

# Research on the Decline and Countermeasures of Township Industrial Structure in China

Xianzhen Yan

School of Finance, Shanghai University of Finance and Economics, Shanghai, China

## Abstract

Since the reform and opening up, the system dividend brought by the economic system reform, the large number of rural surplus labor force and other production factors to provide the advantages of the conditions for the towns in east China injected a huge development power, a time created countless rural “ten-thousand-yuan” households, entrepreneurs. However, on the one hand, after the Lewis turning point, the rural labor force from surplus to shortage, the township industry development is blocked; on the other hand, the State Council to develop the supply-side structural reform, put the technological innovation in the main position, and limited to the shortage of these elements, it is difficult to establish new enterprises with high quality. As a result, some towns were in trouble and a large number of industrial enterprises closed down. On the demand side, due to the balance sheet recession, people shift from the pursuit of profit maximization to the pursuit of debt minimization. The governments strategy of expanding domestic demand is difficult to show results, the fiscal stimulus is weak, the consumer demand of towns and rural areas is difficult to pull, and the industry & service industry are further depressed. Combined, these problems led to the economic recovery of Chinas townships and grassroots social and economic governance into deep water rapids, and the industrial structure of some townships began to decline. This decline is not caused by the migration of industry to big cities in the process of urbanization, but is mainly affected by macroeconomic effects and balance sheet recession.

## Keywords

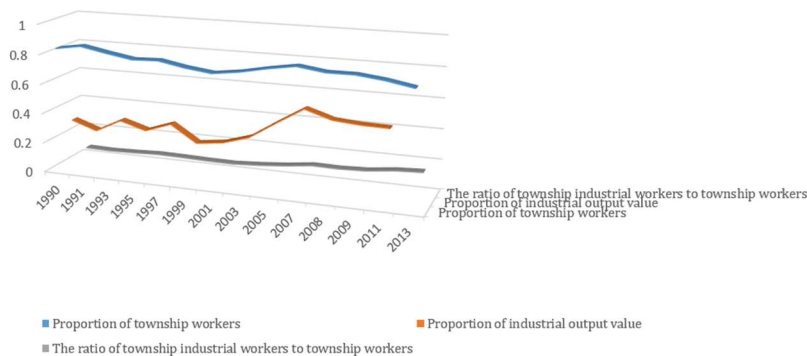
Public Finance; Rural Economics; Macroeconomics; National Economics.

## 1. Research Background and Preliminary Conclusion -- Based on the Analysis of Historical Data from 1990 to 2013 to Jining City, Shandong Province

Jining city(Prefecture-level city, Similar to counties in the US) is located in the hinterland of Shandong, between the huang-Huai-Hai Plain and the southern mountains. The citys land area is more than 10,000 square kilometers, and its pillar industry is a heavy industry centered on coal. Located in the center of the North China Plain,this city is close to Jinan, Xuzhou, not far from Beijing, Shanghai and other big cities, with the typical characteristics of an economically underdeveloped area in southwest Shandong.

After the reform and opening up, the area is no longer engaged in agriculture township labor force to form a huge unemployed group. In order to absorb a large number of rural labor force, "Shedui enterprises" were further recovered and developed. The total output value increased from 49.307 billion yuan in 1978 to 101.683 billion yuan in 1983, an average five-year average increase of 21%. But due to some political factors, these enterprises did not effectively absorb the remaining agricultural labor force. After 1985, the political restrictions were gradually lifted, and the township industries developed rapidly, quickly occupying about one-fifth of Chinas industrial output value.

From 1988 to 1989, the country began to experience economic problems such as overheated economic growth, excessive credit scale and excessive currency issuance. The whole country began to "pressure the township to run enterprises, protect the whole peoples enterprise", the external environment of township enterprises began to become severe. In the environment where banks do not lend and the market does not provide raw materials, township enterprises generally start insufficient construction and their losses rise (Chinese Academy of Social Sciences, 1998), leading in a decline in township industrial structure (see Figure 1).



**Figure 1.** Changes in several important proportions from 1990 to 2013

After Deng Xiaoping's southern tour, the township enterprises had a period of prosperity. However, due to the inherent disadvantages of the operation and management of township enterprises and the serious debt problems among enterprises, township enterprises faced a serious capital shortage around 1995. In 1994, 39,257 township enterprises were shut down, in 1995, 61,812, and more than one million workers returned to agriculture. This is the second precedent in the reverse evolution of the township industrial structure in history (see Figure 1). However, we believe that the structural decline of 1994-1995, though national, was only frictional; the structural decline facing some more backward villages of China today, although regional, may be structural.

After 1995, township enterprises began to adjust their financing channels to avoid excessive reliance on the financial system, and introduced a modern operation and management system. After the financial crisis in 1999, they entered a relatively stable stage of development. In the era of real estate prosperity, some towns and villages near urban areas were influenced by the dividends brought by land acquisition, producing a large number of wealthy groups. Some of these entrepreneurs invested in their hometown after making money, which promoted the progress of the industrial structure of towns and villages. However, after 2022, the decline of housing prices and the contraction of the private sector balance sheet led to a sharp decline in the borrowers in the township, which led to the township economy into a deflationary cycle, facing huge downward pressure, and the industrial structure began to decline in local areas.

