

Research on Corporate Income Tax Planning-taking Precision Forging Technology Company as an Example

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Abstract: In the increasingly complex global economic environment and increasingly fierce competition, as a manufacturing country, the transformation and upgrading of the manufacturing industry is particularly necessary. The Chinese government has also introduced corresponding preferential policies for corporate income tax to promote technological innovation, transformation and upgrading of the manufacturing industry. How to make tax planning through the reasonable use of tax policies is of great significance to the upgrading and development of enterprises. This paper takes the precision Forging Technology Company as the research object, through the company's operating status and the enterprise income tax payment situation, reveals the company in the process of tax planning problems. In view of these problems, this paper puts forward the suggestions of accelerating the depreciation method of fixed assets, increase the proportion of R & D expenses, and make full use of environmental protection preferential policies, so as to achieve reasonable tax saving effect.

1. Introduction

In recent years, China's significant economic growth has enabled more and more people to buy private cars. As the Chinese government has introduced a series of policies to encourage the purchase of domestic cars, the number of people buying domestic cars is also growing rapidly, driving the growth of the domestic car manufacturing industry, but also driving the rapid development of the upstream and downstream industries of domestic cars. With the rapid development of these enterprises, the higher corporate income tax burden of enterprises also affects the financial resources of enterprises, greatly reduces the competitiveness of enterprises, which accelerates the innovation and reform of enterprise income tax planning.

At present, the academic community has the following views on the enterprise income tax planning. Zhao Xiangze took ZH Company as an example, according to the own characteristics and local policies of ZH company, put forward specific plans and problems that should be paid attention to in the improvement [1]. Sun Xiaojie explored the significance and purpose of enterprise tax planning, and put forward the corresponding risk control strategy of tax planning and improve the risk management level of enterprise tax planning according to the problems and deficiencies in the actual tax planning [2]. Li Yi elaborated the common types of tax risks of manufacturing enterprises from

the perspectives of value-added tax and enterprise income tax, analyzed their causes, and gave the corresponding strategy [3] to strengthen the tax risk management of manufacturing enterprises. Yang Hongxia introduced the main taxes involved in the enterprise, analyzed the problems existing in the tax planning of enterprises and gave suggestions [4]. Starting from the significance and purpose of manufacturing enterprise income tax planning, Li Qishu analyzed the current situation and problems of manufacturing enterprise income tax planning, elaborated the implementation of enterprise income tax planning, and put forward the risks and countermeasures that should be paid attention to in enterprise income tax planning [5]. From the perspective of research and development investment, Ma Meiru focused on the relationship between the tax burden of Chinese enterprises and innovation performance. Aiming at the problems existing in the income tax burden of Chinese enterprises, she gave measures to solve the burden of corporate income tax and realize innovative performance management [6]. Wen-qing wang, guo jiang-shan, Ma JiaoYang to Shanghai and Shenzhen 1012 advanced manufacturing listed enterprises as the research object, in 2014 accelerated depreciation of fixed assets income tax policy for natural experiment, set, measurement model, the double difference method empirical test the accelerated depreciation of fixed assets policy on advanced manufacturing enterprise technology innovation level, and according to the research results, the accelerated depreciation of fixed assets income tax incentive policy put forward reasonable suggestions [7]. Li Yihang, Xu Yingjie, Guo Xiao, Dong Xinxin using a-share listed companies quarterly financial report data, through building breakpoint-double difference (RDD-IDD) model, in 2021 two new claim additional deduction preferential tax policies for the influence of manufacturing enterprise research and development investment carried on the thorough study, and further explores the two policies to promote enterprise research and development path, and put forward targeted countermeasures and suggestions [8]. Xie Yingjun in 2013-2018 Shanghai and Shenzhen a-share manufacturing listed companies in Jiangsu province data for the research samples, using individual fixed effect model for regression analysis, the impact of the enterprise innovation performance, and for the government departments in encouraging enterprises to develop innovative research and development policy provide relevant suggestions [9]. Nian Fuyong analyzed the planned path of manufacturing enterprise income tax planning, combined with the actual difficulties of enterprises, gives the specific strategy of improving the level of manufacturing enterprise income tax planning and the specific plan of enterprise income tax planning [10]. Yang Wenzhen according to the characteristics of the newly revised enterprise income tax law, on the basis of clarifying the organization form of enterprise tax planning and mastering the preferential tax policies, gave the specific strategies and matters needing attention of enterprise tax planning [11]. Su Jianhua analyzed the five methods of enterprise income tax payment planning, and pointed out that the enterprise should start from its own actual situation and carry out tax payment planning legally and reasonably [12]. Gu Juan stressed the importance of enterprise tax risk prevention, and gave the current situation of the main problems of the corresponding planning strategy [13].

