

Development Environment and Status Research of Electronic Information Manufacturing Industry in Shanxi Province during 1978-2013

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Abstract—From 1978 to 2013, electronic-information-manufacturing industry in Shanxi Province was gradually developed into a pillar industry. The main business income, profit and total taxes reached respectively 52.16 billion yuan, 0.83 billion yuan, 0.72 billion yuan until 2013, the growth are respectively 2945 times, 547 times and 442 times. The number of employees in 2012 is 115155, growth 5 times. The growth rate is much bigger than other provinces, which shows that with the development of science and technology, labor productivity of electronic-information-manufacturing industry in Shanxi Province has been greatly improved. Besides, it is also very obvious that the development of electronic-information-manufacturing industry promotes local employment greatly. To further promote the electronic-information-manufacturing industry of Shanxi Province, it should be started from the following three aspects: First, we should innovative technology and pay attention to low carbon and environmental protection of electronic-information-manufacturing industry in Shanxi province; Second, government should continue to maintain the speed of the development of electronic-information-manufacturing industry in Shanxi Province and learn advanced development experience from other provinces. Third, build Shanxi province's leading brands and enhance the core competitiveness of enterprises.

Index Terms—Electronic information manufacturing industry, Shanxi Province, Electronic information industry

I. INTRODUCTION

Electronic information industry is one of the common concepts of the information industry in China. At the beginning of the last century, the electronic information industry did not take much weight in the traditional industries, [1-4]but with the development of science and technology, especially the development of information science and technology, the advanced manufacturing industry of electronic information industry developed rapidly. [5]

From fifty's to the seventy's in last century, the electronic information industry mainly belongs to the manufacturing industry. But from the beginning of the eighty's, the software industry has been developed from the electronic information industry, and has become an important part of the electronic

information industry after entering the 21st century. [6]And now it has been separated into two parts - the electronic information manufacturing industry and software industry (which is including information technology services). Therefore, the so-called "electronic information industry" is a concept which is developing all time, it contains different extension in different period. [7]At present, the electronic information industry not only includes the traditional industries of manufacturing, producing and selling electronic equipment and various electronic components, devices, instruments and meters, but also modern industry such as research, production and sales of radio and television equipment, communication navigation equipment, radar equipment, electronic computers, electronic components, electronic instruments and other electronic equipment and corresponding supporting software and industrial services. [8]In this paper, we use this definition, and the electronic information manufacturing industry is the industry which is not including the electronic information industry software industry (including information technology services and electronic commerce).[9]

In this paper, DTDA is used to do the research. It mainly includes: Step 1, Data-collecting M; Step 2, Table-drawing; Step 3, figure -drawing; Step 4, Analysis-making. The DTDA is the Data-Table- figure-Analysis. Also, many formulas about variance, standard deviation and percentage difference are used in this paper:

$$S_1 = \frac{\sum (x_i - \bar{x})^2}{N} \quad \text{or} \quad S_1 = \frac{\sum (x_i - \bar{x})^2}{N - 1}$$

$$S_2 = \sqrt{\frac{\sum (x_i - \bar{x})^2}{N}} \quad \text{or} \quad S_2 = \sqrt{\frac{\sum (x_i - \bar{x})^2}{N - 1}}$$

$$S_3 = 100 \times \frac{|(b - a)|}{(a + b) / 2}$$

Shanxi Province is located in the middle of the Yellow River Valley, east of Taihang Mountain as a natural barrier, and is adjacent to the Hebei Province; West and south to the Yellow River for moat, and Shaanxi Province, Henan Province across; north across the continuous Great wall, adjacent to the Inner Mongolia Autonomous Region. [10-12]The object of this paper is Shanxi Province industry electronic information manufacturing, electronic information manufacturing industry is abbreviated as EIMI by us. In this paper, electronic-information-manufacturing industry is abbreviated as EIMI.

II. ADDED VALUE TREND OF EIMI IN SHANXI PROVINCE

Table I.

Added value of EIMI statistics in Shanxi Province from 1978 to 2013

Year	Added value(Million yuan)	Growth rate(%)	Growth value(Million yuan)	Total Added value(Million yuan)
1978	32.15	-	-	-
1979	31.96	-0.58	-0.19	64.11
1980	41.11	28.61	9.15	105.22
1981	27.74	-32.52	-13.37	132.96
1982	31.14	12.24	3.40	164.09
1983	50.32	61.61	19.18	214.41
1984	74.87	48.82	24.55	289.29
1985	88.51	18.22	13.64	377.80
1986	94.10	6.31	5.59	471.89
1987	71.43	-24.09	-22.67	543.32
1988	107.52	50.53	36.09	650.85
1989	114.50	6.48	6.97	765.34
1990	109.71	-4.18	-4.79	875.05
1991	114.51	4.38	4.80	989.56
1992	119.32	4.2	4.81	1108.88
1993	252.73	111.81	133.41	1361.61
1994	173.68	-31.28	-79.04	1535.29
1995	237.74	36.88	64.05	1773.03
1996	218.04	-8.29	-19.70	1991.06
1997	299.33	37.29	81.30	2290.40
1998	292.86	-2.16	-6.48	2583.26
1999	225.50	-23	-67.35	2808.76
2000	336.05	49.02	110.55	3144.81
2001	371.48	10.54	35.42	3516.29
2002	224.50	-39.57	-146.98	3740.79
2003	217.88	-2.95	-6.62	3958.67
2004	211.25	-3.04	-6.63	4169.92
2005	363.95	72.28	152.70	4533.87
2006	461.79	26.88	97.84	4995.66
2007	970.59	110.18	508.80	5966.25
2008	2021.24	108.25	1050.65	7987.49
2009	2178.82	7.8	157.58	10166.31
Total	10166.31	640.66	2146.67	-

