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内容提要 2004- 2013
C- D Shift- Share

关键词
210098
211100

一、引 言

2013 5.92 12.8% GDP 1978 249.24
1989 1978 " " " "
2013
Syrquin(1988)
2002
2005
Timmer Szirmai(2000) 2012
2007 TPF
"

2015

Share 2004- 2013 Shift-

二、江苏省制造业现状与存在问题

1.

90
2013
59161.75
41% 1
2 2004- 2013

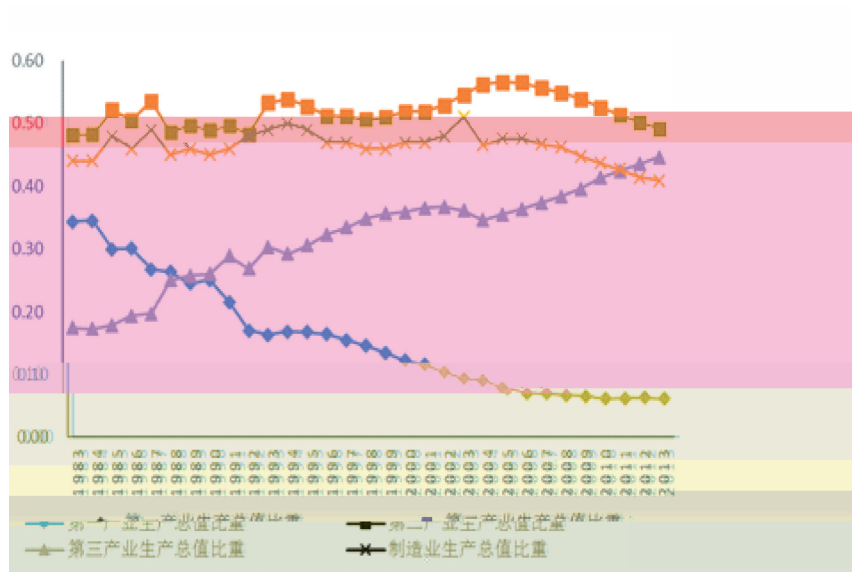


图1 1983-2013年江苏省产业结构

2

GB/T 4754- 94
(OECD)

2005

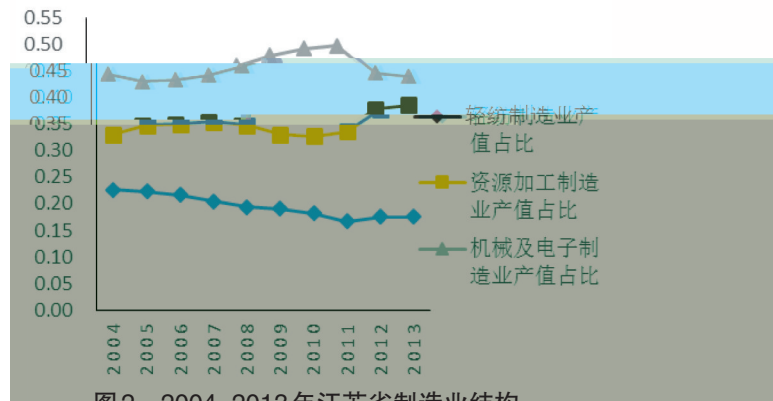


图2 2004-2013年江苏省制造业结构

2004- 2013

1 1
1

6989.01

24227.18

46.17% 50.70%

5

表1 2004-2013年江苏省四类技术密度制造业基本统计数据

2004	2005	2006	2007	2008	2009	2010
4475.34	5744.17	6914.96	8838.95	10799.74	11563.42	14351.43
37.98	47.57	53.53	61.57	61.33	62.82	68.49
0.1719	0.196	0.1923	0.2074	0.2087	0.2152	0.2162
243.09	360.11	530.63	679.34	769.68	713.59	1044.92
0.1683	0.1702	0.1889	0.1802	0.1602	0.1202	0.139
6348.77	8495.1	11145.75	14754.57	20149.89	22097.92	29148.99
64.68	69.48	75.49	81.04	84.19	83.8	89.79
0.2928	0.2863	0.2712	0.273	0.2865	0.2871	0.353
463.08	678.1	908.64	1285.65	1842.36	2398.33	
0.3206	0.3206	0.3234	0.341	0.3835	0.404	
3714.24	4772.69	6344.95	8401.43	10636.69	12266.36	
34.1	34.94	38.63	40.37	40.86	43.36	
0.1543	0.144	0.1388	0.136	0.1391	0.1485	
255.36	357.22	481.62	697.08	910.27	1179.67	
0.1768	0.1689	0.1714	0.1849	0.1895	0.1967	
8904.77	11630.1	14544.94	18383.87	22613.36	23363.54	
84.17	90.69	110.7	113.85	107.47	101.95	
0.381	0.3737	0.3977	0.3836	0.3657	0.3492	
483.08	719.98	888.81	1108.09	1281.32	1644.16	
0.3344	0.3403	0.3163	0.2939	0.2662	0.277	

