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Guangdong Province and Taiwan Area**

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Abstract: Guangdong Province is the earliest area of China's Reform and Opening Up , is also one of the quickest area of economic development. By that development of 30 years , the economic strength of Guangdong Province is being strengthened constantly , some main economic indicators are surmounting Taiwan area gradually. With 2002 and 2005 input-output tables of Guangdong Province , we analyzed the economic structure and industrial connection in Guangdong Province and analyzed their change. With 2001 and 2004 input-output tables of Taiwan area , we analyzed the economic structure and industrial connection in Taiwan area and analyzed their change. Step forward , we comparatively analyzed economic structure and industrial connection of Guangdong and Taiwan and comparatively analyzed their change and difference. These economic structure include industrial structure , final use structure , export structure , import structure , added value structure of each industry and so on. By comparative analysis , we were able to know industrial structure , industrial development level , foreign trade , industrialization developing stage , industrialization developing level etc. of Guangdong and Taiwan.

Keyword: Comparative Analysis, Economic Structure, Guangdong Province, Taiwan Area

1. Introduction

Guangdong Province is the earliest area of China's Reform and Opening Up , is also one of the quickest area of economic development , the economic aggregate has ranked first for many years. By that development of 30 years, the economic strength of Guangdong Province is being strengthened constantly; economy grows at top speed and increases by mean 13.8% in the years of reform and opening-up over the past 29 years. The average annual speed of the 17 years from 1991 to 2007 is 14.6%. In 2007, the gross domestic product of Guangdong is 408,800 million dollars, Taiwan is 383,300 million dollars; The total import and export value of Guangdong is 634 billion dollars, among them the import value is 264,800 million dollars, the export value is 369,200 million dollars, and Taiwan is 466 billion dollars, among them the import value is 219,300 million dollars, the export value is 246,700 million dollars; The economic growth rate of Guangdong is 14.7%, Taiwan is 5.7%. The economic indicator of Guangdong Province has already surmounted Taiwan. However, the per capita gross domestic product of Guangdong is 4360 dollars, and only about 1/4 at 16792 dollars of Taiwan, the economy of Guangdong compared with Taiwan has disparity greatly. In 2007, the three-industry structure of gross domestic product of Guangdong is 5.4:51.3:43.3, roughly in middle and later stage of industrialization, and Taiwan is 1.5:27.5:71.0, enters the social shape of developed area taking service trade as leading factor, the three-industry structure of Guangdong is only equivalent to the structure more than 20 years ago of Taiwan, Difference of industrial structure of Guangdong and Taiwan were enormous. But seen from structure inside two and three industries, there is a lot of similarity in structure inside two and three industries in Guangdong and Taiwan. So, understand every economic structure in Taiwan and their development, correspond with Guangdong economic structure is compared, it is instructive in holding the economic structure in Guangdong.

2. Input-Output Tables of Guangdong Province and Taiwan Area

Guangdong and Taiwan compile the basic input-output table every 5 years at present and the extended input-output table in the middle of 5 years. The basic input-output table in recent years that the statistics bureau of Guangdong Province releases is 2002's, the extended input-output table is 2005's in recent years, they had 42 departments. The basic input-output table in recent years that directorate-general of budget, accounting and statistics Executive Yuan of Taiwan releases is 2001's, the extended input-output table is 2004's in recent years, they had 49 departments.

" Standard of Classification of National Economy " which State Statistics Bureau made was issued in July of 2002, at the foundation of three industrial classification, according to this standard of

classification, according to manufacturing industry and service portion in the industry, divide the national economy in both Guangdong and Taiwan into 13 the same industries, they are respectively Agriculture, Mining and Quarrying, Petroleum Refining and Chemical Industry, Smelt and Electromechanical Industry, Electronic Information Industry, Other Manufacturing, Production and Supply of Electric Power, Heat Power and Water, Construction, Transport and Storage Services, Business Services, Banking and Insurance, Real Estate, Other Services. The manufacturing industry is divided into 4 industries and service trades and divided into 5 industries, petrochemical industry, smelt and electromechanical industry,, electronic information industry to take greater share in Guangdong and Taiwan economy in the manufacturing industry, transport and storage industry, business services, banking and insurance, real estate take share more too in Guangdong and Taiwan economy in the service industry.

According to departments described above, have led out the 2002 and 2005 input-output tables of 13 departments of Guangdong Province and the 2001 and 2004 input-output tables of 13 departments of Taiwan, these 4 input-output tables are left out.

3. Comparative Analysis on the Structure of Added Value and Total Use

According to the 2002 and 2005 input-output tables of 13 departments of Guangdong Province and the 2001 and 2004 input-output tables of 13 departments of Taiwan led out above, calculate added value structure and ratio of Guangdong Province and Taiwan Area, as table 1 show. The data indicate, the three-industry structure of Guangdong Province by 2002's 7.8: 46.6: 45.6 changes into 2005's 6.5: 51.8: 41.7, industrial structure of " two, three, one " further enhances, the proportion of service industry drops to some extent, this can reflect through what business services, banking and insurance and transport and storage services account for proportions of added value drop; The three-industry structure of Taiwan by 2001's 2.1: 28.9: 69.0 changes into 2004's 2.1: 30.4: 67.5, though the proportion of the tertiary industry drops to some extent, industrial arrangement of " three, two, one " already forms, this is superior to Guangdong Province for industrial structure. So far as added value rate, added value rates such as the mining and quarrying, business services, banking and insurance, transport and storage services and other services of Guangdong Province and Taiwan Area are greater than 0.5, it means no matter for Guangdong Province or Taiwan that the competence for value- added of these industries is relatively strong, the majority has developmental potentiality, especially to Guangdong Province, the added value rates of these industries will all rise to some extent compared with 2002 in 2005, and mostly all service industries, therefore, the service industries of Guangdong Province has greater developmental potentiality, should improve the proportion of service industry in a more cost-effective manner, further optimize the structure of

industry.