Average	317.70	20.67	69.25	-
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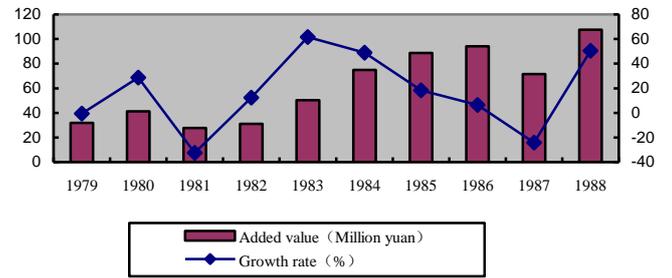


Figure 1. Added value trend of EIMI in Shanxi Province from 1979 to 1988.

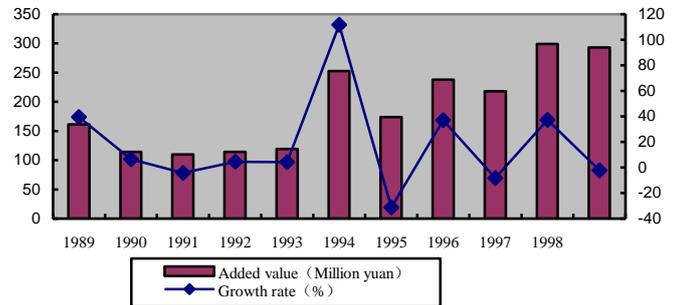


Figure 2. Added value trend of EIMI in Shanxi Province from 1989 to 1998.

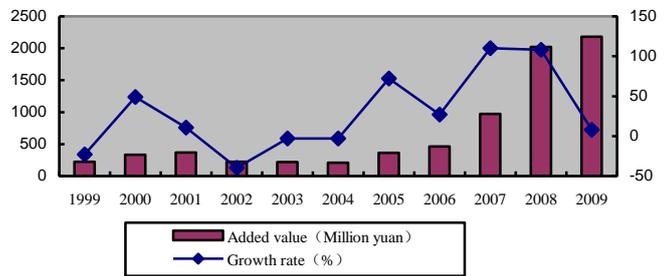


Figure 3. Added value trend of EIMI in Shanxi Province from 1999 to 2009.

It can be seen clearly from the charts above that the total added value of EIMI in Shanxi Province from 1978 to 2013 reached 10166.31 million yuan, it increases from 32.15 million yuan (1978) to 2178.82 million yuan (2009), growth 65 times. However, there is a rise and fall in different years, the development style shows like wave. 1988, 1993, 1997 and 2009 are some of the highest points. From 1978 to 1999, the added value had a wavelike growth. After entering this century, the growth is slow from 2001 to 2004. However, it became substantial after 2005.

III. MAIN BUSINESS INCOME TREND OF EIMI IN SHANXI PROVINCE

Table II.

Main business income of EIMI statistics in Shanxi Province from 1978 to 2013

Year	Main business income (Million yuan)	Growth rate(%)	Growth value(Million yuan)	Total main Business income(Million yuan)
1978	17.71	-	-	-
1979	91.48	416.51	73.77	109.19

1980	92.56	1.18	1.08	201.75
1981	100.60	8.69	8.04	302.35
1982	102.55	1.95	1.96	404.90
1983	153.49	49.67	50.94	558.39
1984	186.86	21.74	33.37	745.25
1985	247.90	32.66	61.03	993.15
1986	226.38	-8.68	-21.52	1219.52
1987	291.59	28.81	65.22	1511.12
1988	366.37	25.64	74.78	1877.49
1989	265.82	-27.45	-100.55	2143.31
1990	288.98	8.71	23.15	2432.29
1991	353.30	22.26	64.32	2785.58
1992	471.95	33.58	118.65	3257.54
1993	584.06	23.75	112.11	3841.60
1994	465.04	-20.38	-119.02	4306.63
1995	960.04	106.44	495.00	5266.67
1996	986.66	2.77	26.62	6253.34
1997	1082.29	9.69	95.63	7335.63
1998	1063.34	-1.75	-18.95	8398.97
1999	737.45	-30.65	-325.89	9136.41
2000	1290.51	75	553.07	10426.92
2001	1017.51	-21.15	-273.00	11444.44
2002	1176.27	15.6	158.75	12620.70
2003	1167.40	-0.75	-8.87	13788.10
2004	1095.11	-6.19	-72.29	14883.21
2005	1819.95	66.19	724.84	16703.16
2006	2393.95	31.54	574.00	19097.11
2007	6688.87	179.41	4294.92	25785.98
2008	10172.46	52.08	3483.59	35958.44
2009	9735.43	-4.3	-437.03	45693.87
2010	12731.31	30.77	2995.88	58425.18
2011	19365.76	52.11	6634.45	77790.94
2012	45940.12	137.22	26574.36	123731.06
2013	52161.81	13.54	6221.69	175892.87
Total	175892.87	1326.22	-	-
Average	4885.91	37.89	-	-

