

# Research Analysis of Tax Reduction on High Quality Employment

## -- Based on Panel Quantile Model

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### Abstract

Preserving employment is the primary task of China's economic work to make steady progress, so has the tax reduction policy implemented by the country promoted employment and improved the quality of employment? The article uses panel data of listed The article examines the effects of tax and fee reductions on the quantity and quality of employment of enterprises using panel data of listed companies and 31 provinces, autonomous regions and municipalities directly under the central government. It is found that: the comprehensive tax burden of enterprises is negatively related to employment size, and reducing the tax burden of enterprises has a significant effect on increasing employment in technology-intensive industries; the actual contribution rate of enterprise social insurance premiums is significantly negatively related to employment quantity; the actual contribution rates of VAT and urban workers' basic pension insurance are positively related to informal employment; administrative fees are only significantly positively related to informal employment in the eastern region; and Corporate income tax does not significantly affect informal employment nationwide. Therefore, it is necessary to implement new policies to reduce taxes and fees, especially to reduce social security rates and expand the beneficiaries of tax incentives, while beware of the crowding-out effect of tax cuts and fee reductions on employment.

### Keywords

Tax Reduction; Quality Employment; Comprehensive Tax; Value Added Tax.

## 1. Introduction

Under the triple pressure of contracting demand, supply shock and weakening expectations, the central government proposes to continue to do a good job of "six stability" and "six protection", especially to protect employment, people's livelihood and market players, and to continue to implement new tax and fee reduction policies. Therefore, to study the impact of tax and fee reduction policies on the quantity and quality of employment since 2008, and then put forward policy suggestions to improve tax and fee reduction and promote employment in China, it is helpful to formulate more accurate fiscal policies to achieve the goal of preserving and stabilizing employment.

## 2. Literature Review

According to the Laffer Curve, tax and fee reductions are conducive to increasing enterprise investment and improving labor motivation. Tax reduction and fee reduction can reduce the production and operation costs of enterprises, improve the return on investment, and motivate enterprises to expand, thus increasing employment. In practice, whether tax reduction and fee reduction can increase the quantity and improve the quality of employment is affected by various factors such as industrial structure and employment structure, and empirical studies

have come to different conclusions. Guofu Peng and Lingzhi Zhang conclude that tax reduction is beneficial to increase employment based on Cookman-Ramsey model analysis. Koskela, Daveri et al. argue that on the basis of reducing labor tax rate, appropriately increasing capital tax rate will cause enterprises to reduce fixed asset investment and increase pre-tax labor, which in turn will promote employment and economic growth. Juan et al. point out that reducing corporate income tax can promote enterprises to increase investment and expand production capacity, thus increasing employment. Yang Xiaomei argues that corporate income tax reduction has a significant incentive effect on employment. Xie Hongtao and Zhang Jianshun found that tax reduction and fee reduction policies only have a greater effect on promoting employment in labor-intensive industries such as residential services and transportation. Some scholars also argue that tax cuts have no effect on corporate labor demand, and there is even an employment crowding-out effect. Zhu Wenjuan et al. argue that social insurance contributions have a crowding-out effect on employment, and the higher the income, the greater the crowding-out effect is, and reducing the labor cost of enterprises helps increase employment. Xue Fengzhen found that reducing the income tax burden of SMEs with low operating levels could not significantly increase employment. Shin, Guangjun et al. show that the VAT rate is positively related to employment in firms with strong financing constraints, with each 1% reduction in the tax rate crowding out 0.6% of employment. Buera et al. argue that the corporate income tax has little effect on labor demand in small and micro enterprises with financing constraints.

