# Development Environment and Value Assessment of Electronic Information Manufacturing Industry in Zhejiang Province during 1978-2013

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Abstract—Since the reform and opening up to the outside world, vigorous development of electronic-information-manufacturing industry in Zhejiang Province has become the pillar industry and leading industry of Zhejiang Province. Based on the statistical analysis of the manufacturing industry of electronic information industry in Zhejiang province from 1978 to 2013, the corresponding numerical function space model and the comparison function space model are established. To further promote the Zhejiang Province Electronic Information Industry Development of the manufacturing industry, Zhejiang Province. should start from the following three aspects: first, attach importance to technological innovation of information industry. Second, speed up the information industry cluster. Third, promote the internationalization of information industry.

*Index Terms*—Electronic information manufacturing industry, Zhejiang 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].

Zhejiang Province, located in the southern part of Yangtze River Delta of the southeast coast of China, lies in the east of the East China Sea, south of Fujian Province, west of Jiangxi Province and Anhui Province, and north of Shanghai and Jiangsu Province. Zhejiang is one of the developed provinces in China's economy and society. Zhejiang is one of the developed provinces in China's economy and society. Electronic information industry is a pillar industry in Zhejiang province. 2015, Zhejiang Province, the leading role of the information economy and modern service industries, such as the leading role of the leading role to further show. Annual information economy core industry added number of 3310 billion \$, an increase of 15.1%, accounting for 7.7% of GDP, the proportion increased by 0.6 percentage points over the previous year. [6-7] The object of this paper is Zhejiang Province industry electronic information manufacturing, electronic information manufacturing industry is abbreviated as EIMI by us.

In this paper, DTDA is used to do the research. It mainly includes: Step 1, Data-collecting;Step 2, Table-drawing; Step 3, drawing Function Spaces figure; Step 4, Analysis-making. The DTDA is the Data-Table-figure-Analysis.

#### II. THE ADDED NUMBER TREND OF EIMI ZHEJIANG PROVINCE

Table I is that we have been based on "China Electronic Information Industry Statistics (1949-2009)"[8] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[9] used percentage difference formulas and so on.

TABLE I. ADDED NUMBER OF EIMI STATISTICS IN ZHEJIANG PROVINCE FROM 1978 TO 2009

Year	Added number(Millio n¥)	Growt h rate(% )	Growth number(Millio n ¥)	Total Added number(Millio n¥)
1978	76.25			
1979	72.72	-4.63	271.05	401.20
1980	127.57	75.42	34.37	771.71
1981	156.85	22.96	-57.79	1084.42
1982	118.02	-24.76	6.08	1403.21
1983	149.26	26.46	83.05	1805.05
1984	222.55	49.11	150.01	2356.90
1985	442.92	99.02	680.51	3589.27
1986	571.09	28.94	136.68	4958.30
1987	563.76	-1.28	287.61	6614.95
1988	755.94	34.09	375.27	8646.88
1989	857.53	13.44	361.31	11040.12
1990	855.70	-0.21	208.89	13642.25
1991	1232.04	43.98	1057.31	17301.68
1992	1319.51	7.1	948.13	21909.25
1993	2122.69	60.87	3493.92	30010.73
1994	3108.76	46.45	2039.58	40151.79

1995	4380.72	40.92	8945.74	59238.59	2004	27135.35	8.97	46475.24	617668.83
1996	3748.73	-14.43	5658.06	83983.45	2005	30427.72	12.13	11660.69	772147.13
1997	6389.67	70.45	4029.11	112757.42	2006	41606.81	36.74	64504.93	991130.36
1998	7745.40	21.22	4124.55	145655.94	2007	50596.95	21.61	12949.84	1223063.43
1999	8973.01	15.85	4829.14	183383.60	2008	64242.95	26.97	22066.97	1477063.47
2000	14254.23	58.86	14384.37	235495.64	2009	60919.55	-5.17	-17968.09	1713095.42
2001	15756.70	10.54	17437.14	305044.82	Total	390179.49	837.7		
2002	16347.22	3.75	3914.85	378508.85	Averag	12102 11	27.02		
2003	24901.30	52.33	22878.34	474851.22	e	12195.11	27.02		



Figure 1. Function Spaces diagram of Added number trend of EIMI 1980-1989 in Zhejiang Province.



Figure 2. Function Spaces diagram of Added number trend of EIMI1990-1999 in Zhejiang Province.