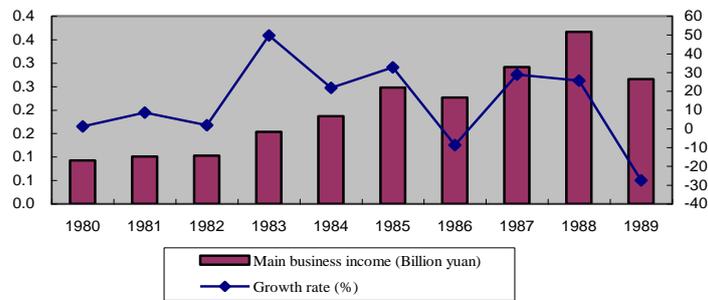


Figure 4. Main business income trend of EIMI in Shanxi Province from 1980 to 1989.

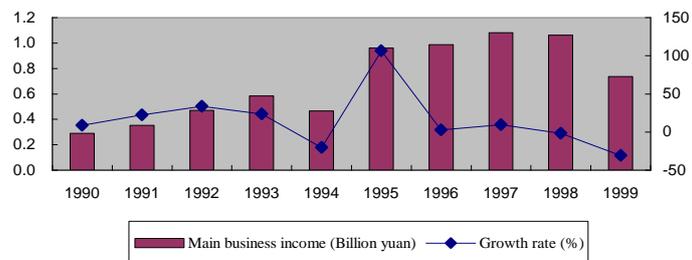


Figure 5. Main business income trend of EIMI in Shanxi Province from 1990 to 1999.

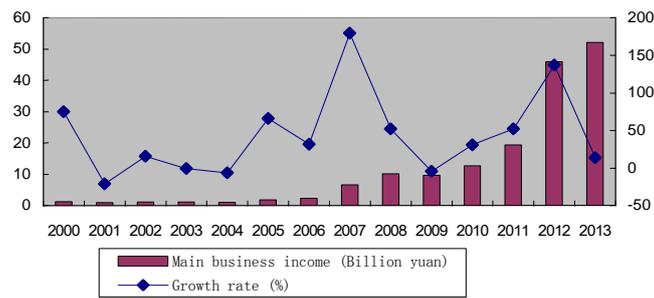


Figure 6. Main business income trend of EIMI in Shanxi Province from 2000 to 2013.

It can be seen clearly from the charts above that the total main business income of EIMI in Shanxi Province from 1978 to 2013 reached 175.89 billion yuan, it increases from 17.71 million yuan (1978) to 52.16 billion yuan (2013), growth 2945 times. However, there is a rise and fall in different years, the development style shows like wave. 1983, 1995, 2007 and 2012 are four of the highest points. 1978 to 1999, the total income

showed sustained growth. At the beginning of this century, there has been a slow increase, and the growth rate keeps stable for several years. Since 2010, it became substantial.

IV. MAIN BUSINESS INCOME TREND OF EIMI IN SHANXI PROVINCE

Table III.
Profit of EIMI statistics in Shanxi Province from 1978 to 2013

Year	Profit (Million yuan)	Growth rate(%)	Growth value(Million yuan)	Total profit(Million yuan)
1978	1.54	-	-	-
1979	1.43	-0.07	-0.11	2.97
1980	6.06	3.23	4.63	9.03
1981	-5.02	-1.83	-11.08	4.01
1982	-3.46	-0.31	1.56	0.55
1983	10.47	-4.03	13.93	11.03
1984	20.82	0.99	10.35	31.85
1985	18.84	-0.1	-1.98	50.69
1986	-1.81	-1.1	-20.65	48.88
1987	-25.48	13.08	-23.67	23.40
1988	3.35	-1.13	28.83	26.75
1989	-1.63	-1.49	-4.98	25.12
1990	-11.18	5.86	-9.55	13.94
1991	3.87	-1.35	15.05	17.81
1992	2.07	-0.47	-1.80	19.88
1993	-19.37	-10.37	-21.44	0.51
1994	-8.84	-0.54	10.53	-8.33
1995	-36.95	3.18	-28.11	-45.28
1996	-42.30	0.14	-5.35	-87.58
1997	-21.71	-0.49	20.59	-109.29
1998	-32.49	0.5	-10.78	-141.78
1999	-61.25	0.89	-28.76	-203.03
2000	-10.14	-0.83	51.11	-213.17
2001	0.53	-1.05	10.67	-212.64
2002	2.60	3.9	2.07	-210.04
2003	31.38	11.07	28.78	-178.66
2004	-29.67	-1.95	-61.05	-208.33
2005	1.21	-1.04	30.88	-207.12
2006	73.37	59.64	72.16	-133.75
2007	385.77	4.26	312.40	252.02
2008	127.76	-0.67	-258.01	379.78
2009	45.77	-0.64	-81.99	425.55
2010	-89.84	-2.96	-135.61	335.71
2011	911.93	-11.15	1001.77	1247.64
2012	2423.53	1.66	1511.60	3671.17
2013	831.89	-0.66	-1591.64	4503.06
Total	4503.06	64.17	-	-
Average	125.08	1.83	-	-