Scholars study not only the quantity of employment but also the quality of employment. Porta et al. argue that informal sector employment is an indication of poorer quality of labor employment. The informal sector is defined as a sector that operates inefficiently and has a tendency to evade tax collection. Because of the low productivity level of the informal sector, in order to compete with sectors with higher productivity levels, firms choose to downsize their operations to avoid being identified by tax authorities and thus evade taxes. Developing countries have a large informal economy and informal employment, and it is difficult to guarantee the quality of employment if regulation is absent. Wu Youwu and Cai Fang argue that the formal sector is regulated by the government, and its high entry barriers or restrictions are the reason for labor supply and demand to enter the informal sector, such as setting higher levels of labor employment standards and social security standards, which undoubtedly increase the cost of labor for enterprises. Song Hong et al. argue that when the social security contribution rate is high, enterprises will adopt various ways to avoid paying contributions, such as signing non-compliant employment contracts with employees to reduce the number of contributions payable by enterprises. Zhi-Xuan Wang et al. establish a PVAR model to confirm that tax reduction can reduce the scale of informal employment and thus improve the quality of employment, but the effect of fee reduction is heterogeneous; reducing administrative fees is consistent with the effect of tax reduction, while reducing forfeited revenue is just the opposite.

Scholars at home and abroad have studied the effects of tax and fee reductions on the quantity and quality of employment in enterprises from macro and micro perspectives, with mixed findings. The contribution of this paper is to theoretically analyze the effects of reducing comprehensive corporate taxes and fees, VAT, income tax, social security fees, and administrative fees on the quantity and quality of corporate employment, and to test them with data from small and medium-sized listed enterprises, concluding that reducing comprehensive taxes and fees can promote employment and improve the quality of employment. Since the extent of the impact of reducing the tax rates of different taxes on employment is different, the findings of the study thus provide a reference for the government's decision to continue to implement tax and fee reduction policies.

### 3. Theoretical Basis and Research Hypothesis

#### 3.1. Tax Reduction Policy and the Number of Corporate Employment

Reducing corporate income tax is equivalent to tax reduction on capital, which will produce substitution effect and scale effect. Under the substitution effect, enterprises will replace labor with capital and reduce the number of employment; under the scale effect, enterprises will expand production and increase the demand for capital and labor. The final change of labor demand of enterprises depends on the relative changes of substitution effect and scale effect, and the net effect is uncertain. Theoretically, the VAT paid by enterprises can be fully passed on, and reducing the VAT rate will reduce the cost of capital employed by enterprises, but in practice, enterprises must sell their goods to realize the input tax credit. Therefore, enterprises must consider the elasticity of supply and demand of goods in pricing, otherwise the interruption of the VAT tax chain will tie up cash flow. For enterprises with weak sales chain or supply chain tax pass-through ability, lowering the VAT rate will reduce capital tied up costs and help enterprises expand production and employment. Reducing social security contributions will reduce labor costs, and under the substitution effect, enterprises will replace capital with labor and promote employment; under the scale effect, enterprises will expand production and increase employment. Under the combination of substitution effect and scale effect, lowering social insurance premiums will promote employment. At the same time, the social security premiums paid by workers will be lower, and the disposable income of workers will increase, which will also tend to increase labor supply. Therefore, reducing the burden of social security premiums on enterprises will increase the number of employment.

In summary, the theoretical mechanism of the impact of tax reduction policies such as reducing VAT and income tax on labor force is complicated, and it is difficult to determine the direction and extent of the impact of tax reduction on labor demand, and the effect of tax reduction varies by industry type and enterprise nature, which needs to be analyzed with micro data. Therefore, the following hypotheses are proposed.

Hypothesis 1: Under certain other conditions, the social insurance premium rate borne by enterprises is negatively correlated with the change in employment quantity.

Hypothesis 2: Under certain other conditions, the comprehensive tax burden borne by enterprises is negatively correlated with the change in the number of employment after the implementation of tax reduction and fee reduction policies.

#### 3.2. Tax and Fee Reduction Policies and Enterprise Heterogeneity

The traditional view is that labor-intensive industries can provide more jobs. In today's rapid development of science and technology, labor-intensive industries also have the distinction between emerging and traditional. The ability of traditional labor-intensive industries to create new jobs is gradually declining, while emerging labor-intensive industries have a strong employment impetus. Therefore, it is uncertain whether tax cuts and fee reductions can induce labor-intensive industries to increase employment, and the net effect is uncertain. Some theories argue that technology is a strong substitute for labor in technology-intensive industries and that a low tax burden on technology-intensive industries is not conducive to promoting employment. Such an understanding is biased and clearly does not take into account the time lag factor. In the short term, the quality structure of labor force cannot fully match the development of technology-intensive industries, and the tax cut and fee reduction will exclude labor force when the scale of technology-intensive industries grows, but in the long term, the demand for labor force in technology-intensive industries will increase as workers update their knowledge and technology-intensive industries accumulate capital and expand their organization scale. In addition, the effect of tax reduction on capital-intensive industries is like the effect of reducing corporate income tax, which also generates substitution effect and scale

effect, and the net effect of employment is uncertain. Therefore, the following hypothesis is proposed.