The above is a brief introduction of the governance policy and development of China's township industry in the past 40 years. Due to the lack of micro data township industry, the research on township industrial structure mainly case study and qualitative research, has not from the national level analysis of industrial structure characteristics of small towns and spatial differences, and most of the researchers to the law of normal evolution of villages and towns industry, few systematically study the township industrial structure decline (The word is a good expression of both reduction and recession) academia of lack of the mechanism of township industrial structure decline analysis and empirical research. This paper tries to collect relevant data to demonstrate that the decline of industrial structure has become a "structural,, problem

in some regions, and to find out the relevant mechanism of action and conduct empirical research.

**Table 1.** 1991-2013 Indicators of Township Economy in Jining City, Shandong Province

Year	Number of social workers in townships and towns/10,000 people	Number of social workers/10,000 people	Proportion of township workers	Number of industrial workers in townships and towns/10,000 people	The ratio of township industrial workers to township workers	The growth rate of the proportion of industrial workers	GDP of counties and townships with large township populations /100 million yuan	Among them: industry/100 million yuan	Proportion of industrial output value	The growth rate of the proportion of industrial output value	Cultivated land area /1,000 hectares	GDP growth rate for the year	The growth rate of GDP growth in that year
1990	288	344.72	83.546%	16.71	5.802%		41.67	12.73	30.550%			11.314%	20.600%
1991	303.69	352.04	86.266%	16.34	5.380%	-7.27%	48.74	12.06	24.744%	19.01%		12.100%	6.95%
1993	318.26	383.49	82.990%	18.55	5.829%	8.33%	81.89	27.4	33.460%	35.23%		32.600%	169.42%
1995	321.45	401.3	80.102%	21.04	6.545%	12.30%	140.1	39.66	28.308%	15.40%	539	23.530%	27.82%
1997	329.11	407.67	80.730%	20.52	6.235%	-4.74%	178.39	61.39	34.413%	21.57%		14.600%	37.95%
1999	332.1	428.52	77.499%	19.23	5.790%	-7.13%	195.91	45.55	23.250%	32.44%		11.100%	23.97%
2001	325.16	431.64	75.331%	18.29	5.625%	-2.86%	241.34	61.36	25.425%	9.35%		12.457%	12.23%
2003	336.68	433.5	77.666%	22.43	6.662%	18.44%	343.41	105.76	30.797%	21.13%		16.700%	34.06%
2005	357.32	440.2	81.172%	29.36	8.217%	23.34%	481.85	203.1	42.150%	36.86%	545	17.300%	3.59%
2007	372.07	442.9	84.008%	38.62	10.380%	26.32%	598.96	317.07	52.937%	25.59%		16.300%	5.78%
2008	379.37	465.3	81.532%	38.30	10.096%	-2.74%	833.33	395.04	47.405%	10.45%		13.100%	19.63%
2009	383.75	470.1	81.632%	41.38	10.783%	6.81%	888.00	407.99	45.945%	-3.08%		12.700%	3.05%
2011	392.51	493.23	79.580%	50.69	12.914%	19.76%	1140.77	519.69	45.556%	-0.85%	520	10.800%	14.96%
2013	398.71	522.07	76.371%	55.16	13.835%	7.13%						11.000%	1.85%

We have collected some critical national economic data of Jining City, Shandong Province from 1990 to 2013 (Table 1), and the yellow part is the three times of township industrial structure decline in the history mentioned above. They appeared around 1991, 1995 – 1999, and 2008, respectively.

In short, the recession in 1991 may stem from the economic restructuring of "suppressing rural enterprises and protecting enterprises for the whole people" and the economic overheating during China's seventh five-year plan and the "three-year rectification" period. At that time, The State Council, led by Deng Xiaoping, decided to carry out price reform to solve the price distortion problem and promote the transformation of a product economy to a commodity economy. In August 1988, the Political Bureau of the CPC Central Committee adopted the price and wage reform plan in principle and decided to liberalize the prices of most commodities. After that, the news triggered a wave of panic buying and bank runs, and reform suffered setbacks. In 1989, the central government adjusted its decision, issued an urgent notice to

explain the reform plan, decided to carry out rectification and deepen the reform, extended the time for governance and rectification, which eased the serious economic and social problems. In addition, the government began to suppress the development of township enterprises, resulting in a more complex and severe external environment faced by township enterprises, which eventually led to the closure of a large part of the local township industrial enterprises in 1991, a large-scale decline in the industrial structure in the region, and the proportion of township industrial GDP decreased by shocking 19.01%.

Then, the 1995 – 1999 recession was caused by many causes. On the one hand, since the implementation of financial policy adjustment in 1994, the distribution pattern of credit funds in the rural formal financial system has changed greatly, the sources of credit funds for township enterprises have been greatly reduced, and the proportion of the total scale of national credit funds has decreased simultaneously. In October 1996, *the Law of the Peoples Republic of China on Township Enterprises* was officially issued, marking that the planning and management of township enterprises in China embarked on the legal track. In the long run, the development of township enterprises was normalized and modernized, but also contained the brutal growth of them in the short term, causing a certain downward pressure. Since then, the state has taken a series of major measures in "agriculture, rural areas and farmers" (AKA Three Rural Issues, San-Nong in Chinese), attracting a large number of township enterprises to return to agriculture, and to a certain extent also produced a recession on the township industrial structure. The brief industrial structure recession in 2008 was mainly caused by the financial crisis.

