

Investigation on the Actual Tax Burden of Technology-based SMEs in Dongguan*

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Abstract—The tax and fee burden in mainland China has as always been a disputable topic. However, whether the actual tax and fee burden of technology-based small and medium-sized enterprises at this level is high or low is actually more ambiguous. This paper takes the actual tax and fee burden of technology-based small and medium-sized enterprises in Dongguan city as the research object, takes Shenzhen Stock Exchange listed companies and the new Three-Board listed companies that meet the conditions of technology-based small and medium-sized enterprises in Guangdong province as a sample, and collects the cross-sectional data in 2016. Meanwhile, it selects and constructs the actual tax and fee burden indicators of key enterprises, and conducts an investigation and research on their actual tax and fee problems. At the same time, comparative analysis method is adopted to select homogeneous data from other cities in the Pearl River Delta to the comparative analysis, which make clear the true tax and fee burden of technology-based small and medium-sized enterprises in Dongguan and surrounding cities, so as to provide possible evidence for the reform of supply-side tax and fee.

Keywords—technology-based; small and medium-sized enterprises; investigation on actual tax and fee burden; structural tax reduction

I. INTRODUCTION

Complaints and disputes about the excessive tax burden of Chinese enterprises have been long-standing, but the macro tax and fee is high or low in China has been debated endlessly by political circles, practical circles and experts and scholars. In fact, enterprises have different tax and fee burdens in different industries, the ability that the enterprises bear tax and fee burdens is different in different scales, and the sense of tax and fee burdens is different. In different regions, the actual taxes and fees burden of enterprises has relatively large regional differences because of different tax and fee collection and management environments, different levels of compliance with tax and fee laws and regulations, different intensity of collection and management. It can be said that the tax and fee burden of different industries, different regions and different hierarchical types of enterprises is high or low is a little bit more ambiguous compared with the macro tax and fee burden of our country. Compared with large enterprises, small and medium-sized enterprises have a weak ability to bear the tax

and fee burden, and the degree of pain to tax and fee burden is much higher. Technology-based small and medium-sized enterprises are those small and medium-sized enterprise groups that are engaged in research and development, production and service of new high-tech products, which play an important role in improving scientific and technological innovation ability, supporting the sustainable development of economy and expanding social employment, etc. The development of their role will be related to whether the transformation and upgrading of China's economy as a whole can be successful, and whether they can get out of the painful period of shifting.

Because technology-based small and medium-sized enterprises are facing great risks, but their ability to take risks is weak, their sense of tax and fee burden may be more painful. The actual tax and fee burden of technology-based small and medium-sized enterprises at this level is high or low that is "looking at flower in fog" compared with that of macro tax burden. This project takes the actual tax and fee burden of technology-based small and medium-sized enterprises in Dongguan city as the main research object, and supplemented by the comparison with other cities in the Pearl River Delta, so as to clarify the real tax and fee burden of technology-based small and medium-sized enterprises, so as to provide partial evidence to the supply-side reform and policy-making.

II. DATA SELECTION AND MAIN RESEARCH METHODS

The main research object of this project is technology-based small and medium-sized enterprises in Dongguan city. The Small and Medium Enterprise Board and Growth Enterprise Market in Shenzhen Stock Exchange are mainly aimed at technology-based small and medium-sized enterprises with prominent main business, good growth and high-tech content, while the national share transfer system of small and medium-sized enterprises (the new Three Board) mainly serves small and medium-sized enterprises. The data publicly disclosed by the Shenzhen Stock Exchange and the New Third Board are audited by the accounting firms and examined by the regulatory departments. Therefore, the enterprises in Dongguan city that meet the requirements of technology-based small and medium-sized enterprises on the Small and Medium Enterprise Board, Growth Enterprise Market and the new Three Board of the Shenzhen Stock Exchange are taken as samples to manually extract and statistics the relevant data in 2016.