Hypothesis 3a: Under certain other conditions, the comprehensive tax burden rate of enterprises in labor-intensive industries is negatively correlated with the number of employment.

Hypothesis 3b: Other things being equal, the tax substitution effect of capital-intensive industries is greater than the scale effect, which cuts the number of employment.

Hypothesis 3c: Under certain other conditions, the comprehensive tax burden rate of enterprises in technology-intensive industries is negatively correlated with the number of employment.

### **3.3. Tax Reduction Policy and Employment Quality**

Employment quality refers to the form of employment in which workers' rights and interests, such as income compensation, insurance benefits, labor relations and career development, can be fully guaranteed, usually by signing a formal labor contract with an enterprise. Employment quality reflects the working environment and status of a country's residents, and is a comprehensive indicator to evaluate the level of labor force employment. The International Labor Organization usually uses the proportion of "informal employment" to reflect the quality of employment. All employees in the informal sector can be considered as informal employment. Of course, temporary workers, part-time workers and leased employees who are in the formal sector but do not have a formal and stable labor relationship are also considered informal employment. The use of informal employees can result in significant cost savings in the formal sector. Therefore, there are two paths to transform informal employment into formal employment and improve the quality of employment: first, to increase the demand for formal employees in the formal sector. Tax cuts and fee reductions reduce business operating costs and increase corporate profits, which help the formal sector expand production and thus increase formal sector employment. The second is to encourage businesses to enter the formal sector. The informal sector can gain invisible gains through tax evasion to increase net profits, but if they reduce the scale of operation in order not to be identified by the tax authorities, they will lose efficiency as a result. Enterprises will compare the invisible gains and efficiency losses of entering the informal economy, and tax cuts and fee reductions reduce the invisible gains of the informal sector, prompting the informal sector to expand production to increase earnings and gradually move to the formal sector, which in turn increases Formal employment.

Among the various types of taxes and fees borne by enterprises, social security fees very obviously affect informal employment. When the state reduces the social security contributions borne by enterprises, the formal sector can both increase the level of disposable income of workers and protect their legal rights, which will attract workers to join formal employment. Therefore, the size of formal employment is inversely related to social security contributions, and reducing the corporate income tax will enable the formal sector to earn a higher return on investment and help the informal sector to transform into the formal sector. Reducing corporate income tax is to some extent conducive to the expansion of formal employment, i.e., corporate income tax has a positive effect on the number of informal jobs. Similarly, reducing the VAT tax burden and administrative fees both help to increase the demand for formal employment in the formal sector.

Based on the above analysis, the following hypotheses are formulated.

Hypothesis 4: Other things being equal, the social insurance premium rate is positively related to the size of informal employment.

Hypothesis 4a: Other things being equal, the VAT tax burden is positively related to the size of informal employment.

Hypothesis 4b: Other things being equal, the corporate income tax burden is positively related to the size of informal employment.

Hypothesis 4c: Other things being equal, administrative fees and charges are positively correlated with the size of informal employment.