Figure 3. Function Spaces diagram of Added number trend of EIMI 2000-2009 in Zhejiang Province.

It can be seen clearly from the charts and figures above that the added number of EIMI in Zhejiang Province from 1978 to 2009 added up to 390.17 billion ¥. The added number increases

from 76.25 million <sup>¥</sup> to 60919.55 million <sup>¥</sup>. Its growth is 799 times. However, there is a rise and fall in different years. The development style shows like a wave. 1985, 1997 and 2000 is

the three highest point.

# III. THE MAIN BUSINESS INCOME TREND OF EIMI IN ZHEJIANG PROVINCE

Table II is that we have been based on "China Electronic Information Industry Statistics (1949-2009)"[10] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[11] and used variance, standard ,percentage difference formulas and so on.

TABLE II. STATISTICS OF THE MAIN BUSINESS INCOME OF EIMI IN ZHEJIANG PROVINCE

Year	main business	Growth	Total main business
1078	65.08	Tate(%)	
1979	336.13	416 51	401.20
1980	370.50	10.23	771.71
1981	312.71	-15.60	1084.42
1982	318.79	1.95	1403.21
1983	401.84	26.05	1805.05
1984	551.85	37.33	2356.90
1985	1232.36	123.32	3589.27
1986	1369.04	11.09	4958.30
1987	1656.65	21.01	6614.95
1988	2031.92	22.65	8646.88

1989	2393.24	17.78	11040.12
1990	2602.13	8.73	13642.25
1991	3659.44	40.63	17301.68
1992	4607.57	25.91	21909.25
1993	8101.48	75.83	30010.73
1994	10141.06	25.18	40151.79
1995	19086.80	88.21	59238.59
1996	24744.86	29.64	83983.45
1997	28773.97	16.28	112757.42
1998	32898.52	14.33	145655.94
1999	37727.66	14.68	183383.60
2000	52112.04	38.13	235495.64
2001	69549.18	33.46	305044.82
2002	73464.03	5.63	378508.85
2003	96342.37	31.14	474851.22
2004	142817.61	48.24	617668.83
2005	154478.30	8.16	772147.13
2006	218983.23	41.76	991130.36
2007	231933.07	5.91	1223063.43
2008	254000.04	9.51	1477063.47
2009	236031.95	-7.07	1713095.42
2010	311572.19	32.00	2024667.61
2011	321186.95	3.09	2345854.56
2012	335635.78	4.50	2681490.34
2013	361179.40	7.61	3042669.74
Total	3042669.74	1273.81	-
Average	84518.60	36.39	-



Figure 4. Function Spaces diagram of Main business income trend of EIMI 1980-1989 in Zhejiang Province.



Figure 5. Function Spaces diagram of Main business income trend of EIMI 1990-1999 in Zhejiang Province.



Figure 6. Function Spaces diagram of Main business income trend of EIMI 2000-2013 in Zhejiang Province.

It can be seen clearly from the charts and figures above that during the 36 years, the main business income of EIMI in Zhejiang Province has reached 361.18 billion ¥ in 2013 and the total main business income has reached 3042.67 billion ¥. The growth is 5550 times and the average annual growth is 154 times. However, there is a rise and fall in different years, the development style shows like a wave.1985, 1995 and 2004 is the three highest point. During 1978 and 1999, the total main business income kept a constant and high growth. Entering this century, from 2000 to 2006, it increased in a wavelike way. And the growth rate is high. From 2007 to 2013, it grew slowly.

#### IV. The profit trend of EIMI in Zhejiang province

Table III is that we have been based on "China Electronic Information Industry Statistics (1949-2009)"[12] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[13] and used variance, standard, percentage difference formulas and so on.

TABLE III. PROFIT OF EIMI STATISTICS IN ZHEJIANG PROVINCE FROM 1978 TO 2013

Year ¥) Growth Total profit(Million Year ¥) rate(%) ¥)
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1978	7.52	-	-
1979	8.07	7.38	15.59
1980	56.53	600.05	72.12
1981	66.22	17.15	138.34
1982	46.53	-29.73	184.87
1983	69.84	50.09	254.71
1984	104.00	48.92	358.71
1985	182.94	75.91	541.65
1986	126.30	-30.96	667.95
1987	148.00	17.18	815.95
1988	180.66	22.07	996.61
1989	121.67	-32.65	1118.28
1990	158.37	30.17	1276.65
1991	158.68	0.19	1435.33
1992	233.59	47.21	1668.92
1993	332.20	42.21	2001.11
1994	498.51	50.06	2499.62
1995	746.18	49.68	3245.80
1996	820.74	9.99	4066.54
1997	1715.95	109.07	5782.49
1998	1431.14	-16.60	7213.63
1999	2317.51	61.93	9531.13
2000	3558.66	53.56	13089.80
2001	4437.87	24.71	17527.67
2002	5020.56	13.13	22548.23
2003	5587.17	11.29	28135.40
2004	7461.18	33.54	35596.58

