "Several Opinions on Supporting the Development of Yuelu Mountain National University Science and Technology City" issued by the Hunan Provincial Government to accelerate the development of university science and technology cities, it supports universities to use existing properties to establish various entrepreneurship and innovation service platforms, and build research and development and industrial bases. For the land used for the key technological innovation project of "Yuelu Mountain Science and Technology City", a differentiated land price supply policy can be adopted after recognition.

However, according to the beneficiaries of the "differentiated land price supply policy" in the four cases mentioned in this article, due to the limitations of the "operating income threshold" and the "capital scale threshold", almost no "small, medium-sized, and micro industry education integration participants" enjoy the "differentiated land price", and the "differentiated land price" only

saves land acquisition costs for large enterprises.

3.4. The preferential policies for value-added tax have not reduced the turnover tax of small and medium-sized enterprises

The notice on tax policies for technology enterprise incubators, university science parks, and maker spaces issued by the Ministry of Finance of China proposes to exempt property tax and urban land use tax on national and provincial technology enterprise incubators, national registered maker spaces, university science parks for self-use, and properties provided to incubators for free or through leasing; The income obtained from providing incubation services to the incubated objects is exempt from value-added tax.

However, according to the beneficiaries of the "value-added tax preferential policies" in the four cases mentioned in this article, due to the limitations of the "operating income threshold" and the "capital scale threshold", almost no "small, medium-sized, and micro industry education integration participants" enjoy the "value-added tax preferential policies", and the "value-added tax preferential policies" only save land acquisition costs for large enterprises.

3.5. The reform of governance structure has enhanced the enthusiasm of small and medium-sized enterprises for "industry education integration"

The integration of industry and education, the collaborative construction of teaching resources by both parties, and the collaborative cultivation of employees with outstanding practical skills and strong innovation capabilities, save training costs, improve work efficiency and product quality, and enhance the value of human resources. Furthermore, it enhances the market share of innovative products, increases product sales prices, and indirectly creates corporate profits.

Nanjing Tourism Vocational College and Beijing Guanghui Jintong Education Technology Co., Ltd. jointly established a mixed ownership crew college. The "mixed ownership" of the "Nanjing Tourism · Beijing Guanghui" Flight Academy is an innovation that attracts "investment from both industry and education" in the form of "equity dividends", which is conducive to evaluating and distributing the comprehensive benefits of "industry and education integration", and more conducive to attracting "industry and education" to increase investment in industry and education integration.

4. Countermeasures for Increasing the Investment in the Integration of Industry and Education in Small and Medium sized Enterprises

The combined incentive policy of "finance+finance+land+credit+tax incentives" tends to support large enterprises within the national level "deep integration of industry and education" platform. For "small and medium-sized enterprises", it is only a "guiding signal".

The integration of industry and education between small and medium-sized enterprises and local universities requires financial support from local governments.

4.1. Local governments increase financial support for the integration of industry and education in small and medium-sized enterprises

Small and medium-sized enterprises and local universities play a crucial role in the development of local economy. Therefore, local governments with financial capabilities should set up special funds to reduce the evaluation standards for the integration of industry and education between small and medium-sized enterprises and local universities, expand the scope of evaluation for the

integration of industry and education between small and medium-sized enterprises and local universities, increase subsidies for the project, and support the enthusiasm of both industry and education to carry out the integration of industry and education between small and medium-sized enterprises and local universities^[3].

Local governments will increase subsidies for the "differentiated land price supply policy", lower subsidy thresholds such as "operating income" and "capital scale", and encourage enterprises that participate in the "integration of industry and education between small and medium-sized enterprises and local universities" to become beneficiaries of the "differentiated land price supply policy", effectively ensuring the enthusiasm of "small and medium-sized enterprises" to participate in the "integration of industry and education between small and medium-sized enterprises and local universities".

Local governments will expand the scope of "exemption from value-added tax" and lower the threshold for "value-added tax exemption" such as "operating income" and "capital scale", All small and medium-sized enterprises that participate in the integration of industry and education between small and medium-sized enterprises and local universities should become beneficiaries of "exemption from value-added tax", and increase the enthusiasm of "small and medium-sized enterprises" to participate in the integration of industry and education between small and medium-sized enterprises and local universities.

Local governments have lowered the selection criteria and reward standards for "government teaching achievement awards", expanded the scope of "teaching and research achievement awards", increased reward standards, and respectively rewarded "small and medium-sized enterprises" and "local universities" that participate in "industry education integration", to stimulate the enthusiasm of "small and medium-sized enterprises" and "local universities" to participate in "industry education integration".

4.2. Local governments lead the evaluation of the effectiveness of the "integration of industry and education" education in small and medium-sized enterprises

Local governments play a leading role in the integration of industry and education between small and medium-sized enterprises and local universities. Firstly, they should strengthen their awareness of social responsibility, expand channels for enterprise participation, and universities should face social needs, promote interdisciplinary intersection and integration, build a specialized discipline system that adapts to industrial transformation and upgrading, carry out diversified talent cultivation models, and increase the proportion of applied talent cultivation. The second is to promote collaborative innovation and achievement transformation with enterprises as the main body, and accelerate the transformation of basic research achievements into industrial technology. Universities, supported by high-level and high-level scientific research, transform scientific and technological innovation achievements into teaching content that can impart cutting-edge subject knowledge to students; At the same time, college students should also be encouraged to conduct scientific research based on the actual problems of enterprises, in order to improve their innovation and practical abilities. The third is to strengthen the construction of the "dual teacher" teaching team. We attach great importance to enhancing the personal "dual teacher" literacy of teachers, and require them to regularly go to enterprises for practical training, while also providing on-the-job education and training for enterprise employees. In addition, actively introducing enterprises.

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Cooperation between Finance Majors in Vocational Colleges and Local Small and Medium Enterprises (2023ZCY354)".

References

- [1] Xie Chenxin, Ye Dezhu, Ye Xian. *Corporate competitive culture and the risk of stock price collapse*; *Journal of Management Engineering*, 2022
- [2] Huo Lijuan. *Research on the Construction of an Innovation Ecosystem for Industry Education Integration Based on a New Model of Knowledge Production*; *Journal of the National School of Education Administration*, 2019
- [3] Xie Xiaozhen. *Research on the Mechanism and Mechanism Design Path of "Industry Education Integration"*; *Research on Higher Engineering Education*, 2019