## 4. Empirical Study on the Impact of Tax Reduction and Fee Reduction on the Quantity and Quality of Employment in Enterprises

### 4.1. Empirical Analysis of the Impact of Tax and Fee Reduction Policies on the Quantity of Employment

#### 4.1.1. Sample Selection and Data Source

This paper selects listed companies on the Small and Medium-sized Board of the Shenzhen Stock Exchange as the research object. Considering the negative impact of the new crown epidemic on the macro economy, which may affect the final effect of the tax reduction policy on employment, the data of listed companies in 2020 are excluded. As of the end of May 2020, there were 960 listed companies on the SMB, and under this total number of companies, the following screening was executed: (1) Excluding financial listed companies, which have systematic differences from other SMB companies in terms of financial status, asset-liability structure and statement disclosure, and thus such companies were excluded. (2) Excluding companies with major changes in their main business due to shell listing or transformation and upgrading. Such companies have undergone significant changes in their governance structure, operating structure and personnel structure in the year of change, and their financial information and personnel change information are systematically different from those in the year before the change, so they are excluded. (3) Excluding companies that were first listed after 2014 and delisted before 2019. Because this paper studies the surviving companies in the period of 2014-2019, the companies first listed after 2014 and those delisted before 2019 are excluded. (4) Companies with missing data and obvious errors were excluded. After the above screening, the final sample was determined to be 4302 data from 717 companies. A fixed-effects model was used for the analysis in this study.

#### 4.1.2. Model and Variable Setting

To test the hypotheses presented above, the following model was established.

$$Instaff_{it} = \alpha_i + v_i + \beta_0 + \beta_1 compr_{it} + \beta_2 ssr_{it} + \sum \beta control_{it} + \varepsilon_{it} \quad (1)$$

$$Instaff_{it} = \alpha_i + v_i + \beta_0 + \beta_1 compr_{it} + \beta_2 ssr_{it} + \beta_3 soindus_{it} \times compr_{it} + \sum \beta control_{it} \varepsilon_{it} \quad (2)$$

In the above model, the explanatory variable  $Instaff_{it}$  denotes the logarithm of the number of employment in firm  $i$  at the end of year  $t$ . The explanatory variables  $compre_{it}$  and  $ssr_{it}$  denote the combined tax burden rate and the actual contribution rate borne by social security premiums in firm  $i$  in year  $t$ , respectively.  $\beta_t$  is the coefficient of each explanatory variable  $\beta_t$  is the coefficient of each explanatory variable,  $v_i$  is the individual effect,  $\alpha_t$  is the time effect, and  $\varepsilon_{it}$  is the random disturbance term.  $\sum \beta control_{it}$  denotes the control variables, including firm size (asset), firm profitability (profit), financial structure (lev), and per capita wage and salary (wage).

This paper uses the ratio of the current increase in basic pension insurance, unemployment insurance, medical insurance, work injury insurance and maternity insurance to the current increase in wages, bonuses and allowances in enterprises' annual reports to reflect the actual contribution rate ( $ssr_{it}$ ) borne by social security premium enterprises. The comprehensive tax

burden rate (comprit), on the other hand, takes into account the effects of direct taxes, indirect taxes and various surcharges, and is measured by the actual annual payment of various taxes and fees over the previous year's operating income.

Model (2) considers the influence of industry type by production factors on the comprehensive tax burden and employment quantity of enterprises on the basis of model (1), and introduces the variables of industry type to which enterprises belong (soindusit) and the interaction term between industry type to which enterprises belong and comprehensive tax burden rate of enterprises (soindusit×compreit) for testing hypothesis 2.

#### 4.1.3. Regression Analysis

In the sample of 717 enterprises, the mean value of the logarithm of employment is 7.75, and the maximum value (12.34) is 9.51 larger than the minimum value (2.83), which indicates that there are large differences in the number of employment in different enterprises, and the median value is 7.66, which indicates that the peak of employment level of enterprises is generally right-skewed, and most enterprises are at a high level of employment. The mean value of enterprise comprehensive tax rate is 0.05, and the median value is also 0.05, indicating that the comprehensive tax burden rate of SMEs basically obeys normal distribution. The minimum and maximum values of the comprehensive tax burden rate and the actual social insurance contribution rate of enterprises differ greatly, indicating that the comprehensive tax burden rate as well as the social insurance contribution rate of different enterprises vary greatly. In addition, since 2014, the overall employment level has shown an upward trend, while the mean values of the comprehensive tax burden rate and the actual social insurance contribution rate of enterprises have shown a significant downward trend since 2015, which also shows from the side that China's tax reduction and fee reduction policies have benefited the majority of SMEs.