The above documents all emphasize the importance and rationality of corporate income tax payment planning, and also point out that tax payment planning needs to be combined with the actual tax payment situation of the company itself. Through an in-depth analysis of the tax status of the enterprise income tax, we point out the problems existing in the company's enterprise income tax planning, and combine with the enterprise income tax policy of China. The advantages of this paper are: the data is accurate, the data used in this paper is from the official financial report of each company, so it has high accuracy, combining the current tax planning policy and the actual tax status of the company, with strong operability.

2. Current status of Precision Forging Technology Company

2.1 Company profile

Through the official website of Jiangsu Pacific Precision Forging Technology Co., Ltd. (www.ppforging.com) and Baidu Encyclopedia official website (baike.baidu.com), Jiangsu Pacific precision forging technology company is founded in 1992 in Jiangsu province, the leading business includes: automotive differential bevel gear, car transmission shaft, EDL (electronic differential lock gear), synchronizer gear, clutches drive disc hub parts, parking gear, high-end agricultural machinery with gear production and sales. At present, the company is the most significant supplier of domestic car precision forging gear sales, entered the GKN, MAGNA, VW, GM, GETRAG, AAM, DANA and John Deere notable enterprises like global procurement system, is the only one in the domestic counterparts at the same time with Volkswagen, gm, ford, motor, Toyota and other models of precision forging gear enterprises.

2.2 Financial position of the company

By the giant tide Information Network (www.cninfo.com.cn), we can see the financial data of Precision Forging Technology Company in the past three years.

Table 1: Financial Data Statement of Precision Forging Technology Company (Unit: ten thousand Yuan)

a particular year	In 2022,	In 2021,	In 2020,
income from main business	180,827.38	142,336.01	95,639.61
Main cost	129,456.74	100,692.58	73,651.98
profit	24,782.17	17,200.10	16,076.79
Return on equity	7.63%	5.59%	7.17%

As can be seen from the Table 1, from 2020 to 2022, the company's income from 956.3961 million yuan to 1808.2738 million yuan, income continuous growth, but the return on equity did not achieve synchronous growth, the return on equity in 2022 reached the highest value of the three years, but in 2021 the company's return on equity relative to 2020. At the same time, the company's operating cost increased year by year, from 736,519,800 yuan in 2020 to 1,294,567,400 yuan in 2022, and there is room for improvement.

To further explore the emergence of the above problems, this paper researches from the perspective of corporate income tax burden.

Table 2: Financial Data Statement of Precision Forging Technology Company (Unit: ten thousand Yuan)

a particular year	In 2022,	In 2021,	In 2020,
income from main business	180,827.38	142,336.01	120,313.09
Corporate income tax expense	3,450.88	2,690.02	3,168.60
Tax burden rate	1.91%	1.89%	2.63%

Through further analysis of the company's financial data table, can list Table 2, by Table 2 can be found in the precision forging technology company primary income increased year by year, but the tax rate did not improve, the tax rate in 2021 to 1.89%, but in 2022 the tax rate rose to 1.91%, which makes precision forging technology company enterprise income tax cost has been high.

In order to further reflect the corporate income tax burden of the company, this paper compares

the corporate income tax burden of Precision forging Technology Company and other companies in Table 3, it can be perceived that the return on net equity is the highest, indicating that there is considerable room for improvement in the corporate income tax burden of the company.