Table 1 Added Value Structure and Ratio of Guangdong Province and Taiwan Area

Department	Ordinal	Guangdong Added Value Structure(%)			Taiwan Added Value Structure(%)			Guangdong Added Value Ratio			Taiwan Added Value Ratio		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	6.5	7.8	-1.4	2.1	2.1	0.0	0.584	0.559	0.02	0.474	0.459	0.02
Mining and Quarrying	2	2.1	1.8	0.3	0.6	0.5	0.1	0.651	0.593	0.06	0.558	0.598	-0.04
Petroleum Refining and Chemical Industry	3	6.3	5.9	0.3	5.5	4.7	0.9	0.248	0.246	0.00	0.198	0.239	-0.04
Smelt and Electromechanical Industry	4	12.4	10.1	2.3	7.1	6.8	0.3	0.230	0.225	0.00	0.205	0.260	-0.05
Electronic Information Industry	5	9.1	6.5	2.5	7.3	5.6	1.8	0.188	0.175	0.01	0.239	0.225	0.01
Other Manufacturing	6	14.1	14.0	0.1	5.3	5.7	-0.5	0.279	0.270	0.01	0.258	0.283	-0.02
Production and Supply of Electric Power, Heat and Water	7	3.9	3.8	0.1	1.9	2.3	-0.3	0.286	0.274	0.01	0.395	0.477	-0.08
Construction	8	3.9	4.5	-0.6	2.7	3.3	-0.7	0.253	0.261	-0.01	0.259	0.331	-0.07
Transport and Storage Services	9	4.3	5.4	-1.0	3.7	4.0	-0.3	0.476	0.456	0.02	0.429	0.482	-0.05
Business Services	10	10.7	11.8	-1.1	17.3	16.8	0.5	0.596	0.562	0.03	0.685	0.701	-0.02
Banking and Insurance	11	3.1	3.4	-0.4	8.5	8.7	-0.3	0.549	0.527	0.02	0.584	0.644	-0.06
Real Estate	12	6.6	6.1	0.5	9.9	10.6	-0.7	0.834	0.796	0.04	0.831	0.842	-0.01
Other Services	13	17.1	18.8	-1.7	28.1	28.9	-0.8	0.551	0.531	0.02	0.659	0.685	-0.03
Total		100	100	0.0	100	100	0.0	0.341	0.346	0.00	0.421	0.472	-0.05

Upgrading of industrial structure of Guangdong Province and Taiwan has gone through the gradual progress course in 30 and 50 years respectively, has already made the prominent effect at present. The industry of Guangdong Province, especially the heavy chemical industry, develops with higher speed, the industrial added value rate rises, the advanced and the moderately heavy-duty trend of the industry is obvious; The tertiary industry of Taiwan grows vigorously, service industries such as finance, insurance, etc. are very developed. However, the tertiary industry of Guangdong Province relatively slowly develops; The manufacturing industry of Taiwan though structural share rise to some extent, most added value rates downward trend appear, The phenomenon of "industry cavity " reflects to some extent.

Labor remuneration and fixed assets depreciation structures which labor remuneration and fixed assets depreciation account for primary input of Guangdong Province and Taiwan Area, as table 2 show. In view of total amount, the proportions which labor remuneration and fixed assets depreciation account for primary input of Guangdong Province and Taiwan all drop to some extent. As to Guangdong Province, except agriculture, banking and insurance and real estate, the proportions which other labor remunerations account for primary input drop by a relatively large margin, the proportions which most fixed assets depreciations account for primary input drop to some extent too at the same time, but the decreasing amplitude is not so large as the former, prove the labor input of most industries of Guangdong Province drops relatively, and the capital input

increases relatively, is carried out the transition to the capital-intensive industry progressively by the labor-intensive industry. Can know to analyze the labor remuneration and fixed assets depreciation structures of Taiwan, similar to Guangdong Province, the labor input of most industries drops relatively, the capital input increases relatively, from the labor-intensive industry to the capital-intensive industry transform. The capital-intensive and high technology industries of Guangdong Province and Taiwan grow up rapidly.