The research method mainly adopts the manually receipted data for statistical analysis. The 2016 annual report of relevant

*Project: Research results of major scientific research projects of universities in Guangdong province (2015GXJK163) and philosophy and social science topic in Dongguan, Guangdong (2017ZDZ12).

company is downloaded from Shenzhen Stock Exchange and the new Three Board website, and then the data from the annual report is obtained and compile the corresponding tables for statistics. Questionnaires, interviews and communications are used as supplementary research methods.

Comparative analysis method is adopted. The corresponding data of other cities in the Pearl River Delta such as Shenzhen, Guangzhou, Huizhou, Foshan, Zhaoqing, Jiangmen, Zhongshan, Zhuhai and other cities are selected for simple comparative mathematical analysis and research.

III. SELECTION AND CONSTRUCTION OF MEASURABLE INDICATOR FOR THE ACTUAL TAX AND FEE BURDEN OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES

A. Selection of Absolute Number Indicator to Measure Actual Tax and Fee Burden

The tax burden of enterprises consists of value-added tax, enterprise income tax, urban construction tax, surcharged educational expenses and so on. It is difficult to separately obtain the data of each tax revenue or fee, and the investigation and research is the total actual tax and fee burden, so it is not necessary to separately count every tax categories. The "various taxes and fees paid" in the cash flow statement in the annual reports publicly disclosed to the outside world reflects the various taxes and fees paid in a certain period of time, and is actually the handed in "money in hard cash". Another item in the cash flow statement, "refund of tax and fee received" reflects that enterprises receive tax and fee returns from government departments during the period, and is "money in hard cash" received by enterprises from government departments. The balance that "various taxes and fees paid" deduct "refund of tax and fee received" is expressed as "actual tax and fee burden $_1$ ", which is used to reflect the actual tax and fee burden borne by enterprises except for "five social insurances and one housing fund".

"Five social insurances and one housing fund" is a relatively heavy extra tax paid burden borne by enterprises, which is levied in most foreign countries in the form of "social security tax". This piece also has relatively detailed disclose in the annotation of the external statements. The sum of the "current period reduction" (or "current period payment") of each item of "five social insurances and one housing fund" reflects the actual five social insurances and one housing fund borne by enterprises during the period, which is showed by the use of "five social insurances and one housing fund" form.

Use "actual tax and fee burden $_1$ " plus "five social insurances and one housing fund", the total actual tax and fee burden paid by enterprises is calculated, which is expressed as "actual tax and fee burden $_2$ ". That is, actual tax and fee burden $_2$ = actual tax and fee burden $_1$ + five social insurances and one housing fund. It is a better absolute number dedicator to use "actual tax and fee burden $_2$ " to reflect the actual total tax burden of the enterprises during the period.

B. Construction of Relative Number Indicator to Measure Actual Tax and Fee Burden

However, because the size of enterprises has big and small, and "actual tax and fee burden $_1$ ", "five social insurances and one housing fund" and "actual tax and fee burden $_2$ " after all are absolute number indicators, it is not convenient to compare among different scales. The "operation revenue" of the enterprises reflects the external sales revenue of the enterprises during the period, which is a cardinal number indicator, and many financial indicators use operation revenue as denominator. Use the ratio of "actual tax and fee burden $_2$ " to "operation revenue", "actual tax and fee burden $_2$ /operation revenue" reflects how much operation revenue should be paid during the period, that is, how much of the 1 yuan income should be paid to the state, The value of "actual tax burden $_2$ /operation revenue" reflects the total tax and fee burden borne by the enterprise, which is a relatively better absolute indicator to measure the actual tax and fee burden. To make a more detailed analysis and provide more detailed statistical information, the ratio of "actual tax and fee burden $_1$ " to "operation revenue", and the "actual tax and fee burden $_1$ / operation revenue" reflects the operation revenue per 1 yuan how much taxes and fees are handed in except for the five social insurances and one housing fund during the period. Similarly, the "five social insurances and one housing fund/operation revenue" is used to reflect how much five social insurance and one housing fund actually borne by the enterprises in the operation revenue during the period.