Table 3: Comparison of corporate income tax burden of Precision Forging Technology Company and its peers (Unit: ten thousand yuan)

project	Precision Forging Technology Co	Xingyu shares	Changshu steam decoration	Silver wheel shares
income from main business	180,827.38	824,799.46	366,567.22	847,963.79
Corporate income tax expense	3,450.88	10,849.94	4,550.83	3,447.28
Return on equity	7.63%	11.59%	13.01%	8.46%
tax incidence	1.91%	1.32%	1.24%	0.41%

3. Problems existing in the enterprise income tax planning of Precision Forging Technology Company

3.1. Depreciation method of fixed assets needs to be optimized

According to the financial report of Precision Forging Technology Company, we can see that the number of fixed assets of Precision Forging Technology Company is 675 million yuan, and the fixed assets and their depreciation methods are as shown in Table. 4:

Table 4: Fixed assets and depreciation methods of Precision Forging Technology Company

class	method of depreciation	Depreciation year now	ratio of remaining value	yearly depreciation
Houses and buildings	Number of year average method	20	10	4.50%
machinery equipment	Number of year average method	20	10	9.00%
ED	Number of year average method	3	10	30.00%
conveyer	Number of year average method	4	10	22.50%
detection device	Number of year average method	10	10	9.00%
Office other	Number of year average method	10	10	9.00%

Through the analysis of Table 4, you can see that the company fixed assets with average depreciation, annual depreciation rate unchanged, namely the annual depreciation amount, prevents the annual cost fluctuations, but compared with the accelerated depreciation method, is equivalent to just pay taxes in advance, and cannot make full use of the time value of money, reduce the utilization rate of funds.

3.2 The policy of additional deduction for Research and development expenses is underutilized

According to relevant policies of China: for the research and development expenses incurred in the activities to be deducted, 100% of the actual amount is 200% from January 1, 2023; for the intangible assets, 200% of the intangible assets shall be tied from January 1, 2023.

As can be seen from Table 5 and Table 6, although the research and development expenses of enterprises increased year by year, from 81218645.01 yuan in 2020 to 102120883.60 yuan in 2022, the proportion of additional deduction also increased from 7.16% in 2020 to 16.75% in 2022, compared with other similar companies, such as Huayang Change and Sainty Seiko, the proportion of the two companies reached 21.68% and 47.24% respectively, compared with the deduction proportion of Seiko Group still has room for greater growth.

The financial report of Precision Forging Technology Company in the past three years shows the deduction ratio of research and development expenses as shown in Table .5:

Table 5: Deduction proportion of research and development expenses of Precision Forging Technology Company (unit: yuan)

project	In 2022,	In 2021,	In 2020,
Additional deduction amount	17,102,397.94	9,307,890.25	5,812,302.09
RESEARCH and development expenses	102,120,883.60	73,352,855.29	81,218,645.01
Additional deduction ratio	16.75%	12.69%	7.16%

Table 6: Comparison of the proportion of additional deduction of research and development expenses in the current year in 2022(Unit: Yuan)

project	Fine forging technology company	Huayang change	Shun yu seiko
Additional deduction amount	17,102,397.94	3,666,474.88	9,440,129.04
RESEARCH and development expenses	102,120,883.60	7,762,038.97	43,537,661.79
Additional deduction ratio	16.75%	47.24%	21.68%

Conditions that China allows additional deductions for research and development expenses:

(1) It is applicable to resident enterprises with sound accounting, audit collection and can accurately collect research and development expenses. Therefore, enterprises and non-resident enterprises that collect enterprise income tax by verification collection method cannot enjoy this preferential treatment.

(2) The enterprise shall separate accounting for research and development expenses from production and operation expenses, accurately and reasonably calculate the research and development expenses and shall not make additional deductions if the division is unclear.

(3) The enterprise shall conduct accounting treatment for the requirements of the national financial accounting system. Meanwhile, set up auxiliary accounts for the research and development expenses and accurately calculate the actual amount of research and development expenses that can be deducted in the current year.

Through the analysis of the above conditions combined with Table. 5 and Table. 6, it can be seen that if the proportion of additional deduction is low, it indicates that some expenses of the company do not conform to the provisions of the tax policy. Therefore, only by standardizing the expenses and more markedly increasing the proportion of additional deduction can the company reduce the current income tax expenses.