2005	5039.14	-32.46	40635.72
2006	9192.17	82.42	49827.89
2007	10938.18	18.99	60766.07
2008	14380.68	31.47	75146.75
2009	10930.90	-23.99	86077.65
2010	21822.85	99.64	107900.50

2012 23097.52 1.57 15373	0.02
	8.93
2013 27156.26 17.57 18089	5.19
Total 180895.19 1464.97 -	
Average 5024.87 41.86 -	



Figure 7. Function Spaces diagram of Profit trend of EIMI 1980-1989 in Zhejiang Province.



Figure 8. Function Spaces diagram of Profit trend of EIMI 1990-1999in Zhejiang Province.



Figure 9. Function Spaces diagram of Profit trend of EIMI 2000-2013 in Zhejiang Province.

It can be seen clearly from the charts and figures above that during the 36 years, the total profit of EIMI in Zhejiang Province has reached 180.9 billion . It is 7.52 million in

1978 and 27.16 billion ¥ in 2013. The growth is 3611 times and the average annual growth is 100 times. However, there is a rise and fall in different years, the development style shows like a U

model. And 1980, 1997, 1999, 2000 and 2006 is the seven highest point.

### V. THE EXPENSES OF TAXATION TREND OF EIMI IN ZHEJIANG PROVINCE

Table IV is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [14]and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)" [15]and used variance, standard ,percentage difference formulas and so on.

TABLE IV. EXPENSES OF TAXATION OF EIMI STATISTICS IN ZHEJIANG PROVINCE FROM1978 TO 2013

Year	Expenses of taxation(Million ¥)	Growth rate(%)	Total Expenses of taxation(Million ¥)
1978	7.93	-	-
1979	8.32	4.90	16.26
1980	11.77	41.42	28.02
1981	14.60	24.06	42.62
1982	19.87	36.08	62.49
1983	20.23	1.82	82.72
1984	35.75	76.72	118.47
1985	56.89	59.13	175.36
1986	60.57	6.47	235.93
1987	82.51	36.22	318.43
1988	99.09	20.10	417.52

1989	129.26	30.44	546.78
1990	155.00	19.92	701.78
1991	151.65	-2.16	853.43
1992	202.73	33.68	1056.16
1993	371.61	83.30	1427.77
1994	469.77	26.41	1897.54
1995	596.96	27.08	2494.50
1996	747.87	25.28	3242.37
1997	833.88	11.50	4076.25
1998	897.30	7.61	4973.55
1999	1142.66	27.34	6116.21
2000	2110.56	84.71	8226.77
2001	1599.41	-24.22	9826.18
2002	2432.95	52.12	12259.13
2003	2821.38	15.97	15080.51
2004	2891.85	2.50	17972.36
2005	3215.30	11.18	21187.66
2006	3956.60	23.06	25144.26
2007	4376.54	10.61	29520.80
2008	5163.72	17.99	34684.52
2009	5463.65	5.81	40148.17
2010	7095.04	29.86	47243.21
2011	7750.61	9.24	54993.82
2012	8563.05	10.48	63556.87
2013	10188.14	18.98	73745.01
Total	73745.01	865.59	-
Average	2048.47	24.73	-



Figure 10. Function Spaces diagram of Expenses of taxation trend of EIMI1980-1989 in Zhejiang Province.



Figure 11. Function Spaces diagram of Expenses of taxation trend of EIMI 1990-1999in Zhejiang Province.



Figure 12. Function Spaces diagram of Expenses of taxation trend of EIMI2000-2013 in Zhejiang Province.

It can be seen clearly from the charts and figures above that from 1978 to 2013, the total expenses of taxation of EIMI in Zhejiang Province reached 73.75 billion ¥. It was 7.93 million ¥ in 1978 and 10188.14 million ¥ in 2013. The growth is 1284 times and the average annual growth is 36 times. Compared to the same period of the main business income, the expenses of taxation is not fully synchronized development, and the expenses of taxation development model is not stable. Its highest growth rate was 2000, and the growth rate reached 84.71%.