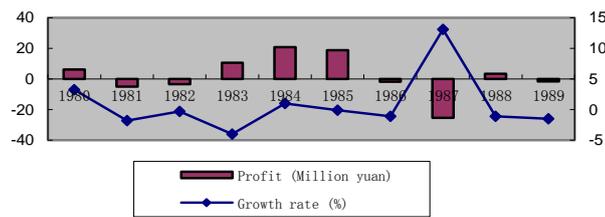


Figure 7. Profit trend of EIMI in Shanxi Province from 1980 to 1989.

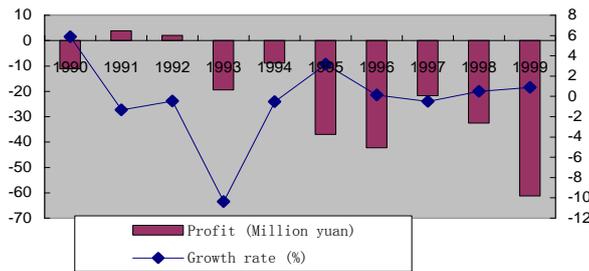


Figure 8. Profit trend of EIMI in Shanxi Province from 1990 to 1999.

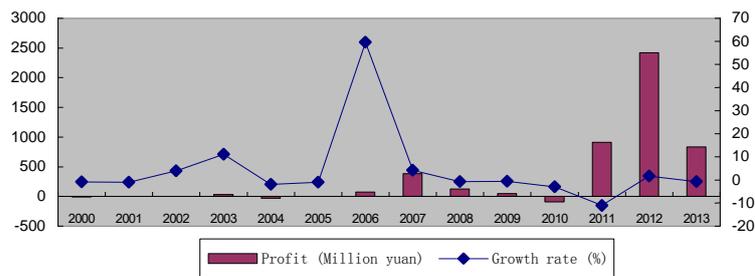


Figure 9. Profit trend of EIMI in Shanxi Province from 2000 to 2013.

It can be seen clearly from the charts above that the total profit of EIMI in Shanxi Province from 1978 to 2013 reached 4503.06 million yuan. It increases from 1.54 million yuan (1978) to 831.89 million yuan (2013), growth 547 times. However, there is a rise and fall in different years, in many years there has been a negative profit, it's very volatile. It is the 21st century when EIMI in Shanxi Province had a rapid growth, precisely after 2006, which reflects the characteristics of catching up from behind of Shanxi province. 1984, 1991, 2007, 2011, 2012 and 2013 are some of the highest points.

V. EXPENSES OF TAXATION TREND OF EIMI IN SHANXI PROVINCE

Table IV. Expenses of taxation of EIMI statistics in Shanxi province from 1978 to 2013

Year	Expenses of taxation (Million yuan)	Growth rate(%)	Growth value(Million yuan)	Total expenses of taxation(Million yuan)
1978	1.62	-	-	-
1979	1.91	17.87	0.29	3.54
1980	1.92	0.54	0.01	5.46

1981	1.64	-14.48	-0.28	7.10
1982	2.96	79.94	1.31	10.06
1983	3.98	34.33	1.02	14.04
1984	5.96	50.02	1.99	20.00
1985	8.41	41.04	2.45	28.42
1986	9.17	8.98	0.76	37.59
1987	12.45	35.79	3.28	50.03
1988	17.48	40.44	5.03	67.52
1989	13.13	-24.92	-4.36	80.64
1990	13.15	0.2	0.03	93.80
1991	16.46	25.13	3.31	110.25
1992	12.64	-23.22	-3.82	122.89
1993	16.80	33	4.17	139.69
1994	16.61	-1.15	-0.19	156.30
1995	31.04	86.86	14.43	187.34
1996	30.64	-1.3	-0.40	217.97
1997	31.18	1.77	0.54	249.15