This is a qualitative perspective. From a quantitative point of view, the township industrial structure decline on the data has the following characteristics: 1. Using *Spearman* correlation analysis (Figure 2, The horizontal axis from left to right is the growth rate of the ratio of township workers to total workers, the proportion of township industrial workers in the current, next and third years, and the growth rate of the proportion of township industrial output value in the current, next and third years. The longitudinal axis is the same), we can easily find the precursor of township industrial structure decline is township workers accounted for social workers rise, and advance time is about 1 year, such as 1991,1997,2007. The change of the ratio of the township industrial GDP to the township GDP and the township industrial workers to the township workers is more violent and has a certain lag. 3. The decline in the ratio of township industrial GDP to township GDP tends to coincide with the slowdown in the growth rate of regional GDP.

1	0.358	0.455	0.358	0.442	0.624	0.491
0.358	1	0.733	0.6	0.867	0.733	0.552
0.455	0.733	1	0.806	0.721	0.855	0.782
0.358	0.6	0.806	1	0.455	0.733	0.842
0.442	0.867	0.721	0.455	1	0.576	0.467
0.624	0.733	0.855	0.733	0.576	1	0.673
0.491	0.552	0.782	0.842	0.467	0.673	1

Figure 2. Matrix of correlation coefficients for the above data

Using *Kendalls tau-b* correlation analysis (Table 2), the growth rate of the ratio of industrial workers to township workers has a certain correlation with the ratio of industrial GDP to township GDP ( $P < 0.1$ ). At the same time, the growth rate of the ratio of the township industrial GDP to the township GDP is also strongly correlated with the GDP growth rate of the region in that year ( $P < 0.05$ ). This means that the slowdown in regional economic growth and the decline of local township industrial structure do not occur by accident, but are two highly related and always accompanied phenomena.

**Table 2.** Three Scheme comparing

	The ratio of township industrial workers to township workers	The ratio of the total industrial production of townships and towns to the gross domestic product of townships and towns	GDP growth in the region that year
The growth rate of the ratio of the total industrial production value of townships to the gross industrial product of townships	-	0.333(0.153)	0.455(0.045)
The growth rate of the ratio of township industrial workers to township workers	0.576(0.009)	0.424(0.063)	0.303(0.197)

In summary, this section reviews several declines of the industrial structure in the history of 1990-2013, and notes that these declines tend to be associated with economic declines and forepioneer the return of workers from cities to the countryside. These declines are only frictional, because the industrial structure of the township has returned to normal within 1-3 years after the first year of the recession. Since 2020, various reasons caused by the township economic recession caused a new round of industrial structure decline, the structural recession has at a moderate rate for more than three years, and will persist in the next few years, below will demonstrate this in different aspects, and from the flow of production factors, macro economy, government support three aspects to explore the formation mechanism of this decline.

## 2. A Cross-industry and Cross-regional Flow of Production Factors Represented by Labor Force Caused by Government Policies and Macroeconomy

Jining city in Shandong province for a long time relying on Yankuang group (now Shandong Energy group) and other famous well-known industrial enterprises (mainly SOEs), with industry as a pillar industry, support the urban economic development and employment, and for the villages and towns provides a lot of jobs and employment opportunities, supporting the villagers economic income and township industrial structure evolution. In the towns with developed industry, the government committee of the CPC, the management committee of the economic and technological development zone, the town committee and the town government are generally established, together with the local large enterprises to form a three-way governance system under the leadership of the party committee. The town committee, the town government and its subordinate village committees represent the local rural society, while the

industrial park committee and the management committee of the economic and development zone represent the political intervention at the county and city levels. Enterprises (generally SOEs or collective enterprises) are an important force in the economy. Although the governance pattern of "integrating towns and parks" has been proposed in the 2011 government work report, there is still a big gap between the policy positions of different departments. In this case, the policy differences and political game of different departments will have a considerable impact on the township industrial structure.

**Table 3. Some Important Data About Industry**

Year	The ratio of township workers to the number of township labor resources	The ratio of township workers to social workers	The ratio of township industrial workers to township workers	The growth rate of the ratio of industrial workers in townships and towns to township workers	The ratio of the per capita labor remuneration machine of non-private manufacturing employees to agricultural employees	Cultivated land area: 10,000 hectares	The growth rate of regional GDP in the current year	The growth rate of the GDP growth rate in that year	The ratio of the total investment in fixed assets of the whole society	The ratio of industrial loans to agricultural loans from financial institutions	Township enterprise loans/10,000 yuan
07	94.60%	84.01%	10.38%	26.32%	111.55%	52.17	16.30%	-5.78%	8.27%	157.34%	230164
08	93.96%	81.53%	10.10%	-2.74%	102.48%	60.10	13.10%	20.00%	8.36%	159.69%	200567
09	94.21%	81.63%	10.78%	6.81%	84.15%	52.07	12.70%	-3.00%	6.36%	119.70%	290779
10	93.87%	80.64%	11.85%	9.87%	-	52.03	12.90%	2.00%	5.94%		
11	93.44%	79.58%	12.91%	9.01%	117.36%	61.13	10.80%	16.00%	3.76%		
12	93.11%	77.76%	13.39%	3.70%	-	61.13	11.00%	2.00%	5.54%		
13	93.11%	76.37%	13.83%	3.30%	143.88%	61.13	11.00%	0.00%	3.81%		

Taking the economic data of towns and townships from 2007 to 2013 (Table 3) and related policies as an example, we found one by one that several variables related to the changes in the industrial structure of towns and townships were greatly affected by the governance policies.