Table 2 Labor Remuneration and Fixed Assets Depreciation Structures of Guangdong Province and Taiwan Area (%)

Department	Ordinal	Guangdong Labor Remuneration Structure			Taiwan Labor Remuneration Structure			Guangdong Fixed Assets Depreciation Structure			Taiwan Fixed Assets Depreciation Structure		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	99.2	97.5	1.7	59.5	68.3	-8.8	0.8	1.7	-0.9	10.0	10.6	-0.6
Mining and Quarrying	2	6.1	9.6	-3.5	52.5	63.4	-10.9	4.0	3.5	0.5	12.6	15.4	-2.8
Petroleum Refining and Chemical Industry	3	32.6	36.0	-3.4	34.8	44.8	-10.0	15.4	16.2	-0.8	16.3	18.7	-2.4
Smelt and Electromechanical Industry	4	37.8	46.9	-9.1	56.0	64.6	-8.6	15.8	14.9	1.0	14.5	16.0	-1.5
Electronic Information Industry	5	43.3	48.3	-5.0	40.3	45.8	-5.4	14.9	18.2	-3.4	35.4	46.2	-10.8
Other Manufacturing	6	39.6	48.7	-9.2	59.2	62.3	-3.2	13.8	15.0	-1.2	13.9	16.0	-2.1
Production and Supply of Electric Power, Heat Power and Water	7	17.5	23.7	-6.2	25.8	24.9	0.9	29.7	32.8	-3.1	48.6	38.3	10.3
Construction	8	51.9	58.7	-6.8	83.5	77.5	6.0	6.3	7.0	-0.8	5.0	4.3	0.8
Transport and Storage Services	9	25.8	33.7	-8.0	68.0	70.3	-2.4	27.9	18.4	9.5	17.6	19.1	-1.5
Business Services	10	26.7	33.9	-7.2	69.6	69.6	0.0	7.7	8.3	-0.6	4.7	4.5	0.2
Banking and Insurance	11	42.0	36.1	5.9	48.6	48.3	0.3	4.6	7.2	-2.6	3.4	3.9	-0.5
Real Estate	12	17.0	17.0	0.1	5.3	5.2	0.1	49.0	57.1	-8.1	5.3	5.5	-0.1
Other Services	13	47.8	48.2	-0.3	77.5	76.4	1.1	18.1	16.6	1.4	10.6	9.6	1.0
Total		40.0	45.3	-5.3	57.2	58.8	-1.6	16.3	16.3	-0.1	11.9	12.0	-0.1

The ratios which intermediate use and import account respectively for total use refer respectively to as intermediate use distribution ratio and import ratio, as table 3 show. Guangdong Province inputs includes import and transfer from the other provinces, import exceeds 60%, Taiwan inputs is import. The intermediate use distribution ratios such as electronic information industry of Guangdong Province, other manufacturing and banking and insurance, etc. relatively increase to some extent in 2005 with 2002, prove using the intermediate use more and more of these products, each ratio exceeds 0.7, prove these products are only used in final use less than 30%, at the same time, the intermediate use distribution ratios such as mining and quarrying and petrochemical industry, etc. reduce to some extent, prove it is used in final use more and more of these products. And except the intermediate use distribution ratios of agriculture and construction of Taiwan drop compared with 2001 in 2004, other most intermediate use distribution ratios rise to some extent, prove it is used for

the intermediate use more and more of every products of Taiwan. As to import ratio to look, Guangdong Province is except that petrochemical industry, electronic information industry and other manufacturing drop compared with 2002 in 2005, other industries all rise to some extent, and only the import ratio of business services drops to some extent compared with 2001 in 2004 in Taiwan, prove the proportions which the import products account for total use of Guangdong Province and Taiwan all have rising in various degree in recent years.

Table 3 Intermediate Use Distribution Ratio and Import Ratio of Guangdong Province and Taiwan Area

Department	Ordinal	Guangdong Intermediate Use Distribution Ratio			Taiwan Intermediate Use Distribution Ratio			Guangdong Import Ratio			Taiwan Import Ratio		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	0.46	0.46	0.00	0.59	0.60	-0.01	0.23	0.20	0.03	0.20	0.20	0.01
Mining and Quarrying	2	0.86	0.89	-0.03	1.00	1.00	0.00	0.67	0.58	0.09	0.86	0.82	0.05
Petroleum Refining and Chemical Industry	3	0.91	0.92	-0.01	0.91	0.89	0.01	0.50	0.56	-0.06	0.33	0.30	0.03
Smelt and Electromechanical Industry	4	0.72	0.73	-0.01	0.70	0.67	0.03	1.05	0.90	0.15	0.41	0.38	0.03
Electronic Information Industry	5	0.93	0.87	0.05	0.85	0.77	0.08	0.51	0.71	-0.20	0.69	0.64	0.05
Other Manufacturing	6	0.80	0.75	0.05	0.55	0.55	0.00	0.32	0.36	-0.05	0.35	0.31	0.04
Production and Supply of Electric Power, Heat Power and Water	7	0.85	0.90	-0.04	0.76	0.76	0.01	0.05	0.04	0.01	0.01	0.00	0.00
Construction	8	0.02	0.03	-0.02	0.14	0.15	-0.01	0.00	0.00	0.00	0.01	0.01	0.00
Transport and Storage Services	9	0.75	0.84	-0.09	0.55	0.54	0.02	0.19	0.15	0.04	0.22	0.21	0.00
Business Services	10	0.51	0.64	-0.12	0.33	0.30	0.03	0.24	0.16	0.09	0.05	0.06	-0.01
Banking and Insurance	11	0.75	0.72	0.03	0.70	0.69	0.01	0.02	0.02	0.01	0.03	0.02	0.00
Real Estate	12	0.27	0.40	-0.13	0.18	0.17	0.01	0.00	0.00	0.00	0.01	0.01	0.00
Other Services	13	0.41	0.43	-0.02	0.43	0.39	0.04	0.00	0.00	0.00	0.10	0.09	0.01
Total		0.68	0.67	0.01	0.59	0.54	0.05	0.42	0.38	0.04	0.26	0.22	0.04