#### 4.1.4. Empirical Results of Full-sample Estimation

The empirical results of full-sample estimation. It can be seen that the coefficients of the comprehensive burden rate of enterprise tax and fee (compre) are all negative and significant at the 1% or 5% level. This indicates that after the implementation of the tax and fee reduction policy, the reduction of the tax burden of SMB enterprises leads to a significant increase in the number of employment compared to the previous higher tax burden, supporting hypothesis 2. Observing the second column of the regression results of each fixed effects model, it can be seen that the coefficients of the actual percentage of social insurance premium enterprises' contributions (ssr) are negative and all pass the significance test, indicating that the lower the actual percentage of social insurance enterprises' contributions, the more employment. After the introduction of the social insurance contribution ratio (ssr) variable, the coefficient of goodness of fit (R<sup>2</sup>) of the model is improved, indicating that the inclusion of the social insurance contribution ratio (ssr) variable improves the explanatory power of the model. Moreover, the magnitude, direction and significance of the coefficients of the comprehensive tax burden rate of enterprises do not change significantly due to the addition of new variables, which also indicates the stability of the model from the side, and again confirms hypothesis 1.

In order to test the stability of the regression results, variable substitutions are made for the relevant explanatory variables in this paper. According to the study of Guoliu Hu et al, the level of enterprise investment affects the ability of enterprises to create jobs. In this paper, the level of investment (INVEST) is included in the model, and the difference between cash paid and cash recovered for fixed assets, intangible assets and long-term assets is used to measure the level of investment. In addition, firm performance is measured by the ratio of EBITDA to the book value of net assets at the end of the period, and the regression analysis of each model is re-run, and the conclusions are consistent with the previous paper.

#### 4.1.5. Estimation of Heterogeneous Enterprise Sample

The estimation of heterogeneous enterprise sample is performed according to different industry types. Model (2) further examines the employment effects of tax reduction on different industry types on the basis of model (1) by introducing the interaction term variable of industry type and comprehensive tax burden rate of enterprises. After the introduction of the variable of industry type by factor intensity, the coefficients of the comprehensive tax burden rate (compre) are all negative and statistically significant at the 1% level. The coefficients of the interaction term (soindus2×compre) for the composite tax burden rate with capital-intensive industries are positive (2.145 and 2.1) and statistically significant at the 1% level, regardless of whether the year variable is controlled for or not. This indicates that the tax substitution effect is larger than the income effect in capital-intensive industries compared to labor-intensive and technology-intensive industries, i.e., the tax and fee reduction policies fail to induce employment expansion in capital-intensive industries and partially offset the positive effect of the tax and fee reduction policies on overall employment. This verifies hypothesis 3c. When considering the types of industries classified by factor intensity, not only the comprehensive tax burden rate and the actual social insurance premium rate of enterprises have a significant impact on the number of employment, but also the direction and degree of the impact of tax and fee reduction on the number of employment differs among different types of industries.

The actual contribution rate of enterprise social insurance premiums in the three types of industries is negatively correlated with the number of employment, indicating that reducing the contribution rate of enterprise social insurance premiums helps increase employment in the three types of industries, with the greatest incentive effect on employment in labor-intensive industries. The impact of the comprehensive enterprise tax burden rate on the number of employment in the three types of industries is slightly different. The rate of comprehensive enterprise tax burden in labor-intensive industries is negatively but not significantly related to the number of employment, indicating that reducing the tax burden of labor-intensive enterprises helps increase the number of employment, but the tax burden is not the main reason for affecting the employment size compared with the social security fee policy that directly incentivizes employment. Currently, the most important cost of labor-intensive industries in China is the cost of labor, and the high cost of labor has led some enterprises to use machinery and equipment to replace labor, and the organic composition of labor-intensive industries has increased, and their R&D investment is also increasing year by year. It is inferred that when facing fierce market competition, emerging labor-intensive industries will use the dividends of tax and fee reduction policies for technological innovation rather than just increasing labor factor inputs.