1998	37.56	20.48	6.39	286.71	2007	175.46	372.43	138.32	684.45
1999	23.38	-37.77	-14.19	310.09	2008	114.50	-34.74	-60.96	798.95
2000	27.96	19.61	4.58	338.05	2009	95.73	-16.39	-18.77	894.68
2001	27.75	-0.74	-0.21	365.81	2010	182.85	91.01	87.12	1077.53
2002	30.98	11.62	3.22	396.78	2011	374.41	104.76	191.56	1451.94
2003	25.54	-17.55	-5.44	422.32	2012	690.79	84.5	316.38	2142.73
2004	25.53	-0.04	-0.01	447.85	2013	717.03	3.8	26.24	2859.76
2005	24.00	-5.99	-1.53	471.85	Tota l	2859. 76	104 0.55	-	-
2006	37.14	54.75	13.14	508.99	Aver age	79.44	29.7 3	-	-

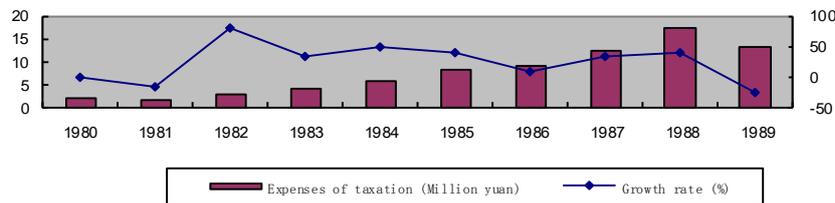


Figure 10. Expenses of taxation trend of EIMI in Shanxi province from 1980 to 1989.

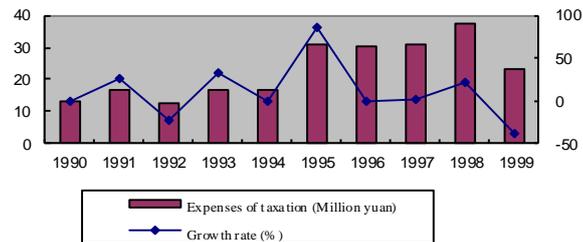


Figure 11. Expenses of taxation trend of EIMI in Shanxi province from 1990 to 1999.

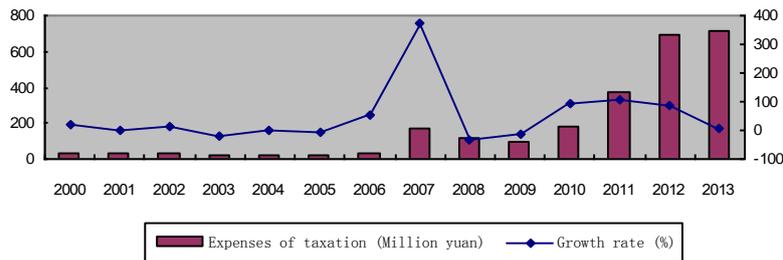


Figure 12. Expenses of taxation trend of EIMI in Shanxi province from 2000 to 2013.

It can be seen clearly from the charts above that the total expenses of taxation of EIMI in Shanxi province from 1978 to 2013 reached 2859.76 million yuan. It increases from 1.62 million yuan (1978) to 717.03 million yuan (2013), growth 442 times. Through the analysis of the main business income of the same period, the income of the tax revenue is positively related to the main business income. The expenses of taxation of EIMI in Shanxi province is still maintained a steady development in spite of the loss of some years. But there is no lack of volatility, 1982, 1997 and 2002 are three of the highest points.

VI. EMPLOYMENT TREND OF EIMI IN SHANXI PROVINCE

Table V.

Employment of EIMI statistics in Shanxi province from 1977 to 2012

Year	Employed population(person)	Growth rate (%)	Growth value (person)	Total employed population (person)
1977	24797	-	-	-

1978	26365	6.32	1568	51162				
1979	26753	1.47	388	77915				
1980	27052	1.12	299	104967				
1981	27824	2.85	772	132791				
1982	28152	1.18	328	160943				
1983	27299	-3.03	-853	188242				
1984	27567	0.98	268	215809				
1985	27627	0.22	60	243436				
1986	27165	-1.67	-462	270601				
1987	28855	6.22	1690	299456				
1988	28598	-0.89	-257	328054				
1989	34599	20.98	6001	362653				
1990	34763	0.47	164	397416				
1991	36162	4.02	1399	433578				
1992	35904	-0.71	-258	469482				
1993	40941	14.03	5037	510423				
1994	42134	2.91	1193	552557				
1995	44738	6.18	2604	597295				
1996	46383	3.68	1645	643678				
1997	44722	-3.58	-1661	688400				
1998	38663	-13.55	-6059	727063				
1999	31689	-18.04	-6974	758752				
2000	27161	-14.29	-4528	785913				
2001	27778	2.27	617	813691				
2002	13810	-50.28	-13968	827501				
2003	14026	1.56	216	841527				
2004	14586	3.99	560	856113				
2005	14874	1.97	288	870987				
2006	16381	10.13	1507	887368				
2007	60092	266.84	43711	947460				
2008	66818	11.19	6726	1014278				
2009	64458	-3.53	-2360	1078736				
2010	84726	31.44	20268	1163462				
2011	96496	13.89	11770	1259958				
2012	115155	19.34	18659	1375113				
Total	1375113	325.71	-	-				
Average	38198	18.09	-	-				