4. Comparative Analysis on the Structure of Final Demand

The demand change is the direct factor causing the industrial structure to develop, enlargement or shrinking of the industry is driven by final demand. Analyze that should analyze the change of the final demand structure first in change of the industrial structure. The ratios which local final use (to include local Consumption and Investment) and export of Guangdong Province and Taiwan Area account respectively for total final use and gross output refer respectively to as local final use distribution ratio and export ratio, as table 4 show. Guangdong Province exports and includes the export and supplying other provinces, the export accounts for nearly 70%, Taiwan exports and exports. Guangdong Province is except that agriculture, electronic information industry and industry that drinks trader, etc. will use distribution coefficient to drop compared with 2002 finally here in 2005, other most industry have in various degree rising, indicate Guangdong Province here use in not using finally always occupying important status more and more finally, meanwhile,

output coefficient to look correspondingly, petrochemical industry, electronic information industry, other manufacturing industries, etc. will output coefficient to drop to some extent than 2002 in 2005, prove it is used in here using finally that there are more and more products of these departments, however, electronic information industry and output coefficient of smelting electromechanical industry exceed more than 70%, these products are still used mainly for exporting. And Taiwan is except that agriculture, other manufacturing industries, financial circles, etc. used distribution coefficient to rise finally than 2001 in 2004, and the ascensional range is not big, other most trades drop, prove Taiwan uses and reduces the products of these trades to some extent finally, combine, output coefficient come, watch, petrochemical industry, electronic information industry and transport and storage industry output coefficient have rising by a relatively large margin, the final output product structure coefficient of these industries is more than 20%, prove Taiwan exports and occupies the important status while always producing, however, the output coefficient which has the electronic information industry only exceeds 70%, this point and Guangdong structure are extremely alike.

Table 4 Local Final Use Distribution Ratio and Export Ratio of Guangdong Province and Taiwan Area

Department	Ordinal	Guangdong Local Final Use Distribution Ratio			Taiwan Local Final Use Distribution Ratio			Guangdong Export Ratio			Taiwan Export Ratio		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	0.85	0.87	-0.02	0.81	0.80	0.01	0.11	0.10	0.02	0.10	0.11	0.00
Mining and Quarrying	2	0.45	0.41	0.03	—	—	—	0.35	0.27	0.08	0.00	0.01	-0.01
Petroleum Refining and Chemical Industry	3	0.28	0.20	0.08	0.23	0.30	-0.07	0.33	0.43	-0.10	0.31	0.26	0.05
Smelt and Electromechanical Industry	4	0.22	0.22	0.00	0.49	0.49	0.00	1.05	0.90	0.15	0.35	0.36	-0.01
Electronic Information Industry	5	0.05	0.13	-0.07	0.09	0.17	-0.08	0.73	0.75	-0.02	0.83	0.76	0.07
Other Manufacturing	6	0.44	0.33	0.11	0.62	0.59	0.04	0.28	0.45	-0.17	0.30	0.32	-0.02
Production and Supply of Electric Power, Heat Power and Water	7	0.88	0.78	0.10	1.00	1.00	0.00	0.02	0.03	-0.01	0.00	0.00	0.00
Construction	8	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transport and Storage Services	9	0.50	0.41	0.09	0.44	0.48	-0.04	0.23	0.21	0.02	0.42	0.39	0.03
Business Services	10	0.38	0.45	-0.07	0.75	0.75	-0.01	0.51	0.34	0.17	0.19	0.19	0.00
Banking and Insurance	11	0.96	0.91	0.04	0.96	0.96	0.01	0.01	0.03	-0.01	0.01	0.01	0.00
Real Estate	12	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Services	13	0.99	0.99	0.01	0.94	0.94	0.00	0.00	0.01	0.00	0.04	0.04	0.00
Total		0.41	0.44	-0.03	0.60	0.65	-0.05	0.44	0.40	0.04	0.27	0.24	0.03

The ratios which local consumption and investment of Guangdong Province and Taiwan Area account respectively for local final use refer respectively to as local final use distribution ratio and export ratio, as table 5 show. The data reveal, the agriculture, mining industry, petrochemical industry and smelting electro mechanics' industrial consumption distribution coefficient to rise to

some extent of Guangdong Province, indicate the local consumption portion increased in using more finally than 2002 in 2005, at the same time, but the investment distribution coefficient of these trades drops to some extent, the proportion explained and made an investment in in final use drops, and analyze to other trades that can draw the opposite conclusion. To Taiwan, besides electronic information industry, each trade consumption distribution coefficient dropped to some extent compared with 2001 in 2004, prove each industry consumes to reduce while using finally to some extent here, and the investment distribution coefficient with corresponding every profession and trade mostly have rising in various degree, prove in every profession and trade of Taiwan were used finally, the investment portion rose to some extent than 2001 in 2004. Therefore can know, the more and more one is used for making the investment in Guangdong Province and Taiwan use finally, but Guangdong Province use for share that invest as fast as development of Taiwan far use finally.