3.3 Energy conservation and environmental protection tax policies are not fully utilized

According to relevant policies in China, the income of energy-saving and water-saving projects shall be exempted from enterprise income tax from the first year to the third year of the project, and the enterprise income tax shall be halved from the fourth year to the sixth year. According to the enterprise data, Jiangsu, Tianjin and Chongqing have sewage treatment stations without independent operation and cannot enjoy the preferential tax policy of 3 free and 3 halving.

However, the precision forging technology company did not make reasonable use of this policy. If the policy of 3 exemption and 3 halving can be reasonably used, the tax cost of the enterprise can be reduced.

4. Improvements and suggestions

4.1 Fixed assets use the method of double balance accelerated depreciation depreciation

The financial report of 2022 shows that the newly added fixed assets in the same year were 309,749,200 yuan. The amount of depreciation calculated according to two different depreciation methods is compared as shown in Table. 7 below

Table 7: Comparison of different depreciation methods for newly added fixed assets (unit: ten thousand yuan)

project	Houses and buildings	machinery equipment	Transportation equipment	ED	detection device	Other equipment	amount to
New fixed assets	1,181.17	26,812.67	99.18	489.25	1,144.29	1,248.34	30,974.92
Linear method depreciation	53.15	1,206.57	22.32	146.78	102.99	112.35	1,644.15
Double balance of accelerated depreciation	106.31	2,413.14	44.63	293.55	205.97	224.70	3,288.30
difference	53.15	1206.57	22.32	146.78	102.99	112.35	1644.15

It is not challenging to see from Table 7 that compared with the straight-line depreciation, the double balance accelerated depreciation method has increased by 16.4415 million yuan. If the minimum tax rate is calculated at 15%, the income tax of 2.4662 million yuan can be reduced in 2022. Although the long time does not reduce the enterprise income tax paid, it reduces the capital expenditure of the year, indirectly obtains the same amount of interest-free loan, and reduces the capital pressure of the enterprise.

4.2 We will increase the proportion of additional deductions for research and development expenses

Additional deduction of research and development expenses represent an critical measure for the state to encourage enterprises' scientific and technological innovation. Enterprises can increase

research and development expenditure, which can not only enhance the competitiveness of enterprises, but also reduce tax expenditure. At present, the enterprise research and development additional deduction accounts for about 16% of the actual research and development expenditure, far from reaching the national 100% limit standard, and there is also room for improvement compared with companies in the same industry. If an enterprise standardizes all kinds of research and development expenditure in accordance with the tax law, and the proportion of research and development expenditure will be increased by 4 percentage points. Based on the actual research and development expenditure of 102,120,900 yuan, an additional deduction of 4,044,800 yuan will be made, and the 15% tax rate will reduce the income tax expenditure by 612,700 yuan.

4.3 Use preferential environmental protection policies for planning

The three sewage stations within the enterprise will be independent to establish a company controlled by the parent company and participated by the subsidiary company. The sewage company operates independently and provides sewage treatment services to the Atomic Company and collects annual sewage treatment fees. The equipment depreciation and expenses of the Atomic Company become the equipment depreciation and expenses of the wastewater company, and the overall expenses of the Group remain unchanged. The reasons are as follows:

Assuming by the subsidiary to sewage company provides sewage treatment fee of 1.5 million yuan a year, the subsidiary increased 1.5 million per year, the parent company increased 1.5 million yuan, reduce the tax burden of the parent company, sewage company before the income of 1.5 million, sewage company enjoy income tax exemption policy not pay income tax, exclude the influence of value-added tax, from the group can save income tax 675,000 yuan ($450 * 15\%$).

5. Conclusions

This paper through the analysis of precision forging technology company operating status and tax-related situation, and other companies in the same industry, found that the enterprise in the depreciation of fixed assets, researches a development deduction tax planning problems, in view of these problems, discusses the through the accelerated depreciation of fixed assets, standardize research and development expenses increase claim deduction proportion, set up the possibility of sewage treatment company tax planning. With the change of China's enterprise income tax policy, enterprises should timely optimize the tax planning plan of enterprise income tax, make full use of the corresponding tax laws, regulations and preferential policies from the overall interests of enterprises, so as to reduce the tax burden of enterprises, improve the income of enterprises, and promote the healthy development of enterprises.

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