The positive coefficient of comprehensive tax burden rate of capital-intensive enterprises indicates that tax and fee reduction may prompt capital-intensive enterprises to reduce employment. This is because the current tax policy discourages capital accumulation, and the substitution effect of tax and fee reduction policy is smaller than the income effect, which eventually encourages enterprises to expand production scale and capital accumulation. Although statistically insignificant, it also indicates to some extent that capital-intensive industries will cut the positive effect of tax and fee reduction on employment, proving hypothesis 3c.

The reduction of the comprehensive tax burden rate of enterprises helps technology-intensive industries to expand the scale of employment and is statistically significant, which confirms hypothesis 3b. In recent years, the state has been increasingly supporting the taxation of high-tech enterprises, and the profits of enterprises have increased, and the development of new industries has been promising, forming a virtuous cycle of industrial development and taxation. At the same time, with the continuous expansion of higher education, the supply of composite

talents with bachelor's degree and above has increased, which also provides conditions for the expansion of employment scale in technology-intensive industries.

## 4.2. Empirical Analysis of the Impact of Tax Reduction Policy on Employment Quality

### 4.2.1. Sample Selection and Data Sources

This paper uses panel data from 2008-2019 for 31 provinces, autonomous regions and municipalities directly under the central government in China to study the impact of VAT, corporate income tax, administrative fees and charges, and urban workers' basic pension insurance income on informal employment. All data are obtained from Wind database, national statistical yearbooks and local statistical yearbooks.

### 4.2.2. Variable Setting and Model Building

The following panel data model is established.

$$Infor_{it} = \alpha_t + v_i + \beta_1 cit_{it} + \beta_2 var_{it} + \beta_3 gov_{it} + \beta_4 ssr_{it} + \sum \beta_i control_{it} + \varepsilon_{it} \quad (3)$$

where, the explained variable  $infor_{it}$  denotes the share of informal employment in province  $i$  in year  $t$ . The explanatory variables  $cit_{it}$ ,  $var_{it}$ , and  $gov_{it}$  denote the ratio of corporate income tax revenue, value-added tax revenue, and administrative fee revenue to GDP in province  $i$  in year  $t$ .  $ssr_{it}$  denotes the actual contribution rate of basic pension insurance for urban workers on the job, calculated by first using the ratio of urban workers' The calculation method is to calculate the per capita contribution of basic pension insurance for urban workers by using the ratio of basic pension insurance income to the number of urban workers on duty, and then using the per capita contribution of basic pension insurance for urban workers to the average wage of the previous year. The control variables are the year-on-year growth rate of GDP in the secondary industry, the year-on-year growth rate of GDP in the tertiary industry, the urban unemployment rate, and the average wage level of urban employees.

In this paper, the measure of informal employment is based on the labor contracts of enterprises, and the informally employed are employees who do not sign formal labor contracts and those who do not enjoy social insurance benefits although they sign formal labor contracts. Since employees without formal labor contracts are also generally not entitled to social insurance, and the five social insurance policies in China are bundled participation, as long as workers receive pension insurance or medical insurance, they can be considered to be entitled to social insurance. Therefore, referring to the method of Xue Jinjin and Gao Wen, the scale of informal employment is measured by employees who do not receive basic employee pension insurance or basic medical insurance. In order to avoid overestimating the scale of informal employment and based on the availability of data, the author uses the number of employees on the job who do not participate in basic urban employees' medical insurance over the number of employees on the job to measure the scale of informal employment.

### 4.2.3. Regression Analysis

From the descriptive statistical analysis, it can be seen that the variation of the proportion of informal employment in the sample areas ranges from 6% to 88%, with a mean value of 36% and a median value of 0.348, which has a large variation, indicating that there are large differences in the ratio of informal employment in different areas. The mean value of corporate income tax as a share of GDP of each province is 1.2%, and the mean value of the sum of VAT and business tax as a share of GDP of each province is 3.8%, indicating that VAT is the main tax in each region of China. The average value of the actual contribution rate of basic pension insurance for urban workers on the job is 23.4%, and the median value is 0.216. The actual contribution rate of basic pension insurance for urban workers on the job basically follows a normal distribution. The mean and median values of administrative fees as a percentage of GDP are the same, indicating that the percentage of administrative fees also basically conforms to