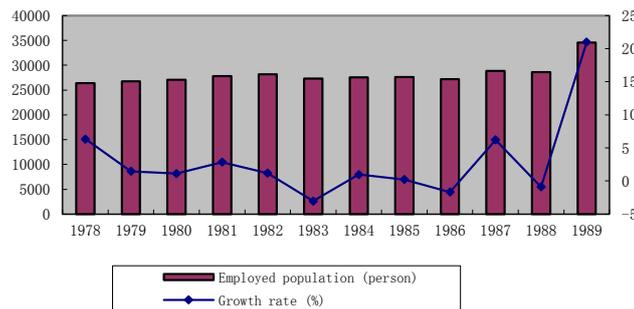


Figure 13. Employed population trend of EIMI in Shanxi province from 1978 to 1989.

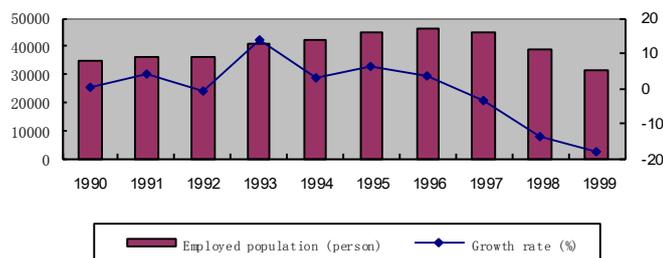


Figure 14. Employed population trend of EIMI in Shanxi province from 1990 to 1999.

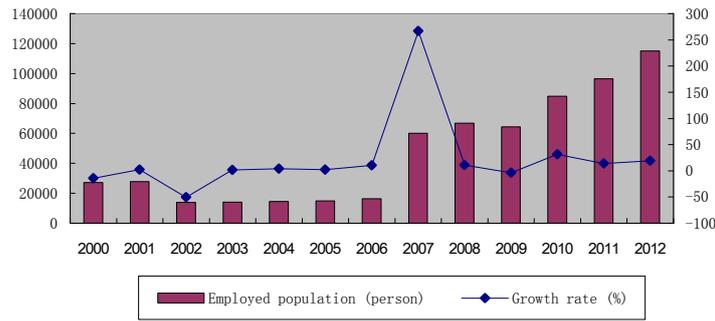


Figure 15. Employed population trend of EIMI in Shanxi province from 2000 to 2012.

It can be seen clearly from the charts above that the employed population of EIMI in Shanxi province from 1978 to 2012 shows a steady rise in the trend. It increases from 24797 employees (1977) to 115155 employees (2012). It has a steady trend when comparing with profit and income. However, the increase is more obvious compared to Beijing and other places. Its steady trend shows that with the development of science and technology, the labor productivity of EIMI in Shanxi province is

greatly improved.

VII. GROWTH RATE COMPARISON OF EIMI IN SHANXI PROVINCE

A. The comparison between the growth rate of added value and income of EIMI in Shanxi province

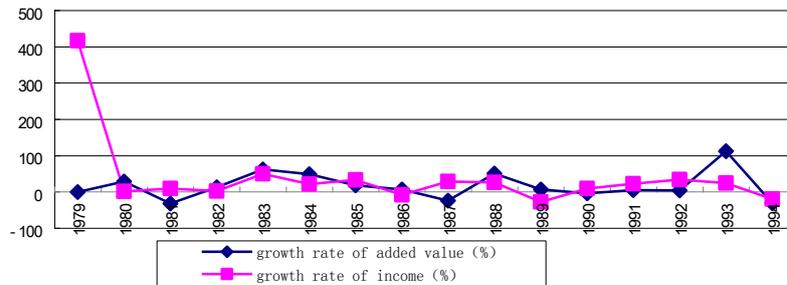


Figure 16. The comparison between the growth rate of added value and income of EIMI in Shanxi province from 1979 to 1994.

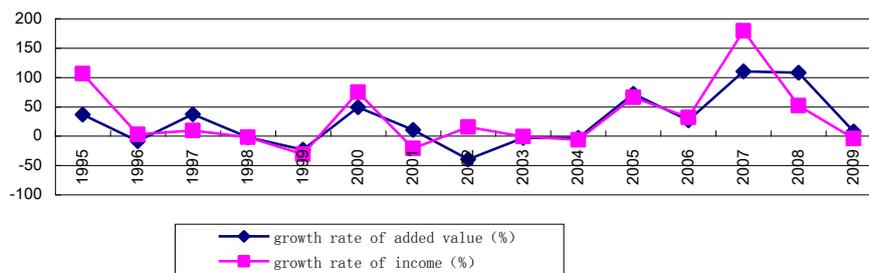


Figure 17. The comparison between the growth rate of added value and income of EIMI in Shanxi province from 1995 to 2009.