Or use "actual tax and fee burden $_2$ / enterprise net profit (net profit after deducting non-recurring profits and losses)¹", that is, how much the net profit of one yuan should be handed in to the state during a certain period of time, which can also be used as an indicator to measure the tax and fee burden. However, the company may be in loss in the start-up stage and growth stage, and the net profit is negative, so the calculation result of this indicator has no meaning. Therefore, it is necessary to exclude enterprises whose calculation results are negative, net profit and tax payments are also negative.

IV. ACTUAL TAX AND FEE BURDEN OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES IN DONGGUAN CITY

By the end of 2016, the main market players in Dongguan have increased to 840,000 households. The sales revenue of 100 billion yuan enterprises has achieved the zero breakthrough. Enterprises with 50 billion yuan, 10 billion yuan and 5 billion yuan have increased to 3, 11 and 31 respectively, and the number of over 1 billion yuan enterprises rank first in prefecture-level cities in the province, with 33 listed enterprises both at home and abroad. There are no listed companies in Dongguan city which meet the requirements of technology-based small and medium-sized enterprises on the main boards of Shanghai Stock Exchange and Shenzhen Stock Exchange

¹ Net profit after the deduction of non-recurring profits and losses can better reflect the real profit level of enterprise operation. Net profit after the deduction of non-recurring profits and losses is used as an indicator, which can exclude the influence of non-recurring profits and losses on enterprises' net profit.

(see annotation at the end of the article). There are 6 small and medium-sized enterprises that are in line with technology-based enterprises listed on Small and Medium Enterprise Board and Growth Enterprise Market of Shenzhen Stock Exchange, 168 enterprises listed on the new Three Board of Dongguan city, ranking first in provincial prefecture-level cities and third in national prefecture-level cities in terms of the number². As of December 31, 2016, there are a total of 10, 163 new Three Board enterprises in China, with a total market value of 2.72 trillion yuan. There are a total of 1585 new Three Board enterprises in Guangdong province, with a total market value of 454.986 billion yuan. There are 168 new Three Board listed companies in Dongguan city, ranking first in provincial prefecture-level cities and third in national prefecture-level cities in terms of the number. There are 159 listed companies in Dongguan city which can directly download the 2016 annual report on the new third board. The choice is conducted according to the conditions of technology-based small and medium-sized enterprises in Guangdong province (see the annotation at the end of the article), 128 technology-based small and medium-sized enterprises are selected as samples to practically analyze the actual tax and fee burden after eliminating these enterprises are negative in "actual tax and fee burden₂" (because this kind of enterprise does not have tax and fee burden)

A. Actual Tax and Fee Burden of Technology-based Small and Medium-sized Enterprises in Dongguan City

Download the annual report of 6 companies that meet the requirements of the technology-based small and medium-sized enterprises on the Small and Medium-sized Board and the Growth Enterprise Market of Shenzhen Stock Exchange, and the annual report of 128 listed companies that meet the requirements of the technology-based small and medium-sized enterprises on the new Three Boards of Shenzhen Stock Exchange. The four relative number indicators of "actual tax and fee burden₁ / operation revenue", "five social insurances and one housing fund / operation revenue", "actual tax and fee burden₂ / operation revenue" and "actual tax and fee burden₂ / net profit" are manually counted to measure the tax and fee burden of each enterprise.

1) *Actual tax and fee burden₁*: Among 134 sample companies, the minimum value and the maximum value of "actual tax and fee burden₁/operation revenue" are 9.69% (Huilun Crystal), 16.02% (Mingheng Intelligence) respectively. After two negative companies are removed and three minimum values and three maximum values are also removed, the mean value of 126 companies is 5.54%, that is, to earn 100 yuan operating income within one year, it is necessary to pay tax and fee of 5.54 yuan. The distribution of the specific value range of "actual tax and fee burden₁/operation revenue" is shown in "Table I". The number of companies with values between 2% and 8% is 67.16% of the total 134. The tax and fee burden of

17 companies under 2% is relatively light, and the tax and fee burden of 13 companies over 10% is overweight.