In terms of enterprises, the compensation system for non-private employees is essential. In 2007, the government launched the *Shandong province peoples government on strengthening enterprise wage macroeconomic regulation and control improve the worker wage growth mechanism of normal opinion*, the private manufacturing unit worker salary 11.55% more than agriculture, caused the township agricultural practitioners, industrial practitioners to urban state-owned industrial enterprises, township industrial enterprises once lack of labor. The following financial crisis led to setbacks in regional industrial production. In 2008, the salary of manufacturing units was only 2.48% more than that of agricultural employees, and in 2009, it was surpassed by more than 15%. As a result, some of the workers returning to cities returned to towns, and the decline in 2008 to the proportion of industrial workers in towns. Nevertheless, the change in industrial structure is irreversible. From 2008 to 2011, the ratio of gross industrial product to GDP in the township area has declined for many years, which is the lag effect brought by the flow of workers to cities in 2007 and the decline in economic growth in 2008.



For provincial and municipal higher government, one important thing is the township industry to agriculture-based policy tone. In 2000, Jining city government work report pointed out that to adjust and optimize the agricultural structure, promote agricultural industrialization management, township industry to return to agriculture, agriculture as the center. Second, environmental protection policies to protect the environment, conserve energy and reduce emissions, and eliminate backward production capacity. On April 25, 2007, the National Development and Reform Commission promulgated the Comprehensive Work Plan for Energy Conservation and Emission Reduction. In the government work report of The State Council, Premier Wen Jiabao proposed to eliminate backward production capacity, and township industries are exactly the worst disaster areas of backward production capacity with large pollution and low efficiency. Under the effect of these two policies, the development of township industry was severely frustrated, which is also an important reason for the decline of industrial structure during the financial crisis from 2007 to 2008.

In the township government, the *To Build a Beautiful Countryside Issues* and the restriction of industry for the protection of basic farmland. After 2000, The State Council repeatedly stressed the need to strengthen the basic farmland protection system. In 2001, *the Notice on Further Strengthening the Protection of Basic Farmland* was issued, and a large number of township land was divided into basic farmland, resulting in the lack of land support for the development of township industry, which is one of the reasons for the slowdown in development after 2000. The township government itself wants to develop industry, upgrade the employment structure and improve the income of township residents. However, the township government cannot overcome the policy pressure of the superior government, and many townships have insufficient policy support for industrial development, so it is difficult to form large-scale industrial enterprises.

Jining city is a relatively underdeveloped area in Shandong Province, and the surrounding big cities (such as Jinan, Qingdao, Beijing and Shanghai) are popular areas for the local labor force to work outside. The imbalance of regional economic development and the repeated adjustment of local governance policies bring about the cross-regional flow of production factors. First of all, from the labor level, due to COVID-19 outbreak, environmental protection work gradually and macroeconomic downward background, Jining escrow several county areas of many factories fell in recent years, by the 2023 zoucheng city national economic and social development statistical bulletin visible: industrial benefit pressure, the annual scale of industrial revenue fell 5.7% year on year, profits fell 18.5%, the citys eight above designated size the scale revenue fell 6.6%, revenue fell 20.5%, a large number of enterprises need to scale layoffs. At the same time, many enterprises actively respond to the call of the government, vigorously promote the reduction of overcapacity and the development of new quality productivity, the mechanization level of the industry is constantly improving, resulting in many urban industrial workers either lost their jobs, or face the pressure of wage reduction, resulting in the loss of a large number of urban labor force.

In cities, such loss has little impact on the industrial structure, because most of its industries are secondary and tertiary industries, even if layoffs are made, the labor force flowing into the market is unlikely to enter the primary industry. The lost labor is either reemployed in urban secondary and tertiary industries, or return to the countryside, or to work in big cities such as Beijing, Shanghai, Jinan and Qingdao. Back to the countryside, due to the multiple policy restrictions on the township industry after 1996, it is difficult to expand new industrial enterprises to provide employment in the secondary industry, so they can only engage in the primary industry related to agriculture.

**Table 4.** Relevant Data of Industrial Enterprises Above Designated Size

2007						2008						2010					
	quantity	The number of losses	Loss side	Gross industrial output	Proportion of total industrial output		quantity	The number of losses	Loss side	Gross industrial output	Proportion of total industrial output		quantity	The number of losses	Loss side	Gross industrial output	Proportion of total industrial output
Firms	2590	139	5.37%	23902330	100.00%	Firms	3416	201	5.88%	31994435	100.00%	Firms	3907	117	2.99%	38571804	100.00%
SOEs	71	21	29.58%	1862676	7.79%	SOEs	79	25	31.65%	2561907	8.01%	SOEs	68	15	22.06%	3231996	8.38%
light industry	1072	58	5.41%	8023682	33.57%	light industry	1364	75	5.50%	10327951	32.28%	light industry	1447	41	2.83%	11795636	30.58%
heavy industry	1518	81	5.34%	15878648	66.43%	heavy industry	2052	126	6.14%	21666484	67.72%	heavy industry	2460	76	3.09%	26776168	69.42%
Large	30	0	0.00%	8475028	35.46%	Large	25	1	4.00%	10346468	32.34%	Large	29	1	3.45%	15011836	38.92%
Small	2560	139	5.43%	15427302	64.54%	Small	3391	200	5.90%	21647967	67.66%	Small	3878	116	2.99%	23559969	61.08%