31.44% 34.49%

17.12% 16.95%

2

37.98%

15.84%

15.64%

3

2013 31.79%

2013 35.04% 17.53%

2004

2003 27.08%

2003 19.09% 2013

1

2004-2013

17.19%

29.33%

32.06%

42.20%

1

三、研究方法及数据来源

1.

1 C-D

-

A

$A_i = Y_i / K_i L_i$

$i = 1, 2, \dots, n$

$Y = AK^{\alpha} L^{1-\alpha}$

$A = Y / K^{\alpha} L^{1-\alpha}$

$K^{\alpha} L^{1-\alpha}$

1

A_i i 1 $0 < \alpha < 1$,
 $0 < \alpha < 1$
 2 Shift- Share
 Shift- Share
 Fabricant

LV i S_i i 0
 t t 0

$$LV_{it} = \frac{Y_t}{L_t} = \sum_i^n \frac{Y_{it}}{L_{it}} = \sum_i^n LV_{it} S_{it} \quad LV_{i0} = \frac{Y_i}{L_i} = \sum_i^n \frac{Y_i}{L_i} = \sum_i^n LV_{i0} S_{i0} \quad 2$$

$$LV_{it} - LV_{i0} = \sum_i^n (LV_{it} - LV_{i0}) S_{i0} + \sum_i^n (S_{it} - S_{i0}) LV_{i0} + \sum_i^n (S_{it} - S_{i0}) (LV_{it} - LV_{i0}) \quad 3$$

$$\frac{LV_{it} - LV_{i0}}{LV_{i0}} = \sum_i^n \frac{LV_{it} - LV_{i0}}{LV_{i0}} S_{i0} + \sum_i^n \frac{S_{it} - S_{i0}}{LV_{i0}} + \sum_i^n \frac{S_{it} - S_{i0}}{LV_{i0}} \frac{LV_{it} - LV_{i0}}{LV_{i0}} \quad 4$$

3
4
2007

i t Y_{it} L_{it} K_{it} Solow(1957)

$$A_{it} = Y_{it} - \alpha L_{it} - (1-\alpha) K_{it} \quad 5$$

$$i=1,2,3,4 \quad i=0 \quad t \quad P_{it} \quad i$$

$$P_{it} A_{it} = P_{it} A_{it} + Y_{it} - P_{it} Y_{it} + P_{it} \alpha L_{it} - \alpha L_{it} + P_{it} (1-\alpha) K_{it} - (1-\alpha) K_{it} \quad 6$$

$$L_t \quad P_{it} \alpha K_{it} - \alpha K_t$$

2

OECD

2004- 2013

四、实证结果及分析

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2

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表2 2004-2013年江苏省四类制造业科技进步水平及产值占比情况

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2004- 2013

			%	
2004	1.1200	19.09	1.2278	
2005	1.0118	18.75	1.1617	
2006	0.9299	17.75	1.2086	
2007	0.8948	17.54	1.1573	
2008	0.8959	17.21	1.1789	
2009	0.9789	16.69	1.1519	
2010	0.9063	16.42	1.2018	
2011	0.8917	16.29	1.1953	
2012	0.8627	16.16	1.0872	
2013	0.7996	15.64		

2004

1.12

2013 0.7996

1.0031

0.9723

1.0347

2004 1.0504

2013 1.1815

30%

2004 1.2278 2013

10

10

2

6

3

3

2

1 3

2004- 2013

2012- 2013

2004- 2013

2

“ ” 1

五、建 议

“ ”

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2007 7