Table 5 Consumption Distribution Ratio and Investment Distribution Ratio of Guangdong Province and Taiwan Area

Department	Ordinal	Guangdong Consumption Distribution Ratio			Taiwan Consumption Distribution Ratio			Guangdong Investment Distribution Ratio			Taiwan Investment Distribution Ratio		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	0.97	0.91	0.06	0.98	1.00	-0.02	0.03	0.09	-0.06	0.02	0.00	0.02
Mining and Quarrying	2	0.08	0.03	0.05	—	—	—	0.92	0.97	-0.05	—	—	—
Petroleum Refining and Chemical Industry	3	0.75	0.61	0.15	0.89	0.97	-0.08	0.25	0.39	-0.15	0.11	0.03	0.08
Smelt and Electromechanical Industry	4	0.22	0.18	0.04	0.29	0.34	-0.05	0.78	0.82	-0.04	0.71	0.66	0.05
Electronic Information Industry	5	0.14	0.15	-0.01	0.59	0.44	0.15	0.86	0.85	0.01	0.41	0.56	-0.15
Other Manufacturing	6	0.85	0.87	-0.02	0.80	0.88	-0.09	0.15	0.13	0.02	0.20	0.12	0.09
Production and Supply of Electric Power, Heat Power and Water	7	1.01	1.02	-0.01	1.00	1.00	0.00	-0.01	-0.02	0.01	0.00	0.00	0.00
Construction	8	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Transport and Storage Services	9	0.58	0.81	-0.23	0.97	0.97	-0.01	0.42	0.19	0.23	0.03	0.03	0.01
Business Services	10	0.81	0.91	-0.11	0.89	0.90	-0.01	0.19	0.09	0.11	0.11	0.10	0.01
Banking and Insurance	11	0.95	0.98	-0.03	1.00	1.00	0.00	0.05	0.02	0.03	0.00	0.00	0.00
Real Estate	12	0.44	0.63	-0.19	0.96	0.97	-0.01	0.56	0.37	0.19	0.04	0.03	0.01
Other Services	13	1.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.58	0.60	-0.03	0.77	0.79	-0.03	0.42	0.40	0.03	0.23	0.21	0.03

Consumption and investment structures of Guangdong Province and Taiwan Area are as table 6 show. Seen by the consumption structure of Guangdong Province, its agriculture, smelting electromechanical industry, other manufacturing industries, industry that drinks trader, the real estate and other service trades are relatively large in proportion, account for more than 90%, and the electromechanical industry of smelting of Taiwan, trades such as other manufacturing industries, industry that drinks trader, financial circles, real estate and other service trades, etc. occupy

proportion greatly in the consumption structure, the door service industries mainly also, know consumption structure of Guangdong Province manufacturing industry occupy great proportion very, and the service trade is very large in specific gravity in Taiwan consumption structure, this is in conformity with process of the industrial structure. Can know, the smelting electromechanical industry and construction of Guangdong Province and Taiwan are relatively large in proportion while analyzing investment structure, there is the amount of 70%, it means the manufacturing industry occupies the majority in Guangdong Province and investment structure of Taiwan.

Table 6 Consumption and Investment Structures of Guangdong Province and Taiwan Area (%)

Department	Ordinal	Guangdong Consumption Structure			Taiwan Consumption Structure			Guangdong Investment Structure			Taiwan Investment Structure		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	12.89	14.25	-1.36	2.71	2.68	0.03	0.53	2.08	-1.56	0.15	-0.04	0.18
Mining and Quarrying	2	0.14	0.03	0.11	0.01	0.01	-0.01	2.16	1.57	0.60	-0.11	-0.20	0.09
Petroleum Refining and Chemical Industry	3	4.62	2.76	1.86	3.17	2.82	0.35	2.07	2.74	-0.67	1.31	0.31	1.00
Smelt and Electromechanical Industry	4	6.58	3.72	2.86	4.58	4.03	0.54	32.68	26.53	6.15	36.57	30.26	6.32
Electronic Information Industry	5	0.52	1.10	-0.58	2.02	2.20	-0.18	4.48	9.64	-5.16	4.50	10.70	-6.20
Other Manufacturing	6	17.77	17.97	-0.20	10.80	10.72	0.08	4.18	4.10	0.08	9.08	5.47	3.61
Production and Supply of Electric Power, Heat Power and Water	7	4.01	2.75	1.26	1.57	1.53	0.04	-0.06	-0.07	0.01	0.00	0.00	0.00
Construction	8	0.00	0.08	-0.08	0.00	0.00	0.00	39.91	46.20	-6.29	39.26	44.12	-4.86
Transport and Storage Services	9	2.34	2.56	-0.21	3.71	3.79	-0.08	2.37	0.93	1.44	0.41	0.41	0.00
Business Services	10	8.70	9.87	-1.17	17.45	17.17	0.28	2.89	1.42	1.47	6.89	7.20	-0.32
Banking and Insurance	11	2.60	3.23	-0.63	5.98	5.62	0.36	0.19	0.09	0.09	0.00	0.00	0.00
Real Estate	12	4.92	5.28	-0.36	12.75	13.50	-0.75	8.45	4.73	3.72	1.84	1.81	0.03
Other Services	13	34.90	36.40	-1.50	35.24	35.91	-0.67	0.16	0.04	0.12	0.10	-0.04	0.14
Total		100	100	0.00	100	100	0.00	100	100	0.00	100	100	0.00