# VI. THE QUANTITY OF EMPLOYMENT TREND OF EIMI IN ZHEJIANG PROVINCE

Table V is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [16] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[17] and used variance, standard ,percentage difference formulas and so on.

TABLE V. FUNCTION SPACES DIAGRAM OF QUANTITY OF EMPLOYMENT OF EIMI1977-2013 STATISTICS IN ZHEJIANG PROVINCE

Vear	quantity of	growth	Total quantity of
Tear	employment(person)	rate(%)	employment(person)
1977	23652	-	-
1978	27776	17.44	51428
1979	30730	10.64	82158
1980	34854	13.42	117012
1981	39692	13.88	156704
1982	35778	-9.86	192482
1983	36822	2.92	229304
1984	38341	4.13	267645
1985	60578	58.00	328223
1986	60089	-0.81	388312
1987	68087	13.31	456399
1988	71823	5.49	528222

1989	98235	36.77	626457	2002	244073	15.88	2725444
1990	105469	7.36	731926	2003	278276	14.01	3003720
1991	119437	13.24	851363	2004	378485	36.01	3382205
1992	132557	10.98	983920	2005	426278	12.63	3808483
1993	142255	7.32	1126175	2006	487899	14.46	4296382
1994	153470	7.88	1279645	2007	505367	3.58	4801749
1995	149798	-2.39	1429443	2008	563473	11.50	5365222
1996	151492	1.13	1580935	2009	541397	-3.92	5906619
1997	159925	5.57	1740860	2010	637323	17.72	6543942
1998	157949	-1.24	1898809	2011	568417	-10.81	7112359
1999	165998	5.10	2064807	2012	540770	-4.86	7653129
2000	205943	24.06	2270750	Total	7653129.00	352.80	-
2001	210621	2.27	2481371	Average	212586.92	10.08	-



Figure 13. Function Spaces diagram of Quantity of employment of EIMI1978-1989 in Zhejiang Province.



Figure 14. Function Spaces diagram of Quantity of employment of EIMI1990-1999 in Zhejiang Province.



Figure 15. Quantity of employment of EIMI in Zhejiang Province from 2000 to 2012.

It can be seen clearly from the charts and figures above that from 1977 to 2012, compared with the main business income, profits, tax fluctuations, the quantity of employment of EIMI in Zhejiang Province basically maintained a stable and slight rise. The quantity of employment was 23.652 thousand in 1977 and 540.77 thousand in 2012. However, there is a rise and fall in different years, the development style shows like a W model. With the improving main business income, profits, expenses of taxation and steady development of the employment, productivity of labour in EIMI of Zhejiang increased significantly.

# VII. THE GROWTH RATE COMPARISON OF EIMI IN ZHEJIANG PROVINCE

#### A. The comparison between the growth rate of added number and income

Table VI is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [18] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[19] and used variance, standard ,percentage difference formulas and so on.

TABLE VI. COMPARISON BETWEEN THE GROWTH RATE OF ADDED NUMBER AND INCOME OF EIMI IN ZHEJIANG PROVINCE FROM 1978 TO 2009

Year	growth rate of added number(%)	growth rate of income(%)	Difference percentage
1978			
1979	-4.63	416.51	204.50
1980	75.42	10.23	152.22

1981	22.96	-15.60	1047.83
1982	-24.76	1.95	234.20
1983	26.46	26.05	1.56
1984	49.11	37.33	27.26
1985	99.02	123.32	21.86
1986	28.94	11.09	89.18
1987	-1.28	21.01	225.95
1988	34.09	22.65	40.32
1989	13.44	17.78	27.80
1990	-0.21	8.73	209.86
1991	43.98	40.63	7.92
1992	7.10	25.91	113.97
1993	60.87	75.83	21.89
1994	46.45	25.18	59.39
1995	40.92	88.21	73.24
1996	-14.43	29.64	579.49
1997	70.45	16.28	124.92
1998	21.22	14.33	38.76
1999	15.85	14.68	7.66
2000	58.86	38.13	42.75
2001	10.54	33.46	104.18
2002	3.75	5.63	40.09
2003	52.33	31.14	50.77
2004	8.97	48.24	137.28
2005	12.13	8.16	39.13
2006	36.74	41.76	12.79
2007	21.61	5.91	114.10
2008	26.97	9.51	95.72
2009	-5.17	-7.07	31.05
Total	837.7	1226.61	3977.64
Average	27.02	39.57	128.31
Variance	794.44	5666.24	41667.73
Standard deviation	28.19	75.27	204.13



Figure 16. Comparison Function Spaces diagram of between the growth rate of added number and income of EIMI in Zhejiang Province from1979 to 1994.