Through the comparison between the growth rate of added value and income of EIMI in Shanxi province from 1979 to 2009, we can see that the difference was significant. On the whole, both of them are positive numbers, which can show the great development of EIMI in Shanxi province. In addition, by comparison, it can be found that the growth rate of added value and income of EIMI in Shanxi province has a strict positive correlation.

B. The comparison between main business income and profit of EIMI in Shanxi province

Table VI.

Growth value of main business income and profit of EIMI statistics in Shanxi province from 1978 to 2013

Year	Growth value of main business income (Million yuan)	Growth value of profit (Million yuan)	Percentage difference (%)
1978	-	-	-
1979	73.77	-0.11	200.58
1980	1.08	4.63	124.48
1981	8.04	-11.08	1256.83
1982	1.96	1.56	22.35
1983	50.94	13.93	114.1
1984	33.37	10.35	105.34
1985	61.03	-1.98	213.4
1986	-21.52	-20.65	4.12

1987	65.22	-23.67	427.89
1988	74.78	28.83	88.69
1989	-100.55	-4.98	181.11
1990	23.15	-9.55	480.8
1991	64.32	15.05	124.15
1992	118.65	-1.80	206.18
1993	112.11	-21.44	294.57
1994	-119.02	10.53	238.82
1995	495.00	-28.11	224.08
1996	26.62	-5.35	300.59
1997	95.63	20.59	129.13
1998	-18.95	-10.78	54.97
1999	-325.89	-28.76	167.56
2000	553.07	51.11	166.16
2001	-273.00	10.67	216.27
2002	158.75	2.07	194.85
2003	-8.87	28.78	378.06
2004	-72.29	-61.05	16.86
2005	724.84	30.88	183.66
2006	574.00	72.16	155.33
2007	4294.92	312.40	172.88
2008	3483.59	-258.01	232
2009	-437.03	-81.99	136.81

2010	2995.88	-135.61	218.96
2011	6634.45	1001.77	147.53
2012	26574.36	1511.60	178.47
2013	6221.69	-1591.64	337.51
Total	52144.10	830.35	7695.09
Average	1489.83	23.72	219.8597143
Variance	21505433.12	171719.7146	42571.32259
Standard deviation	4637.395079	414.3907752	206.3281914

We can see clearly from table 6 that the differences between growth value of main business income and profit of EIMI were significant in Shanxi province from 1978 to 2013. The difference of profit is higher than the income, which means the correlation between profit and income is not high.

C. The comparison between the growth rate of income and expenses of taxation of EIMI in Shanxi province

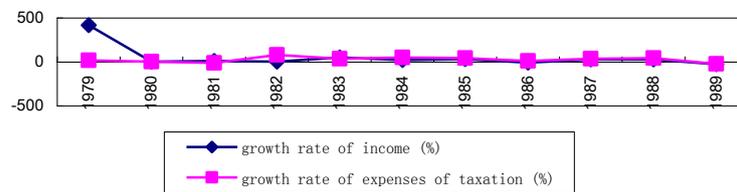


Figure 18. The comparison between the growth rate of income and expenses of taxation of EIMI in Shanxi province from 1979 to 1989.

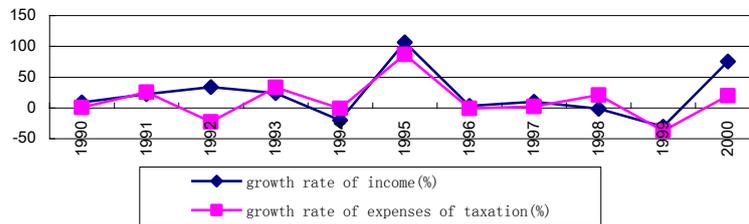


Figure 19. The comparison between the growth rate of income and expenses of taxation of EIMI in Shanxi province from 1990 to 2000.

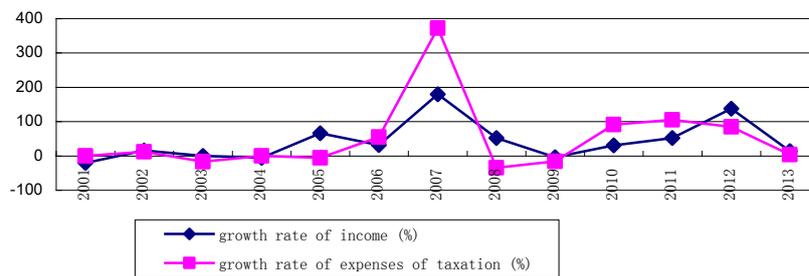


Figure 20. The comparison between the growth rate of income and expenses of taxation of EIMI in Shanxi province from 2001 to 2013.

We can see clearly from the figures above that there is a big difference between the growth rate of income and expenses of taxation of EIMI in Shanxi province from 1978 to 2013. In general, the growth rate of income and expenses of taxation were all positive, which shows that there is a rapid development of EIMI in Shanxi province. In addition, strict positive correlation was found between the growth rate of income and growth rate of expenses of taxation by comparison. It illustrates

the increase in income has brought an increase in the amount of taxes.