TABLE I. SPECIAL VALUE DISTRIBUTION TABLE OF ACTUAL TAX AND FEE BURDEN 1/OPERATION REVENUE RATIO OF SMALL AND MEDIUM-SIZED ENTERPRISES IN DONGGUAN CITY IN 2016

Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)	Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)
Below zero	2	1.49%	5%-6%	13	9.70%
0-1%	7	5.22%	6%-7%	12	8.96%
1%-2%	8	5.97%	7%-8%	11	8.20%
2%-3%	10	7.46%	8%-9%	5	3.73%
3%-4%	19	14.18%	9%-10%	9	6.72%
4%-5%	25	18.66%	Above 10%	13	9.70%

2) *Burden of five social insurances and one housing fund*: The indicator of "five social insurances and one housing fund/operation revenue" reflects how much of the operation revenue is used to pay five social insurances and one housing fund during the period. Among the 134 technology-based small and medium-sized enterprises, the minimum value of this indicator is 0.11%, the maximum value is 8.85%, and the mean value is 1.4% after three minimum values and three maximum values are removed. From "Table II", the specific value distribution of five social insurances and one housing fund/operation revenue main distributes 0-5%, especially concentrated in 0-2%. The total number of companies is between 0-2% that accounts for 82.1%, which means that most companies need to pay less than 2 yuan of five social insurances and one housing fund within one year from 100 yuan of operation revenue.

TABLE II. SPECIFIC VALUE DISTRIBUTION TABLE OF FIVE SOCIAL INSURANCES AND ONE HOUSING FUND/OPERATION REVENUE OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES IN DONGGUAN CITY IN 2016

Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)	Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)
Below zero	0	0.00%	4%-5%	4	2.99%
0-1%	54	40.30%	5%-6%	2	1.49%
1%-2%	56	41.80%	6%-7%	0	0.00%
2%-3%	12	8.96%	7%-8%	0	0.00%
3%-4%	5	3.73%	8%-9%	1	0.75%

² Data from: Report on the work of Dongguan Municipal Government in 2017 at the first meeting of the 16th People's Congress of Dongguan city on January 10, 2017

3) *Total actual tax and fee burden*: Indicator 1, actual tax and fee burden $\frac{2}{\text{operation revenue}}$. "The actual tax and fee burden $\frac{2}{\text{operation revenue}}$ " reflects the total actual tax and fee burden of the enterprises during a certain period of time, that is, how much of the operation revenue during a certain period of time is used to pay the state. Among 134 companies, the minimum value is - 8.15% (Huilun Crystal), the specific value is negative mainly because Hungrily Crystal company's taxes paid in 2016 are not as much as those returned, and maximum value is 20.44% (Mingheng Intelligence). The mean value is 6.92% after three minimal values and three maximal values are removed. From "Table III", the specific value of "actual tax and fee burden $\frac{2}{\text{operation revenue}}$ " is mainly distributed between 4% and 9%, which accounts for 58.95% of 134 companies in the range of minimum value of -8.15% to maximum value of 20.44%. The specific value of 41 companies is less than 5%, which means that the 41 companies only need to pay less than 5 yuan to the state from the 100 yuan operation revenue in 2016, there are 28 companies that this specific value is higher than 10% and more than 10 yuan needed to pay the state from 100 yuan operation revenue within one year, which means that the tax and fee burden is overweight

TABLE III. SPECIFIC VALUE DISTRIBUTION TABLE OF ACTUAL TAX AND FEE BURDEN $\frac{2}{\text{OPERATION REVENUE}}$ OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES IN DONGGUAN CITY IN 2016