normal distribution, and the difference between the minimum and maximum values is large, reflecting the large differences in the implementation of the "administrative services" in each region. Among the other control variables,  $gdp_2$ ,  $gdp_3$ , wage and  $une$  have certain differences between their minimum and maximum values, which indicate that there are large differences in economic development, per capita wage level and urban unemployment rate in each region. The empirical results from the full sample show that VAT expands informal employment and is statistically significant, which verifies hypothesis 4a. By region, VAT revenue is significantly and positively correlated with the size of informal employment in the eastern and western regions, but not with the size of informal employment in the central region. The reason may be that the eastern region, by virtue of its superior geographical location and policy support, has a significant concentration of modern service industries, and productive service industries such as information technology and scientific research and consulting have become the focus of VAT tax support, and their actual enjoyment of VAT preferences is greater, and the decrease in VAT tax burden has to a certain extent promoted the economic development of the eastern region and the expansion of production scale and human resource demand of enterprises. At the same time, in order to attract high-quality talents, enterprises in the eastern region are increasingly focusing on providing higher-quality employee benefits, thus reducing the scale of informal employment. In contrast, the deepening of VAT reform has driven the GDP of the western region, and the supporting preferential policies for the development of the west have significantly increased the formal employment of enterprises in the western region.

The coefficients of corporate income tax and administrative fees are not significant in the full sample and do not satisfy hypotheses 4b and 4c. The current income tax exemption policy for small and micro enterprises and high-tech enterprises can hardly reduce the scale of informal employment, and the income tax rate for general enterprises should be further reduced or the pre-tax deduction standard should be increased. It is worth noting that administrative fees are significantly and positively related to informal employment in the eastern region. The excellent business environment and the openness and transparency of fees in the eastern region strongly promote the expansion of the formal sector and enhance the scale of formal employment.

The basic pension insurance fees for urban employees have a positive effect on informal employment and are statistically significant in both the full sample and by region, verifying hypothesis 4. By region, the coefficient of the actual contribution rate of social insurance premiums is the smallest in the western region, i.e., reducing the burden of social insurance premium contributions has a smaller effect on promoting formal employment in the western region, probably because the enforcement and supervision are relatively weak in the western region and evasion of fees is easy, thus the incentive effect of lowering social insurance premiums on employment in enterprises is not obvious.

## 5. Conclusion and Policy Recommendations

### 5.1. Conclusion of the Study

This paper selects panel data of small and medium-sized board listed companies on the Shenzhen Stock Exchange from 2014-2019 and panel data of 31 provinces, autonomous regions and municipalities directly under the central government from 2008-2019 to empirically analyze the impact of tax reduction and fee reduction policies on the quantity and quality of enterprise employment, and obtains the following conclusions.

#### 5.1.1. The Effect of Tax Reduction and Fee Reduction on Expanding the Quantity of Enterprise Employment is Obvious

From the perspective of tax reduction, the tax burden borne by SMEs is significantly negatively related to employment, i.e., the deeper the tax reduction of enterprises, the more favorable the

impact on labor demand; the incentive effect of reducing the comprehensive tax burden of enterprises on employment in labor-intensive industries is not significant, while there is a significant incentive effect on employment in technology-intensive industries; although the empirical analysis indicates that capital-intensive industries may choose to increase capital factor input due to tax reduction and reduce employment and have a crowding-out effect on employment, the tax cut policy increases employment overall. From the perspective of fee reduction, social insurance premiums borne by enterprises have a suppressive effect on the number of employment, and the actual contribution rate of enterprise social insurance premiums is significantly negatively related to the number of employment, regardless of the type of industry.

### **5.1.2. Tax and Fee Reduction Policies Induce Enterprises to Raise the Proportion of Formal Employment**

VAT is significantly and positively related to informal employment, i.e., reducing the VAT tax burden helps expand formal employment and improve the quality of employment. The preferential corporate income tax policy mainly targets small and micro enterprises and high-tech enterprises and covers a smaller area, so corporate income tax does not significantly affect the quality of employment nationwide. From the perspective of fee reduction, lowering the burden of social security fees helps reduce the share of informal employment, and administrative fees are only significantly and positively related to informal employment in the eastern region.