Figure 17. Comparison Function Spaces diagram of between the growth rate of added number and income of EIMI in Zhejiang Province from1995 to 2009.

It can be seen clearly from the charts and figures above that from 1978 to 2009, the added number and main business income growth differences of EIMI in Zhejiang Province are relatively large, but the difference in income growth is greater than the increase in the added number of growth differences. At the same time, we can see that the increase in number and income basically maintained a synchronous increase or decrease by figure -16. In particular, 1980-1986, 1990-1993, 1999-2009, the added number and income maintain nearly the same growth rate.

# *B. The comparison between the growth rate of income and profit*

Table VII is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [20] and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[21] and used variance, standard ,percentage difference formulas and so on.

TABLE VII. COMPARISON BETWEEN THE GROWTH RATE OF INCOME AND PROFIT OF EIMI 1978-2013 IN ZHEJIANG PROVINCE

Year	growth rate of income(%)	growth rate of profit(%)	Difference percentage
1978	-	-	-
1979	416.51	7.38	193.03
1980	10.23	600.05	193.30
1981	-15.60	17.15	4218.11
1982	1.95	-29.73	228.00
1983	26.05	50.09	63.15
1984	37.33	48.92	26.87
1985	123.32	75.91	47.60

1986	11.09	-30.96	423.25
1987	21.01	17.18	20.05
1988	22.65	22.07	2.61
1989	17.78	-32.65	678.29
1990	8.73	30.17	110.24
1991	40.63	0.19	198.12
1992	25.91	47.21	58.26
1993	75.83	42.21	56.95
1994	25.18	50.06	66.16
1995	88.21	49.68	55.88
1996	29.64	9.99	99.17
1997	16.28	109.07	148.04
1998	14.33	-16.60	2733.20
1999	14.68	61.93	123.36
2000	38.13	53.56	33.66
2001	33.46	24.71	30.10
2002	5.63	13.13	79.97
2003	31.14	11.29	93.60
2004	48.24	33.54	35.95
2005	8.16	-32.46	334.41
2006	41.76	82.42	65.49
2007	5.91	18.99	105.03
2008	9.51	31.47	107.15
2009	-7.07	-23.99	108.91
2010	32.00	99.64	102.76
2011	3.09	4.21	30.74
2012	4.50	1.57	96.61
2013	7.61	17.57	79.12
Total	1273.81	1464.97	11047.14
Average	36.39	41.86	315.63
Variance	5096.27	10717.02	672288.15
Standard	71.30	103 52	810.03
deviation	/1.37	105.52	017.75



Figure 18. Comparison Function Spaces diagram of between the growth rate of income and profit of EIMI in Zhejiang Province from 1980 to 1989.



Figure 19. Comparison Function Spaces diagram of between the growth rate of income and profit of EIMI in Zhejiang Province from 1990 to 1999.



Figure 20. Comparison Function Spaces diagram of between the growth rate of income and profit of EIMI in Zhejiang Province from 2000 to 2009.

As can be seen from the above table and figures from 1978 to 2013, the growth differences of main business income and profit are very significent, and the difference in profit growth is greater than the increase in the main business of growth

differences. The correlation between profit and income is not high. From 1981 to 1989, the profit and main business income grow stably, and increase or decrease in the same direction growth. While from 1990 to 2013, the differences of main business income growth rate and profit growth rate are obviously different.

# *C.* The comparison between the growth rate of income and expenses of taxation

Table VIII is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [22]and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[23]and used variance, standard ,percentage difference formulas and so on.