Range	The Number of Companies	Proportion of the Sample Number (A Total of 134)	Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)
Below zero	1	0.75%	8%-9%	11	11.19%
0-1%	5	3.73%	9%-10%	6	4.48%
1%-2%	4	2.99%	10%-11%	8	5.97%
2%-3%	7	5.22%	11%-12%	5	3.73%
3%-4%	8	5.97%	12%-13%	5	3.73%
4%-5%	16	11.94%	13%-14%	3	2.24%
5%-6%	22	16.42%	14%-15%	4	2.99%
6%-7%	11	8.21%	15%-16%	1	0.75%
7%-8%	15	11.19%	Above 16%	2	1.49%

Indicator 2, actual tax and fee burden $\frac{2}{\text{net profit}}$. The actual tax and fee burden $\frac{2}{\text{net profit}}$ reflects how much the total tax burden needed to pay from 1 yuan net profit during a certain period of time. From the perspective of statistics, the minimum value is 8810.20% and the maximum value is 8066.25%. From "Table IV", the distribution is relatively dispersed, and there are 29 companies that specific value is less than 0, accounting for 21.64% of the total sample. From the

annual report, the number of these 29 companies payment is a positive number and net profit is negative, that is, these 29 companies have to pay taxes and fees even if they are in loss. There are 48 companies in the 15%-100% range, accounting for 35.82%, and 46 companies in the 100%-500% range, accounting for 32.84% of the total. There are 10 companies of more than 500%, 4 of which are more than 1000%. As a result, these 10 companies undoubtedly bear heavy tax and fee burdens.

TABLE IV. SPECIFIC VALUE DISTRIBUTION TABLE OF ACTUAL TAX AND FEE BURDEN $\frac{2}{\text{NET PROFIT}}$ OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES IN DONGGUAN CITY IN 2016

Range	The Number of Companies	Proportion of the Sample Number (A Total of 134)	Range	The Number of Companies	Proportion in the Sample Number (A Total of 134)
Below zero	29	21.64%	100%-200%	27	20.15%
0-10%	3	2.24%	200%-300%	13	9.70%
10%-20%	4	2.99%	300%-400%	2	1.49%
20%-30%	6	4.48%	400%-500%	4	2.99%
30%-40%	4	2.99%	500%-600%	2	1.49%
40%-50%	2	1.49%	600%-700%	2	1.49%
50%-60%	5	3.73%	700%-800%	0	0.00%
60%-70%	10	7.46%	800%-900%	0	0.00%
70%-80%	8	5.97%	900%-1000%	0	0.00%
80%-90%	6	4.48%	Above 1000%	4	2.99%
90%-100%	3	2.24%	-	-	-

B. Comparison of Actual Tax and Fee Burdens of Small and Medium-sized Enterprises in Dongguan with Those in Other Cities of Pearl River Delta

In every cities of the Pearl River Delta (except Dongguan city), 16 companies are randomly selected (except 13 in Zhaoqing and 12 in Jiangmen) among the technology-based small and medium-sized enterprises listed on the new Three Board, and calculate the specific value of actual tax and fee burden $\frac{2}{\text{operation revenue}}$ and actual tax and fee burden $\frac{2}{\text{net profit}}$, and then compile tables. In the end, a simple comparative analysis is made.

1) *Comparison of "actual tax and fee burden $\frac{2}{\text{operation revenue}}$ "*: There are 128 technology-based small and medium-sized enterprises that meet the requirements listed on the new Three Board in Dongguan city. In order to remove the influence of extreme value on mean value, the specific value

of "actual tax and fee burden \div operation revenue" removes ten minimum values and ten maximum values. The mean value of "total taxes and fees paid/operation revenue" of 108 companies is 6.81%, which is shown in "Table V". The condition of tax and fee burden of small and medium-sized enterprises is consistent with those obtained by member visit of project team and communications

The average number is calculated by removing three minimum values and maximum values of the specific value of "actual tax and fee burden \div operation revenue" in Shenzhen, Guangzhou, Zhuhai, Huizhou, Foshan, Zhaoqing and Zhongshan. There are only 12 samples in Jiangmen city, with the number of samples being small. The average number is calculated by removing one minimum value and maximum value of the specific value of "actual tax and fee burden \div operation revenue". The mean value of the indicator of "actual tax and fee burden \div operation revenue" of the new Three Board listed technology-based small and medium-sized enterprises in every cities in the Pearl River Delta is between 4.98% and 9.15%, as shown in "Table V". As a whole, all cities are in the same area of Pearl River Delta region, and then the actual total tax and fee burden of each city is not very different.