Export and import structures of Guangdong Province and Taiwan Area are as table 7 show. For exporting the products, Guangdong Province and the petrochemical industry of Taiwan, output product which smelted industries such as electromechanical industry, electronic information industry, other manufacturing industries and industry that drinks trader, etc. have taken the majority, accounts for more than 90% that Guangdong Province and Taiwan exported the products separately, and have the tendency to continue rising, explaining Guangdong Province and Taiwan has the same output product structure, lead product structure to further optimize in export. In inputting product structure, Guangdong Province and Taiwan have roughly the same structure too, petrochemical industry, smelt electromechanical industry, electronic information industry and other manufacturing industry input product of industry input the majority of product into; And smelt the improvement that the electromechanical industrial products have in the input product of Guangdong Province by

a relatively large margin, and the input products of the mining industry of Taiwan and other service trades occupy certain proportion in always importing the products. Therefore can know, the outputs of Guangdong Province and Taiwan and input product structure are roughly the same, mainly reflect in the petrochemical industry, smelt on these industries of electromechanical industry, electronic information industry and other manufacturing industries.

Table 7 Export and Import Structures of Guangdong Province and Taiwan Area (%)

Department	Ordinal	Guangdong Export Structure			Taiwan Export Structure			Guangdong Import Structure			Taiwan Import Structure		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	0.97	1.16	-0.19	0.74	0.99	-0.25	2.46	2.99	-0.53	1.68	2.20	-0.52
Mining and Quarrying	2	0.86	0.72	0.14	0.01	0.02	-0.01	3.55	2.84	0.71	10.82	8.33	2.48
Petroleum Refining and Chemical Industry	3	6.46	8.96	-2.50	13.68	10.18	3.50	14.27	16.50	-2.23	15.65	13.85	1.80
Smelt and Electromechanical Industry	4	44.22	35.36	8.86	19.55	18.77	0.78	49.39	36.18	13.21	26.58	22.86	3.72
Electronic Information Industry	5	27.38	24.50	2.88	40.08	37.38	2.69	11.45	21.31	-9.86	19.93	23.41	-3.48
Other Manufacturing	6	10.97	20.19	-9.23	9.64	12.84	-3.20	14.39	15.48	-1.09	13.02	14.11	-1.08
Production and Supply of Electric Power, Heat Power and Water	7	0.22	0.36	-0.14	0.00	0.01	-0.01	0.54	0.58	-0.03	0.04	0.03	0.01
Construction	8	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.14	0.19	-0.05
Transport and Storage Services	9	1.63	2.19	-0.56	5.73	6.45	-0.71	1.35	1.51	-0.16	2.28	2.97	-0.69
Business Services	10	7.16	6.22	0.93	7.65	9.27	-1.63	2.37	2.40	-0.03	1.74	2.55	-0.81
Banking and Insurance	11	0.05	0.15	-0.10	0.27	0.39	-0.12	0.11	0.10	0.01	0.62	0.62	0.00
Real Estate	12	0.00	0.00	0.00	0.00	0.04	-0.04	0.00	0.00	0.00	0.14	0.20	-0.06
Other Services	13	0.07	0.18	-0.11	2.59	3.59	-1.00	0.12	0.12	0.00	7.36	8.67	-1.32
Total		100	100	0.00	100	100	0.00	100	100	0.00	100	100	0.00

5. Comparative Analysis of Industrial Connection

According to economic development process of the world, between each industry with there are extensive, complicated and close technological economic links inside the industry in economic activity. Need other industries to offer for oneself producing as every industry, as the supply of its factor of production; Meanwhile, the output of every industry must be consumed by other industries too, the production process could continue again. So, this kind of technological economic links formed in the course of producing again by every industry, it is a kind of inherent law of economic development. Each industry mainly behaves to economic influence and contribution in two aspects: One is the direct influence that each industry produces to economy; Second, each industry to economic indirect influence, i.e. each industry exist a strong one getting related.

Calculate according to Guangdong Province and input-output table of Taiwan, if every industry increases the gross output value of 10 billion Yuan, in keep other industry use under the terms that does not change finally, Entire industries of Guangdong Province and Taiwan Area require

increased gross output, as table 8 show. The data reveal, the electronic information industry of Guangdong Province, electricity fire water industry, construction, transport and storage industry and other every industries of service trade and increase the gross output value of 10 billion yuan, all industries need to increase the gross output value and rise to some extent compared with 2002 in 2005 together, prove the direct influence on the economic growth of development of these industries rose to some extent, the role in economic growth is increasingly important, on the contrary, other eight industries increase the gross output value of 10 billion yuan respectively, all industries of Guangdong Province need to increase the gross output value and drop to some extent compared with 2002 in 2005 together, prove the direct influence on the economic growth of development of these industries is reduced to some extent, the role in economic growth subsides relatively. Likewise, Taiwan smelts electromechanical industry and increases the gross output value of 10 billion yuan, all industries need to increase the gross output value to drop to some extent compared with 2001 in 2004 together, prove the direct influence on the economic growth of development of this industry is reduced to some extent, the role in economic growth is weakened relatively, on the contrary, the direct influence on the economic growth of development of other industries is strengthened to some extent, the role in economic growth is increasingly important. Combine Guangdong Province with Taiwan come, watch, electronic information industry whether two area have strong to industry that influence while being only nearly, i.e. have function of other industries of drive that is strengthened.