#### TABLE VIII. THE COMPARISON BETWEEN THE GROWTH RATE OF INCOME AND EXPENSES OF TAXATION OF EIMI IN ZHEJIANG PROVINCE FROM 1978 TO 2013

Year	growth rate of income(%)	growth rate of expenses of taxation(%)	Difference percentage
1978			
1979	416.51	4.90	195.35
1980	10.23	41.42	120.77
1981	-15.60	24.06	937.59
1982	1.95	36.08	179.49
1983	26.05	1.82	173.88
1984	37.33	76.72	69.07
1985	123.32	59.13	70.36
1986	11.09	6.47	52.62
1987	21.01	36.22	53.15
1988	22.65	20.10	11.93

1989	17.78	30.44	52.51
1990	8.73	19.92	78.12
1991	40.63	-2.16	222.46
1992	25.91	33.68	26.08
1993	75.83	83.30	9.39
1994	25.18	26.41	4.77
1995	88.21	27.08	106.05
1996	29.64	25.28	15.88
1997	16.28	11.50	34.41
1998	14.33	7.61	61.26
1999	14.68	27.34	60.26
2000	38.13	84.71	75.84
2001	33.46	-24.22	1248.48
2002	5.63	52.12	161.00
2003	31.14	15.97	64.40
2004	48.24	2.50	180.29
2005	8.16	11.18	31.23
2006	41.76	23.06	57.70
2007	5.91	10.61	56.90
2008	9.51	17.99	61.67
2009	-7.07	5.81	2044.44
2010	32.00	29.86	6.92
2011	3.09	9.24	99.76
2012	4.50	10.48	79.84
2013	7.61	18.98	85.52
Total	1273.81	865.59	6789.39
Average	36.39	24.73	193.98
Variance	5096.27	561.13	165109.08
Standard deviation	71.39	23.69	406.34



Figure 21. Comparison Function Spaces diagram of between the growth rate of income and expenses of taxation of EIMI in Zhejiang Province from 1980 to 1989.



Figure 22. Comparison Function Spaces diagram of between the growth rate of income and expenses of taxation of EIMI in Zhejiang Province from 1990 to 1999.



Figure 23. Comparison Function Spaces diagram of between the growth rate of income and expenses of taxation of EIMI in Zhejiang Province from 2000 to 2013.

As can be seen from the above table and figures, from 1978 to 2013, the main business income growth difference is significantly higher than the expenses of taxation growth difference, that is, the difference in annual income growth is very significant, while the annual expenses of taxation increase is relatively small. From 1992 to 1994 and from 2007 to 2013, the expenses of taxation growth and main business income growth maintain a basic change. The significant difference between income and taxes shows that the increase in corporate income does not bring increased tax synchronization.

#### *D.* The comparison between the growth rate of income and quantity of employment

Table IX is that we have been based on "China Electronic Information Industry Statistics (1949-2009)" [24]and "China Electronic Information Industry Statistical Yearbook (2010, 2011, 2012, 2013)"[25]and used variance, standard ,percentage difference formulas and so on.

TABLE IX. COMPARISON FUNCTION SPACES DIAGRAM OF BETWEEN THE GROWTH RATE OF INCOME AND QUANTITY OF EMPLOYMENT OF EIMI IN ZHEJIANG PROVINCE FROM 1978 TO 2012

Year	growth rate of income(%)	growth rate of quantity of employment(%)	Differencepercentage
1978	-	17.44	-
1979	416.51	10.64	190.04
1980	10.23	13.42	27.01
1981	-15.60	13.88	3433.90
1982	1.95	-9.86	298.29
1983	26.05	2.92	159.71

1984	37.33	4.13	160.20
1985	123.32	58.00	72.05
1986	11.09	-0.81	231.40
1987	21.01	13.31	44.86
1988	22.65	5.49	122.00
1989	17.78	36.77	69.62
1990	8.73	7.36	16.96
1991	40.63	13.24	101.67
1992	25.91	10.98	80.90
1993	75.83	7.32	164.80
1994	25.18	7.88	104.61
1995	88.21	-2.39	211.15
1996	29.64	1.13	185.30
1997	16.28	5.57	98.09
1998	14.33	-1.24	237.73
1999	14.68	5.10	96.92
2000	38.13	24.06	45.23
2001	33.46	2.27	174.57
2002	5.63	15.88	95.33
2003	31.14	14.01	75.87
2004	48.24	36.01	29.03
2005	8.16	12.63	42.93
2006	41.76	14.46	97.14
2007	5.91	3.58	49.16
2008	9.51	11.50	18.88
2009	-7.07	-3.92	57.43
2010	32	17.72	57.46
2011	3.09	-10.81	359.77
2012	4.50	-4.86	5126.09
Total	1266.12	352.80	12336.10
Average	37.24	10.08	362.83
Variance	5222.95	180.14	1038124.07
Standard deviation	72.27	13.42	1018.88





Figure 25. Comparison Function Spaces diagram of between the growth rate of income and quantity of employment of EIMI in Zhejiang Province from 1995 to 2012.