At the same time, due to the manufacturing and enterprises above designated size polarization (table 4), the economic downturn (such as 2007-2008) small micro industrial enterprises loss is often greater than large enterprises, and township enterprises are mostly small micro enterprises, the market demand is not high, the number of orders, problems such as insufficient exports, so in the industrial market, the villages and towns small micro enterprise management difficulties.

In terms of policy, the above reasons lead to the migration of production factors dominated by labor force and supplemented by talent and technology between urban and rural areas and between industries.

From the perspective of economic environment, the differences in the conditions on both sides of cities and towns contribute to the migration decisions of different workers. We think of analyzing this using the migration decision theory proposed by *Dr. Julian Wolpert* in the mid-20th century. He believes that: the first problem faced by the individual workers is "whether to leave the original residence", and then the individual workers also face the problem of choosing the place to enter or move in. The analysis of these two decisions is based on the following ideas: Place utility, that is, the utility of the individual to the individual, where the variable is greater than 0, the magnitude of the value is satisfactory; when the individual is less than 0, the larger the absolute value, the less satisfactory. Threshold, The utility value when an individual begins to consider whether to leave the original place of residence. The utility value varies according to the individual differences, and it is not fixed for a single individual, but may increase or decrease. When place utility is less than threshold, individuals leave the original place of residence. Activity space is, the choices that working individuals face after deciding to leave their original residence, including many urban options. The actual situation of this space will affect the utility value of individual workers after migration. Based on the extension of the model, we will abstract the space across regional migration for the economic structure, from



the perspective between industry based on 2007-2011 Jining city data respectively describe the township industry related labor production factors in the economic upward, economic downturn flow tendency respectively, variables are selected from table 1. We use the *ordinary linear* regression analysis method, and the results reveal the relationship between the net growth of township industrial workers (Analyze it as +1) or negative growth (Analyze it as -1) and multiple social and economic indicators, thus reflecting the law of individual cross-industry flow of rural labor force (especially industrial labor force):

The overall fit of the model was measured by  $R^2$  (0.411) and adjusted  $R^2$  (0.411), indicating that the model explained 41.1% of the variability of the dependent variable, although not high, it still has some explanatory power in social science research. Here, we first explain this result, and in the following text, we will consider additional potential variables and improve the model setting to reflect the refreshing, inspiring results.

The influence of the number of township social workers and the number of social workers on the net growth of township industrial workers is in the opposite and significant direction ( $P < 0.5$ ). Specifically, the increase of 10,000 increase (Beta = -0.622); and every 10,000 increase promotes the number of industrial workers (Beta = 0.604). This shows that the expansion of the total scale of social workers contribute to the growth of township industrial labor force, and the increase in the number of workers may be essentially from the economic downturn period urban unemployed home, while the villages and towns of industrial enterprises did not grow or even decrease, so the number of industrial workers fell, this is consistent with our previous argument. The VIF value (all less than 10) indicates that there is no collinearity problem between the independent variables, and the model estimation is relatively reliable.

Next, the problem of insufficient prediction accuracy encountered above is discussed. Inspired by *Richard C. Koo*, we directly selected the ratio of total assets and total liabilities of township industrial enterprises as the new variable. Surprisingly: sure enough, after the linear regression analysis (table 5) reveals the ratio of total assets and total liabilities (hereinafter referred to as assets than liabilities) and the GDP growth on township industrial workers net growth (+ 1) or negative growth (-1), the overall model is statistically significant ( $F=10.495$ ,  $P=0.044$ ), indicating that at least one independent variable has a significant impact on the dependent variable. The model explained 79.2% of the variability of the dependent variable (adjusted  $R^2=0.792$ ), showing a high goodness of fit.

**Table 5.** Linear regression analysis results n=6

	Non-normalized coefficients		Normalization factor	t	P	VIF	R <sup>2</sup>	F
	B	standard error	Beta					
constant	-6.839	1.669	-	-4.097	0.026**	-	0.875	F=10.495 P=0.044**
Total Assets: Total Liabilities	4.191	1.299	1.381	3.226	0.048**	4.396		
GDP Growth	-18.555	14.459	-0.549	-1.283	0.29	4.396		
Dependent variable: net growth (+1) or negative growth (-1) of rural industrial workers								
Note: ***, **, and * represent the significance levels of 1%, 5%, and 10%, respectively								

Specifically, the asset-to-liabilities ratio of industrial enterprises ( $B=4.191$ ,  $Beta = 1.381$ ,  $t=3.226$ ,  $P=0.048$ ) had a significant positive impact on the dependent variables, significant at the 5% significance level. This means that when controlling for other variables, each unit of net increase in township industrial workers will increase significantly. The Beta coefficient (1.381) indicates that among all independent variables, the asset ratio is the most influential factor on the dependent variable, with more explanatory power than other variables. Therefore, we

cannot ignore the huge role of the ratio of assets and liabilities of township industrial enterprises as a variable in the topic discussed in this paper, which shows the foresight of economists in the impact of balance sheet recession, and will be explained as an argument in the next section of this article.