Table 8 Entire Industries of Guangdong Province and Taiwan Area Require Increased Gross Output(100 million Yuan)

The following departments increase by 10 billion Yuan	Ordinal	Guangdong Increased Gross Output			Taiwan Increased Gross Output		
		2005	2002	change	2004	2001	change
Agriculture	1	173.7	176.0	-2.2	194.2	183.0	11.3
Mining and Quarrying	2	185.2	204.2	-19.1	170.1	158.2	11.8
Petroleum Refining and Chemical Industry	3	161.7	164.3	-2.6	152.9	152.0	0.9
Smelt and Electromechanical Industry	4	186.7	206.0	-19.3	156.5	157.8	-1.3
Electronic Information Industry	5	206.9	162.4	44.5	188.5	170.4	18.0
Other Manufacturing	6	163.8	187.8	-24.1	209.7	194.0	15.6
Production and Supply of Electric Power, Heat Power and Water	7	223.3	222.2	1.2	222.2	191.4	30.7
Construction	8	335.6	330.9	4.7	311.3	264.1	47.2
Transport and Storage Services	9	214.9	208.3	6.6	214.0	189.7	24.2
Business Services	10	194.3	194.5	-0.3	160.6	152.3	8.3
Banking and Insurance	11	204.6	206.8	-2.3	127.9	124.2	3.8
Real Estate	12	130.5	137.3	-6.9	138.9	132.5	6.4

Other Services	13	185.8	183.5	2.3	147.0	138.3	8.7
Average		197.5	198.8	-1.3	184.1	169.9	14.3

Reaction degree and influence power coefficients of Guangdong Province and Taiwan Area are as table 9 show.

Table 9 Reaction Degree and Influence Power Coefficients of Guangdong Province and Taiwan Area

Department	Ordinal	Guangdong Reaction Degree Coefficient			Taiwan Reaction Degree Coefficient			Guangdong Influence Power Coefficient			Taiwan Influence Power Coefficient		
		2005	2002	change	2004	2001	change	2005	2002	change	2004	2001	change
Agriculture	1	0.649	0.628	0.021	0.616	0.688	-0.072	0.794	0.795	-0.001	0.963	1.019	-0.056
Mining and Quarrying	2	0.756	0.688	0.068	1.231	1.060	0.172	0.754	0.801	-0.048	0.877	0.863	0.014
Petroleum Refining and Chemical Industry	3	2.240	2.087	0.153	2.279	2.059	0.220	1.221	1.189	0.032	1.341	1.302	0.039
Smelt and Electromechanical Industry	4	1.675	1.508	0.167	1.823	1.545	0.277	1.339	1.336	0.003	1.388	1.305	0.083
Electronic Information Industry	5	0.861	1.374	-0.513	0.833	0.951	-0.117	1.457	1.535	-0.078	1.317	1.423	-0.106
Other Manufacturing	6	2.053	1.464	0.589	1.031	1.088	-0.057	1.194	1.153	0.040	1.211	1.230	-0.019
Production and Supply of Electric Power, Heat Power and Water	7	1.000	1.018	-0.018	0.667	0.738	-0.071	1.141	1.142	-0.001	1.010	0.983	0.027
Construction	8	0.390	0.399	-0.009	0.473	0.526	-0.053	1.266	1.216	0.050	1.258	1.183	0.075
Transport and Storage Services	9	0.709	0.835	-0.126	0.603	0.666	-0.064	0.932	0.922	0.009	0.990	0.963	0.027
Business Services	10	0.633	0.803	-0.170	0.779	0.814	-0.036	0.762	0.762	-0.001	0.661	0.693	-0.032
Banking and Insurance	11	0.598	0.615	-0.017	0.951	1.015	-0.064	0.788	0.778	0.010	0.706	0.710	-0.004
Real Estate	12	0.483	0.520	-0.037	0.489	0.545	-0.056	0.516	0.537	-0.021	0.562	0.594	-0.032
Other Services	13	0.953	1.062	-0.109	1.226	1.305	-0.079	0.838	0.834	0.004	0.715	0.731	-0.016
Average		1	1	0	1	1	0	1	1	0	1	1	0

One degree of data reveal, one degree of coefficient of reaction was greater than 1 in the petrochemical industry, smelting electromechanical industry, other manufacturing industries, electricity to fire the water industry of Guangdong in 2002 and 2005 in reaction, prove these trades develop the impetus to economic development bigger, and pressures of receiving the social demand such as agriculture, mining industry, construction, real estate, etc. are relatively weak, these trade independence is relatively strong, the impetus to economic development is relatively little. Likewise, the mining industry of Taiwan, petrochemical industry, smelted one degree of coefficient of electromechanical industry, other manufacturing industries, reaction of other service trades and was greater than 1 in 2001 and 2004, the impetus to economic development is relatively great, and the agriculture, electricity fire independence such as the water industry, construction, transport and storage industry and real estate relatively strong, the impetus to economic development is relatively little.