As can be seen from the above table and figures that from 1978 to 2012, the main business income growth difference in Zhejiang Province is significantly higher than the quantity of employment growth difference, that is, the difference in annual income growth is very significant, while the annual quantity of employment increase is relatively small. The significant difference between income and quantity of employment shows that the increase in corporate income does not bring increased quantity of employment synchronization.

#### VIII. CONCLUSIONS

To further promote the development of EIMI in Zhejiang Province, we should start from the following aspects:

#### A. Attach importance to the technology innovation of information industry

As we all know, technological innovation is the basis of the technology of electronic information industry in the world. Innovation cycle will become shorter and shorter, innovation content will become more and more complex, and innovation scope will be more and more wide. Independent innovation is the key to the development of electronic information industry. [26] According to the analysis of EIMI in Zhejiang Province, we can conclude that from 1978 to 2013, the main business income, profit, expenses of taxation, quantity of employment and added number don't show a synchronous growth. [27]It shows that the number growth advantage in Zhejiang is not prominent. While technology is the breakthrough point in the number growth of electronic-information -manufacturing industry, Zheiiang Province is lack of technical innovation. Therefore, Zhejiang Province should attach importance to the technology innovation, constantly improve the construction of enterprise technology centers, improve independent innovation, strengthen innovation management, and enhance digestion and absorption capacity of foreign advanced technology.[28][29]

#### B. Accelerate the gathering of information industry

In last 19's, American scholars put forward the concept of "Industry Cluster". It mainly talks about regional industrial or regional economic development in a geographic area. But nowadays this concept has become an important view of analyzing Industrial Development". [30]Industry Cluster" is not only point to a high degree of concentration in certain space within the industry, but more importantly, an industry digs out competitive advantage in a particular area from setting out wholly. [31]Zhejiang, located in the Yangtze River Delta, has developed economy, abundant resources and convenient transportation: favorable natural conditions for the development of electronic information industry provides a unique condition; excellent location provides electronic information industry with logistics, capital flow and information stream; universities and research institutes, gathering together for the electronic information industry development in Zhejiang Province, offers a variety of levels of human resources.[32]

At present, Hangzhou area mainly produce microelectronics, software, communication. Main leading enterprises of microelectronics include Shi LAN electronics, khanazir Zheda. Major enterprises in the software industry include Hang Seng, Xin Li, Sunyard. Communications industry includes Eastern Communications engaged in the production and development of mobile communication products, ut Starcom. Photoelectron communication mainly concentrated in Fuyang, including Fortis Group. Ningbo area mainly produce mobile communications, computer motherboard, accessories, small size of the integrated circuit manufacturing, as well as small household electrical appliances based industrial characteristics.[33]

### *C. Promote the internationalization of information industry*

With the development of economic globalization, the domestic economy and the international economy, the domestic market and the international market are fused together. Therefore, the sustainable development of EIMI in Zhejiang province cannot be separated from the international market. [34]

To further promote the EIMI of Zhejiang Province, it should be started from the following three aspects: The first is the export oriented strategy, that is, the EIMI in Zhejiang province should adhere to export orientation, not only to meet the domestic market. According to statistics, from January to May in 2015, Zhejiang electronic information products exports amounted to 10 billion 800 million U.S. dollars, which had an increase of 3%, but still far behind in Guangdong province (119 billion 200 million U.S. dollars, 0.1%) and Jiangsu province (54 billion 800 million U.S. dollars, -1.4%). [35][36]It shows that Zhejiang province has not made full use of the international market. Secondly, the internationalization of Industrial Development is also vital. It is undeniable that, compared with the developed countries, the development of EIMI in China started late. Therefore, in order to achieve rapid development, in the world of "science and technology is the productive forces", we should grasp the core of industrial development, that is, technology. Zhejiang province should encourage the internationalization of industry research and development and learn of foreign advanced electronic manufacturing technology. Finally, the level of utilization of foreign capital should be improved. Fund is also a crucial element in the development of EIMI. The introduction of foreign capital and the establishment of foreign-funded enterprises in Zhejiang Province, to some extent, are the process of absorption and utilization of international resources in the context of the international transfer of industry and the evolution of the international industrial division of labor.

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