## **5.2. Policy Recommendations**

### **5.2.1. Implement New Tax and Fee Reduction Policies to Effectively Reduce the Tax and Fee Burden of Enterprises**

Among the "six stability" and "six protection", employment is in the first place. To stabilize employment, the focus is on stabilizing market players, especially the large number of small, medium and micro enterprises. Under the impact of the epidemic and the external environment, the active fiscal policy should improve its effectiveness and pay more attention to precision. New tax reduction and fee-cutting policies should be implemented to strengthen support for small, medium and micro enterprises, individual entrepreneurs, etc. and release the vitality of market subjects. First, continue to deepen the VAT reform and simplify the VAT rate structure. The VAT rate structure should continue to advance toward two tax rates. For labor-intensive industries with high labor costs, it is recommended to introduce policies allowing pre-tax VAT credit for labor costs to further reduce labor costs in order to improve the quantity and quality of employment. Second, develop a more competitive corporate income tax policy. The current preferential corporate income tax policy tends to favor specific industries or specific enterprises and is not universal. In July 2021, the G20 reached an agreement on the lowest corporate tax rate, setting the lowest corporate tax rate in the world at 15%. China's statutory corporate income tax rate is 25%, which is significantly higher than the global minimum tax rate level. China should enhance the competitiveness of the corporate income tax system by gradually reducing the standard tax rate, increasing the costs and expenses that can be expensed before tax by enterprises and extending the loss carry-forward years. For example, increasing the pre-tax deduction in the process of enterprise R&D, flexibly arranging the depreciation method of fixed assets, raising the limit of investment tax deduction for start-up enterprises and the maximum percentage of employee education expenses. Among them, employee education expenses are directly related to workers' vocational quality and employment planning, however, at present, only the training expenses for employees of software industry enterprises and operators of nuclear power plants are fully deductible, and the coverage of this preferential policy involving enterprises can be broadened in the future, so as to promote the upgrading of employment structure and high-quality employment with the

upgrading of industrial structure. Third, increase the efforts to reduce fees. Further reduce social insurance rates, such as further relaxing the social insurance premium contribution rate for small and medium-sized enterprises, and temporarily exempting small and micro enterprises that absorb key groups from paying social insurance premiums to promote employment incubation in enterprises.

### **5.2.2. Go Beyond the Pattern of Fiscal and Tax Policies to Stabilize the Number of Jobs and Strive to Increase the Proportion of Formal Employment**

The existing fiscal policy is limited to stimulating the expansion of employment quantity with active fiscal policy. In the process of economic downturn, if the pursuit of employment quantity is obsessed, the policy of tax reduction and fee reduction will undoubtedly bring huge pressure to the finance and even cause local debt problems. We should deeply understand the dialectical unity between the quantity and quality of employment, the quantity of employment is the premise of high-quality employment, and high-quality employment is an important guarantee for further expansion of employment quantity. Through the optimization of employment structure and the increase of formal employment demand of enterprises, more surplus labor is attracted to enter the labor market, so as to improve the quantity and quality of employment.

### **5.2.3. Expand the Beneficiary Area of Tax Incentives and Prevent the Crowding-Out Effect of Tax Cuts and Fee Reductions on Employment**

In the process of rapid development of technology and replacement of labor by machines and equipment, those who are most affected are those with poor professional ability, low education level and insufficient working experience (referred to as the "three low" people), and the "three low" people are concentrated in migrant workers, disabled people and other groups with difficulties in employment. However, the current tax incentives for employment are aimed at the poor, college graduates, zero-employment families, retired soldiers, military dependents and other groups, ignoring the migrant workers and urban residents with low education at high school or below among the "three low" people. "In order to stay in the labor market, they have to sign unequal employment contracts with enterprises. Therefore, it is necessary to further expand the coverage of tax incentives for direct employment, and include all the "three low" groups in the incentives. At the same time, enterprises should provide pre-employment training for such employees to improve their working ability, and the government can appropriately increase the percentage of deduction for education expenses of such employees as a token of encouragement.

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