### 3. The Balance Sheet Recession Has Put Some Rural Economies into Trouble and Governance policies Fail

The decline of township industrial structure is a complex phenomenon. From the perspective of balance sheet recession, the three factors of government, enterprises and consumers all play an important role.

In the process of promoting the development of township industry, the government has reduced the support for township industry due to the adjustment of macroeconomic policies or financial pressure after the epidemic. For example, when the local government of Jining city faces the fiscal deficit, it reduces the supporting policies of investment subsidies and tax incentives, which leads to the tension of the enterprise capital chain and the recession of the balance sheet, which is the shrinking of assets caused by the government supply. In addition, the rapidly falling housing price and land price in recent years and the high operating cost also lead to the shrinkage of the asset side and the relative expansion of the debt side.

Changes in policy orientation will also affect the development of township industry. In recent years, the government has strengthened the supervision of environmental protection, safety and other aspects. Some township industrial enterprises that do not meet the standards need to invest a lot of money to rectify, that is, "eliminate backward production capacity", which further reduces the profit space of enterprises and aggravates the recession of the balance sheet. Township industrial enterprises tend to be small and have low credit ratings, making it difficult to obtain loan support from traditional financial institutions such as banks. Even if loans can be obtained, its financing costs are relatively high, which increases the financial burden of enterprises. After 2024, the government will strengthen the supervision of the financial industry. Under the high-pressure situation, financial institutions are more reluctant to release loans to small and micro township industrial enterprises, and it is more difficult for enterprises to obtain external financing, which will easily lead to further deterioration of the balance sheet and unsustainable business operation (Table 6).

**Table 6.** Total Assets: Total Liabilities

	Total assets/100 million yuan	Including: net fixed assets	Total liabilities / 100 million yuan	Total Assets: Total Liabilities
2007	413.36	167.42	186.46	221.69%
2010	745.1	303.69	315.85	235.90%
2013	949.75	291.79	482.38	196.89%
2016	1506.16	485.62	662.34	227.40%
2019	2988.58	700.5	1902.82	157.06%
2022	2313.39	481.57	1506.69	153.54%

Unit: 100 million yuan

In addition, in the context of the macroeconomic downturn, the consumption power of residents, especially those with already low income level, has declined seriously. This has eroded the market of township enterprises from the demand side, and the demand for low-end consumer goods in the whole society has declined, and township industrial enterprises are the important suppliers of such commodities.

To sum up, from the perspective of balance sheet recession, the three factors of government, enterprises and consumers interweave and influence each other, which jointly leads to the decline of the development of township industry. In order to change this situation, the government needs to increase the support (In this case, monetary policy is far more useful than fiscal policy, such as United States QE), enterprises to strengthen the transformation and upgrading, consumers to enhance confidence and other efforts.

#### 4. The Failure of Fiscal Stimulus Policies

The Chinese government by increasing credit, strengthen agricultural credit guarantee, improve the agricultural insurance mechanism and a series of measures, build a relatively perfect rural financial service system, but compared with rural revitalization strategy of financial demand, there is still a certain gap between supply and demand, the breadth and depth of rural financial services still need to be further strengthened. Especially in remote rural areas, ensuring that small and micro agricultural operators and poor farmers can obtain the necessary financial support is an urgent problem to be solved now. With the continuous increase of financial support and the promotion of financial product innovation, how to effectively manage and control the rural financial risks, especially to prevent the occurrence of systemic financial risks, and to protect the legitimate interests of farmers, has become an important challenge.

The high risk of agriculture-related finance is a major obstacle to the development of township finance, which makes the financial and insurance departments fail to fully commit to agricultural and rural development. Due to the small number of farmers, remote residence and inconvenient transportation, many farmers do not make timely payments, which increases the risk of bank loans, leading to the low enthusiasm of many banks for agriculture-related loans. In addition, the state has strengthened its risk management, leading to more and more problems exposed to agriculture-related loans. At the present stage, although a large number of rural credit cooperatives and other financial institutions have been built in China, but the policies and settlement methods are not perfect, so that many relevant policies conducive to rural development can not be fully and effectively implemented.

In terms of government finance, fiscal leverage can be flexible and constantly adjusted according to specific actual conditions, so as to increase financial guarantee for rural revitalization and development. All kinds of enterprise capital can actively expand the investment scale in agricultural projects through direct investment, joint venture, the establishment of agricultural industry funds and other ways, and use funds to effectively promote the development of agricultural related industries. But compared with municipal, transportation projects, agricultural PPP(Public-Private-Partnership) project quantity is not much, the scale and scope of investment is limited, mainly focus on the fishing port, agricultural science and technology, leisure industry, agriculture, comprehensive utilization of waste, in addition, with the government and social cooperation of the project gradually increased and not establish reasonable exit mechanism, some project running late gradually exposed the financial exit difficulties, affect the financial leverage.