2) *Comparison of "actual tax and fee burden \div net profit"*: In 2016, the specific value of "actual tax and fee burden \div net profit" of 27 technology-based small and medium-sized enterprises in Dongguan City is removed because the specific value is negative, which is meaningless to compare. After removing ten minimum values, ten maximum values and the influence of extreme values, the mean value of total taxes and

fees paid/net profit paid by 81 companies is 133.63%, as shown in "Table V".

The average number is calculated by removing three minimum values and maximum values respectively of the specific value of "actual tax and fee burden \div net profit" of Shenzhen, Guangzhou and Zhuhai in 2006. There are five companies in Huizhou whose specific value of "actual tax and fee burden \div net profit" is negative, and then the average number is calculated by removing two minimum values and maximum values. There are four companies in Foshan in 2016 whose specific value of "actual tax and fee burden \div net profit" is negative, and then the average number is calculated by removing two minimum values and maximum values. There are four companies in Zhongshan whose specific value of "actual tax and fee burden \div net profit" is negative, and then the average number is calculated by removing one minimum value and maximum value. The average number is calculated by removing two minimum values and two maximum values from the specific value of total taxes and fees paid/net profit in Jiangmen. As shown in "Table V".

From "Table V", the mean value of "actual tax and fee burden \div operation revenue" of the new Three Board listed companies in the Pearl River Delta is relatively close, ranging from 4.98% to 9.15%, with Huizhou (4.98%) being relatively low, and Zhuhai (9.11%) and Zhaoqing (9.15%) being relatively high. The mean value of "actual tax and fee burden \div net profit" is relatively dispersed, with Dongguan (133.63%) and Foshan (209.13%). Zhuhai (112.06%) is higher, and Huizhou (44.28%), Guangzhou (51.06%) and Zhaoqing (75.53%) lower.

TABLE V. MEAN PROPORTION TABLE OF TOTAL TAX AND FEE BURDEN OF TECHNOLOGY-BASED SMALL AND MEDIUM-SIZED ENTERPRISES IN PEARL RIVER DELTA CITIES IN 2016

City	the Number Of Sample Companies	Actual Tax and Fee Burden \div Operation Revenue			Actual Tax and Fee Burden \div Net Profit		
		Minimum value	Mean value	Maximum value	Minimum value	Mean value	Maximum value
Huizhou	16	-1.13%	4.98%	15.27%	-47.61%	44.28%	92.43%
Jiangmen	12	0.57%	6.20%	18.27%	-192.89%	88.60%	232.87%
Guangzhou	16	2.90%	6.64%	13.69%	16.75%	51.06%	107.18%
Dongguan	128	0.26%	6.81%	20.44%	-8810.20%	133.63%	8066.25%
Zhongshan	16	1.37%	7.37%	17.53%	-1290.43%	107.39%	172.90%
Shenzhen	16	-1.01%	7.94%	53.55%	-113.61%	84.29%	1256.19%
Foshan	16	-0.78%	8.24%	13.18%	-80.96%	209.13%	1107.04%
Zhuhai	16	3.47%	9.11%	21.78%	28.57%	112.06%	366.51%
Zhaoqing	16	0.96%	9.15%	16.63%	-1683.28%	75.53%	683.04%

V. CONCLUSION

A. *The Actual Total Tax and Fee Burden of Technology-based Small and Medium-sized Enterprises in the Pearl River Delta Is Overweight*