D. The comparison between the growth rate of income and employed population of EIMI in Shanxi province

Table VII.

Growth rate of main business income and employed population of EIMI in Shanxi province from 1978 to 2013

Year	Growth rate of Income(%)	Growth rate of employed Population(%)	Percentage difference (%)
1978	-	-	-
1979	416.51	1.47	198.59
1980	1.18	1.12	5.43
1981	8.69	2.85	101.11
1982	1.95	1.18	49.29
1983	49.67	-3.03	225.99
1984	21.74	0.98	182.72
1985	32.66	0.22	197.35
1986	-8.68	-1.67	135.39
1987	28.81	6.22	128.96
1988	25.64	-0.89	214.39
1989	-27.45	20.98	1498.11
1990	8.71	0.47	179.36
1991	22.26	4.02	138.76
1992	33.58	-0.71	208.68
1993	23.75	14.03	51.46
1994	-20.38	2.91	266.73
1995	106.44	6.18	178.05
1996	2.77	3.68	28.14
1997	9.69	-3.58	434.48
1998	-1.75	-13.55	154.24
1999	-30.65	-18.04	51.81
2000	75	-14.29	294.14
2001	-21.15	2.27	248.13
2002	15.6	-50.28	379.91
2003	-0.75	1.56	568.51
2004	-6.19	3.99	926.78
2005	66.19	1.97	188.41
2006	31.54	10.13	102.75
2007	179.41	266.84	39.18
2008	52.08	11.19	129.24
2009	-4.3	-3.53	19.61
2010	30.77	31.44	2.17
2011	52.11	13.89	115.81
2012	137.22	19.34	150.6
Total	1312.67	319.39	7794.28
Average	38.61	9.39	229.24
Variance	6466.58	2244.27	81994.52
Standard deviation	80.42	46.67	286.35

We can see clearly from table 7 that the growth rate of main business income is much higher than the growth rate of employed population of EIMI in Shanxi province from 1978 to 2013. The difference between the annual income growth is very significant. The same result, however, did not appear to the growth rate of employed population. Therefore, the number of employees is not closely related to income or profit. Scientific and technological innovation has also brought about a significant increase in labor productivity, which has a greater role in leading the higher revenue and profits.

VIII. DEVELOPMENT MEASURES ANALYSIS OF EIMI IN SHANXI PROVINCE

To further promote the EIMI of Shanxi Province, it should be started from the following three aspects:

A. We should innovative technology and pay attention to low carbon and environmental protection of EIMI in Shanxi province.

The EIMI of Shanxi Province has made considerable progress. At this stage, the speed and quality of the development of EIMI should be paid the same attention. Technology must be innovated for long-term development, thus the situation that manufacturing is big but not strong can be changed.[13]

First of all, treat innovative technology as the fundamental driving force to achieve the rapid development of EIMI of Shanxi Province. Technological innovation is the power source of EIMI, the latter is a high-tech intensive industry. Therefore, we must increase the intensity of the development of new technologies and new products.[14]

In addition, the government and enterprises have to refine the energy-saving emission reduction program, to do the green electronic products. [15]At present, the focus of the EIMI nationwide is the direction of low energy consumption and high energy efficiency. Only by fully grasping the elements of environmental protection, can leapfrog development be achieved in EIMI of Shanxi province.

B. The government should continue to maintain the speed of the development of EIMI in Shanxi Province and learn advanced development experience from other provinces.

Development of EIMI is a long process. It cannot be done overnight. Government of Shanxi province should seize the current golden development period and develop EIMI as a key industry vigorously. The development speed of EIMI in Shanxi province is accelerating year by year when comparing with the historical period. Its income, profit and added value all had a larger increase. However, the development of EIMI of Shanxi province is still far behind the national average.[15-16]In the short term, it is terribly difficult to catch up with developed provinces such as: Jiangsu, Guangdong and other provinces for EIMI in Shanxi province. In a sense, it can be of great benefit to Shanxi province. It means, Shanxi province still has the advantage that it is easier to adopt new technologies, accept new methods, and avoid many problems in the process of development. Therefore, advanced development experience from other provinces should be learned to achieve further development.[17]

C. Build Shanxi province's leading brands and enhance the core competitiveness of enterprises.

The development of the industry depends on the enterprises. Development of EIMI relies on a large number of enterprises, especially enterprises above the scale. [18]First of all, the government should formulate and improve the planning outline of EIMI, encourage processing trade enterprises to extend the industrial chain, enhance value-added products to increase the core competitiveness of the backbone of enterprises and independent brand market influence, and cultivate the backbone enterprises whose sales revenue are more than one hundred billion yuan, then create a number of international influence of the new industrial demonstration bases and industrial parks. In addition, the enterprise itself should develop new technologies to enhance their creativity and competitiveness, and accelerate the digestion and absorption of new technology and innovation. Enterprises should continue to make progresses in the traditional strong industries such as LED light manufacturing.[19]

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