Using the *Johansen* test model of the number of time series relationship study of Gansu province financial support spending and the added value of the first industry between the dependency of degree is high (Wang Shengguo, 2021), fully illustrate the finance of "San-Nong(agriculture, rural areas and farmers)" development, the implementation of the strategy of rejuvenating the country has basic, pillar and affordable role. In addition, the total fiscal expenditure related to agriculture is increasing year by year, but the proportion of the total fiscal expenditure in the total agricultural production is relatively low. Fiscal spending supporting agriculture has irregular items lead to the volatility of agricultural output, it shows that the financial support for "San-nong" development and the implementation of the strategy of rejuvenating the country,

to a large extent also by the geographical terrain, natural conditions, crop types, financial level, agricultural policy, the influence of basic financial management level, agricultural investment has a lot of instability, which affects the stable development of the township economy.

At present, the financial departments support for the township economic recovery has the following defects: First, the tax support for promoting the construction of new infrastructure is insufficient. At present, China's preferential tax policies for rural infrastructure mainly focus on traditional infrastructure such as water conservancy and power grid, and the preferential treatment for new construction of infrastructure is limited. With the development of digital economy, the importance of new infrastructure for the construction of digital countryside and improving rural competitiveness is constantly increasing, and the coverage of relevant preferential policies needs to be expanded. Second, there are insufficient tax incentives to promote farmers to reduce the burden and increase their income. At present, individual income tax is exempted from agriculture, forestry, animal husbandry, fishing and other industries from individual income tax. However, the income obtained by farmers through traditional agricultural production activities is generally low, and the effect of this income tax on reducing the burden and increasing the income is limited (Wulan et al., 2023). Third, the lack of tax incentives to promote farmers employment and entrepreneurship. Improving farmers own quality is an important way to promote farmers employment. Vocational training is conducive to improving the cultural quality and technical level of farmers, improving their competitiveness in the employment market, so as to have more employment choices, which has a positive role in promoting the increase of farmers income. However, the current tax preferential policies cover a small scope of technical training, and only the taxpayers who provide agricultural technical training business such as mechanical farming, drainage and irrigation, pest control and so on are exempted from VAT, which cannot meet the needs of the current development of modern agriculture. China's preferential tax policies for employment and entrepreneurship focus on the poor, the unemployed and college graduates who graduated in the same year, including migrant workers who have not returned to their hometowns to start businesses. Fourth, the tax preferential measures in the deep processing and transportation of agricultural products are relatively limited, and a tax preferential system covering the whole agricultural industry chain has not yet been established. To some extent, this restricts the in-depth development of agricultural industrialization and the improvement of the overall agricultural benefits. Fifth, the coverage of preferential policies for new types of agricultural business entities is relatively small. The construction of an integrated development system of rural industries with new agricultural operators as the core is of great significance for promoting the integration of rural industrial resources and accelerating the process of agricultural and rural modernization (Jiang Changyun, 2018). At present phase Guans tax policies mainly focus on farmers specialized cooperatives and leading agricultural enterprises, and have not yet covered other new agricultural operators.

Even worse, the lack of preferential tax policies for the integration of rural industries is a new problem emerging after 2020. Rural industrial integration has remarkable versatility, which can effectively optimize the allocation of rural resources guided by the market, and give birth to the birth of emerging industries (Li Xiaolong et al., 2019). At present, no corresponding preferential tax policies have been formulated for rural tourism, leisure agriculture, home stay economy and farming culture experience.

In addition, the effect of China's financial support for urban and rural integrated development is not yet obvious. At present, fiscal decentralization in China has a significant inhibitory effect on the development of urban-rural integration: the mediating variables of infrastructure level and marketization level are further introduced, and the mediating effect analysis through the *stepwise* regression method, *Sobel* test and *Bootstrap* test shows that fiscal decentralization has an indirect effect on urban-rural integration development by inhibiting the improvement of

infrastructure level and reducing the level of marketization (He et al., 2024). Through the measurement of urban-rural integration development index from 2011 to 2021, it is found that the process of urban-rural integration in China is still slow in recent years; and due to the differences in economic foundation, resource endowment and geographical environment, the gap of urban-rural integration between east, central and west is large, in the east, middle and west steps, the negative effect of financial decentralization on urban-rural integration development is mainly concentrated in the central region, which has a significant role in promoting the development of urban-rural integration in western China.

## 5. Conclusion

As we have discussed above, we find a gratifying fact: the phenomenon of township industrial structure decline and the reasons behind it have initially shown its context, and slowly clear itself in front of us. Supported by factors such as government governance, fiscal policy, and rural social characteristics, Two reasons for the macroeconomic background (especially the balance sheet recession) are the contraction of jobs that cities can provide, This leads to the flow of urban labor force to rural areas (the proportion of rural labor force increases), And due to the shortage of township industrial enterprises, Are unable to provide industrial jobs, These workers are either unemployed, or engaged in agriculture, or engaged in the workshop style of simple handicrafts, Unable to remain employed in the secondary industry employment, At the same time, there was a significant decline in the industrial composition of the labor force, Bring about the decline of the township industrial structure.