From the key indicator of "actual tax and fee burden $\frac{1}{2}$ /operation revenue", among 134 technology-based small and medium-sized enterprises in Dongguan, the mean value is 6.81% after deducting the effect of extreme value, and the specific value is mainly distributed between 4% and 9%. The mean value of the indicator of "actual tax and fee burden $\frac{1}{2}$ /operation revenue" of the new Three-Board listed technology-based small and medium-sized enterprises in every cities of the Pearl River Delta is between 4.98% and 9.15%. That is to say, in case of the obtain of 100 yuan income, about 5-9 yuan needs to be spent for paying tax and fee alone. On the level of technology-based small and medium-sized enterprises, because of their large scientific research expenditure, relatively poor profitability, more sensitive tax and fee burden, the actual total tax and fee burden of the enterprises is overweight.

From the indicator of "actual tax and fee burden $\frac{1}{2}$ /net profit", the mean value of "actual tax and fee burden $\frac{1}{2}$ /net profit" of 81 companies is 133.63% after deducting the negative value and extreme value of technology-based small and medium-sized enterprises in Dongguan city, that is, to earn 100 yuan net profit within one year, it is necessary to pay 133.63 yuan the total tax and fee to the state. Dongguan (133.63%), Foshan (209.13%), Zhuhai (112.06%) are too high, Huizhou (44.28%), Guangzhou (51.06%), Zhaoqing (75.53%) are not high. This indicator is greatly influenced by net profit, and the calculation results are highly dispersed. Most of the technology-based small and medium-sized enterprises are in the start-up stage and growth stage, with large investment, high calculation results. The profitability and calculation results are largely different in different industries and different stages. There are quite a large number of enterprises that even is in loss still have to pay taxes and fees. From the perspective of "actual tax and fee burden $\frac{1}{2}$ /net profit", the tax and fee burden of technology-based enterprises in the Pearl River Delta is much heavier.

B. *The Technology-based Small and Medium-sized Enterprises in the Start-up Stage and Early Growth Stage Have a Large Tax Burden and a Strong Sense of Tax Burden*

Compared with mature enterprises, enterprises that are in the start-up stage and early growth stage have many uncertainties, higher risks and poor profitability. Even with the same tax and fee burden, enterprises are more sensitive to tax burden, have stronger sense of tax burden, and suffer higher degree of tax burden. At present, the economy is in a critical period of conversion between old driving forces and new ones. The various costs of enterprises are rising, especially the higher cost of labor forces and housing, and the profit margin is shrinking. Compared with the previous period of "downwind and downstream", the sense of tax burden of the enterprises will be strengthened and the pressure of tax burden will be much greater.

C. *Reform Orientation of Taking Low Taxes and Fees as the Keynote and Structural Tax and Fee Reduction as the Main*

At present, with the accelerated advancement of global scientific and technological innovation and industrial revolution, China is in a critical period of the conversion between old driving forces and new ones and structural optimization, which is urgent to create new engines and develop new powers by relying on scientific and technological innovation. Meanwhile, policies should be adjusted accordingly with different stages in order to promote sustainable and healthy economic and social development. The technology-based small and medium-sized enterprises shoulder the heavy responsibility of acting as the main force to march forward scientific and technological innovation and industrial revolution, but most of them are in the start-up stage and early growth stage, with high risks, high pressure on survival and weak profitability, so there is an urgently need to "send them a journey and help them to the horse". Moreover, with the implementation of various measures of collection and management such as the third phase of national gold tax, the difference between the nominal tax burden and the actual tax burden of the enterprises will be narrowed, and the actual tax and fee burden of enterprises will rise if in accordance with the nominal tax policy to collect the tax in a solid manner. In order to develop the new power of scientific and technological innovation, tax and fee reform should take low tax and fee policy as the keynote and structural tax and fee reduction as the main reform orientation to cultivate new kinetic energy and develop new economy, so as to drive the sustained and healthy development of economic society.

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