The influence data reveal, electronic information industry of Guangdong in 2002 and 2005, smelt electromechanical industry, petrochemical industry, construction, electricity and fire the water

industry and other influence coefficient of manufacturing industry and is greater than 1, it means from the related in industry viewpoint, the development of these departments exerts a great influence on other departments, have obvious pulling effects, it is several departments exerting a largest influence on economy of Guangdong Province, the majority is a pillar industry of Guangdong Province. Can know, the same these pieces of trade influence coefficient are greater than 1 according to the data of Taiwan, great to the complete kindling which every industry produces, there is important induced effect in economic development. However, the influence coefficient of the agriculture of Taiwan reduced from 1.019 to 0.963 in 2001 and 2004, explain the quickening with the industrialized process, the agricultural role in economic growth of Taiwan is being weakened. What merits attention is, the real estate no matter reaction one degree of coefficient or influence coefficient are about 0.5, no matter Guangdong Province or Taiwan is like this, i.e. the real estate does not have no impetus have induced effect. The so-called people generally think the function with strong pulling national economy of real estate, in fact it is instead of the construction of accompanying.

In the industrialized course, when the economic growth rate is higher, one degree of departments with higher coefficient of reaction is generally shown as that it is very fast to develop, the development of the department of and the influence with higher coefficient has induced effect on department's development of other industries. Influence coefficient and induction force coefficient in some industries are all greater than 1, indicate these industries are usually in the strategic position in economic development; it is to the most sensitive industry of the economic growth rate. Data indicate Guangdong Province with Taiwan petrochemical industry, smelt electromechanical industry, other manufacturing industry reaction degrees of coefficient and influence coefficient greater than 1, explaining these industries has important strategic position in economic development, the most sensitive too to the economic growth at the same time. When the economic growth is very fast, these industries develop will be very fast too, have obvious pushing and pulling functions to other industries; And as the growth and delay of economy, it will be more serious that the development of these industries slows down.

6. Conclusion

With analyzing, we can draw the following conclusions according to the above-mentioned comparison:

1. On the basis of existing industrial structure of Guangdong Province, combine the industrial structure change characteristic of Taiwan, synthesize the factor that may exert an influence on the industrial structure adjustment of Guangdong Province in the future, can obtain the trend of the

industrial structure change of Guangdong Province. Within the following several years, the steady change will take place in the industrial structure of Guangdong Province, enter the stage on later stage of industrialization progressively, the tertiary industry exceeds the secondary industry, finish three time industry from " two, three, one " The structure turns towards " three, two, one " Development of the structure.

2. The upgrading of industrial structure of Taiwan has already made it rise to the high-level industrial structure stage relying mainly on Hi-Tech industry from labor-intensive industrial structure of the low level, the fact proves the gradual progress course of upgrading of industrial structure of Taiwan, make Taiwan melt international economy's great trends of people rapidly, have participated in the international division actively, Taiwan possess strong industry international competitiveness, his Hi-Tech industry already take certain share of international market under new industrial structure, become the indispensable a member in the international division system. After Guangdong Province has the advantage of being higher and comparative and fades in labor-intensive manufactured goods, should be like Taiwan that year, in accordance with following industry gradient present and comparative advantage complementarity, relying on has certain comparative advantages on the capital, technology-intensive industry to the Midwest, improve the competition advantages of the capital, technology-intensive industry constantly, participate in the international competition actively.

3. Guangdong Province and Taiwan are both typical export-oriented economic systems, foreign trade and foreign capitals occupy quite important position in economy. Since reform and opening-up, the constant improvement of improvement and industry's competitiveness day by day of the investment environment of Guangdong, make its foreign export and ability to absorb foreign capitals heighten year by year. Taiwan is for a long time in order to success of exporting and driving the development model of the economic growth very, after Taiwan is going on and exporting and leading the economic development path 1960 times, foreign trade is developed rapidly, keep than high growth for a long time.

4. National economy is an organic whole, there is extremely complicated related relation among every industry. If traditional industry upgrading slowly, production develop slowly, electronic information, etc. technology-intensive industry develop at a high speed, output value and exporting value increase rapidly, become the new leading factor of the manufacturing industry. This kind of industry development leads to the fact industry presents the trend concentrated to minority industries such as the electronic information industry, etc., and these industries risk is relatively high, receive international market cycle of great impact, is unfavorable to the whole economic stability to develop in a healthy way. Meanwhile, inside the technology-intensive industry, present excessive homogeneity to tend to too, the industry only concentrates on several midstream and

downstream industry. Main reason because research and development ability insufficient, in support new industry of scientific and technological industry on the way to processed and exporting while highly melting naturally government. In fact, the upper reaches industry without rich research and development makes and supports, the real scientific and technological industry is very difficult to be complete. Have not had the complete system of midstream and downstream, just the processing production of the midstream and downstream, therefore has caused and lacked independence on technology and independence in these industries of rising in this world such as the electron, information, once meet the foreign leading manufacturer and change the tactics or put out the new products, these industries may receive the enormous impact. In a word, the related industry does not form a complete set, or the whole industry develops unevenly, will cause serious influence on the sustained economic development.

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