Out of the national boundaries, the acceleration of the process of global economic integration increases the economic interdependence of various countries, and the fluctuations of the international economic situation also directly affects the stable operation of the domestic economy. In recent years, global trade protectionism has been on the rise and frequent geopolitical conflicts have led to a complex and volatile international trade environment. These external factors have had a significant impact on China's economy, especially for the township enterprises with high export dependence. The deterioration of the international trade environment has directly impacted their market share and profitability. At the same time, the domestic economy is also facing pressure from transformation and upgrading. In the period of shifting growth rate, the period of painful structural adjustment, and the digestion of previous stimulus policies, the downward pressure on the economy continues to increase. In such a macroeconomic environment, the production and operation of township enterprises are facing unprecedented challenges. Some enterprises fall into difficulties due to the shrinking market demand, increasing cost pressure and other reasons, which leads to the decline of industrial structure.

At the same time, in order to cope with the new normal of the economy, the state has vigorously implemented the supply-side structural reform, aiming to improve the quality and efficiency of the supply system by optimizing the allocation of factors and adjusting the industrial structure. This reform is both an opportunity and a challenge for township enterprises. On the one hand, the supply-side structural reform encourages enterprises technological innovation and industrial upgrading, providing broad development space for enterprises capable of technological transformation and innovation; on the other hand, for those enterprises with backward technology, insufficient innovation ability and low product added value, reform means survival crisis. Due to their long-term dependence on low-end processing and manufacturing and low-cost competition strategies, some township enterprises lack core technology and brand advantages, and it is difficult to meet the needs of supply-side structural reform. In the case of increasingly fierce market competition, these enterprises are often

eliminated by the market, which further aggravates the decline trend of the township industrial structure.

As mentioned above, fiscal and financial policies are one of the important means of national macro-control. With the change of the domestic and foreign economic situation and the adjustment of the national development strategy, the fiscal and financial policies are also constantly optimized and adjusted. However, the impact of these policy adjustments on township enterprises is a double-edged sword. 1. In order to prevent and resolve the risks of local government debt and maintain financial stability, some local governments are more cautious in fiscal expenditure, and reduce direct subsidies and tax incentives for township enterprises; 2. Financial institutions are more strict in risk management, which increases the loan threshold and financing cost for small and micro enterprises. Under the combined action of these factors, township enterprises face greater difficulties in financing. The problem of capital chain tension is increasingly prominent, which further affects the normal operation and development of enterprises. Especially during the economic downturn, the financing difficulties of township enterprises became more prominent, which further aggravated their survival difficulties.

In order to solve the problem of township industrial structure recession, it is necessary to strengthen the macroeconomic regulation and control to stabilize the economic growth expectation. China should continue to implement a more proactive fiscal policy and a combination of prudent monetary policies to effectively expand aggregate demand, especially consumer demand and investment. Promote infrastructure construction and industrial upgrading by increasing government investment; reduce the burden on enterprises and enhance their profitability; optimize the credit structure to support the development of small and micro enterprises and township enterprises. At the same time, strengthen the policy guidance and support for township economic development and formulate more scientific and reasonable policies and measures to encourage township enterprises to carry out technological innovation and industrial upgrading. For example, special funds can be set up to support technology development and new product development of township enterprises; provide preferential tax policies to encourage township enterprises to increase R & D investment; strengthen the guidance of industrial policies to promote the development of township characteristic industries and competitive industries. In addition, the monitoring and evaluation of the economic development of towns and townships should be strengthened to find and solve problems in time to ensure the implementation of policies and measures.

In view of the difficult and expensive financing problems of township enterprises, the state should further improve the fiscal and financial policy support system to broaden the financing channels of township enterprises to reduce their financing costs, only then can the decline of the industrial structure of townships be curbed and the next round of industrial prosperity can be gradually started.

## Acknowledgements

Institute of Finance and Economics, Shanghai University of Finance and Economics, University of Southampton and my sister Yan Yiyi, BEST wishes for her.

## References

- [1] Li Guoping, Xi Qiangmin, Wu Aizhi, et al. Study on industrial structure characteristics and influencing factors in small towns in China [J]. *Geographic Sciences*, 11(2018),p.1769-1776.
- [2] The Institute of Economics, Chinese Academy of Social Sciences. Development and change of township enterprises in China [R].



- [3] Chen Jianbo. Technology acquisition and technology selection of township enterprises in the Evolution of market economy [J]. Economic Research, 4(1999),p.34-44.
- [4] Guo Jinhui. Township enterprises rose rapidly, highlighting the great creativity of Chinese farmers [N].
- [5] Yu Bin. "Paipaidai" mode of financing support for small and micro enterprises [J]. Cooperative Economy and Technology, 24(2018),p. 80-81.
- [6] He Qianqian, research on the path of citizenization in the urban suburbs -- Based on the perspective of family strategy [J]. Journal of the Party School of Ningbo City, CPC 41(2019),p. 122-.
- [7] Li Silin, Exploration and practice of digital inclusive finance enabling rural revitalization -- Take the "211" innovative product system of Industrial and Commercial Bank of China Chengdu Branch as an example [J]. The Modern Financial Guide.
- [8] Luo Baoshun, research on the financial dilemma and countermeasures of Nanning Area of China (Guangxi) Free Trade Zone [J]. Reference for economic research, 10(2021),p.75-84.
- [9] Liu Tianqi, Song Junjie. The path, problems and countermeasures of financial agricultural support and support policy to boost rural revitalization [J]. Economy, 6(2020), p.6.